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Influences of E-Logistics Service Quality On Gen-Z Customer Satisfaction and Loyalty in Mekong Delta, Vietnam

Kiet Hong Vo Tuan Truong* [1], Tri Minh Nguyen[2], Tuyen Thi Kim Tran, Ngan Tran Thuy Pham, Huong Thi Bich Nguyen, Minh Thi Ngoc Do

Abstract

The purpose of this research is to determine how e-logistics service quality influences online shopper satisfaction and loyalty. Online shoppers made up both the study's population and its sample. Primary data was utilized for analysis in this research. The questionnaire and purposive sample techniques used to compile this data were both tried and true methods. There were 631 respondents of Generation Z (Gen-Z) included in the sample (Mekong Delta, Vietnam). The SPSS and AMOS measurement and structural models were used in this investigation. This study presents on relevant literature to provide a theoretical framework proposing a connection between the quality of an e-logistics provider's service and the satisfaction and loyalty of its youngest customers, Gen-Z. Perceived online safety (POS), capacity of office employees in e-logistic service center (COS), user interface quality (UIQ), and e-logistic quality (ELQ) are all factors included in this research into e-commerce customers' satisfaction with e-logistics service providers. Online customer satisfaction and office staff capacity in an e-logistic service center were shown to be significant predictors of Gen-Z customers' loyalty to online shopping. E-logistics service quality, such as e-logistics quality, user interface quality, perceived security, perceived privacy, and perceived information quality, is assessed using the current literature. This study's findings suggest that the quality of e-logistics services in Vietnam's Mekong Delta has been reorganized to take into account factors such perceived online safety, user interface quality, e-logistic quality and capacity of office staff in e-logistic service center. This study adds to the literature on developing market customer satisfaction and loyalty online, as seen by the findings.

Keywords: *E-logistic, Gen-Z, satisfaction, loyalty, Mekong Delta*

1. Introduction

Over the last decade, the internet and information technology have expanded customers' shopping possibilities beyond malls and grocery stores. Online commerce is becoming more important in the economy. Online shopping platforms' prominence has increased industry competition. Internet and smartphone users have increased online buying. Simon (2019) reported 366 million more internet users (9%) and 100 million more smartphone users (2%) in 2018. Gen-Z is growing in Southeast Asia (Digital News Asia, 2017). According to the Vietnam e-business index 2022 by the Vietnam E-commerce Association (2022), the e-commerce industry in Vietnam would increase by 20% to 16 billion USD in 2021, accounting for 5.5% of total retail sales of consumer products and services. E-commerce in Vietnam has attracted local

[1] Department of Business Administration, FPT University, 90000, Can Tho City
[2] International Business, Faculty of Business Administration, FPT University, Can Tho City
*Corresponding author: kietthvt@fe.edu.vn

and international enterprises due to its potential.

Gen-Z strongly influences home purchasing behaviors, according to Wegert (2016). Since this generation dominates internet and smartphone usage globally. Note that Gen-Z consumers have high expectations for their shopping experiences. Gen-Z is the first generation to grow up with constant access to the internet; as such, it is crucial that you cater to them through the digital channels they prefer. This generation also has a strong desire for easy, instant payment methods, which is changing the face of online shopping. The good news is that what Gen-Z wants from an e-commerce site is precisely what stores should be doing to boost traffic, revenue, and customer loyalty anyhow. Therefore, improving your website for a Gen-Z perspective is just good the search engine optimization. Positively, Gen-Z is influencing the future of internet retailing. Gen-Z is changing the way we market digital services and goods, demanding both improved user experiences and more interactive social connections. As a result, the mentality of Gen-Z is having an effect on e-commerce, and businessman needs to adjust online business operation to fit the needs of the next generation of buyers. Gen-Z, one of the most informed generations, may know a product's price before buying it. Due to their need for rapid satisfaction and impatience to learn about new products, Gen-Z provides unique problems for companies (Priporas et al., 2017). Schlossberg (2016) found that Gen-Z values shopping and has greater standards. A good product, service, or marketing campaign makes Gen-Z customers loyalty. A company's logistical skills may help build customer relationships (Bowersox et al., 1995). E-logistic service quality (ELSQ) advancements have helped many internet merchants succeed. To stay up with the global economy, the logistics business and delivery systems are continually changing (Jalowiec, 2020). E-logistics' fast growth as caused many of these developments. Due to Internet and worldwide commerce computerization, e-logistics is a new sector. E-logistics may help companies save money on transportation, increase income, satisfy customer needs, and reduce waste (Iskandar & Ramantoko, 2017).

Researchers have identified ELSQ as an important activity for retailers (Cao et al., 2018; Yumurtaci et al., 2018; Murfield et al., 2017). By meeting customer needs, e-logistics services boost revenue (Erceg & Damoska, 2019). Customer satisfaction concerns increase with the e-logistics business. Since customer happiness is the most important factor in recurring purchases (Arslan, 2020), this is problematic. To attract and maintain customers, e-Logistics organizations must offer exceptional services in addition to fast delivery. Value-added services like easy payment and high-quality items may boost e-logistics customer satisfaction (Gunasekaran & Ngai, 2003). The purpose of study is to identify Gen-Z's opinions on e-logistics' reliability as prospective consumers who are receptive to new technologies and abilities. The paper helps organizations understand what makes their consumers satisfy and loyal and how to benefit from this knowledge.

2. Methodology

2.1 Sampling technique

A structured questionnaire was used to collect data from 631 Gen-Z residing in both urban and rural areas of the Mekong Delta, Vietnam. All respondents selected had previous experience in online shopping on e-commerce platforms. Walk-ins were monitored through QR code-based data collection from 8th May 2023 to 8th June 2023. After data collection, the questionnaire was retrieved with a 96% response rate, which was considered suitable for data analysis. The questionnaire consisted of two parts, with the first part addressing control variables. The control variables

included gender, age, education level, and region. The second part was assessed on a five-point Likert scale (1=strongly disagree to 5=strongly agree) and referred to 38 items used to measure the impact of various factors on the satisfaction and loyalty of Gen-Z customers, based on previous studies (Eid, 2011; Chang & Chen, 2009). These items were categorized into the following dimensions: logistic service quality (14 items), user interface quality (4 items), security awareness (4 items), privacy awareness (4 items), perceived information quality (4 items), online customer satisfaction (4 items), and online customer loyalty (4 items).In this study, individuals born between 1997 and 2012 are considered members of Gen-Z (Dimock, 2019).

2.2 Literature Review

Choi et al. (2013) defined customer satisfaction as consumers' overall appraisal of the product or service that they bought. E-commerce companies and consumers judged performance by customer satisfaction. Comparing expectations to performance is satisfaction. Hidayat et al. (2016) define customer satisfaction as the perceived gap between product expectations and performance after use. Thus, pleasure happens when actual performance equals or surpasses expectations and dissatisfaction occurs when it does not (Brilliant & Achyar, 2013). According to Pereira et al. (2017), unsatisfied customers are more likely to reject the present company's attempts to build a tighter connection and try to minimize their dependency on that shop. E-customer satisfaction a customer's faith in a service that makes them feel good was a significant business indicator. Customer satisfaction resulted from a customer's purchase and experience with goods and services and determined future consumer behavior, such as repurchase and loyalty (Pereira et al., 2016). When their main needs were addressed, online shoppers were pleased (Kong & Chow, 2015). Hult et al. (2019) contended the largest issue for online buying was customer service. "E-Customer Satisfaction" can be an important factor affecting online customer loyalty. Based on the above arguments, the study proposed the following hypothesis:

H1: *E-Customer Satisfaction positively influences E - customer loyalty*

E-Logistics integrates data and regulations into a single platform to display how the organization handles logistics, technology, internet, and electronics (Imran et al., 2019). Data, technology, software, and informal rules automate supply chain logistics activities such quotation requests, shipping, warehousing, and follow-up (Gong & Kan, 2022). E-logistics reduces operational expenses, increases advertising revenue, speeds up customer service, and reduces inefficiencies (Iskandar & Ramantoko, 2018). Customer satisfaction depends on service quality (Ramanathan, 2010). A pleasant customer experience, which leads to satisfaction, helps a firm acquire and keep consumers. E-logistics customer satisfaction has numerous elements. E-Logistics service quality affects customer satisfaction while shopping online (Liu et al., 2008) and loyalty (Bouzaabia et al., 2013). Rao et al. (2011) stated that clients who perceive inferior e-logistics service quality would order less often and have more purchasing anxiety. Retailers should evaluate LSPs' e-logistics service quality (Cao et al., 2018; Yumurtaci et al., 2018; Koufteros, 2014; Murfield, 2017). E-LQ improves client satisfaction and retention, according to Murfield et al. (2017) and Rao et al. (2011). "E-Logistics Quality" plays a significant role in influencing both online customer satisfaction and online customer loyalty. Taking into consideration the points mentioned above, the research puts forward the subsequent hypothesis:

H2a: *E-Logistics Quality positively influences E - customer satisfaction*

H2b: *E-Logistics Quality positively influences E - customer loyalty*

Gummerus et al. (2004) identified effective user interfaces and online enterprises' knowledge. Brilliant and Achyar (2013) (citing Gummerus et al., 2004) mentioned online user interfaces enhance customer-seller relations. Ethier et al. (2006) discovered that improving online customers' "environment" via the website's interface (the seller's "atmosphere") boosts sales. Thus, online users' satisfaction requires search-ability, engagement, organization, and simplicity of navigation. A good website has straightforward navigation, nice aesthetics, intelligible information, and quick page loading. Zhang and von Dran (2001a, 2001b) emphasized cleanliness for online shoppers. Liang and Lai (2000) said promotion, cleanliness, and media influence website quality. Hygiene protects consumers during transactions, while promotions make the site enticing. Multimedia enhances data presentation. Researchers assessed websites using different criteria. These measures include checking website content, presentation, customer-supplier interactions, search mechanisms, security, technical features, diverse media, and many other factors (Zhang & von Dran, 2000; Grandon & Ranganathan, 2001; Koufaris et al, 2002). "User Interface Quality" as a key determinant impacting online customer satisfaction. It is presented the following hypothesis:

H3: *User interface quality positively influences E - customer satisfaction*

"Perceived Security" (PS) of e-commerce websites is the "customer's perception of security for the entire transaction (including payment methods) and mechanisms for storing and transmitting all personal information" (Chang and Chen, 2009, p.412). Due to the increased risk of transferring sensitive information like credit card information via e-commerce sites, inadequate security measures deter prospective online shoppers. Online clients worry most about transaction security since their personal information is at danger (Brilliant & Achyar, 2013). Consumer security assumptions affect online purchasing intention. Web security may affect customer risk behavior (Al-Adwan et al., 2018). Jin and Park (2006) say consumer pleasure requires security knowledge. Online consumers appreciate secure websites. E-commerce website security may boost client trust and happiness. Full encryption, digital signatures, and third-party authentication may scientifically assure EC transaction security (Bhimani, 1996), but recent research reveal that consumers' online security perception is still a challenging challenge to tackle. There is limited study on consumer perception of internet security (Lee, 2001). Consumer security worries continue despite vendor security enforcement. PS research also suggests that educating electronic system users about security is vital.

H4: *Perceived Security positively influences E - customer satisfaction*

Yousafzai et al. (2003) defined "perceived privacy" (PP) as consumers' capacity to manage and monitor their data. To keep clients' internet trade data private, customers' confidential data is secured from future misuse by the firm (Mekovec & Hutinski, 2012). Westin (1967) showed perceived privacy as consumers knowing their personal information is protected from intrusion. Security and privacy impact customer satisfaction (Gummerus et al., 2004). Technology areas have explored privacy awareness. To maintain privacy, online shoppers submit payment card and other personal information (Belanger et al., 2002). The literature examines customers' online data security concerns. Internet companies desire secondary data control. Belanger et al. (2002, p. 249) said consumers worry about secondary data use since they have little control over whether their voluntarily online data is shared. Thus, internet privacy protects customer data. Sadeh et al. (2011) and Eid (2011) proved PP impacts customer satisfaction. Websites and shopping applications with privacy features satisfy customers. E-commerce success depends on consumer privacy. From the above arguments, the factor perceived privacy can propose the hypothesis that:

H5: *Perceived Privacy positively influences online customer satisfaction.*

According to Nicolaou and McKnight (2006), p. 335, "the user's perception of the information's reliability, accuracy, completeness, and relevance constitutes its perceived quality". Park and Kim (2003) indicated perceived information quality as users' views of a website's service or product information. Users' information, service, and function expectations determine a website's quality. Study showed information system properties impact service quality ratings. Data quality (Lee et al., 2002; Wang & Strong, 1996), information quality (Bovee, 2004), and "information integrity" (Boritz, 2004) are some of these criteria. "Perceived information quality" relates to consumers' views of an online storefront's data accuracy and timeliness. Kim and Niehm (2009) found that website content affects consumers' views of a firm. Online shoppers and service users utilize the website's information to assess product and service quality (Wang & Strong 1996). High-quality website content is crucial (Szymanski & Hise, 2000). Users get incorrect judgments from information gaps (Lukyanenko et al., 2019; 2014). The platform's information may turn consumers off. Unreliable or missing data may impair customer satisfaction (Kaplan et al., 2010; Wang, 1995). Hsu et al. (2018) discovered that accessible data availability makes online buyers happy. Yuan et al. (2013) discovered that better information makes online customers happy. Sadeh et al. (2011) discovered website usability is key to success. Online shops with reliable information will please clients. Therefore, based on the above arguments, the hypothesis of perceived information quality is proposed:

H6: *Perceived information quality positively influences E - customer satisfaction*

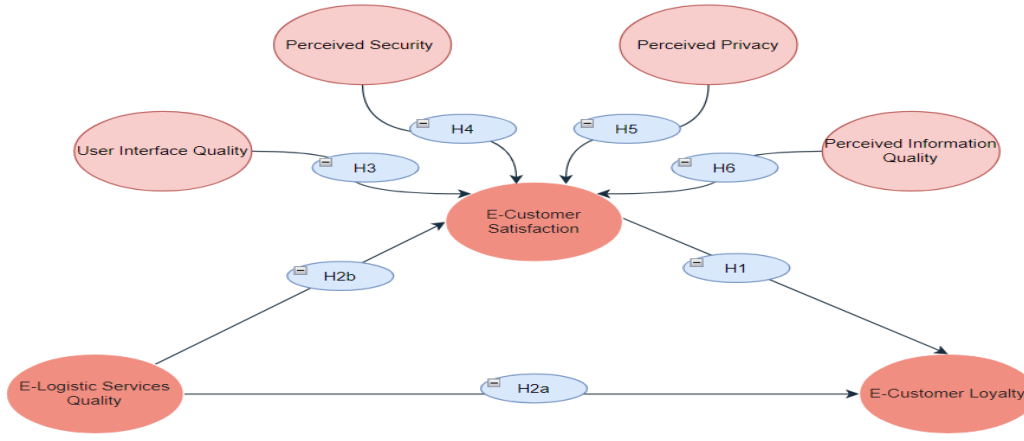

Figure 1. Initial research hypothesis

The structural model is evaluated to establish the nature of the relationship between the quality of logistic services (ELQ) and customer satisfaction (OCS) and loyalty (OCL) in online customers. The SPSS 24.0 and AMOS 24.0 software packages are utilized to process the collected data.

3. Results and Discussion

Structural equation modeling (SEM) and other recent statistical approaches were used to determine the connections between variables (Wang and Rhemtulla, 2021). The assumptions were tested using SEM performed in AMOS.24. To ensure validity and reliability, a confirmatory factor analysis (CFA) was performed. Cronbach's alpha Table 1 provides a summary of load intervals and confidence estimates for each construct, including: logistics

service quality (0.910), customer satisfaction (0.910), loyalty (0.910), user interface quality (0.841), security perception (0.821), privacy perception (0.843), and information quality (0.868). The correlation between the observable and latent variables is robust, since all Cronbach's alpha values are more than 0.7 (De Leeuwet al., 2019).

Table 1. Factor loading and the Cronbach's α estimates (Cronbach's Alpha)

	E-Logistics quality_ELQ (Cronbach's Alpha)	**0.910**
ELQ1	Packaging quality	0.905
ELQ2	Delivery staff service attitude	0.907
ELQ3	Up-to-date information	0.905
ELQ4	Convenient service 24/7	0.905
ELQ5	Compared to traditional retailers, e-commerce has/had satisfied the needs	0.906
ELQ6	Satisfaction with unique needs	0.904
ELQ7	Receive the right product at the right time	0.904
ELQ8	Trace transporting process and timely informed him/her	0.905
ELQ9	Availability of message areas for customers to make comments and suggestions	0.905
ELQ10	Safe and secure	0.906
ELQ11	Knowledge to answer all queries	0.901
ELQ12	Readiness to respond to customer's inquiries	0.903
ELQ13	Customized the product/service for a specific customer	0.902
ELQ14	Accurate information about the product	0.901
	User interface quality_UIQ (Cronbach's Alpha)	**0.843**
UIQ1	The website is easy to use	0.810
UIQ2	The information on the website is attractively displayed	0.795
UIQ3	The website is visually appealing	0.780
UIQ4	The website does increase my search effectiveness	0.816
	Perceived security_PS (Cronbach's Alpha)	**0.858**
PS1	The website has a mechanism to ensure the safe transmission of its users' information	0.829
PS2	The website has sufficient technical capacity to ensure that the data I send cannot be modified by hackers	0.806
PS3	Purchasing on the website will not cause financial risk	0.823
PS4	The electronic payment on the website is safe	0.820
	Perceived privacy_PP (Cronbach's Alpha)	**0.868**
PP1	The website abides by personal data protection laws	0.820
PP2	The website only collects users' data that are necessary for its activity	0.828
PP3	The website does not provide my personal information to others without your consent	0.835
PP4	I feel safe when sending my personal information to the website	0.843
	Perceived information quality_PIQ (Cronbach's Alpha)	**0.847**
PIQ1	The information on the website facilitates buying the products or services that it sells or markets	0.796
PIQ2	The website necessarily has to provide up-to-date product and service information	0.803
PIQ3	The website provides relevant product/service information	0.793
PIQ4	The website presents information that is easy to understand	0.830
Online customer satisfaction_OCS (Cronbach's Alpha)		**0.841**
OCS1	The performance of the website meets my expectation	0.788
OCS2	The website must have sufficient experience in the marketing of the products and services that it offers	0.778
OCS3	The website knows its users well enough to offer them products and services adapted to their needs	0.816
OCS4	The website must have the necessary resources to carry out its activities successfully	0.812
	Online customer loyalty_OCL (Cronbach's Alpha)	**0.821**
OCL1	I will increase shopping on e-commerce platforms	0.827
OCL2	I do recommend that others use electronic commerce services	0.751
OCL3	My preference for electronic commerce would not willingly change	0.756
OCL4	Changing my preference for electronic commerce requires major rethinking	0.758

Source: Field Survey Data, 2023

Table 2's analytical findings reveal a clustering and disaggregation of variables across components compared to Table 1. Furthermore, ELQ4, ELQ7, ELQ9, and OCL1 are not included in the findings of the CFA analysis. This indicates that the variables make a negligible contribution to the model or have a low correlation. The results of this research relied heavily on the perspectives of Gen-Z consumers and confirmatory factor analysis (CFA), with the latter yielding new components based on the aforementioned data gathering and variable separation procedures. This finding is consistent with what we know about Gen-Z and how they talk about the impact poor E-logistics service quality has on their happiness and loyalty. Combining the variables PS1, PS2, PS3, and PS4 from the perceived security factor with the variables PP1, PP2, PP3, and PP4 from the perceived privacy factor yields a new component, POS (Perceived Online Safety). E-logistics quality (ELQ) and COS office personnel capability are the two components of the E-logistics quality factor. The new online customer satisfaction variable is a combination of the two previous components, perceived information quality and customer satisfaction (with the company's website) overall. The standard of the user interface has not altered. By include formative elements, the study more accurately represents the opinions of its participants, allowing for a richer understanding of the interplay between its many components. This is a departure from, and an addition to, the prior research in this area. These novel considerations are crucial for expanding our comprehension of the model and its underlying relationships.

Table 2. Scale of factors and test parameters in confirmatory factor analysis (CFA)

Items	**Factors**					
	1	2	3	4	5	6
Perceived online safety (POS)						
PP4	0.893					
PP1	0.800					
PS4	0.786					
PS2	0.785					
PS3	0.784					
PP3	0.765					
PP2	0.735					
PS1	0.631					
Online customer satisfaction (OCS)						
PIQ3		0.829				
OCS4		0.799				
PIQ4		0.759				
PIQ2		0.737				
OCS2		0.729				
PIQ1		0.667				
OCS1		0.574				
OCS3		0.526				
Capacity of office staff in e-logistic service center (COS)						
ELQ2			0.748			
ELQ3			0.733			

Items	Factors					
	1	2	3	4	5	6
ELQ8			0.702			
ELQ5			0.677			
ELQ6			0.575			
ELQ1			0.504			
User interface quality (UIQ)						
UIQ2				0.792		
UIQ3				0.760		
UIQ1				0.693		
UIQ4				0.638		
E-logistic quality (ELQ)						
ELQ12					0.888	
ELQ13					0.751	
ELQ11					0.658	
ELQ14					0.649	
Online customer loyalty (OCL)						
OCL4						0.837
OCL3						0.772
OCL2						0.650
Parameters of test						Result
Kaiser-Meyer-Olkin (KMO)						0.967
Cumulative % (Initial Eigenvalues)						64.16
Bartlett's Test of Sphericity (Sig.)						0.000
Initial Eigenvalue						1.004

Source: Field Survey Data, 2023

The new research hypotheses are presented as follows:

H1: *E-Customer satisfaction positively influences E - customer loyalty*

H2a: *E-Logistics quality positively influences E - customer satisfaction*

H2b: *E-Logistics quality positively influences E - customer loyalty*

H3: *User interface quality positively influences E - customer satisfaction*

H4: *Perceived online safety positively influences E - customer satisfaction*

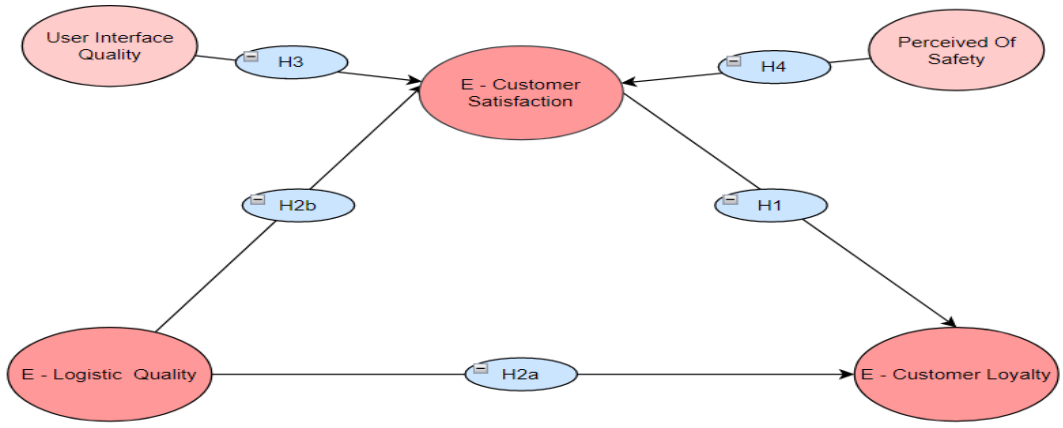

Figure 2. Official research hypothesis

Values in Table 2 for factor loading that are more than 0.5 are considered to be valid (Al-Lozi et al., 2018; Sung et al., 2019). Rimkeviciene et al. (2017) suggested a comparison method for evaluating covariance-based SEM's discriminant validity. All scores are within the acceptable range above 0.5, as determined by the Kaiser-Meyer-Olkin (KMO) test, which is used to examine measures of relationship performance and establish whether factor analysis for the scale is adequate. In that analysis, the KMO value needed to be more than 0.5 to be judged significant (0.967). The study also took out any component that had an eigenvalue larger than one thousand. Bartlett's test allows us to understand whether the variables in the factor are connected. Bartlett's test shows a statistically significant correlation between the observed variables in the factor (sig Bartlett's Test 0.05 (0.00)). The level of relationship between the factors and the observed variables is shown by the fact that all seven factor loading coefficients are higher than 0.50.

Once a weighted average has been calculated for each multivariate construct, the measurement procedure is complete. The SEM definition has been bolstered by a recommendation from the EFA. Items are recommended to be placed within the recommended dimensions (Figure 3) for evaluation. To evaluate the usefulness of the data sets utilized in this investigation, this study performed Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) using the statistical software program SPSS and AMOS version 24.0. Multiple analyses were conducted to determine the data sets' usefulness for the model. Using the revision index, the study connected the covariance between elements E1 and E3. Figure 2 displays the covariance correlations between E3 and E5, E4 and E8, E12 and E14, and E20 and E21, E15 and E13. This study discovers findings that are consistent with the prior ones when we include these new sets of variables.

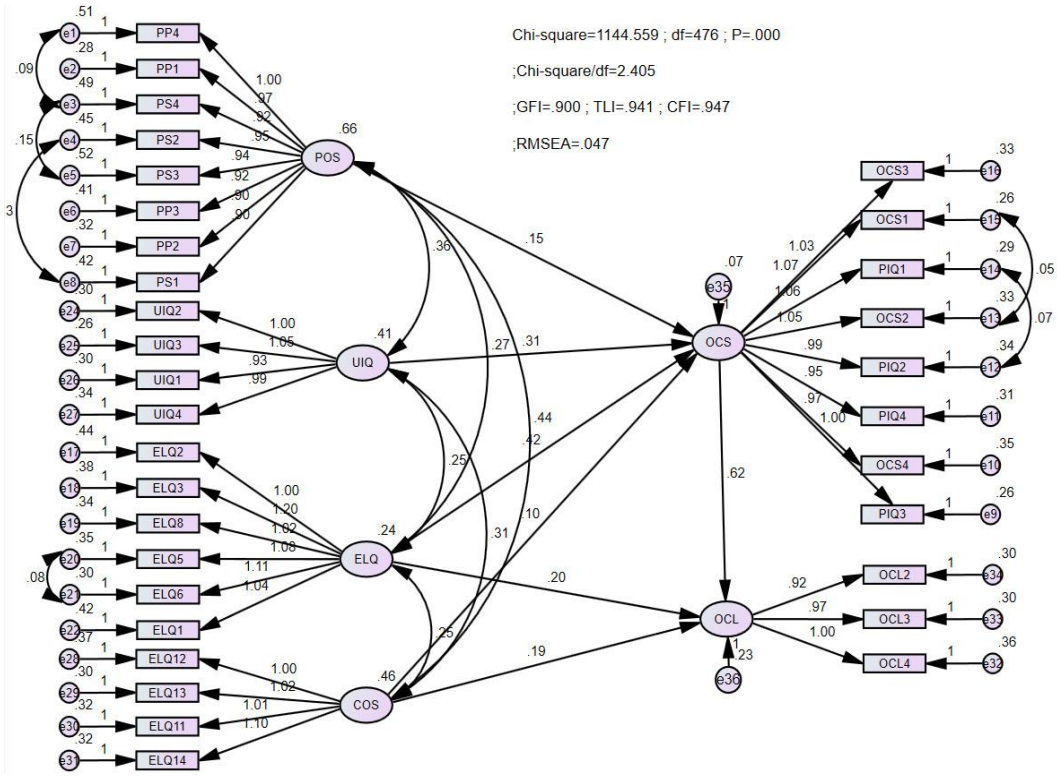

Figure 3. SEM Model E-LSQ, online customer satisfaction and loyalty

A fit-generated structural model was developed once the investigation was finished; it had a p-value of 0.000 (p-values less than 0.01 are deemed significant), a chi-square/df value of 2.405, and a goodness-of-fit index (GFI) of 0.900 (more than 0.800). Baumgartner and Homburg (1995) indicate that although GFI cannot be less than 0.9, a value of 0.8 is still regarded acceptable. In this study, the GFI value is 0.900. Similarly, results such as a root mean square error of approximation (RMSEA) of 0.047 (less than or equal to 0.080) and a Tucker-Lewis index (TLI) of 0.941 (>0.900) are all considered to be within acceptable ranges. In light of these findings, the research model was tested, and the outcomes confirmed the model's sufficiency (Table 3).

Table 3. Model fit indicators in SEM

Indicators	Cut-off values	Calculated values	Conclusion
Chi-square/df	≤ 3.000	2.405	Fit
CFI	≥ 0.900	0.947	Fit
GFI	≥ 0.900	0.900	Fit
TLI	≥ 0.900	0.941	Fit
RMSEA	≤ 0.080	0.047	Fit

Source: Field Survey Data, 2023
Note: Cut-off values adopted from Yu *et al.* (2013)

Table 4 displays the significance level as R=0.812. This suggests a strong positive correlation between OCS and POS, UIQ, ELQ, and COS in the perceptions of online shoppers. The degree of satisfaction with OCS has a favorable effect on after-sales support, the perception of online safety, the perception of user competence, and the perception of staff competence, as

predicted (Table 4). We hypothesize that OCS positively affects users' perceptions of online safety, UIQ, and support received after the transaction. Table 4 indicates that there is a 0.148 level of online safety, a 0.308 level of quality in the user interface, a 0.423 level of quality in the logistical service, and a 0.104 degree of competence among employees. The P-value is less than 0.1, and all of these numbers are positive. Consistent with the results of a previous study by Eid et al. (2011), we found that this strategy had a positive effect on the degree of satisfaction felt by online consumers. In addition to expanding upon the aforementioned foundational aspects (POS, UIQ), our study also incorporates additional modern features (ELQ, COS) that are in line with modern needs and expectations. Since these considerations are more contemporary, they are more suited to the present realities and requirements.

Table 4. Factors influence on online customer satisfaction

Relationship	Estimate β	S.E	C.R	P – value	Hypothesis Result
OCS ← POS	0.148	0.037	4.013	***	Accepted
OCS ← UIQ	0.308	0.053	5.846	***	Accepted
OCS ← ELQ	0.423	0.081	5.218	***	Accepted
OCS ← COS	0.104	0.055	1.911	0.056	Accepted
R^2 = 0.812 (OCS)					

Source: Field Survey Data, 2023

Note: *, **, and *** are levels of significance at $P < 0.05$, $P < 0.01$, and $P < 0.001$, respectively.

OCS = 0.148 POS + 0.308 UIQ + 0.423 ELQ + 0.104 COS (1)

The efficacy of online customer satisfaction is shown by Equation (1), which highlights the importance of four factors (perceived online quality, user interface quality, logistics service quality, and staff competency in E-logistic service center). Perceived online quality, user interface quality, logistical service quality, and staff capacity in E-logistic service center have a favorable effect on customers' satisfaction, as shown by the original sample value of 0.148; 0.308; 0.423; 0.104.

This finding contributes to verify prior findings. According to SEM regression, "the quality of E-Logistics services plays an important role in customer satisfaction when making online purchases" (Liu et al., 2008). E-logistics quality influences customer satisfaction (Murfield et al., 2017; Rao, 2011). Barshan et al. (2017) found that pampered customers return. Most research agree that good service keeps customers happy (Gil et al., 2008). Wang (2015) benefits from customer-satisfied logistics. Yumurtac et al. (2018) found that after-sales support boosts client loyalty. Liu et al. (2010) discovered that post-sale service satisfaction reflects service quality. Kilibarda and Andrejic (2016) found that rating the after-sale help business favorably enhanced customer satisfaction. Politis et al. (2014) related after-sales support, service quality, and customer behavior. Lasserre (2017) suggests that after-sales support may boost e-commerce consumer happiness.The research reveals that E-Logistics quality influences online purchasers' experiences and that effective after-sales service offers enterprises an edge.

This research demonstrated that good user interfaces increase consumer satisfaction. This result is similar with the past researches. For example, Hidayat et al. (2016) found that product user interface trumped reputation for customer happiness. Gummerus et al. (2004) said a well-designed user interface may show online companies' knowledge and trustworthiness. Brilliant & Chyar (2013) recommend updating the website's user interface to increase buyer-seller

communication and consumer satisfaction. Ethier et al. (2006) found that user-friendly websites may boost revenue. Easy search, interaction, organizing, and navigation are included. Website aesthetics impact cleanliness and user enjoyment, Zhang, von Dran, Small, and Barcellos found. Promotion, cleanliness, and media impact website quality. A.S. Al-Adwan et al. (2002) found that practicality and simplicity increased consumer confidence. These studies imply beauty, simplicity, utility, clear organization, data security, and information quality may increase consumer satisfaction. Website quality and attractiveness depend on advertising and maintenance. The interface has improved online commerce and customer confidence.

This customer satisfaction assessment is unique. Security and privacy affect consumer satisfaction, according to Chang and Chen (2009). The study used PS and PP to demonstrate how "perceived online safety" (POS) affects customers' satisfaction. Our investigation confirmed Brilliant and Achyar (2013)'s finding that privacy makes consumers satisfied. PS and PP help e-commerce succeed. Information system researchers have shown that end-user security knowledge is crucial. Yousafzai et al. (2003) describe privacy awareness as online data protection. (Mekovec & Hutinski, 2012). Security and privacy affect customer satisfaction (Gummerus et al., 2004). Belanger et al. (2002) evaluated customers' worries about providing personal and financial data online. Online data security literature exists. Online enterprises must protect secondary data. Since clients have little influence over secondary data usage, Belanger et al. (2002, p. 249) raised concerns. Online privacy laws restrict user data. Sadeh et al. (2011) and Eid (2011) validated PP's effect on customer satisfaction. Secure internet buying has helped firms please customers. Internet shoppers' privacy is becoming important.

No previous study has examined how staff competence affects online customer satisfaction because it mixes PS and PP. Research on staff competence and online consumer interactions may benefit others. Few research have addressed this topic. Online shoppers' experiences are affected by four primary aspects. Understand every question first. This demands a deep grasp of the company's offerings and the ability to communicate them to customers. The poll found that competent and friendly personnel make satisfied consumers. Next is fast customer service. Well-trained, prepared, and fast-responding staff may make customers happier. Staff attentiveness and preparation build customer confidence.Third, we customized our services for each customer. Online shops require more personalization than ever. Employees that go above and beyond for consumers build customer loyalty. Fourth and last was product description accuracy. Digital comparisons and alternatives provide customers more choices. Accurate product descriptions increase sales and customer satisfaction. This study covers these concerns. Online customer help is planned. The research found that these factors greatly affect online buyers' pleasure and may help companies build trust with their customers, stand out in a competitive market, and succeed.

Table 5. Factors influence on online customer satisfaction online customer loyalty

Relationship	Estimate β	S.E	C.R	P – value	Hypothesis Result
OCL ← OCS	0.621	0.113	5.507	***	Accepted
OCL ← ELQ	0.204	0.137	1.490	0.136	Not accepted
OCL ← COS	0.192	0.077	2.486	0.013	Accepted
R^2 = 0,584 (OCL)					

Source: Field Survey Data, 2023

Note: *, **, and *** are levels of significance at $P < 0.05$, $P < 0.01$, and $P < 0.001$, respectively.

OCL = 0.621 OCS + 0.192 COO (2)

According to the findings of the research shown in Table 5, there is a correlation that can be characterized as both positive and considerable between online customer loyalty (OCL), online customer satisfaction (OCS), and staff competence in e-logistic service center (COO). According to the available research, online customer loyalty has an impact not only on the enjoyment of consumers but also on the productivity of businesses. As a result, the study hypothesizes that the level of online customer loyalty has a positive correlation with the level of staff expertise. According to Table 5, the connection between online customer loyalty (OCL) and online customer satisfaction and staff competency are 0.621 and 0.192, and the significance level (P-value) for this correlation is 0.00, which is less than 0.01.

In growing countries like Vietnam, buyers are more loyal to online businesses that assure their satisfaction (Beg et al., 2018; Guo et al., 2012). If shoppers want to retain consumers, Ndubisi and Wah (2007) advised understanding what they want. Cerri (2012) also highlighted that brands require a unique offering and long-term customer relationships to build loyalty. Yoo and Bai (2013) suggested that business managers focus on customer happiness and service to understand repurchase behavior and loyalty. Yen et al. (2022) and Phan et al. (2020) found several variables affect customer satisfaction and loyalty. These include need identification, website staff technical help, and customer care. In Vietnam's young market, after-sale service excellence builds brand loyalty. Choi et al. (2013) also argued that customer satisfaction is a comprehensive measure of product and service quality. Like traditional markets, e-commerce success is measured by buyer-seller satisfaction.In conclusion, pleased internet shoppers are more likely to return. By meeting customer needs, providing excellent products and services, improving after-sales assistance, and building lasting relationships, businesses may boost customer loyalty.

This academic study emphasizes staff competency's role in maintaining online consumers' four most important traits. Knowledge and expression first. Experienced employees who can adequately convey the company's services are appreciated. When a company's personnel can meet all their demands and provide accurate information, customers feel supported and trust it. The second concern is response time. Staff are ready to assist clients. Being prepared and responsive helps build client trust and relationships. Third, customization. Internet sellers now require personalized service. When informed and attentive staff members meet their demands, customers are more loyal and attached to a firm. Finally, digital alternatives and comparisons give customers greater flexibility. Employees who answer consumers' inquiries honestly and informatively build customer loyalty. In conclusion, a company's experience, communication skills, timeliness, capacity to tailor products/services, and availability of accurate information affect online consumer loyalty. This research shows that these four factors influence customer loyalty.

Conclusion

First, E-logistics has changed drastically. E-logistics quality affects Gen-Z customers' satisfaction and loyalty. E-logistics makes global business-to-consumer communication easier. Online buying brings logistical challenges and opportunities. E-logistics has become widespread and seen as a competitive advantage in today's globally distributed workplace and market. To improve customer satisfaction, companies worldwide are reassessing their supply chains and other procedures. Businesses must meet Gen-Z's needs. This study examines how

electronic logistics quality (UIQ, PS, PP, and PIQ) affects Mekong Delta youth satisfaction and loyalty. Technology allows firms to meet consumers' requirements. Electronic logistics may improve production, comfort, and service. Real-time monitoring, automated notifications, and optimized mobile experiences may make Gen-Z consumers satisfied.

Second, research, academic papers, and journals have solely focused on e- logistical service quality, consumer satisfaction, and loyalty. Thus, a hypothesis on Gen-Z's loyalty and happiness with e-logistics quality is needed. Gen-Z, the next generation of customers, leaders, and cultural shapers, is a marketable population. It shows that e-logistics quality affects young consumers' satisfaction and loyalty. E-logistics enterprises must grasp millennial loyalty to flourish in these industries.

Third, E-Logistics education and training must be examined to correctly administer the system. Data analysis and processing may improve service quality and operational efficiency for well-trained e-logistics workers. E-commerce stimulates the supply chain. It impacts the supply chain, according to our research and case studies. E-Logistics' quick growth will affect future customers' satisfaction and loyalty.

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