

# Understanding the E-Satisfaction Needs of Generation X Online Grocery Customers – An Emerging African Market Perspective

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## Keywords

Service convenience;  
E-service quality;  
E-trust;  
E-satisfaction;  
Grocery retail stores;  
South Africa

## Abstract

This study employs online relationship marketing theory and generational cohort theory to investigate the impact of service convenience, e-service quality, and e-trust on e-satisfaction among consumers using grocery apps in emerging markets. Data was collected via online questionnaires from 300 Generation X consumers purchasing groceries online in an emerging market. Structural equation modelling was utilised for data analysis. The findings confirm that service convenience, e-service quality, and e-trust significantly drive e-satisfaction among Generation X consumers using grocery apps in selected South African retailers. This research contributes to a deeper understanding of factors influencing e-satisfaction in online retail, with implications for future relational intentions. It provides valuable insights for grocery retailers in emerging markets aiming to enhance customer satisfaction and build enduring relationships amidst competitive online retail environments.

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# 1. Introduction

## 1.1. Background

In the realm of digital shopping, a recent report from Kemp (2021) reveals that 65.3% of retail customers (including Generation X) in South Africa utilise mobile applications (apps) for their online purchases (these statistics were the most current at the time of the study). Differentiating through e-service quality (e-SQ) enables e-retailers to enhance their overall competitiveness in the local online retail market (Alzoubi, Abdo, Al-Gasaymeh & Alzoubi, 2019; Anser, Tabash, Nassani, Aldakhil & Yousaf, 2023). Generation X, constituting a significant portion (over 35%) of online grocery shoppers in South Africa, considers e-SQ crucial when shopping online, which can foster a positive experience and positively influence e-trust and e-satisfaction (Alkire, O'Connor, Myrden & Köcher, 2020). Compared to previous generations, Generation X has shown higher internet adoption rates (exceeding 80% since the early 2000s) and engages in online shopping at least once every three months, encompassing groceries, electronics, apparel, and furniture (Pitts, Ng, Blitstein, Gustafson & Niculescu, 2018; Statista, 2023b). These consumers' motivation for online grocery shopping include convenience, avoiding crowds and queues, and the ability to multitask (Pitts et al., 2018).

E-SQ plays a decisive role in shaping the satisfaction of Generation X consumers in their online grocery shopping experiences (Hu & Krishen, 2019; Singh & Söderlund, 2020). Kao and Lin (2016) suggested that providing consistent, secure payment options and intuitive online platform navigation positively influences the online shopping experience and contributes to future e-satisfaction. Additionally, trust holds pivotal importance for Generation X consumers, influencing their overall e-satisfaction levels, commitment, and long-term relationships with e-retailers (Al-dweeri, Obeidat, Al-dwiry, Alshurideh & Alhorani, 2017).

Internationally, Generation X shows a preference for online purchases, particularly for appliances, furniture, and holidays (Ramírez-Correa, Grandón & Arenas-Gaitán, 2019). However, evidence indicates that Generation X in South Africa engages in less online shopping compared to younger generations, placing greater emphasis on establishing e-trust before making online purchases (Pentz, Du Preez & Swiegers, 2020; Zhuang, Lin, Zhang, Li & He, 2021). Consequently, this study aims to explore how service convenience and e-SQ impact e-trust and ultimately e-satisfaction among Generation X online grocery consumers in South Africa. Empirical studies by Faraoni, Rialti, Zollo and Pellicelli (2019) and Al-Khayyal, Alshurideh, Al Kurdi and Aburayya (2020) highlight the positive influence of e-trust on e-satisfaction for Generation X. Furthermore, Generation X consumers' online experiences demonstrate a lesser propensity to develop e-trust compared to younger generations, attributed to their later exposure to technological innovations like online shopping during adulthood (Dabija, Bejan & Tipi, 2018). Yarimoglu (2017) and Zhou, Wang, Shi,

Zhang, Zhang and Guo (2019) underscored that enhanced consumer experiences lead to increased e-satisfaction and higher purchase frequencies among Generation X.

While existing research has explored the impact of e-SQ on satisfaction (Al-dweeri et al., 2017; Demir, Maroof, Khan & Ali, 2020), scholars advocate for further investigation in emerging markets. To date, limited research has examined this critical link within the context of online grocery shopping in an emerging African market, such as South Africa. This study addresses this gap by developing an integrated framework that examines the relationships between service convenience, e-SQ, e-trust, and e-satisfaction in South Africa's online retail grocery sector.

This paper outlines the research at hand by presenting a discussion of the study's literature review, research hypotheses, and significance. This paper concludes by contextualising the study's research methodology adopted as well as outlining and discussing the findings, the managerial and theoretical implications, and limitations and scope for future research.

## **1.2. Problem Statement**

There exists a notable distinction in online grocery shopping behaviours across generational cohorts, with Generation X constituting 25% of the total online grocery customer base. According to Kaur and Shukla (2016), perceptions towards online grocery shopping vary significantly between different generations. Variations in perceptions among generations regarding service convenience, e-SQ, and e-trust have been documented (Berraies, Yahia & Hannachi, 2017; Ladhari, Gonthier & Lajante, 2019; Trabelsi-Zoghalmi, Berraies & Yahia, 2020). Consequently, understanding how these factors influence the future e-satisfaction of Generation X requires further exploration. Lissitsa and Kol (2021) emphasised that consumers' acceptance of online shopping, perceptions of e-SQ, and e-satisfaction with an e-retailer are heavily influenced by age. Therefore, Generation X harbours distinct perceptions that shape their online shopping behaviour (Chakraborty & Balakrishnan, 2017). For instance, Generation X tends to utilise various electronic devices for online shopping (Dorie & Loranger, 2020; Ngubelanga & Duffett, 2021). Moreover, Bauerová (2021) and Ponte and Sergi (2023) noted that Generation X prefers home delivery for online grocery purchases. Thus, gaining insights into the perceptions of e-SQ, e-trust, and e-satisfaction among Generation X is crucial within the South African retail sector.

Furthermore, existing literature on customer online shopping predominantly focuses on Generation Y (Kim, 2019; Ladhari et al., 2019; Pentz et al., 2020), with limited research exploring the relationships between e-SQ, e-trust, and e-satisfaction in an online retail context specific to South Africa. Therefore, this study aims to bridge this gap by examining how Generation X's perceptions of e-SQ influence their e-satisfaction in the context of South African retail grocery shopping. The research

question guiding this study is: *What impact do Generation X consumers' perceptions of e-SQ have on their e-satisfaction in the South African retail grocery context?*

### **1.3. Purpose of the Study**

The study's primary objective is to investigate the factors driving the e-satisfaction of Generation X consumers when purchasing groceries online.

In order to achieve the primary objective, the following secondary objectives are set:

- To determine the influence of service convenience on e-SQ and e-satisfaction when Generation X is shopping online for groceries through mobile apps.
- To determine the influence of e-SQ on e-trust when Generations X is shopping online for groceries through mobile apps.
- To determine the influence of e-trust on e-satisfaction when Generations X is shopping online for groceries through mobile apps.

## **2. Theoretical Overview**

### **2.1. A brief overview of the South African online grocery industry**

In South Africa, the uptake of online grocery shopping has been sluggish over the past decade. Despite an increasing trend in internet usage (74.7%) compared to previous years (Statista, 2024), most consumers still prefer traditional methods like physical stores for grocery shopping, rather than turning to e-retailers. According to Srivastava (2023), grocery retailers have encountered significant challenges in e-retailing, especially in managing the logistics of perishable foods. Simply offering an online service is complex, with devising effective strategies to retain customers posing an even greater challenge (Jung & Seock, 2017). Major South African retailers, such as Woolworths, Pick n Pay, Spar, Checkers, and Massmart, have introduced online grocery shopping options, recognising that consistent online service quality is pivotal for enhancing customer e-satisfaction. Despite the hurdles facing the online grocery industry in South Africa, there has been a noticeable growth in online purchases, as consumers adjust their spending habits due to economic pressures and seek savings on household expenses like groceries (Connecting Africa. 2023).

### **2.2. A brief overview of Generation X**

Generation X includes individuals born between 1961 and 1979 (Jang & Sung, 2021). Many people from this cohort experienced households where both parents worked or were divorced, fostering early independence (Ting, Lim, De Run, Koh & Sahdan, 2018). Key characteristics attributed to Generation

X are individualism, self-reliance, and cynicism (Chakraborty & Balakrishnan, 2017). Growing up during a period of technological infancy, these individuals often exhibit scepticism towards online shopping due to their heightened risk aversion (Lissitsa & Kol, 2021).

### **2.3. Theories grounding the study**

The study is founded on two theories: generational cohort theory (GCT) and online relationship marketing theory (ORM). The core concept of GCT suggests that individuals exposed to similar economic, political, and social events during their developmental years tend to adopt comparable ideologies, values, and behaviours (Liang & Xu, 2018; Padayachee, 2017). In marketing, generational cohorts represent a valuable segmentation approach due to the shared traits within a generation and the diversity across different generations (Eger, Komárková, Egerová & Mičik, 2021). Likewise, Chaney, Touzani and Slimane (2017) as well as Marjanen, Kohijoki, Saastamoinen and Engblom (2019) argued that the experiences, preferences, and attitudes of generational cohorts exert a significant influence on their shopping habits, whether online or offline.

In terms of ORM, the concept evolved from Berry's traditional relationship marketing theory developed in the early 1980s, emphasising the establishment and maintenance of enduring relationships in a virtual setting (Hunt, Arnett & Madhavaram, 2006). ORM theory serves as a strategic approach aimed at fostering customer e-trust, enhancing experience, e-satisfaction, and positive word of mouth both online and offline, thereby facilitating the development of profitable relationships that aid e-retailers in retaining consumers (eMarketer, 2016; Boateng, 2019; Thaichon, Liyanaarachchi, Quach, Weaven & Bu, 2019). This was underscored by Steinhoff, Arli, Weaven and Kozlenkova (2019), who asserted that seamlessly offering online services reduces uncertainty and positively enhances online relationship building with consumers. Effectively leveraging ORM theory is crucial for enhancing business performance and cultivating enduring consumer relationships (Boateng, 2019).

### **2.4. Validating the proposed hypotheses formulated for the study**

#### **2.4.1. Service convenience and its relationship with e-service quality and e-satisfaction**

According to Almarashdeh, Jaradat, Abuhamdah, Alsmadi, Alazzam, Alkhasawneh and Awawdeh (2019), service convenience pertains to how consumers perceive the time and effort involved in online purchasing as part of service quality. Almarashdeh et al. (2019) further delineated five dimensions of service convenience: access, search, evaluation, transaction, and possession/post-purchase. Raman (2019) highlighted that online consumers prioritise convenience more than traditional buyers. Khan and Khan (2018) and Eryiğit and Fan (2021) asserted that service convenience significantly impacts e-SQ, thereby enhancing customer satisfaction. Additionally, Generation X consumers favour home

delivery due to the convenience offered by online shopping (Bauerová, 2021; Ponte & Sergi, 2023). In this study, service convenience was assessed as a single-dimensional concept, aligning with approaches used in studies like Annaraud and Berezina (2020) and Khan and Khan (2018), which examined its influence on e-SQ and e-satisfaction. Based on these findings, the study proposes the following hypotheses:

- *H<sub>1</sub>: Service convenience has a significant and positive impact on the e-SQ of Generation X consumers purchasing groceries online through mobile apps.*
- *H<sub>2</sub>: Service convenience has a significant and positive impact on the e-satisfaction of Generation X consumers purchasing groceries online through mobile apps.*

#### **2.4.2. E-service quality and its relationship with e-trust**

E-SQ is the overall assessment and interpretation of services provided by a firm's online platforms (Alzoubi et al., 2019; Rita, Oliveira & Farisa, 2019), encompassing how well these services meet consumer needs through elements such as efficiency, reliability, and privacy (Zhou et al., 2019). The increasing digital interactions enable consumers to publicly discuss a firm's e-SQ across various online platforms, contributing to the development of e-trust (Khan & Khan, 2018; Oliveira, Alinho, Rita & Dhillon, 2017). Generation X consumers require high e-SQ levels to develop trust in e-retailers (Lissitsa & Kol, 2021), as they prefer interactions with familiar individuals or groups who can cater to their emotional needs and aspirations. These insights underscore the crucial role of e-SQ in cultivating e-trust among current and potential Generation X consumers towards e-retailers. Based on these observations, the following hypothesis is posited for the study:

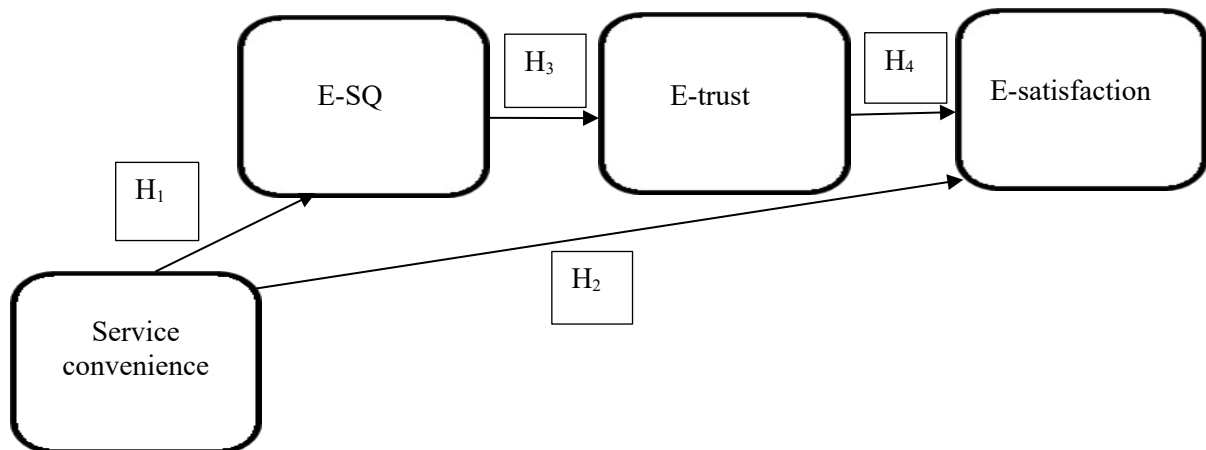
- *H<sub>3</sub>: E-SQ has a significant and positive impact on the e-trust of Generation X consumers purchasing groceries online through mobile apps.*

#### **2.4.3. E-trust and its relationship with e-satisfaction**

E-trust forms the fundamental basis for the e-satisfaction of Generation X consumers. Chauke and Dhurup (2017:152) support this idea, noting that e-trust can directly or indirectly influence the e-satisfaction of Generation X consumers in the context of online shopping. Giao et al. (2020:364) further emphasize that e-trust plays a significantly positive role in shaping the e-satisfaction of Generation X consumers in online shopping scenarios. This suggests that Generation X consumers who have higher levels of e-trust also tend to experience higher levels of e-satisfaction. Researchers like Venkatakrisnan et al. (2023) agree, asserting that trust serves as a precursor to the satisfaction of Generation X consumers who make online purchases from e-retailers such as Amazon, Snapdeal, Flipkart, Myntra, and E-bay. Therefore, an e-retailer that cultivates e-trust among its Generation X customers also enhances their overall e-satisfaction. Based on this premise, the following hypothesis is proposed:

- *H<sub>4</sub>: E-trust has a significant and positive impact on the e-satisfaction of Generation X consumers purchasing groceries online through mobile apps.*

Considering the discussion above, the model in Figure 1 is proposed.



**Figure 1: Proposed model reflecting the proposed hypotheses developed for the study**

Source: Authors' own construction.

### 3. Methodology

This study employed a quantitative and descriptive research design. The study followed a positivistic paradigm, since it tested hypothetical propositions. The target population comprised all Generation X individuals, who resided in Gauteng and had made an online grocery shopping purchase (via a mobile app) in the past three months. Gauteng was selected because it is the economic powerhouse of South Africa (Nhamo, Rwizi, Mpandeli, Botai, Magidi, Tazvinga, Sobratee, Liphadzi, Naidoo, Modi, Slotow & Mabhaudhi, 2021; Statista, 2023a). For the purpose of this study, a probability sampling method (stratified sampling) and a non-probability sampling method (convenience sampling) were used to provide the sample from which the quantitative results were drawn. The sample of the responses collected represented the market share value for each online grocery retailer, implying that majority of respondents would have selected Pick n Pick (30% market share) and Checkers (30% market share), Woolworths (9% market share), or Spar (6%). As such, 120 responses were secured from Pick n Pay consumers, 120 responses from Checkers consumers, 36 responses from Woolworths consumers and 24 responses from Spar consumers, resulting in a sample size of 300 responses.

The study used an online questionnaire to gather data from the sample. The questionnaire consisted of four constructs whose items were adapted from Oliveira et al. (2017); Rodríguez, Villarreal, Valiño

and Blozis (2020), Jiang, Lai, Yang and Wang (2023) and Liao, Hu and Fang (2023). Furthermore, a five-point Likert scale was adapted to measure the items, ranging from 5 (“strongly agree”) to 1 (“strongly disagree”). Partial least squares structural equation modelling (PLS-SEM) analysis with the aid of SmartPLS 4.0 was utilised to analyse the gathered data from the respondents. Table 1 reflects the different items applied to the four constructs in the study.

## **4. Results**

### **4.1. Demographic information**

In relation to the demographic data collected from respondents, the largest group of respondents ( $n = 159$ , 53%) lived in Johannesburg and the majority were black ( $n = 219$ , 73%). This accurately mirrors the broader population since most residents in the selected cities and South Africa are black (Statista, 2023a). Furthermore, English was the most common language spoken among respondents ( $n = 92$ , 31%). In terms of education, the majority of respondents ( $n = 105$ , 35%) held a university degree and were employed full-time by organisations ( $n = 189$ , 63%).

### **4.2. Confirmatory factor analysis**

Conducting a confirmatory factor analysis is a stage in SEM that deals with the validity of the measurements employed in the models, namely the correlations between the indicators and their respective latent variables, as well as the inter-latent variable relationships (Sureshchandar, 2023). This validity assessment considers reliability, convergent validity, and discriminant validity, as discussed next.

#### **4.2.1. Reliability**

Cronbach’s alpha and composite reliability (CR) are commonly used to examine the reliability of a scale, as recommended by Hair, Howard and Nitzl (2020). For both the Cronbach’s alpha and CR, the 0.7 threshold is considered good (Babin & Zikmund, 2016; Hair, Page & Brunsveld, 2019). The results in Table 1 show that the Cronbach’s alpha values range from 0.729 to 0.949, indicating an overall good level of internal consistency of all four constructs considered in the proposed model. These Cronbach’s alpha results were further supported by CR coefficients, which varied from 0.729 to 0.952. Based on both Cronbach’s alpha and the CR, all constructs involved in this study were considered very reliable.

**Table 1: Statistical evidence of reliability and convergent validity**



<b>Construct</b>	<b>Items</b>	<b>Factor loadings</b>	<b>p-value</b>	<b>Cronbach's alpha</b>	<b>CR</b>	<b>Average variance extracted (AVE)</b>
<b>Service convenience</b>	1	0.870	***	0.901	0.901	0.770
	2	0.883	***			
	3	0.903	***			
	4	0.854	***			
<b>E-SQ</b>	5	0.622	***	0.949	0.952	0.540
	6	0.596	***			
	7	0.767	***			
	8	0.806	***			
	9	0.715	***			
	10	0.716	***			
	11	0.624	***			
	12	0.746	***			
	13	0.754	***			
	14	0.757	***			
	15	0.756	***			
	16	0.756	***			
	17	0.739	***			
	18	0.832	***			
	19	0.813	***			
	20	0.760	***			
	21	0.706	***			
	22	0.719	***			
<b>E-trust</b>	23	0.883	***	0.893	0.893	0.756
	24	0.849	***			
	25	0.890	***			
	26	0.853	***			
	27	0.880	***			
	28	0.866	***			
<b>E-satisfaction</b>	29	0.884	***	0.859	0.859	0.876
	30	0.886	***			
	31	0.937	***			
	32	0.935	***			

Source: Authors' own construct

#### 4.2.2. Validity

- *Face (or content) validity*

To ensure that the scale and items used in the questionnaire were valid in terms of their relevance and clarity, they were selected from previous studies available in databases like Scopus and Web of Science, where they have been utilised and validated. Additionally, a pilot test was carried out to gather initial feedback on the scales and items from a small sample of 20 respondents. These methods were instrumental in establishing the face and content validity of the study.

- ***Convergent validity***

Convergent validity refers to how well a scale aligns positively with other measures assessing the same concept (Malhotra, 2020). For adequate convergent validity, the correlation should exceed 0.5 and ideally surpass 0.7 (Hair, Celsi, Ortinau & Bush, 2017; Malhotra, 2020). The AVE, which represents the average squared correlation between items within a construct, indicating the shared variance among them (Alt, Raichel & Naamati-Schneider, 2022), it should be 0.5 or higher (Malhotra, 2020). As depicted in Table 1, the factor loadings consistently meet or exceed the 0.5 threshold, reinforcing the convergent validity of the measures and the AVE estimates, which exceed the recommended 0.5 cut-off. These results provided strong support for the convergent validity based on the findings.

- ***Discriminant validity***

Discriminant validity was evaluated using the Fornell-Larcker criterion, which compares squared inter-construct correlations (SICCs) with AVE values. Table 3 presents the findings on means, standard deviations, SICCs, and AVE values. All AVE values exceeded their corresponding SICCs, meeting the criteria for discriminant validity, as proposed by Fornell and Larcker (1981).

- ***Nomological validity***

According to Malhotra (2020), nomological validity refers to the degree to which the scales correlate with measurements of separate, but related domains in theoretically predicted ways. Similarly, Lee (2019) posited that nomological validity seeks to determine whether there is a correlation between factors that reflect the proposed hypothetical relationships of the factors. To evaluate nomological validity in this study, the independent constructs (service convenience, e-SQ, e-satisfaction, e-trust) should statistically correlate with each other on the correlation matrix. Furthermore, to achieve the predictive power of constructs in the model, the assessment of correlation of determination ( $R^2$ ) should be greater than 0.30. Considering that this is the case for all constructs in the proposed model, nomological validity was secured (refer to Table 2).

**Table 2: The coefficients of determination ( $R^2$ )**

<b>Construct</b>	<b>R-square</b>
Service convenience	0.712
e-SQ	0.650

E-satisfaction	0.756
E-trust	0.754

Source: Researchers' own construct

**Table 3: Constructs, mean  $\pm$  SDs, SICCs, and AVEs**

Construct	Mean	$\pm$	Service convenience	E-SQ	E-trust	E-Satisfaction	
Service convenience	4.49	$\pm$	1.675	<b><i>0.770</i></b>			
E-SQ	4.09	$\pm$	1.181	0.084	<b><i>0.540</i></b>		
E-trust	4.22	$\pm$	1.203	0.099	0.516	<b><i>0.756</i></b>	
E-satisfaction	4.29	$\pm$	1.223	0.093	0.524	0.507	<b><i>0.876</i></b>

Note: Diagonal elements in bold italics represent AVE

Source: Researchers' own construct

#### 4.2.3. Measurement model assessment

The measurement model, outlined in Table 4, demonstrates favourable fit indices. All indicators of goodness of fit, including normed chi-square ( $\chi^2/df$ ), normed fit index (NFI), relative fit index (RFI), incremental fit index (IFI), Tucker-Lewis index (TLI), and comparative fit index (CFI), exceeded the threshold of 0.9, while the root mean square error of approximation (RMSEA) was below 0.08, aligning with the guidelines set by Hair et al. (2014). These combined goodness-of-fit measures provided strong evidence of a well-fitting model.

**Table 4: Measures for goodness of fit (measurement model)**

CMIN	DF	<i>p</i>	CMIN/DF	NFI	RFI	IFI	TLI	CFI	RMSEA
371.22	133	0.00	2.55	0.91	0.97	0.96	0.95	0.97	0.057

Source: Researchers' own construct

#### 4.2.4. Structural model assessment

After evaluating the psychometric properties of the model and confirming underlying assumptions, the focus shifted to assessing its structural properties. Similar to the measurement model, various

goodness-of-fit measures were examined, including chi-square, normed chi-square ( $\chi^2/df$ ), NFI, RFI, IFI, TLI, CFI, and RMSEA. According to Table 5, all these measures align with the criteria outlined by Hair et al. (2014), except for the normed chi-square ( $\chi^2/df$ ), which slightly exceeds the recommended threshold of 3. However, NFI, RFI, IFI, TLI, CFI values were all above 0.9, and RMSEA was below 0.08. As per Hair et al. (2014), while a single goodness-of-fit measure may exceed its cut-off point, such as the normed chi-square ( $\chi^2/df$ ) in the structural model, the comprehensive evaluation of all measures indicates sufficient model fit.

**Table 5: Measures for goodness-of-fit (structural model)**

CMIN	DF	<i>p</i>	CMIN/DF	NFI	RFI	IFI	TLI	CFI	RMSEA
446.111	135	0.00	3.010	0.91	0.97	0.96	0.97	0.96	0.07

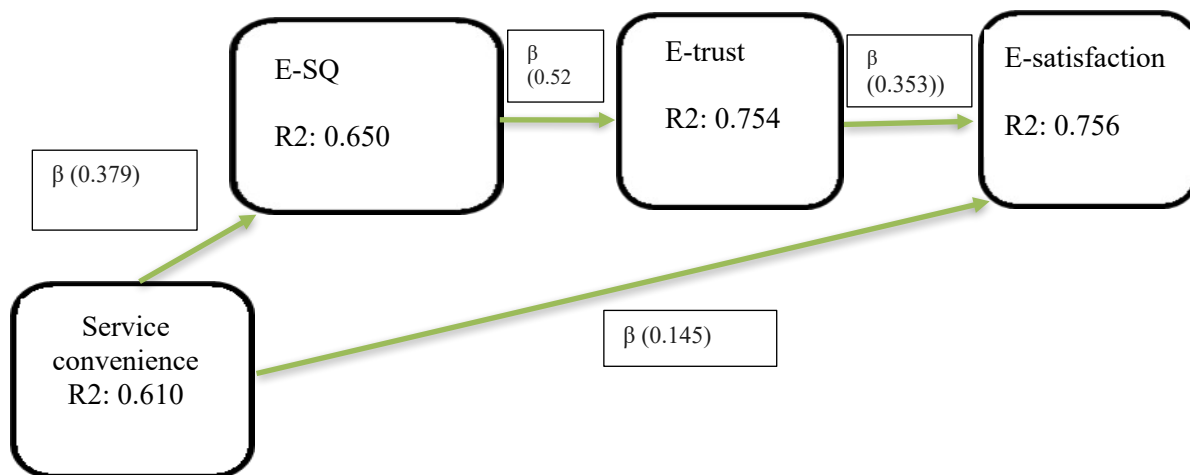
Source: Researchers' own construct

Table 6 offers a detailed view of the results regarding the study's formulated hypotheses. All four hypotheses were substantiated by the data.

**Table 6: Hypothesis testing**

Hypothesis	Variable	Variable	$\beta$	Sig.	Finding
H <sub>1</sub>	Service convenience	E-SQ	0.25	0.000	Supported
H <sub>2</sub>	Service convenience	E-satisfaction	0.87	0.000	Supported
H <sub>3</sub>	E-SQ	E-trust	0.52	0.000	Supported
H <sub>4</sub>	E-trust	E-satisfaction	0.37	0.000	Supported

Against the background provided above, Figure 1 is proposed.



**Figure 2: Proposed Model**

Source: Authors' own construction.

## 5. Discussion

Based on the study's findings, it can be inferred that service convenience within the context of grocery shopping applications encompasses several components: energy or effort savings (Eletxigerra et al., 2021:205; Wang, Wong et al., 2021:850), economic benefits (Liu et al., 2019:1580), and order tracking capabilities (Kapoor & Vij, 2018:343; Roggeveen & Sethuraman, 2020:306). The study indicates that service convenience exerts a positive ( $\beta=0.145$ ), albeit modest ( $f^2 \leq 0.14$ ), and statistically significant ( $p<0.05$ ) impact on e-satisfaction. This finding aligns with research by Saha et al. (2022:17) and Venkatakrishnan et al. (2023), which highlights that service convenience positively and significantly influences Generation X consumer satisfaction in online shopping contexts.

In the scope of this study, electronic service quality (e-SQ) refers to the assessment of online service excellence across the pre-purchase, purchase, and post-purchase stages, focusing on its effectiveness and efficiency. This includes aspects of pre-purchase, during online shopping, and post-purchase services (Izogo & Jayawardhena, 2018:386; Nisar & Prabhakar, 2017:143; Rita et al., 2019:6), promise fulfillment (Singh, 2019:1303), and the efficiency and effectiveness of mobile applications (Al-dweeri et al., 2018:906; Miao et al., 2022:18). The results demonstrate that e-SQ has a substantial positive ( $\beta=0.525$ ), large ( $f^2 \geq 0.35$ ), and statistically significant ( $p<0.05$ ) effect on e-trust. This is consistent with Dua and Uddin's (2022:209) findings, which show a strong correlation between e-SQ and Generation X consumers' e-trust in online purchasing environments.

In conclusion, E-trust is conceptualised as consumers' confidence in the ability of an e-retailer platform to facilitate successful online transactions. It encompasses experiences free from excessive pricing, the secure handling of personal information (Kumar & Ayodeji, 2021:4; Pappas et al., 2017:732), third-party certifications, trading memberships, and positive word-of-mouth (both offline and online) (Ahmad & Shang, 2020:13; Mero, 2018:213; Sharma, Bajpai et al., 2019:306), as well as prior consumer feedback and reasonable pricing strategies on mobile applications (Liu et al., 2021:1133; Wang & Bae, 2020:11). Consequently, e-trust has a positive ( $\beta=0.353$ ), moderate ( $f^2$  between 0.15 and 0.34, inclusive), and statistically significant ( $p<0.05$ ) effect on e-satisfaction. This finding is corroborated by Venkatakrishnan et al. (2023), who assert that trust is a crucial factor in enhancing Generation X consumers' satisfaction within online shopping contexts.

## **6. Managerial and Theoretical Implications**

### **6.1. Implications for theory**

#### **6.1.1. Developing an in-depth understanding of service convenience as a precursor to e-service quality and e-satisfaction**

In contemporary marketing theory, service convenience is increasingly recognised not only as a facilitator, but as a fundamental driver of both e-SQ and e-satisfaction in online grocery environments. This new theoretical argument proposes that service convenience acts as a transformative force that directly shapes consumers' perceptions of service quality and satisfaction in digital retail contexts. The essence of service convenience lies in its ability to streamline and simplify the online shopping experience for consumers. It encompasses factors, such as user-friendly interfaces, intuitive navigation, quick loading times, efficient checkout processes, and seamless integration across devices. These elements collectively reduce cognitive effort and transactional friction, enhancing the perceived convenience of using digital grocery platforms. From an academic perspective, service convenience is posited to serve as a precursor to e-SQ by influencing key dimensions outlined in existing frameworks (Eryiğit & Fan, 2021; Setyawan, 2023). For instance, the reliability dimension of e-SQ is bolstered when consumers experience consistent and error-free interactions facilitated by convenient features. Responsive customer service channels and transparent communication further contribute to the assurance dimension, instilling confidence in consumers regarding the reliability of an online service provider.

Furthermore, the convenience of services is suggested to have a profound impact on e-satisfaction by shaping how consumers perceive their overall shopping experiences. Studies indicate that content customers are more inclined to return and endorse the service to others, thereby nurturing loyalty and positive word of mouth. By prioritising convenience-focused attributes, such as personalised recommendations, effortless access to product details, and straightforward returns, online grocery retailers can elevate satisfaction levels among Generation X consumers who prioritise pragmatism and effectiveness. This viewpoint advances marketing theory by positioning service convenience not merely as an adjunct aspect, but as a pivotal determinant of e-SQ and e-satisfaction in digital retail settings. It underscores the strategic necessity for marketers to invest in refining convenience-driven functionalities and user experiences to distinguish themselves in a competitive marketplace. Additionally, this theoretical framework highlights the dynamic nature of service convenience as a strategic lever evolving alongside consumer expectations and technological advancements. Through continuous refinement and innovation of convenience features based on consumer insights and feedback, marketers can consistently enhance e-SQ and e-satisfaction, thereby cultivating enduring customer relationships and organisational success in the digital age. In conclusion, this novel

theoretical argument underscores the transformative role of service convenience in propelling both e-SQ and e-satisfaction in online grocery retail. By exploring and implementing innovative convenience strategies, marketers do not just meet, but exceed consumer expectations, leading to heightened customer loyalty and profitability in the digital marketplace.

### **6.1.2. An improved understanding of the e-service quality, e-trust, and e-satisfaction relationships in a business-to-consumer context**

In contemporary marketing theory, the interaction between e-SQ, e-trust, and e-satisfaction constitutes a pivotal nexus influencing consumer behaviours and organisational outcomes in digital environments. This theoretical perspective proposes a nuanced understanding of how these elements interplay and contribute to shaping consumers' perceptions and behaviours in the digital marketplace. First, e-SQ encompasses dimensions, such as reliability, responsiveness, assurance, empathy, and tangibles, adapted from traditional service quality frameworks to fit the digital context. Scholarly literature suggests that high e-SQ enhances consumers' perceptions of service excellence in online interactions (Çelik, 2021; Juwaini, Chidir, Novitasari, Iskandar, Hutagalung, Pramono, Maulana, Safitri, Fahlevi, Sulistyono & Purwanto, 2022). For example, dependable service delivery, prompt response times to customer queries, secure transactions, and intuitive user interfaces collectively foster positive e-SQ perceptions among consumers. Second, e-trust emerges as a critical outcome influenced by e-SQ in digital settings. E-trust reflects consumers' confidence in the reliability, integrity, and security of online transactions and interactions with service providers. Research indicates that perceptions of e-SQ directly shape the formation of e-trust – when consumers perceive high e-SQ, they are more likely to develop trust in an online platform. Factors including transparent communication, consistent service delivery, adherence to privacy standards, and ethical business practices significantly contribute to establishing and maintaining e-trust among digital consumers. Third, e-satisfaction represents the outcome of positive e-SQ and e-trust interactions in digital contexts. It encompasses consumers' overall contentment and fulfilment derived from their online shopping experiences. Theoretical frameworks like the expectancy-disconfirmation model suggest that when consumers' expectations regarding service quality and trustworthiness are met or exceeded, it results in higher levels of e-satisfaction (Hien, Long, Liem & Luu, 2024; Jeong, Park & Hyun, 2019). Elements such as personalised service experiences, timely resolution of issues, accurate product information, and seamless transaction processes contribute to enhancing e-satisfaction among digital consumers (Pokhrel & K.C., 2024).

This theoretical perspective posits that the relationships between e-SQ, e-trust, and e-satisfaction are dynamic and mutually reinforcing. Enhanced e-SQ promotes e-trust, as reliable and responsive service experiences build credibility and reduce perceived risks associated with online transactions.

Conversely, strengthened e-trust fosters e-satisfaction by reinforcing positive perceptions and nurturing emotional fulfilment derived from trusted relationships with digital service providers. Moreover, this framework contributes to advancing marketing theory by underscoring the strategic importance of managing e-SQ and e-trust to foster e-satisfaction and cultivate long-term customer loyalty in digital settings. Marketers are encouraged to prioritise investments in enhancing e-SQ dimensions, promoting transparent and ethical business practices, and implementing customer-centric strategies that foster trust building and satisfaction. In conclusion, this theoretical perspective underscores the interconnected nature of e-SQ, e-trust, and e-satisfaction in shaping consumer behaviours and organisational success in digital marketing contexts. By comprehending and leveraging these relationships, marketers can effectively navigate the complexities of the digital marketplace, promote positive consumer experiences, and drive sustainable business growth.

## **6.2. Implications for practice**

This study purports numerous practical recommendations for strengthening the e-satisfaction of Generation X consumers when purchasing groceries online. These strategies are highlighted below.

First, online grocery retailers should focus on enhancing convenience through their mobile apps to better serve Generation X consumers. One effective strategy is to promote an app's convenience features in marketing campaigns aimed at Generation X. For instance, retailers can use traditional store displays and signage to advertise their apps to those who prefer shopping offline. In-store incentives and assistance should be offered to encourage Generation X consumers to download and use a grocery mobile app. Email marketing can also play a crucial role by highlighting new features, personalised recommendations, and promotions available through an app. Clear communication of product return, exchange, and refund policies within an app and marketing material is essential for Generation X consumers. Simplifying the refund process by pre-filling information, such as address and payment details, in an app can significantly enhance convenience.

Refunds should be processed swiftly, crediting the money back to the original payment method used. Implementing features that allow easy uploading of evidence, such as photos, for damaged goods refunds will further streamline the process. A grocery mobile app should also ensure quick access to product information, easy navigation, fast loading times, and seamless payment methods to facilitate a swift checkout process. Additionally, to simplify the purchasing experience for Generation X, grocery mobile apps should present information clearly and avoid clutter. The search function should be prominently displayed and offer automatic suggestions to help users find products quickly. Avoiding technical terms and providing straightforward information will expedite the shopping process. Moreover, online retailers should provide robust customer support through helplines or live chats, options for easy reordering of frequently purchased items, recipe suggestions, and nutritional



recommendations tailored to Generation X consumers using mobile apps. These enhancements save time and contribute to greater customer satisfaction with online grocery shopping experiences.

Second, Generation X consumers' overall e-SQ and e-trust of grocery mobile apps should be enhanced by prioritising factors like efficiency, reliability, fulfilment, and privacy. Online grocery retailers should highlight compliance with online shopping regulations, such as the Protection of Personal Information Act, in their marketing to Generation X consumers who use mobile apps. This can include obtaining third-party certifications to assure consumers that their personal data is secure. In addition, grocery mobile apps should request explicit permission from Generation X users to access sensitive information, such as personal contacts and location, prior to any deliveries. To ensure reliability, consumers should be encouraged to contact support with any ordering concerns.

For fulfilment and reliability, retailers must focus on transparency, improve interactive communication, and ensure reliable features within the grocery mobile apps. For example, accurate delivery time estimates should be provided and consumers should be promptly notified of any delays or changes to the delivery schedule. Efficiency can be boosted by allowing Generation X consumers to access their accounts across multiple devices and synchronise shopping carts. By integrating these strategies, online grocery retailers can significantly enhance the e-SQ of their mobile apps for Generation X users.

Third, to improve e-trust on e-satisfaction when Generation X is shopping online for groceries through mobile apps, features and communications that foster confidence should be enhanced. Online grocery retailers should prioritise training support staff to be patient and empathetic when addressing questions or issues from Generation X users via their mobile apps. Ensuring consistent feedback and delivering high-quality grocery items are essential steps to demonstrate care for Generation X customers. Clear communication of refund policies for damaged products or delayed deliveries is imperative. Before dispatching orders placed through their mobile apps, retailers should provide delivery details to Generation X consumers. Incorporating tracking features in grocery mobile apps can ensure timely deliveries, while sharing photos of the products and packaging prior to delivery can further bolster trust and enhance overall satisfaction. Conclusively, a proposed grocery mobile app tracking system can be considered, featuring a map, delivery driver details, a chat box, and a call button, which local online grocery retailers may adopt to enhance customer experience.

## **7. Conclusions, Limitations, and Areas for Future Research**

This study aimed to explore how service convenience and e-SQ impact e-trust and ultimately e-satisfaction among Generation X online grocery consumers in South Africa. The study extends relationship marketing theory by investigating service convenience's relationship with e-SQ and e-satisfaction relationship in a business-to-consumer (B2C) context. The study shows that service

convenience is a critical factor that drives the overall e-SQ and e-satisfaction experiences of Generation X consumers purchasing groceries online. Furthermore, this study confirms the importance of securing e-SQ experiences to enhance consumers' overall level of trust and e-satisfaction experiences.

These findings are notable for two reasons. First, they inform the importance of service convenience as a driver of e-SQ and e-satisfaction, emphasising its impactful relevance when designing online grocery apps. Second, the results confirm the relevance of e-SQ and e-trust in securing future e-satisfaction in a B2C setting. Through such validation, the importance of trust in strengthening the e-SQ and e-satisfaction link is confirmed.

Several limitations of this study should be considered when interpreting its findings and conclusions. The study was conducted only in the Gauteng province of South Africa, through a focus on one generational cohort. Therefore, the results cannot be generalised to other regions or generational cohorts of South Africa.

Future research in the realm of B2C studies presents exciting opportunities to explore how new constructs, such as perceived risk, user experience, and purchase intention, intersect, particularly with service interaction as a potential moderator. Understanding how different types of service interactions influence consumers' perceptions of risk and their subsequent purchase intentions could unveil nuanced insights. Research could delve into various service contexts, such as online platforms or physical stores, to discern how these factors vary across different environments. Additionally, exploring how user experience design can mitigate perceived risks and enhance purchase intentions in service settings is crucial for informing strategies that optimise consumer satisfaction and loyalty in the digital age.

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