GEN Z PERSPECTIVE OF E-COMMERCE LOGISTICS SERVICE QUALITY ON HOME DELIVERY AFTER PANDEMIC: SEM APPROACH TO SATISFACTION OF CUSTOMER AND LOYALTY

R. MALLIESWARI*, NIHARIKA MISHRA AND R. JEEVITHA

Ramaiah Institute of Management, Bangalore – 560054, Karnataka, India

✉ mallieswari@msrim.org

ABSTRACT

With recent technological advancements, internationalization, and, of course, the epidemic of COVID-19, the number of electronic retail planning activities has grown rapidly. But the goal of this research is to examine how Gen Z perceives the quality of electronic retail logistics services for home delivery during a pandemic and to pinpoint the aspects of electronic retail logistics service quality that influence the Satisfaction of customers. Additionally, it seeks to discover whether there exists a relationship between the degrees of consumer delight and brand adherence among those Gen Z customers who shop online. An email-based survey was used to gather data from 302 online shoppers in Bangalore, India. The association between the selected factors has been investigated using Structural Equation Modelling (SEM). Customers are more likely to be satisfied when orders are delivered on time, in good condition, accurately, and without difficulties. Customer loyalty and Satisfaction of customers were found to be positively correlated.

INTRODUCTION

To remain competitive in the digital marketplace, businesses today must endlessly progress the superiority of the offerings they provide consumers while also enabling more interactions. More businesses and consumers will embrace online purchasing in the coming years as a consequence of technological improvements, internationalization, and the coronavirus disease 2019 epidemic. E-commerce has completely changed how individuals live their lives and how society functions by making a number of previously thought-impossible operations possible while also boosting productivity and cutting costs (Qin, 2009). Consumers adopt Internet shopping for all their basic buying requirements. COVID-19 began in the midst of a global economic downturn and a drop in industrial output, but unlike many other industries, the annual rate of growth in the virtual supply-chain management and logistics sector increased. (Neger & Uddin, 2020).

COVID-19 has boosted e-commerce growth among new companies, users (including seniors), and product lines (i.e., groceries). A UNCTAD report (https://unctad.org) claims that the epidemic has resulted in a large increase in the number of online sales. According to this survey, the two countries where e-commerce has grown most rapidly are China and Turkey. Turkey's e-commerce market grew from $9.98 billion to $14.2 billion between January and June of 2020, as per https://www.aa.com.tr. The e-commerce sector is expected to grow after the COVID-19 epidemic has passed. (Pantelimon *et al.*, 2020).

Some of the pandemic-era consumption behaviours may become the new norm, forcing shoppers to adopt unconventional purchasing strategies (Guthrie *et al.*, 2021). In comparison, purchaser demands have augmented. Customers generally consider delivery dates while making purchases and presume to get their things the subsequent day. According to a Mckinsey poll, long delivery periods caused 35% of customers to discontinue their online buying, and too long shipment durations caused 46% of potential customers to do the same (https://www.mckinsey.com).

The importance of logistics operations has grown in tandem with the volume of e-commerce, creating opportunities as well as challenges for this industry. Even global behemoths like Amazon.com, FedEx Corporation, and United Parcel Services struggled to meet rising demand on time, especially during the early stages of the pandemic (http://www.thefamuanonline.com). As a result, companies must examine their delivery, inventory, and supply chains (Roggeveen & Sethuraman, 2020). Increasing the degree to which activities are integrated is known to have a positive impact on the quality of the customer service a company provides, which in turn can help it gain an advantage over its rival (Singh, 2021). The literature lists numerous factors that influence the calibre of logistics services, but due to methodological restrictions, various studies use various constructs. Response time (Zailani *et al.*, 2018), order state (Politis *et al.*, 2014), order correctness (Chaisaengduean, 2019), and management of order inconsistencies are all included in this study since they are thought to be crucial (Sutrisno *et al.*, 2019).

Several studies have found that customers' happiness is tied to the quality of logistical services (Grant *et al.*, 2014). In today's business climate, it's more cost-effective to focus on keeping your current clientele than it is to actively pursue new ones (Javed & Wu, 2020). Therefore, it has become a critical issue and a strategic challenge for companies to maintain as much client loyalty as possible. Though some studies have found no correlation between customer happiness and loyalty (Mittal & Kamakura, 2011), the vast majority of studies have drawn this conclusion (Liao *et al.*, 2017). This research aims to identify the variables that contribute to Gen Z consumers' satisfaction and in the context of online purchases, there's a connection between delight and commitment. The connection between these elements in brick-and-mortar businesses is the subject of certain studies. On the other hand, to our knowledge, there aren't many studies looking into the connections between the aforementioned factors in e-commerce content. Insufficient research has been done on the quality of e-commerce logistics services. As a result, more research into leading variables is required (Choi *et al.,* 2019).

As previously mentioned, the rise in e-commerce volume has changed consumer behaviour and prompted a large number of new businesses to enter this industry. As a result, the connections between Satisfaction of customer, loyalty, and logistical service quality variables have been reevaluated. This is the main driving force behind the authors' decision to conduct this study.

This investigation is designed to answer the subsequent study-related inquiries:

1. What variables impact consumer happiness (Satisfaction) and the ability of e-commerce logistics services?
2. Is there a connection between consumer loyalty and satisfaction in the e-commerce sector environment?

REVIEW OF LITERATURE

Home delivery is the foundation of a successful e-supply chain system since the introduction of electronic commerce, or e-commerce. (Agatz *et al.*, 2011) with the intention of offering quickness, comfort, and quality. A top-notch home delivery service guarantees that an online retailer can incorporate responsiveness, convenience, care, quality, and a seamless customer experience. This kind of ability can give you the upper hand over self-pickup and in-store shopping. Home delivery services are simply defined as a firm's delivery activity (Yamoto, 2007) or services provided in which goods and products are dispatched to customers' doors (Kassim & Abdullah, 2010).

LOGISTICS SERVICE QUALITY (LSQ)

Customers are more likely to be loyal to a company that consistently provides outstanding service. Therefore, researchers and those who are curious about service quality. Businesses need to learn how customers rate their service quality in order to make adjustments for the future. Logistics gives companies the chance to differentiate themselves from their competitors (Leuschner & Lambert, 2016). On the other hand, comparing customer perceptions and expectations leads to the enhancement of the quality of logistics services (Huynh *et al.*, 2020).

Customers' perceptions of quality might fluctuate, so it's critical to properly pinpoint the factors that affect it. Depending on the type of service, several elements of service quality exist (Chaisaengduean, 2019). In order to improve the quality of supply chain that strongly influence the value of customers from the items they purchase, it is essential to manage customer expectations while also improving the logistic service's tangible components (Saura *et al.*, 2008).

SATISFACTION OF CUSTOMER

Globalization has grown significantly over the last few decades and now influences corporate strategy and organizational policy. Satisfaction of customers is seen as vital and developing into a fundamental component of corporate strategy as organizations gain clients by successfully competing in an increasingly competitive global market (Chin *et al.*, 2013). Since logistical activities benefit customers in terms of time and space, they have an impact on Satisfaction of customer (Mentzer *et al.*, 2001). It is positively correlated with the caliber of the products or services that are provided to the consumer (Yeo *et al.*, 2015). Customers expect all vendors to at least deliver the product, hence the effectiveness of delivery will have a higher effect on customer dissatisfaction than on satisfaction (McKnight *et al.*, 2017).

Satisfaction of customer is the level of satisfaction customers have with a company's products, services, and expertise (Priyanka & Monica, 2018). If businesses improve the quality of their current offers to supply services that satisfy customers' requests by anticipating client wants, they will be able to keep their place in the market and gain a competitive edge (Chen *et al.*, 2019). Satisfaction of customer has been shown in the literature to be positively impacted by the quality of logistics services (Suresh *et al.*, 2020). Customer expectations in different industries for distribution quality of services elements may have an impact on Satisfaction of customer levels (such as punctuality). Customers and their preferences should be the focus of every business (Kadlubek, 2020). Logistics organizations need to understand how client satisfaction levels are impacted by these factors and how customer preferences differ across the various quality characteristics of their services (Mentzer *et al.*, 2004).

LOYALTY OF CUSTOMER

One of the key success criteria in e-commerce is customer loyalty, which boosts long-term profitability (Wu & Li, 2018). When a customer needs the same type of service again, they are more likely to think of the same source than any other. This is known as customer loyalty. Customer loyalty can range from being wholly devoted to a business to never considering utilizing them again (Gremler & Brown, 1996). A "loyal" customer is one that uses a service frequently, has a positive experience each time, and would never contemplate switching to a different supplier. Extremely disloyal customers are those that have terrible views toward their supplier, won't ever use them again, and are willing to test other providers.

Because of the increased competition, businesses prioritize maintaining long-lasting connections with their current clients and boosting their loyalty above bringing in new ones. Customer engagement is widely acknowledged as a strategy to achieve long-term success because acquiring new consumers is far more expensive and time-consuming than keeping current customers (Soh *et al.*, 2015). 20th issue of Journal of Electronic Commerce in Organizations, success (Jang & Kim, 2012). Because of this, businesses must raise the quality of their services to outperform their rivals and retain clients (Soh *et al.*, 2015). With lower expenses and a larger market share than their rivals, businesses with long-term consumers can outperform them financially. In order to develop deeper and more enduring associations with shoppers and eventually win and keep their loyalty, businesses are finding that logistics services are one of the most useful tools available (Jang *et al.*, 2014). According to studies in logistics, operational factors like customer service and purchasing patterns are positively impacted by relational factors like communication and responsiveness as well as operational factors like product availability, status, delivery reliability, and speed (Stank *et al.*, 1999). Customer loyalty is impacted by the quality of the logistics service, according to prior studies (Fernandes *et al.*, 2018). Additionally, it was shown that Satisfaction of customer, which is a direct or indirect result of the quality of logistics services, influences customer loyalty (Rachmawati & Agus, 2020).

DETERMINANTS INFLUENCING THE QUALITY OF LOGISTICS SERVICES

TIMELINESS

The development of technology and the globalization of commerce have facilitated greater access to items for today's consumers. These customers don't want to be kept waiting, thus they count on their orders to be completed promptly. Timeliness is one of the first criteria of a logistics service's excellence that is cited in the literature. It is described as the prompt fulfilment of customers' orders (Zailani *et al.*, 2018). The frequency of orders being delivered after the expected time, however, is how other authors describe timeliness (Politis *et al.*, 2014).

Timeliness is closely tied to the method and efficiency of receiving, sorting, and transmitting, particularly when choosing the route of conveyance (Yang & Wang, 2019). The four characteristics that can be used to gauge timeliness are the total logistics cycle time, total production cycle time, delivery cycle time, and new demand reaction time (Garcia *et al.*, 2012). The entire distribution process cycle is the typical amount of time it takes from when an order is placed until it reaches the client. The whole manufacturing cycle time is the typical span of time between product conception and final shipment. Time spent loading and unloading trucks and waiting in traffic are factored into the total delivery cycle time. New demand response time is the average amount of time it takes for a provider to respond to a request for service (Gunasekar, S *et al.*, 2021). Numerous studies across numerous industries have found a positive correlation between Satisfaction of customers and timeliness (Esmaeili *et al.*, 2015). Based on the above review, following hypothesis can be framed.

TIMELINESS AND SATISFACTION OF CUSTOMER ARE POSITIVELY ASSOCIATED THROUGH LSQ

CONDITION OF ORDER

Mentzer *et al.* (2001) assert that the Condition of Order refers to whether or not client orders made it to the consumer intact. The condition of the supplied goods is just as significant to the customer as their fast and thorough delivery. If the goods are not sufficiently protected during shipping, they could suffer damage. Customers expect to receive everything they ordered. If a customer does not want to

use a particular business for a prospective transaction, they are free to do so. Because of this, it is vital to identify the variables that may alter the Condition of Order (Zlatkovic, 2013). Businesses must ensure that customer orders are stored safely and efficiently due to the numerous transfers and handling activities required before a consumer receives their product. Defective products are useless to customers; hence, it is up to the manufacturer or the retailer to fix them (Mentzer *et al.*, 2001).

Things that may have an adverse effect on the Condition of the order include the packaging and the mode of transit chosen. There is a need for better delivery services to ensure the goods reach clients undamaged. Specific packaging for liquid or crystal items is one such improvement. In the event that a customer receives damaged or defective goods, they may choose to return them or cancel their transaction (Vasić *et al.*, 2021). According to earlier research (Sutrisno *et al.*, 2019), the condition of the order has an impact on the customer's satisfaction and loyalty. Customers' satisfaction with logistics services has been found to be significantly lower when they receive orders that are especially damaged. If clients receive broken goods, they will be upset, and the business will spend more money to retrieve and fix the damaged goods. Based on the above review, the following hypothesis can be framed.

CONDITION OF ORDER AND SATISFACTION OF CUSTOMER ARE POSITIVELY CORRELATED

HANDLING OF ORDER DISCREPANCY

Order discrepancy management refers to how well a company handles any discrepancies that come up during the order fulfilment process after receiving a customer's order. It includes several distinct features, including making it simple to return the wrong goods and to report an inconsistent order to the logistics provider. If a consumer complains about inaccurate, unsatisfactory, or inferior goods, the company takes action to improve the client's perception of the calibre of the logistics service (Mentzer *et al.*, 2001). Processing order discrepancies can be time-consuming and costly for the business. Product returns are inevitable in today's fiercely competitive market, but return management may help businesses reduce costs, identify areas for growth, strengthen relationships with consumers, and support long-term progress (Chen *et al.*, 2017). To avoid hurting sales or Satisfaction of customers, online retailers must manage the flow of returned goods from customers (Walsh *et al.*, 2016).

The effectiveness of the reporting process and how successfully order errors are handled are the subjects of several studies in the literature. (Kilibarda *et al.*, 2019) Retailers perceive shipping and return procedures such as having an impact on Satisfaction of customers and loyalty rather than as being necessary (Vakulenko *et al.*, 2019). It has been found that a company's ability to manage product returns significantly affects how devoted its customers are (Ramanathan, 2011). Post-delivery services as product swaps, returns, and cash reimbursements in online commerce, customer happiness and confidence in these services greatly mediate consumer loyalty's repurchase intention (Javed & Wu, 2020).

Customers place importance on being able to readily return things due to potential colour and size incompatibilities, especially for clothing items (Zhang *et al.*, 2015). Customers sometimes feel disappointed and unsatisfied even though the logistics provider has done its best to address irregularities (Sutrisno *et al.*, 2019). Handling of order discrepancy has been proven to be beneficial in helping clients gauge the quality of the logistics service, according to numerous research (Masudin *et al.*, 2020). The management of order discrepancies and Satisfaction of customers were discovered to be

positively and strongly connected (Gaudenzi *et al.*, 2021). Based on the above review, the following hypothesis can be framed.

SATISFACTION OF CUSTOMER AND HANDLING OF ORDER DISCREPANCIES ARE POSITIVELY CONNECTED

ASSOCIATION BETWEEN CUSTOMER LOYALTY AND SATISFACTION OF CUSTOMER

Satisfaction of customers with a supplier often has an impact on how loyal they are (Lewin, 2009). Customers might not stay with the company even when they are happy with the product or service, specifically if they are offered other opportunities. On the other hand, it has also been shown that a dissatisfied customer would remain loyal to the company if they have no other choice. Shopper loyalty and preference are indisputably two key behavioural consequences that every service company strives to achieve (El-Adly, 2019). When a firm's product or service outperforms its customers' expectations, it would be proper to discuss Satisfaction of customers. A consumer would also be considered loyal if they frequently use the same company to acquire their goods or services (Meesala & Paul, 2018). The company's profit is a reflection of successful and lasting relationships with customers, which are typically the outcome of client happiness brought on by the calibre of service provided to clients (Kadlubek, 2020).

The degree to which customers are satisfied or dissatisfied with their purchase may affect how they behave going forward. Customers are more likely to repurchase a product if they are delighted with it the first time. Additionally, satisfied customers are more inclined to tell others about the company. Many marketing professionals claim that "happy consumers make for the best advertising" as a result of this. Customers have a number of choices if they are unhappy with a purchase. They can refuse to use or return the goods, voice their unhappiness to the company in public, and take a specific action like not buying it again or warning their contacts. As a result, e-commerce companies must increase customer pleasure, enhance the purchasing experience, and influence customers to carry out more moral post-purchase behaviours (Luo *et al.*, 2020).

Customer happiness has a significant impact on corporate performance and can lead to increased customer loyalty (Lewin, 2009). Oliver (1999) emphasized that while satisfied customers are typically loyal, contentment is not a requirement for loyalty. According to this author, it's critical to consider how customer happiness affects loyalty in order to understand the connection between the two concepts. The same author asserts that while contentment is necessary for loyalty growth, genuine loyalty emerges as a result of a confluence of perceived product quality, social connections, and potential interactions.

In previous research, it was discovered that Satisfaction of customer had a mediating role among customer loyalty (Javed & Wu, 2020), that it directly influenced consumer loyalty (Gautam & Sharma, 2021), and that it had a positive significant association with repurchase intention (Choi *et al.*, 2019). Contrarily, loyalty and satisfaction are not necessarily related. According to this author, buying products from a firm does not signify loyalty (Narayandas, 2005) found. Customers should and will be treated well by businesses, increasing customer loyalty over time. Consumer loyalty is not much impacted by how satisfied customers are with retail services. Customer loyalty is mostly dependent on the effectiveness and satisfaction of the services provided. However, lifelong loyalty to a company is uncommon among today's consumers. In fact, their level of happiness with goods or facilities is likely to last till they come across a rival good or service with better quality and a lower price (Singh & Saini (2016). Based on the above review, the following hypothesis can be framed.

CUSTOMER LOYALTY AND SATISFACTION HAVE A POSITIVE RELATIONSHIP THROUGH LSQ

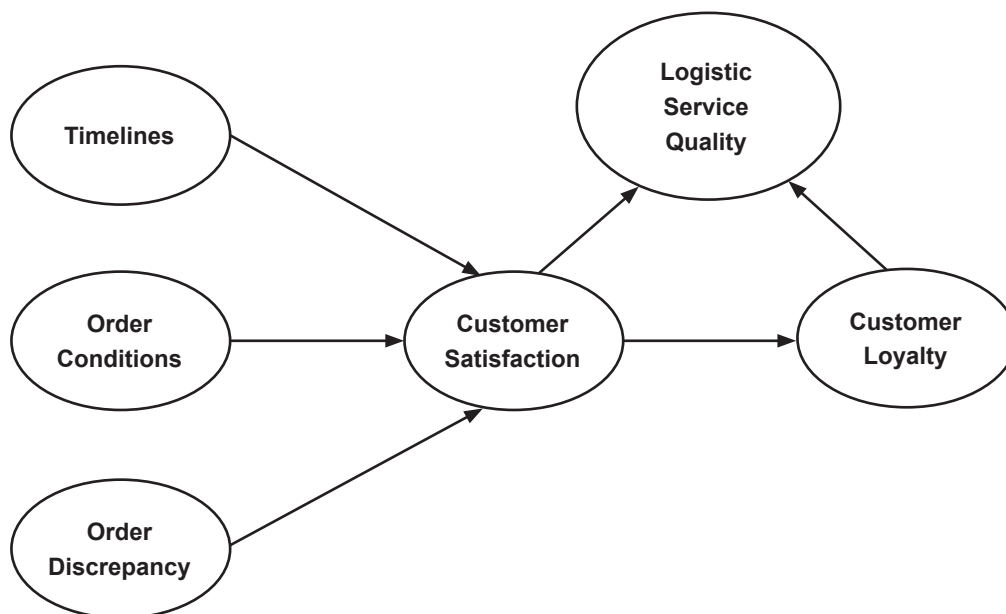The discussions presented in Figure 1 served as the foundation for the research model.

FIGURE 1. CONCEPTUAL MODEL.

OBJECTIVES

Given the foregoing context, the following objectives for the current investigation are established:

- Ascertain factors influencing the Gen Z perspective of LSQ on home delivery during a pandemic.
- Assess the Gen Z perspective of LSQ on home through Satisfaction of customers and Loyalty

METHODOLOGY

RESEARCH DESIGN AND DATA COLLECTION

The descriptive-quantitative technique was used as a study design. A web-based form and question-naire were used to collect the data. Due to its benefits, which include having access to a wide range of demographics and spanning a big geographic area, Internet research was regarded as the most advantageous choice because it was quick, affordable, and efficient and it is also further parallel to a virtual shopping practice. The questionnaire and covering letter detailing the objectives of the study were both provided through Google Forms.

The questionnaire utilized in this study consisted of three parts. The first portion began with a brief introduction that described the study's objectives and instructions for completing the survey ques-tionnaire. Prospective responders were requested to spend around 10-15 minutes completing a fully voluntary anonymous online questionnaire. They were also encouraged to evaluate the website where they make the majority of their purchases in order to maintain consistency between responses.

The following table (Table 1) lists the research constructs employed in this analysis.

TABLE 1. RESEARCH CONSTRUCTS EMPLOYED IN THIS ANALYSIS

Factor	Scale derived	
	Author	**Year**
Logistic service quality	Bienstock et al.	2008
	Mentzer *et al.*	2001
Condition of Order	1.Gil-Saura & Ruiz-Molina	2011
Timeliness	1.Bienstock et al.	2008
Handling of order discrepancy	1.Bienstock et al.	2008
Satisfaction of Customer	1.Gil-Saura & Ruiz-Molina	2011
	2. Stank *et al.*	1999

We selected these constructs because they represented the main process variables for the logistics service.

THE SAMPLING

Data collection involved the use of a convenience sampling method. A type of non-random sampling is one in which participants are chosen based on their convenience (Hair *et al.*, 2020). The opinion survey was distributed on social networking sites using this sample strategy in order to reach the target demographic. The group was then approached and asked to send the survey link to their contacts. To put it another way, a "chain connection" sharing methodology was adopted.

The study's participants are members of Generation Z and are based in Bangalore, India. They all engage in electronic trade. In 302 samples in total were gathered. Since incomplete survey forms were immediately removed by the researcher, there was no missing sample. Since it is unclear how many people who were eligible to reply did not due to the sampling process, the participation rate cannot be calculated. In the literature, there are various methods for determining sample size. However, 10 observations per indicator variable is the lowest (Kline, 2015). To get enough statistical power, a sample size of 240 (24*10) is needed. It was established as a result sample size of N=302, which is considerably greater than the minimum criterion.
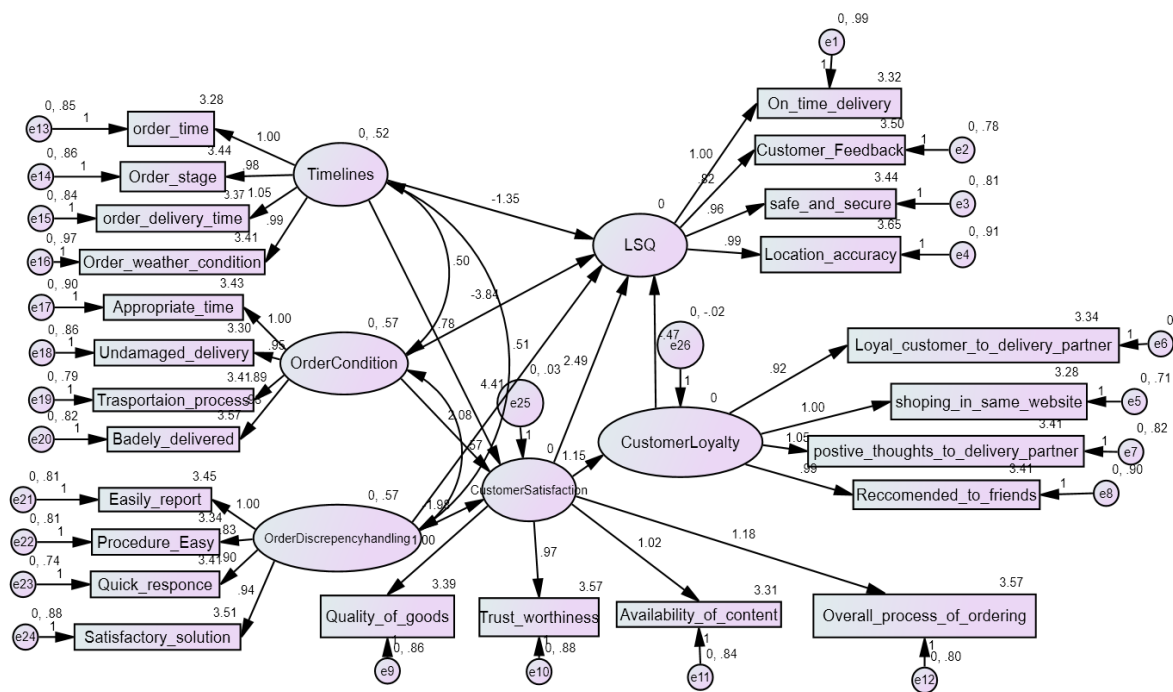
DATA ANALYSIS AND FINDINGS

SAMPLE PROFILE

Table 2 displays the sample companies' profiles. Male and female respondents made up 44.7% and 55.3% of the total respondents, respectively. Ninety-seven per cent of the participants are over the age of 18. Since 85.8% of the participants have a bachelor's degree or more, the sample is highly educated. 88.7% of participants have shopped online over a year. The majority of responded customers (41.7%) affianced in online purchases on average several days per month. 29.5% of participants work in both the governmental and private sectors. Participants from urban areas made up 59.6%, while participants from rural areas made up 40%. For online purchases, the majority of participants (44.4%) chose the UPI payment method. The majority of participants (51%) said that during the COVID pandemic, ordering things online is more affordable and practical, and 46% avoided stores out of concern for COVID 19. The majority of participants (31.5%) spend between 5% and 10% of their income on online shopping. Food (32.45%), apparel (20.31%), books (7.8%), electronics (10%), Travel (6.8%), Cosmetics (8.12%) are the most popular purchases.

TABLE-2. THE DEMOGRAPHICS OF THE RESPONDENTS

Factors	Category	Frequency	Percent (%)
Gender	Male	135	44.7
	Female	167	55.3
Age	19-21	69	22.8
	22-24	163	54
	25-27	60	19.9
	Below 18	10	3.3
Location	Rural	122	40.4
	Urban	180	59.6
Education	P.U.C	23	7.6
	S.S.L.C	9	3
	Undergraduate	141	46.7
	Postgraduates	118	39.1
	Others	11	3.6
Employment Status	Government Employee	26	8.6
	Others	14	4.6
	Part-time Employee	44	14.6
	Private ate Employee	63	20.9
	Student	155	51.3
Payment process	Payment upon delivery	92	30.5
	Credit Card	37	12.3
	Debit Card	26	8.6
	Internet Banking	13	4.3
	Payment with UPI	134	44.4
Frequency of Online shopping	Once a Month	126	41.7
	Once a Week	27	8.9
	Several times a year	37	12.3
	Twice in a Month	59	19.5
	Twice in a Week	53	17.5
Shopping Expenditure	Less than 5%	10	3.31
	5%-10%	101	31.5
	10%-15%	65	20.3
	15%-20%	56	17.5
	20% & above	70	21.9
Product Category	Food	98	32.45
	Clothing	65	21.52
	Book	25	8.28
	Electronics	32	10.6
	Accessories	24	7.95
	Cosmetics	26	8.61
	Travel	22	7.28
	Jewellary and Watch	10	3.31

The hypothesized associations were investigated using the structural equation modelling method using SPSS AMOS. It has been determined how the various aspects of Gen Z's perspective on e-commerce logistics service quality (Mediating variable) for home delivery during the pandemic would influence customer commitment and satisfaction. Each concept was given a score on a 5-point Likert scale. Tables 3-6 present the results of testing the hypotheses for each latent construct. The structural equation model is depicted in Figure 2.

(Source: Original)

FIGURE 2. STRUCTURAL EQUATION OUTPUT MODEL.

HYPOTHESIS

Co-efficient	Statistically Significance at p value
*	<0.05
**	<0.01
***	<0.001

HYPOTHESIS I: TIMELINESS AND SATISFACTION OF CUSTOMER ARE POSITIVELY ASSOCIATED

TABLE 3. SUMMARY OUTPUT OF RELATIONSHIP OF TIMELINESS AND SATISFACTION OF CUSTOMER

Dimension	Estimate	S. E	C.R	P
Order time	1.000	0.112	6.345	***
Order stage	0.982	0.113	8.703	***
Order delivery time	1.047	0.116	9.032	***
Order weather condition	0.990	0.117	8.487	***

HYPOTHESIS II: CONDITION OF ORDER AND SATISFACTION OF CUSTOMER ARE POSITIVELY COR-RELATED

TABLE 4. SUMMARY OUTPUT OF RELATIONSHIP OF CONDITION OF ORDER AND SATISFACTION OF CUSTOMER

Dimension	Estimate	S. E	C.R	P
Appropriate time	1.000	0.112	7.087	***
Undamaged delivery	0.952	0.105	9.045	***
Transportation process	0.894	0.100	8.956	***
Badly delivered	0.927	0.103	9.022	***

HYPOTHESIS III: HANDLING OF ORDER DISCREPANCY AND SATISFACTION OF CUSTOMER ARE POSITIVELY CORRELATED

TABLE 5. SUMMARY OUTPUT OF RELATIONSHIP OF ORDER DISCREPANCY AND SATISFACTION OF CUSTOMER

Dimension	Estimate	S. E	C.R	P
Procedure Easy	0.833	0.096	8.708	***
Quick_responce	0.898	0.096	9.317	***
Satisfactory solution	0.945	0.012	9.147	***
Easily report	1.000	0.018	8.456	***

HYPOTHESIS IV: CUSTOMER LOYALTY AND SATISFACTION HAVE A POSITIVE RELATIONSHIP THROUGH LSQ

TABLE 6. SUMMARY OUTPUT OF RELATIONSHIP OF CUSTOMER LOYALTY CONDITION AND SATISFACTION OF CUSTOMER

Dimension	Estimate	S. E	C.R	P
Shopping in same website	1.000	0.876	9.345	***
Loyal customer to delivery partner	0.924	0.095	9.754	***
Positive thoughts to delivery partner	1.052	0.101	10.387	***
Recommended to friends	0.990	0.101	9.817	***
Quality of goods	1.000	0235	9.832	***
Trust worthiness	0.971	0.119	8.189	***
Availability of _content	1.016	0.120	8.480	***
Overall process of ordering	1.181	0.129	9.142	***

DISCUSSION AND CONCLUSIONS

This study aimed to determine the impact that Gen Z electronic commerce users' perceptions of the quality of logistical services had on their levels of customer satisfaction through the COVID-19 outbreak. Satisfaction of customers and promptness were found to be positively correlated. Complete and dependable shipment of the purchased product to customers on the due date is what we mean by "timeliness." If the product is shipped to customers after the estimated date of effectiveness, they may not reap the benefits advertised. Complete and dependable shipment of the purchased product to customers on the due date is what we mean by "timeliness." If the product is delivered past the

specified date, the customer may not reap the product's full benefits. If this is the case, clients may decide to make their next purchase from a different business.

Satisfaction of customer and Condition of Orders were found to be positively correlated. It mandates that the requested item be sent to the customer intact and in its entirety. The products should be packaged properly to prevent damage during handling and shipping in order to achieve this. Additionally, anti-spoilage precautions should be performed while taking into account the shipping period, particularly for products with unique resistance constraints, such as food and health products. In this study, a link between handling order discrepancies and Satisfaction of customers was discovered. This conclusion is supported by earlier research (such as Sutrisno *et al.*, 2019). A few consumers are more concerned with how a business handles issues after they have placed an order than they are with how pleasant the buying process itself was. However, there are other customers who simply have no interest in how the problem is fixed so long as it is. This study's main finding is that customer loyalty is influenced by Satisfaction of customer. Furthermore, the majority of Gen Z respondents are pleased with the overall quality of logistical service provided during the pandemic. It can be used as a guideline for the companies that are using e-commerce platforms to improve their service quality.

REFERENCES

- Agatz, N., Campbell, A., Fleischmann, M., & Savelsbergh, M. (2011). Time slot management in attended home delivery. *Transportation Science*, *45*(3), 435-449. http://www.jstor.org/stable/23018537

- Chaisaengduean, K. (2019). Market orientatıon and logistics service process quality: an empirical investigation in the logistics service providers in Thailand. The ICBTS 2019 International Academic Research Conference in Vienna, 174-179.

- Chen, H., Anselmi, K., Falasca, M., & Tian, Y. (2017). Measuring returns management orientation. *International Journal of Logistics Management*, *28*(2), 251-265.

- Chen, M. C., Hsu, C. L., & Lee, L. H. (2019). Service quality and Satisfaction of customer in pharmaceutical logistics: An analysis based on Kano model and importance-satisfaction model. *International Journal of Environmental Research and Public Health*, *16*(21), 4091. PMID:31652926

- Choi, D., Chung, C. Y., & Young, J. (2019). Sustainable online shopping logistics for Satisfaction of customerand repeat purchasing behavior: Evidence from China. *Sustainability*, *11*(20), 1–20.

- El-Adly, M. I. (2019). Modelling the relationship between hotels perceived value, satisfaction of customer, and customer loyalty. *Journal of Retailing and Consumer Services*, *50*, 322-332.

- Esmaeili, A., Kahnali, R. A., Rostamzadeh, R., Zavadskas, E. K., & Ghoddami, B. (2015). An application of fuzzy logic to assess service quality attributes in logistics industry. *Transport*, *30*(2), 172-181.

- Fernandes, D. W., Roberto, G. M., & Valdir, A. V. F. (2018). Logistic service quality as a mediator between logistics capabilities and Satisfaction of customer. *Revista de Gestão*, *25*(4), 358-372.

- Garcia, F. A., Marchetta, M. G., Camargo, M., Morel, L., & Forradellas, R. Q. (2012). A framework for measuring logistics performance in the wine industry. *International Journal of Production Economics*, *135*(1), 284-298.

- Gaudenzi, B., Confente, I., & Russo, I. (2021). Logistics service quality and satisfaction of customer in B2B relationships: A qualitative comparative analysis approach. *The TQM Journal*, *33*(1), 125-140.

- Gautam, V., & Sharma, V. (2021). Customers' perceptions of online retailing service quality and their loyalty. *Academy of Marketing Studies Journal*, *25*(3), 1–19.

- Gil-Saura, I., & Ruiz-Molina, M. E. (2011). Logistics service quality and buyer–customer relationships: the moderating role of technology in B2B and B2C contexts. *The Service Industries Journal, 31*(7), 1109-1123.

- Grant, D., Juntunen, J., Jari, J., & Mari, J. (2014). Investigating brand equity of third-party service providers. *Journal of Services Marketing, 28*(3), 214-222.

- Gremler, D. D., & Brown, S. W. (1996). Service loyalty: Its nature, importance, and implications. In B. Edvardsson, S. W. Brown, R. Johnston, and E. E. Scheuing (Eds.), Proceedings American Marketing Association, Academic Press, p. 171-180.

- Gunasekar, S., Kumar, D. S., Purani, K., Sudhakar, S., Dixit, S. K., & Menon, D. (2021). Understanding service quality attributes that drive user ratings: A text mining approach. *Journal of Vacation Marketing*, *27*(4), 400-419.

- Guthrie, C., Fosso-Wamba, S., & Arnaud, J. B. (2021). Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during and after a COVID-19 lockdown. *Journal of Retailing and Consumer Services*, *61*, 102570.

- Hair, J. F., Page, M., & Brunsveld, N. (2020). Essentials of Business Research Methods (4th ed). Routledge.

- Huynh, G., Han, N. T. N., Khanh, V. T., Ngan, V. K., Tam, V. V., & An, P. L. (2020). Knowledge and attitude toward COVID-19 among healthcare workers at District 2 Hospital, Ho Chi Minh City. *Asian Pacific Journal of Tropical Medicine*, *13*.

- Jang, H. M., & Kim, S. Y. (2012). Customer loyalty and logistics service performance in maritime transport: A literature review and conceptual model. *Journal of Navigation and Port Research International Edition*, *36*(9), 753-761.

- Jang, P., Kwon, O. K., & Kim, M. (2014). The role of logistics service quality in long-term partnership development with shippers. *Supply Chain Forum: International Journal*, *15*(2), 82-108.

- Javed, M. K., & Wu, M. (2020). Effects of online retailer after delivery services on Repurchase intention: An empirical analysis of customers' past experience and future confidence with the retailer. *Journal of Retailing and Consumer Services*, *54*, 1-7.

- Kadlubek, M. (2020). Completeness meter in logistics service quality management of transport companies. *International Journal of Qualitative Research*, *14*(4), 1223-34.

- Kassim, N., & Abdullah, A. (2010). The effect of perceived service quality dimensions on Satisfaction of customer, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics*, *22*, 351-371.

- Kilibarda, M., Andrejic, M., & Popovic, V. (2019). Research in logistics service quality: A systematic literature review. *Transport*, *35*(2), 224-235.

- Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications. Available from: kuronekoyamato.co.jp.

- Leuschner, R., & Lambert, D. (2016). Establishing logistics service strategies that increase sales. *Journal of Business Logistics*, *37*.

- Lewin, J. E. (2009). Business customers' satisfaction: What happens when suppliers downsize? *Industrial Marketing Management*, *38*(3), 283-299.

- Liao, C., Lin, H. N., Luo, M. M., & Chea, S. (2017). Factors influencing online shoppers' repurchase intentions: The roles of satisfaction and regret. *Information and Management*, *54*(5), 651-668.

- Luo, H., Ma, S., Rao, J., Zheng, Z., Li, M., & Xu, H. (2020). Research on the influence of logistics service quality on post-purchase behavior in e-business. IEEE 3rd International Conference on Electronic Information and Communication Technology, 31-34.

- Masudin, I., Jie, F., & Wisayat, W. (2020). Impact of halal supplier service quality and staff readiness to adopt halal technology on halal logistics performance: A study of Indonesian halal meat supply chain. *International Journal of Agile Systems and Management*, *13*(3), 315-338.

- McKnight, D. H., Lankton, N. K., Nicolaou, A., & Price, J. (2017). Distinguishing the effects of B2B information quality, system quality, and service outcome quality on trust and distrust. *The Journal of Strategic Information Systems*, *26*(2), 118-141.

- Meesala, A., & Paul, J. (2018). Service quality, consumer satisfaction and loyalty in hospitals: Thinking for the future. *Journal of Retailing and Consumer Services*, *40*, 261-269.

- Mentzer, J. T., Flint, D. J., & Hult, G. T. M. (2001). Logistics service quality as a segment-customized process. *Journal of Marketing*, 65(4), 82-104.

- Mentzer, J. T., Min, S., & Bobbitt, L. M. (2004). Toward a unified theory of logistics. International *Journal of Physical Distribution & Logistics Management*, *34*(8), 606-627.

- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001), Defining supply chain management. *Journal of Business Logistics*, 22, 1-25. https://doi.org/10.1002/j.2158-1592.2001.tb00001.x

- Mittal, V., & Kamakura, W. A. (2011). Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research*, (38), 31-142.

- Narayandas, D. (2005). Building loyalty in business markets. Harvard Business Review, p. 131–139.

- Neger, M., & Uddin, B. (2020). Factors affecting consumers' internet shopping behavior during the COVID-19 pandemic: Evidence from bangladesh. *Chinese Business Review, 19*.

- Pantelimon, F., Georgescu, T., & Posedaru, B.-S. (2020). The impact of mobile e-commerce on GDP: A comparative analysis between Romania and Germany and how Covid-19 influences the e-commerce activity worldwide. *Informatica Economica*, 24, 27-41.

- Politis, Y., Giovanis, A., & Binioris, S. (2014). Logistics service quality and its effects on Satisfaction of customer in the manufacturing companies' supply chains. *Journal of Modelling in Management*, 9(2), 215-237.

- Priyanka, S., & Monica, B. S. (2018). Satisfaction of customer in Priya Technologies. *International Journal of Research*, *7*(12), 1143-1156.

- Rachmawati, D. Z., & Agus, A. A. (2020). E-service and logistics service quality in e-commerce, study case: Shopee Indonesia. 3rd International Conference on Computer and Informatics Engineering.

- Ramanathan, R. (2011). An empirical analysis on the influence of risk on relationships between handling of product returns and customer loyalty in e-commerce. *International Journal of Production Economics*, *130*(2), 255-261.

- Roggeveen A. L., & Sethuraman R. (2020). How the COVID-19 pandemic may change the world of retailing. *Journal of Retailing*, *96*(2), 169-171. PMCID: PMC7183942.

- Saura, I. G., Servera-Francés, D, Berenguer-Contrí, G., & Blasco, M. (2008). Logistics service quality: A new way to loyalty. *Industrial Management and Data Systems*, *108*, 650-668.

- Singh, A. (2021). Basic steps of doing research. Available from: https://ssrn.com/abstract=3925363.

- Singh, J., & Saini, S. (2016). Relationship between consumer acquisition efforts and consumer loyalty. *Kelaniya Journal of Management*, *5*(1), 1-31.

- Soh, K. L., Chin, S. H., & Wong, W. P. (2015). A theoretical model to investigate customer loyalty on logistics service providers for sustainable business performance. *International Journal of Business Performance and Supply Chain Modelling*, *7*(3), 212-232.

- Stank, P. T., Goldsby, T. J., & Vickery, S. K. (1999). Effect of service supplier performance on satisfaction and loyalty of store managers in the fast food industry. *Journal of Operations Management*, *17*(4), 429-447.

- Suresh, S., & Vasantha, S. (2020). Influence of logistics service quality among satisfaction of customer using IOT based techniques. *Materials Today: Proceedings*, 1-3.

- Sutrisno, A., Andajani, E., & Widjaja, F. V. (2019). The effects of service quality on Satisfaction of customer and loyalty in a logistics company. *International Conference on Economics, Management, and Accounting, KnESocialSciences*, 85-92.

- Vakulenko, Y., Shams, P., Hellström, D., & Hjort, K. (2019). Online retail experience and Satisfaction of customer: The mediating role of last mile delivery. *International Review of Retail, Distribution and Consumer Research*, *29*(3), 306-320.

- Vasić, N., Kilibarda, M., Andrejić, M., & Jović, S. (2021). Satisfaction is a function of users of logistics services in e-commerce. *Technology Analysis and Strategic Management*, *33*(7), 1–16.

- Walsh, G., Albrecht, A. K., Kunz, W., & Hofacker, C. F. (2016). Relationship between online retailers' reputation and product returns. *British Journal of Management*, *27*(1), 3-20.

- Wu, Y., & Li, E. Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: A stimulusorganism-response perspective. *Internet Research*, *28*(1), 74-104.

- Yamoto. (2007). The evolution of the Yamoto company [Online]. Available. http://www. kuronekoyamato.co.jp. June 2020, 2020.

- Yang, Y., & Wang, R. (2019). Research on composition and characteristics of logistics capability based on customer value. 2019 International Conference on Emerging Researches in Management, Business, Finance and Economics (ERMBFE 2019), p. 639-643.

- Yeo, G. T., Thai, V. V., & Roh, S. Y. (2015). An analysis of port service quality and Satisfaction of customer: The case of Korean container ports. *The Asian Journal of Shipping and Logistics*, *31*(4), 437-447.

- Zailani, S., Jafarzadeh, S., Iranmanesh, M., Nikbin, D., & Selim, N.I.I. (2018). Halal logistics service quality: Conceptual model and empirical evidence. *British Food Journal*, *120*(11), 2599-2614.

- Zailani, S., Jafarzadeh, S., Iranmanesh, M., Nikbin, D.& Selim, N. I. I. (2018). Halal logistics service quality: Conceptual model and empirical evidence. *British Food Journal*, *120*.

- Zhang, Q., Huang, Y., Yan, W., & Wang, Y. (2015). The impact of logistics factors on customer reviews in e-commerce. *International Journal of Multimedia and Ubiquitous Engineering*, *10*(7), 201-212.

- Qin, Z. (2009). Introduction to E-commerce. Springer, TSINGHUA University Press, Beijing.

- Zlatkovic, M. M. (2013). Survey of satisfaction of customer: The example of freight distribution center. 1st Logistics International Conference Belgrade, p. 215-220.