Course:	SKOM12
Term:	Spring 2025
Supervisor	Ilkin Mehrabov
Examiner	Nils Gustafsson

Understanding the Determinants of E-loyalty in Azerbaijan's E-commerce Market: The role of E-satisfaction and E-trust

SHAHANA TALIBOVA

Lund University

Department of strategic communication

Master's thesis

Abstract

As the internet continues to expand, e-commerce has become a vital part of the global economy. Although online consumer behavior differs from traditional one, loyalty is still the main indicator of online business success and it is called as e-loyalty. E-loyalty, defined as an individual's favorable attitude that leads to repeated purchases from the same e-retailer, is context-dependent. This research using Oliver's loyalty models, E-service quality models, and TRA examined the main factors (e-satisfaction, e-trust, perceived value, fulfillment, customer service, platform design, social influence) role in the e-loyalty formation within the context of Azerbaijan's developing ecommerce market. This study aims to clarify the relative effects of these predictors by simultaneously including them in multiple regression models.

Data was collected from 309 active online shoppers in Azerbaijan and analyzed using SPSS. The results indicate that e-satisfaction is the primary predictor of e-loyalty, followed by e-trust. Within these relationships, perceived value emerged as the strongest driver of e-satisfaction, while customer service was the most influential factor in building e-trust. Furthermore, the study highlights the importance of practical website features. Fulfillment and platform design, specifically the quality of information, platform ease of use, and product offerings, positively impact both e-satisfaction and e-trust. Interestingly, the findings reveal that personalization and aesthetics do not contribute to either e-satisfaction or e-trust. This suggests that in Azerbaijan's e-commerce landscape, consumers prioritize functional utility, fulfillment, and clear information over visual appeal or personalized marketing strategies.

Keywords: e-loyalty, e-commerce, e-trust, e-satisfaction, e-service quality, Azerbaijan, perceived value, social influence, marketing communication

Acknowledgements

I would like to extend my warm gratitude to all those individuals who supported me in writing this thesis.

First of all, I would like to express my sincere gratitude to my supervisor Ilkin Mehrabov for his guidance, support, and feedback on this research. His influence and contribution played a significant role not only in this research but also in my academic development as an individual.

I would also like to thank my family and friends for supporting me, giving me time, and encouraging me to work through the difficulties I faced.

Finally, I would also like to take this opportunity to express my sincere gratitude to the participants and colleagues who assisted me during these sensitive periods of data sharingş Without them, it would not have been possible to complete this thesis.

Shahana Talibova

Lund, December 2025

Table of Contents

List of Tables

List of Figures

1 Introduction

This chapter serves as the introduction to the study, offering an overview of the background and context of the chosen research topic. It outlines the primary research aim and key questions that guide the investigation. Additionally, the chapter discusses the relevance of the study, its contributions to strategic communication, and the specific knowledge gap it seeks to address, thereby justifying the need for this research.

1.1 Background

The rapid digitalization of economies worldwide has transformed traditional business models and created new opportunities through digital markets and e-commerce platforms. While leading economies such as the US, China, and European Union member states have reached advanced levels of digital market maturity, the e-commerce sector in Azerbaijan is still in a dynamic phase of growth and adaptation (Hacıyeva, 2021; International Trade Administration, 2023). However, this development is supported by many critical factors such as a young, digitally literate population, steadily increasing internet penetration rates, and government-backed strategies focused on digital transformation.

1.1.1 Government strategies and developing infrastructure

The Azerbaijani government has launched a series of strategic initiatives to build a strong digital economy and stimulate the growth of e-commerce. According to Hacıyeva (2021), two key programs that show Azerbaijan's commitment to digital change are the "Azerbaijan 2020: Vision for the Future" strategy and the Digital Trade Hub.

The "Azerbaijan 2020: Vision for the Future" strategy established the groundwork for sustainable socio-economic growth. It focuses on innovation, technology improvement and economic diversification beyond the oil sector (Government of the Republic of Azerbaijan, 2012). Following this vision, the National Strategy for Information Society Development in Azerbaijan (2014–2020) marked the start of the country's tech modernization phase (Mammadova, 2024). This strategy highlighted the creation of an information society and a knowledge-based economy by increasing broadband access, improving ICT literacy, and encouraging digital entrepreneurship (President.az, 2014).

Another important step in Azerbaijan's digital change is the creation of the Digital Trade Hub. This platform offers the world's first m-Residency and e-Residency services for non-residents, enabling them to register businesses, obtain e-signatures, open bank accounts, and manage export procedures entirely online. The DTH streamlines administrative processes, supports digital entrepreneurship, and attracts international investors (Centre for Analysis of Economic Reforms and Communication, 2025).

Alongside these initiatives, the legal and technological framework for e-commerce in Azerbaijan began to form in 2005 with the adoption of the Law "On Electronic Commerce" (Hacıyeva, 2021). The creation of domestic electronic payment systems like GoldenPay and online authentication tools such as the "Asan Imza" ("Easy Sign") electronic signature system has supported the growth of online transactions (International Trade Administration, 2023). These developments have played a pivotal role in increasing the accessibility, reliability, and convenience of digital services, laying the groundwork for a more integrated and competitive e-commerce environment in Azerbaijan.

1.1.2 Internet penetration and digital literacy

As a result, the key enablers of digital commerce, internet penetration and ICT literacy are increasing. In 2025, internet access reached 89% of the population, representing approximately 9.23 million individuals (World Bank, n.d.). Among those aged 25 to 34, internet usage is particularly high, with 96.9% of individuals in this demographic actively engaging with online platforms (State Statistical Committee, 2025). This group constitutes the most digitally engaged segment of the population and is also the most likely to participate in e-commerce activities.

In parallel, ICT literacy continues to improve due to government initiatives and educational reforms aimed at fostering a digitally skilled workforce (International Telecommunication Union, 2024). This growing competence in digital tools lays a strong foundation for consumer confidence in online shopping, mobile applications, and digital financial services.

1.1.3 Shifting consumer behavior and preferences

As internet access has increased, consumer behavior in Azerbaijan is shifting in line with global trends. More people, particularly young and tech-savvy individuals, are spending

increasing amounts of time online, engaging with digital content and participating on social media platforms. In 2025, 64% of Azerbaijan's population were active social media users, emphasizing the expanding influence of digital channels in shaping consumer perceptions, brand preferences, and purchasing decisions. Platforms such as Instagram, Facebook, and TikTok are especially popular among Azerbaijani users, reflecting how social media has become a key driver of digital engagement and consumer behavior (DataReportal, 2025).

The COVID-19 pandemic further accelerated this shift, significantly influencing consumers' purchasing behavior in Azerbaijan (Hasanova et al., 2024). Nearly half of the surveyed consumers reported increased e-commerce activity. Foreign platforms, particularly Trendyol, were preferred for product diversity and convenience. Among local options, Birmarket was the most used, while other domestic platforms still struggled to meet consumer expectations. Clothing and accessories were the most frequently purchased categories (Hasanova et al., 2024).

However, despite these increased digital engagement and ecommerce adoption in Azerbaijan, it still remains modest when compared to other forms of digital engagement. By 2023, only 5% of internet users in Azerbaijan used the internet to purchase products or services online, while the majority of online activity remained focused on communication, entertainment, and information searches (State Statistical Committee, 2025).

1.1.4 Consumer market and economic indicators

Along with all these, Azerbaijan's consumer market in early 2025 demonstrates both resilience and growth potential. In the first seven months of 2025, the value of goods sold and services provided to meet consumer demand in Azerbaijan reached AZN 44.6 billion (over USD 26.2 billion), marking a 5% year-on-year growth (Report.az, 2025). Retail trade accounted for 78.6% of turnover. During this period, the average monthly consumer spending rose to AZN 623.1 (USD 366.53), an increase of 57 AZN (USD 33.53) in nominal terms compared to the previous year (Report.az, 2025). Household real wages continued to grow at 3.5%, supporting ongoing consumer spending despite inflationary pressures (World Bank, 2025). These developments reflect continued consumer confidence and increased participation in retail.

1.1.5 Growth trajectory and market projections

The existence of developing digital infrastructure, the digital connectivity of the population, the expansion of retail sectors, and the increase in the consumer market demonstrate

the existence of favorable conditions for the development of the e-commerce market in Azerbaijan.

Statistical forecasts also indicate strong growth potential for Azerbaijan's e-commerce market. Between 2016 and 2020, e-commerce sales in Azerbaijan increased by 1.7 times, in the first quarter of 2020. At that point, online retail transactions accounted for approximately 4% of the country's total trade volume. Though still a small share compared to mature digital markets, this upward trend indicates that Azerbaijan's e-commerce sector is developing steadily and has the potential for accelerated growth (Hacıyeva, 2021).

According to Statista (2025), the market is projected to generate revenues of US$1.94 billion in 2025, with a compound annual growth rate of 5.92% expected through 2030. The number of online users is predicted to increase to 3.3 million by 2030. These projections highlight the growing significance of e-commerce in Azerbaijan's digital economy and the expanding consumer base available to online platforms.

In conclusion, Azerbaijan's E-commerce sector is at a promising yet transitional stage. With strong support from government policies, rapid digitalization, and changing consumer behavior, the country is well-positioned to develop a vibrant online marketplace. While current adoption rates are still modest, upward trends in internet usage, digital literacy and changing consumer behavior point to sustained growth ahead. As a result, both local online platforms (Birmarket, shop.az) and even local companies (Kontakt Home, Solution, Baku Electronics) are rapidly developing online sales in the Azerbaijani market, and foreign online platforms (Amazon, Trendyol, Temu,) has entered the market.

1.2 Problem Statement

Building e-loyalty is crucial for businesses but simultaneously challenging because of the unique features of online environments (López-Miguens & Vázquez, 2017). E-loyalty has a significant impact on business profitability (Reichheld & Sasser, 1990; Reinartz et al., 2005; Donio et al., 2006). Reichheld & Sasser (1990) point out that loyal customers impact a company's profitability more profoundly than factors such as market share, scale, or unit costs, noting that even a five percent increase in customer retention can result in up to a 100 percent rise in profits. They further explain that the longer customers remain with a business, the more

value they generate over time. Additionally, losing existing customers not only reduces future revenue but also incurs high marketing costs to attract replacements. Balabanis et al. (2006) similarly highlight that when customer retention is difficult, the cost of acquiring new online customers often exceeds their expected lifetime value.

Moreover, loyal customers are known to generate indirect value. They tend to avoid switching to competitors, demonstrate a willingness to pay higher prices while spreading positive information about brand (WOM) (Srinivasan et al., 2002; Toufaily et al., 2013), This, in turn, helps attract new customers, highlighting why gaining customer loyalty is essential.

However, depending on unique characteristics of digital environments, achieving e-loyalty is more complex than in traditional offline settings (Liang & Chen, 2009; Hermenegildo et al., 2023). According to Gupta et al. (2023), e-commerce has created significant benefits for all parties, allowing businesses to easily set up online platforms and reach consumers worldwide. It also provides consumers with greater convenience and flexibility, letting them browse, compare, and buy products from almost anywhere at any time. This wide range of choices and easy access to product and price information make switching between competitors simple, weakening long-term business-customer relationships (Anderson & Srinivasan, 2003; Srinivasan et al., 2002; Shankar et al., 2003; López-Miguens & Vázquez, 2017).

As a result, identifying the factors that most effectively promote e-loyalty has become a key research area of research in digital commerce, as it is known that strengthening relationships with existing customers and increasing their loyalty is more beneficial and efficient (Valvi & Fragkos, 2012). These authors, along with Toufaily et al. (2013) also state that these antecedents are context-dependent, varying across market environments, customer segments, and types of online services.

This presents a critical theoretical and practical issue: nurturing e-loyalty is essential for profitability, yet it's much harder in online environments, and its drivers are specific to each context rather than universal. Thus, each market requires careful exploration to find the most influential factors of e-loyalty within its digital ecosystem. Most past studies have focused on developed markets, and even recent research in Turkey may not fully apply to Azerbaijan. Despite shared cultural, historical, and linguistic similarity, the Azerbaijani e-commerce market

has notable differences in consumer behavior, digital adoption, and platform development. Therefore, studying e-loyalty specifically in Azerbaijan is both necessary and timely.

Accordingly, this thesis recognizes both the challenges and strategic significance of fostering customer loyalty in digital markets. It challenges the assumption that e-loyalty is driven by universal factors, instead emphasizing the need to identify the specific contextual determinants that shape e-loyalty in Azerbaijan's developing online marketplace. By addressing this gap, the research utilises globally defined determinants to provide empirically grounded insights into how e-loyalty is formed in an under-researched, emerging e-commerce environment. The findings are expected to assist all businesses, digital entrepreneurs, and policymakers in designing effective strategies aligned with the behavioral patterns and expectations of Azerbaijani consumers.

1.3 Aim and Research Question

This research aims to explore the key factors that influence electronic loyalty in the context of Azerbaijan's growing e-commerce sector. As digital commerce continues to expand in the country, understanding drivers that lead to repeat customer behavior online and positive attitude is essential for businesses looking to establish long-term relationships and achieve success. While global studies highlight many different constructs, such as e-satisfaction, e-trust, e-service quality, perceived value, as central to e-loyalty, the relevance and impact of these factors in emerging markets like Azerbaijan remain underexplored. To fill this gap, this study builds on existing research and theoretical frameworks, including the Theory of Reasoned Action (TRA) and Oliver's loyalty model. These theories help explain how consumers' rational evaluations, feelings, and attitudes influence their loyalty toward online platforms.

Based on these ideas, the study develops and tests a model that includes seven main factors (e-trust, e-satisfaction, platform design, fulfilment/reliability, customer service/responsiveness, perceived value, social influence) affecting e-loyalty. By exploring how these factors work together in Azerbaijan's online market, the research aims to provide useful insights for businesses to build stronger customer relationships and improve the overall online shopping experience of consumers.

Research Question:

Which of the following factors, including e-trust, e-satisfaction, platform design, fulfillment/reliability, customer service/responsiveness, perceived value, and social influence, affect consumers' e-loyalty within Azerbaijan's e-commerce market?

1.4 Relevance

This study is very relevant to the field of strategic communication. Strategic communication focuses on the deliberate and purposeful use of communication to achieve long-term organizational goals (Hallahan, 2007). It includes all types of communication that are essential for an organization's survival and ongoing success (Zerfass et al., 2018). Falkheimer & Heide (2022) identify at least three areas that cover different aspects of goal-oriented organizational communication, one of which is marketing communication.

Although traditional marketing viewed communication mainly as a way to inform, persuade, and differentiate products, modern marketing communication highlights the creation and delivery of value to build long-term relationships (Falkheimer & Heide, 2022). In other words, it focuses on building customer loyalty. Customer loyalty is a critical goal for all types of organizations because it increases profitability and supports stability and competitiveness (Valvi & Fragkos, 2012). Reichheld & Sasser (1990) note that even a small increase in loyal customers can lead to significant revenue growth, making loyalty a key indicator of lasting relationships and success.

This study is particularly relevant and contributes to the external and marketing communication of e-commerce organizations. Understanding how the e-loyalty forms from the cognitive stage to the action stage, and factors such as e-trust, platform design, fulfilment, customer service, perceived value, and social influence, is essential for strategic communication. Some of these factors, like platforms(website, app) and customer service, act as communication channels. Others, such as e-trust and perceived value, come from effective communication. As Zerfass & Huck (2007) explain, strategic communication shapes meaning, builds trust, creates reputation, and manages symbolic relationships with internal and external stakeholders to support organizational growth and secure freedom to operate. Additionally, communicators face

ongoing challenges in identifying target groups, selecting suitable media channels, and crafting messages that resonate effectively (Falkheimer & Heide, 2018).

By examining what drives e-loyalty, this study provides valuable insights for marketing communicators and strategists. Understanding how communication-related factors and operational elements like fulfillment and product offerings build loyalty allows organizations to tailor their strategies better for their target audiences. In doing so, this research contributes to both theory and practice, providing a framework for developing communication strategies that encourage e-trust, e-satisfaction, and lasting consumer relationships, which is at the heart of modern strategic communication.

1.5 Delimitations

This study focuses on the formation of e-loyalty among consumers in Azerbaijan's e-commerce market. The study is delimited in several key ways. First, it considers only B2C (business-to-consumer) online platforms, excluding B2B platforms and offline retail experiences. Second, the sample is restricted to consumers who have made at least four online purchases within the last 12 months, which may limit generalizability to non-digital consumers. Third, the study examines specific constructs such as platform design, customer service, fulfillment/reliability, perceived value, social influence and e-satisfaction, e-trust without including broader macroeconomic or psychological variables. Lastly, data collection is limited to Azerbaijan, which may affect the applicability of findings to other cultural or geographic contexts.

1.6 Disposition

This thesis consists of seven chapters. Chapter 1 introduces the research topic by presenting the background of e-commerce development in Azerbaijan, followed by the problem statement, research aim and questions, relevance of the study, and delimitations.Chapter 2 discusses the previous studies related to e-loyalty and the important antecedents of e-loyalty, namely e-satisfaction, e-trust, e-service quality, and perceived value. Chapter 3 describes the theoretical framework by discussing Oliver’s loyalty model and the Theory of Reasoned Action and constructs the research proposal model and assumptions. Chapter 4 describes the research methodology by covering the research design and construction of the research survey instrument.Chapter 5 shows the results of the quantitative data analysis. Chapter 6 interprets the

findings in the context of the existing body of research related to the topic and its implications. Finally, Chapter 7 summarizes the whole analysis and makes suggestions regarding future studies. Lastly, the references and appendices are included towards the end of the thesis.

2 Literature Review

This chapter aims to provide a comprehensive overview of the current state of research on e-loyalty and its key antecedents. First, to establish the relevance of e-loyalty, its conceptual foundations. The review then examined major determinants of e-loyalty, including e-satisfaction, e-trust, e-service quality, price and perceived value, drawing on a wide range of empirical studies.

2.1 E-loyalty

Brand loyalty is recognized as a complex, multifaceted concept that includes both attitudinal and behavioural dimensions. Behavioral loyalty reflects a customer's repeated purchasing behavior, whereas attitudinal loyalty concerns their emotional connection and commitment toward the brand (Russell-Bennett & Parkinson, 2015). Although some researchers have measured loyalty from only one of these angles, earlier scholars like Day (1969) pointed out that true loyalty combines repeated buying with a strong emotional commitment. Supporting this idea, Dick & Basu (1994, as cited in Russell-Bennett & Parkinson, 2015) described loyalty as repetitive purchase behavior that is driven by a lasting positive view toward a brand. Oliver (1999) offered one of the most influential definitions, viewing loyalty as a strong commitment to continue purchasing a preferred product or service despite external circumstances that could motivate switching. His views, combining both consistent behavior and emotional connections, have influenced later research in both offline and online settings.

With the rise of e-commerce, the concept of loyalty has shifted into the digital sphere and is now called e-loyalty. Anderson & Srinivasan (2003) defined it as a positive consumer attitude toward an online company that leads to repeated purchasing intentions, reflecting traditional loyalty but adjusted for online settings. Other scholars have examined e-loyalty mainly through its behavioral dimension. For instance, Doong et al. (2008) viewed it as the intention to keep purchasing from the same online vendor. These differences underline the evolving and complex nature of customer relationships in digital spaces.

Comprehensive reviews by Valvi & Fragkos (2012) and Toufaily et al. (2013) show that there is still no unified understanding of how e-loyalty should be defined or assessed. Some

authors believe that e-loyalty shares its theoretical roots with traditional loyalty (Luarn & Lin, 2003) and simply needs to consider online-specific elements.

Following this idea, Toufaily et al. (2013) offered a more integrated definition based on Oliver's (1997, 1999) loyalty model and relationship-focused perspective. They describe e-loyalty as a consumer's willingness to maintain a stable online relationship and repeatedly purchase from the same company's website as their preferred option, supported by positive feelings and beliefs despite external influences that may encourage switching.

Similarly, there is no complete agreement on the key factors that drive e-loyalty (Valvi & Fragkos, 2012; Toufaily et al., 2013). Research on the determinants of online e-loyalty reveals significant differences, with different studies emphasizing different factors depending on the context, industry, and methodological approach used. Nevertheless, previous studies have consistently identified e-satisfaction (Anderson & Srinivasan, 2003) and e-trust (Reichheld & Schefter, 2000; Gummerus et al., 2004) as crucial determinants of online loyalty. Valvi & Fragkos (2012) further pointed out satisfaction, trust, service quality, and perceived value as strong predictors of loyalty.

Beyond these factors, the literature also points to other influences such as product attributes (Choi et al., 2006), pricing fairness (Doong et al., 2008), company-level characteristics (Pitta et al., 2006), value perception (Yang & Peterson, 2004; Li, 2015), customer experience (Srinivasan et al., 2002), interface quality (Chang & Chen,2008; Cristobal et al., 2007) and switching costs (Burnham et al., 2003; Balabanis et al., 2006).

More broadly, Gommans et al. (2001) grouped these drivers into six areas: website and technology, customer service, value proposition, brand development, trust, and security. Similarly, Toufaily et al. (2013) identified five important aspects, including website features (interactivity, community, ease of use), consumer perceptions (satisfaction, trust) and product or service characteristics (quality, price, and value). These dimensions interact in complex ways, depending on the e-commerce context and the unique traits of each consumer.

2.2 Antecedents of e-loyalty

As previously mentioned, depending on the context, e-loyalty has been examined through various studies with different antecedents. In this section, we review the most common and

widely recognized antecedents identified in the global literature including e-trust, e-satisfaction, e-service quality, and perceived value.

2.2.1 E-satisfaction

Oliver (1997) defines satisfaction as the emotional pleasure that occurs when an individual's needs, desires, or objectives are effectively met. It reflects how well a product or service fulfills these expectations and creates a positive emotional response. According to his framework, satisfaction is measured on a scale from pleasure to displeasure, showing how much gratification consumers feel after comparing what they expected before their purchase to what they actually received. This definition goes beyond just product quality or value and it includes the overall enjoyment of the consumption process. Later, Oliver (1999) stated that loyalty only develops when satisfaction occurs repeatedly over time. Single instances of satisfaction are insufficient unless they build a consistent pattern of positive experiences.

In online settings, e-satisfaction reflects a consumer's sense of fulfillment with past interactions on an e-commerce platform. Anderson & Srinivasan (2003) define it as the customer's contentment with their previous online shopping experience. Chang et al. (2009) describe e-satisfaction as a psychological state that shows users' positive evaluations and feelings from their engagement in an online space. Szymanski & Hise (2000) were among the first to underline satisfaction's role in online shopping, identifying how it forms through website functionality and interaction quality. Similarly, Hsu et al., (2013) explains that while the Technology Acceptance Model can predict initial technology adoption, continuous use of a website relies mostly on satisfaction, which arises through a positive and engaging "flow" experience.

Ribbink et al. (2004) highlight satisfaction as one of the strongest predictors of e-loyalty, emphasizing its importance for online businesses. Kim et al. (2009) further argue that satisfaction is a key to building long-lasting consumer relationships and maintaining e-loyalty. Supporting these ideas, Tsai & Huang (2007) note that satisfied customers are less likely to switch to competitors, making satisfaction a defense against customer churn. However, Oliver (1999) mentions that the connection between satisfaction and loyalty is not symmetric. Satisfaction lays the groundwork for loyalty but does not automatically ensure it.

A broad body of research identifies different factors that lead to e-satisfaction. These factors include website design and usability (Chang & Chen, 2008), product information quality (Szymanski & Hise, 2000), customization options (Ribbink et al., 2004), perceived value (Li et al., 2015) and frequency and experience of online shopping (Shankar et al., 2003). In addition, reliable logistics and delivery (Semeijn et al., 2005; Ribbink et al., 2004), and responsive customer support (Ribbink et al., 2004; Celik, 2021) improve the online shopping experience and boost satisfaction levels.

Schaupp & Bélanger (2005) categorize the factors leading to e-satisfaction into three main areas: technological, shopping, and product-related factors. Technological factors include aspects like website security, privacy, and ease of navigation. Shopping-related factors involve trust, convenience during transactions, and delivery efficiency, which all influence how consumers view their online experiences. Lastly, product-related factors cover quality, perceived value, product variety, and the accuracy of product information, which help customers make informed purchasing choices and enhance overall satisfaction.

2.2.2 E-trust

In general terms, trust is understood as a willingness to rely on another party, in a situation in which the trusting party has little or no ability to monitor that party's actions, yet believes that they will act in a manner that serves the trustor's interests (Mayer et al., 1995). According to relationship marketing theory, trust is a reflection of faith in the reliability, integrity, and good intentions of an exchange partner (Morgan & Hunt, 1994).

In digital realms, this idea unfolds as electronic trust, or e-trust, which is simply described as the belief that enables consumers to rely on an online retailer despite the intrinsic risks associated with online transactions (Pavlou, 2003; McKnight et al., 2002). Bhattacherjee (2002) explains that trust can be seen as a belief, an attitude, or an intention to act that is complex perception shaped by experience and interaction. Similarly, Wu et al. (2018) describe trust as a combination of belief, sentiment, expectation, and confidence that customers hold toward an e-commerce website while purchasing online.

E-trust is considered a complex and context-dependent construct by McKnight et al. (2002) and Yousafzai et al. (2009) and is generally broken down into two facets: trust in the

retailer, which reflects beliefs about the seller's honesty, competence, and integrity, and trust in infrastructure, which relates to the security, privacy, and dependability of the technological system (Pavlou, 2003). The dimensions of trust in the retailer are usually categorized as competence (the perception that the vendor is capable of fulfilling promises), integrity (the perception of honesty and fairness), and benevolence (the perception that the vendor has the customer's best interests in mind) (Mayer et al., 1995; McKnight et al., 2002). In contrast, the components included in trust in the infrastructure usually were security, privacy, and system reliability, assuring customers that the technological environment is safe and reliable to conduct online transactions (McKnight et al., 2002; Pavlou, 2003; Yousafzai et al., 2009; López-Miguens & Vázquez, 2017).

Trust is a fundamental element in customers' decision-making processes; it lowers perceived risks and builds up long-term relationships with service providers (Hoffman et al., 1999; Reichheld & Schefter, 2000; Pavlou, 2003; Ribbnik, 2004; Palvia, 2009; Kim, 2009; Giao et al., 2020).This role is even more critical in e-commerce, as interactions are impersonal, one cannot assess products and sellers directly, and consumers have to provide sensitive personal and financial data, which demands trust as an important prerequisite of online transactions (Reichheld & Schefter, 2000, Pavlou, 2003, Giao et al., 2020). McKnight et al. (2002) provide further emphasis on this aspect by stating that only when consumers develop trust in an online platform do they go ahead and engage in trust-related behaviors such as disclosure of personal information or making a purchase. Along this line of thinking, Hoffman et al. (1999) also said that without a clear sense of trustworthiness, consumers are unlikely to transact with an online retailer, for the most part due to the fear of seller opportunism, coupled with misgivings about the vulnerabilities of the Internet infrastructure itself.

However, e-commerce trust is not as easy to establish. E-trust is neither universal nor stable, it is shaped by cultural and contextual factors. For instance, consumers act differently in collectivist and individualist societies as cultural factors such as uncertainty avoidance, long-term orientation influence how online trust is formed and how it impacts purchase intentions (Yoon, 2009). Moreover, demographic factors such as income, education, and country of origin also have an impact on trust and related factors (Corbitt et al.,2003). Secondly, compared with offline environments, establishing trust is more difficult online since there is

limited information and customers don't have the opportunity to physically evaluate the product (Wirtz & Lihotzky, 2003) and online trust is still fragile and easily lost due to data leaks, fake advertising, or unprofessional service recovery of companies.

Indeed, trust in e-commerce does not depend on a single factor but rather is an interactive result of several factors. Consumers often rely on specific cues to form trust perceptions, such as website reputation and design, past experiences, perceived service quality, and recommendations from others (Corbitt et al., 2003; Gummerus, 2004). Ribbink et al. (2004) found that assurance has a significant positive effect on e-trust, while Kim et al. (2009) identified security, privacy, and fulfillment as key factors that strongly influence the development of consumer trust in e-commerce.

2.2.3 E-service quality

In the digital environment, service quality has become a critical factor for keeping customers satisfied, earning their trust, and making them loyal (Ribbink et al., 2004; Semeijn et al., 2005; Kim et al., 2009; Kassim & Abdullah, 2010; Wu et al., 2018; Kaya, 2019). Traditionally, service quality refers to customers' overall evaluation of how well a company's services meet their expectations (Parasuraman et al., 1988; Li et al., 2015). It extends to online settings as electronic service quality (e-service quality), defined by Zeithaml et al. (2000, p. 11) as "the extent to which a website facilitates efficient and effective shopping, purchasing, and delivery. According to Shi et al. (2018), e-service quality involves the whole customer experience, not just the transaction phase alone, but also pre-purchase exploration and post-purchase service contact. Studies confirm the existence of certain e-service attributes serving as antecedents of overall service quality, which in turn influences satisfaction, trust, and loyalty outcomes (Parasuraman et al., 2005; Semeijn et al., 2005, Cristobal et al., 2007, Rita et al., 2019).

Conceptual models have been developed in various ways to measure e-service quality. One of the earliest frameworks, SERVQUAL, proposed five core dimensions: tangibles, reliability, responsiveness, assurance, and empathy to capture consumer perceptions of service performance (Parasuraman et al., 1988). While SERVQUAL has laid the groundwork for later models and has been adapted for e-commerce studies (e.g., Gefen, 2002), it was originally created for offline services.

To fill these gaps, researchers have suggested models specific to online environments. For example, SITEQUAL (Yoo & Donthu, 2001) assesses overall perceived website quality in online shopping based on factors like ease of use, aesthetic appeal, processing speed, and security, with an emphasis on the technological usability of websites.

Likewise, WebQual™ (Loiaconon et al., 2002) expands this view by introducing 12 dimensions. These dimensions include informational fit-to-task, interactivity, trust, response time, ease of understanding, intuitive operations, visual appeal, innovativeness, emotional appeal, consistent image, online completeness, and relative advantages, clearly reflecting the role of the website as the main touchpoint for e-commerce.

Similarly, E-S-QUAL (Zeithaml et al., 2002) adapts SERVQUAL for online contexts by focusing on four main dimensions: efficiency, fulfillment, system availability, and privacy. Its complementary model, E-RecS-QUAL, evaluates service recovery performance through responsiveness, compensation, and contact, highlighting the importance of effectively resolving service issues.

E-TailQ (Wolfinbarger & Gilly, 2003) is another well-known model specifically designed for online retailing. It defines e-tail service quality as a multidimensional concept that includes both online experiences and offline logistical factors such as delivery. The model consists of four primary dimensions: fulfillment/reliability, website design, customer service, and security/privacy. Fulfillment/reliability refers to accurately presenting and timely delivering products. Website design encompasses navigability, information access, personalization, and ease of transaction. Customer service assesses responsiveness and helpfulness during shopping, while security/privacy focuses on safeguarding personal and financial information (Wolfinbarger & Gilly, 2003). Thus, E-TailQ offers a broad framework for evaluating e-service quality throughout the customer journey.

Building on these models, Blut (2016) provides a more integrated and structured framework for assessing e-service quality. Using survey data from 358 online consumers, the study suggests that e-service quality functions as a third-order concept linking four key dimensions, website design, fulfillment, customer service, and security/privacy, to overall perceptions of online service quality. Each of these dimensions contains specific subcomponents. For instance, website design includes information quality, aesthetics, purchase process,

convenience, product variety, price offerings, personalization, and system reliability. This multidimensional approach provides deeper insights into how both functional and experiential attributes shape consumers' perceptions of e-service quality, extending beyond the limitations of earlier models like SERVQUAL, WebQual, E-S-QUAL, and E-TailQ.

2.2.4 Price and Perceived value

Price is a critical factor in shaping consumer decision-making, affecting how individuals perceive products, make purchase intentions, and finally develop loyalty to brands. Kotler & Armstrong (2014) define price as a monetary cost that a consumer gives up to obtain a product. Ferguson (2014) says that price informs more than monetary amount as it also conveys symbolic and quality-related meanings. When consumers are uncertain or lack product knowledge, they often use price as a shortcut, with higher prices suggesting better quality or exclusivity and lower prices indicating affordability but potentially lower quality (Kim et al., 2012).

Price becomes an even more important factor in online shopping contexts. The digital environment allows consumers to compare prices of products on numerous websites quickly and easily (Akrin, 2021). Consequently, perceived price shows how consumers assess a vendor's price relative to competitors, influencing transaction utility (Kim et al., 2012). Moreover, based on price-expectancy theory, reference points are also shaped by both the product's perceived quality and how strongly consumers believe that price reflects quality (Ordóñez, 1998). From a technology adoption perspective, the UTAUT2 model highlights price value as a key determinant of technology use, suggesting that consumers are more likely to adopt and continue using a technology when the perceived benefits outweigh the monetary costs (Venkatesh et al., 2012). In Azerbaijan's e-commerce market context, price consistently emerges as a key motivation for online purchases, alongside other factors (Huseynli & Maharramov, 2022)

Building on this, perceived price strongly determines the broader and more important concept of perceived value. While perceived price shows how consumers judge the cost of a product compared to other options, perceived value as defined by Zeithaml (1988), means how consumers assess the overall usefulness of a product by comparing the benefits they gain with the sacrifices they make. She also noted that perceptions of value differ among consumers, so some associate value with low prices, while others see it as a fair balance between price and quality, or as a combination of multiple "give" and "get" components. Consistent with this view,

recent research describes perceived value as a multidimensional and subjective concept that differs among individuals rather than something that can be measured objectively (Blut, 2023). According to Yang & Peterson (2004), this idea aligns with equity theory, which suggests that customers judge the fairness of exchanges based on the balance between received benefits such as quality, convenience, or satisfaction and the resources they invest, including money, time, and effort.

Beyond this individual assessment, consumers often compare their outcome–input ratio with that of the company and competitors. If they feel this exchange is fair, they see higher value (Yang &Peterson, 2004). As a result, consumers who perceive high value tend to feel more satisfied with their purchase experience. Prior studies also demonstrate a positive relationship between perceived value and satisfaction (Anderson, 2003; Hu et al., 2009; Li et al., 2015; Wang & Prompanyo, 2020), suggesting that consumers who believe they receive good value are more likely to develop satisfaction and long-term loyalty toward the brand.

3 Theoretical framework and hypotheses development

3.1 Theoretical frameworks

In order to interpret the real behavior formation (loyalty) of the user, the theory of reasoned action and the four-stage loyalty model created by Oliver need to be briefly mentioned. These models can be used in explaining the formation of customer attitudes and the conversion of these attitudes to behavioral intentions and ultimately actual behaviors (repurchase) especially when it comes to the concept of e-commerce.

3.1.1 Oliver's four - stage loyalty

Oliver (1997) loyalty model builds on the classical triadic (cognitive-affective-conative) model by introducing a fourth step, action loyalty, to demonstrate how intentions can be turned into actual behaviour and there are four stages of loyalty which include cognitive, affective, conative and action (Oliver, 1997, 1999).

The first phase is cognitive loyalty that depends on the rational assessment of the consumer to the attributes of a brand. This level of loyalty is based on a perception that a particular brand is better than others because it does a better job, is less expensive or even of higher quality. Cognitive loyalty can be developed in an online situation due to the perceived usability of the site in competition, prices and the quality of the product (Oliver, 1997, 1999).

When consumers experience the brand over and over again, it starts developing a sense of emotion. Affective loyalty indicates a positive attitude and a liking towards the brand based on the emotional satisfaction that one receives after prior contact. This phase includes both the mental perceptions and the emotional reactions (Oliver, 1997, 1999).

The conative stage entails the intention with a desire of repurchasing the brand. This is the stage where loyalty appears in the form of wish or even devotion to remain with the brand in future. This stage represents an even more internal loyalty compared to the two prior ones, yet it is an expression of intent and not action. Just as with any good intention, conative loyalty does

not always lead to behavior because of the possible obstacles or even opposing forces (Oliver, 1997, 1999).

During the last phase the intentions are transformed into actual repeat purchasing behavior. What Oliver terms as action control, which is the capacity to stick to it in spite of the challenges drives this phase. When a repetitive behavior is maintained, an action inertia is created, thus creating the most intense form of loyalty, where a consumer will continue to purchase regardless of competition or adversities. According to this model, it places the process of loyalty as a multi-stage and dynamic process and not as a final result (Oliver, 1997, 1999).

3.1.2 Theory of Reasoned Action (TRA)

The TRA is a social psychology model that is well established and underlines how attitudes, intentions, and behaviors are related to one another (Fishbein & Ajzen 1975). The key argument of TRA is that behavior of a person is driven by his behavioral intention which, in its turn, is shaped by two important elements: attitude to the behavior, as well as subjective norms. The theory states that the attitude toward the behavior is the expression of the person as either positively or negatively as to whether the person should perform the behavior. It is created by beliefs of the consequences of the action and judgment of the consequences. The subjective norms are the ones that refer to social pressure to act or not to act. This is influenced by the beliefs of the individual on whether the important referents (e.g., friends, family, peers) believe that the individual should perform the behavior and motivation to perform the act as any of the important referents (Fishbein & Ajzen,1975).

In e-loyalty studies, this is the reason why internal elements like satisfaction and trust and external factors like peer recommendation, online reviews affect the repurchase intentions. These attitudes are the evaluations of the consumers with regard to the content of the platform, context, and infrastructure, whereas subjective norms practice the social influence in order to stay loyal (Lu & Lin, 2003). Research indicates that beliefs about the content, context, and infrastructure of the platform determine these attitudes (Lu & Lin, 2003). Similarly, the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) model also emphasizes social influence as one of the key determinants of technology adoption and use, alongside performance expectancy,

effort expectancy, and facilitating conditions (Venkatesh et al., 2012). This further supports the importance of social factors in understanding consumer behavior in digital environments.

Through the introduction of TRA, this study will not only focus on the personal assessments and internal psychological issues determining loyalty, as proposed in the loyalty model by Oliver, but also the external social factors which are crucial in determining consumer behavior within the digital setting. These comprise the perceived social norms, peer recommendations that usually influence the attitude and intention of users to use in repeat transactions. In Azerbaijan, it is especially necessary to consider social factors since the culture of the country is highly collectivist and therefore, the views of loved ones are given great importance. Combining the two models, the research attempts to give a deeper insight into consumer flow leading to loyalty after initial assessment and the influence of social expectations on loyalty within Azerbaijan e-commerce settings.

3.2 Proposed Model

Having reviewed the existing body of literature on the topic of e-loyalty, e-satisfaction, e-trust, e-service quality models, and perceived value, the present research suggests the following research model, which is based on Cognitive-Affective-Conative/Action model and supplemented by the Theory of Reasoned Action (TRA).

3.2.1 Cognitive Stage

During the cognitive phase, consumers establish rational decisions about an e-commerce platform using the functional and strategic characteristics. Using pre-existing literature, the platform design, fulfillment/reliability, customer service/responsiveness, and perceived value were involved in the study as some of the main cognitive variables. The security and privacy aspect of service quality is not treated as a cognitive-stage characteristic. Rather, security and privacy are viewed as elements of e-trust, because consumers' judgments regarding these factors are mainly based on perceptions instead of solely rational or technical evaluations, aligning with the methodology used by Pavlou (2003) and López-Miguens and González Vázquez (2017). Furthermore the considerations of the consumers are formed not merely by the products and the services but also other people and their expectations. Thus, the factor of social influence is

introduced into the process of cognition since it influences the emotional reaction and following the loyalty behaviour of consumers.

3.2.2 Affective Stage

The affective stage involves the development of emotional reactions and attitude towards the e-commerce platform of customers depending on their cognitive judgment. The affective stage in this research will also have two important constructs, e-trust and e-satisfaction.

3.2.3 Conative/Action Stage

The conative/action stage represents the phase in which positive attitudes and emotions are translated into behavioral intentions and actual behavior. At this stage, e-satisfaction and e-trust lead to e-loyalty, which is reflected in consumers' intention and actual behavior to make repeat purchases.

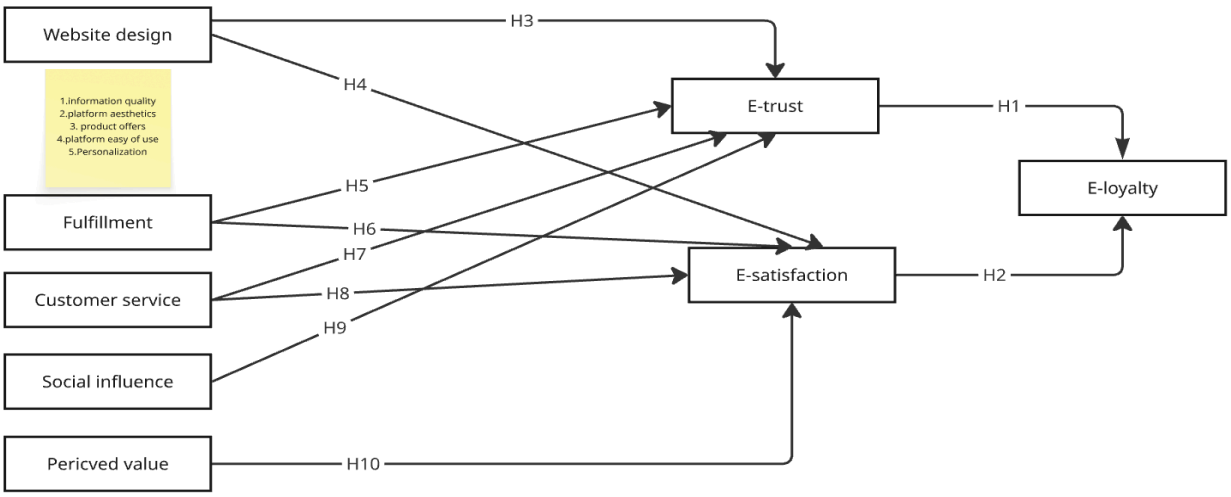


Figure 1 Research model

3.3 E-satisfaction and E-trust as antecedents of E-loyalty

As earlier mentioned, most of the past researchers have found satisfaction as a significant antecedent of e-loyalty. Nevertheless, other researchers claim that satisfaction cannot be used to bring about loyalty. An example is that not every satisfied customer is a loyal customer as Oliver (1999) noted, and Jones & Sasser (1995) moreover discovered that half of the customers who were satisfied still change brands. Researchers like Singh & Sirdeshmukh (2000) and Safa &

Ismail (2013) have proposed e-trust to be addressed in the online context as the e-satisfaction to close this gap and enhance the knowledge of e-loyalty formation. Besides this, other scholars also cite the significance of e-trust in the process of e-loyalty development through minimisation of uncertainty and maximization of security and reliability (Corbitt et al., 2003; Reichheld & Schefter, 2000; Ribbink et al., 2004). The famous argument presented by Reichheld & Schefter (2000) is that loyalty can never be earned without winning trust, and it is rather a prerequisite, but not a complimentary factor.

Gummerus (2004) examined the trust-satisfaction-e-loyalty chain, and the findings showed that e-satisfaction is a driven loyalty process, but the most important antecedent of e-satisfaction is trust. Ribbnik (2004), and Kim et al. (2009) simulated the mediating effect of e-trust and e-satisfaction between e-service quality and e-loyalty. The findings of both articles demonstrate that, e-trust and e-satisfaction have strong influence on the development of e-loyalty. Empirical studies over time, across nations, and industries all show that there are positive and statistically significant relationships between e-satisfaction and e-loyalty, e-trust and e-loyalty (Anderson,2003; Harris & Goode, 2004; Floh & Treiblmaier, 2006; Chung & Shin et al., 2008; Christodoulides & Michaelidou, 2010; Kaya et al., 2019; Giovanis & Athanasopoulou, 2014; Jin et al., 2009) According to this discussion, the following hypotheses are put forward:

H1: E-trust positively influences e-loyalty.

H2: E-satisfaction positively influences e-loyalty.

3.4 Antecedents of E-trust and E-satisfaction

To comprehend what really leads to e-loyalty, it would be necessary to explore deeper into the antecedents of e-trust and e-satisfaction. According to the literature available, these two constructs are conditioned by some important qualities that condition the online experience and perceptions of consumers. They are below:

3.4.1 Website design

The design of the websites is a necessary component of the online shopping experience defining the level of perception and judgment consumers have concerning the e-commerce

systems. It involves all areas of interaction between a consumer and an online shop, excluding customer service. Instead, it includes navigation, information search, order processing, product selection, and personalization functionality (Wolfinbarger & Gilly, 2003). Blut (2016) further adds that the availability of merchandise, the variety of products available on the website, and the price are also part of the web design, which affects the cognitive evaluation of the e-commerce site by its customers. Collectively, these factors contribute to the foundation of cognitive evaluations that users make that in turn interfere with their emotional reactions, especially e-trust and e-satisfaction with the online retailer.

Scientists have covered different web design elements and their influence on customer perception. Rita et al., (2019) established that the overall service quality positively depends on the website design, which, in turn, contributes to e-satisfaction and e-trust, and other researchers, Lee & Lin (2005), Cristobal et al.,(2007) and Li et al. (2015), also found that website design had a significant positive impact on e-satisfaction. Chang & Chen (2008) proved that interface quality which refers to typography, customization, interactivity and convenience had a positive influence on e-satisfaction, a fact further validated by Ribbink et al. (2004) who indicated that the design of user interface was an important issue affecting e-satisfaction. Moreover, Aladwani & Palvia (2002) found information quality as one of the main factors of user satisfaction, whereas McKnight et al. (2002) established that it has a positive influence on e-trust.

The convenience and usability of the websites have been indicated to be one of the best predictors of online satisfaction as well (Szymanski & Hise, 2000). Following this line of thinking, Cyr et. al (2008) concluded that design quality, information design, visual design, and navigation design, creates e-trust by signaling out professionalism and credibility through facilitating user experiences which are intuitive and confidence-inspiring. More recent studies by Saoula et al. (2023) further support such views with results that perceived ease of use and visual design significantly contribute towards e-trust by creating intuitive and confidence-inducing user experiences. In addition to them, Srinivasan et al. (2002) have shown that product variety has a direct effect on e-loyalty, and further empirical researchers on product variety have indicated that product variety also has an effect on e-satisfaction and e-trust (Chang, 2011; Ziaullah et al., 2014; Hanaysha et al., 2025).

Theoretically, these results are supported by the Unified Theory of Acceptance and Use of Technology 2, in which effort expectancy, facilitating conditions, and hedonic motivation play a vital role in the adoption and usage of technology (Venkatesh et al., 2012). In an e-commerce platform, factors such as ease of navigation, information quality, system response, and aesthetic appeal lead to a reduction in perceived effort and increased enjoyment, which improves overall positive beliefs about the platform by customers in relation to e-trust and e-satisfaction.

Collectively, these findings highlight the complexity of the issue of web site design in how it influences consumer perceptions, emotional reactions, and behavioral intentions within Internet-based settings. An effectively designed platform will decrease cognitive load, perceived control, and competence, thus creating e-satisfaction as well as e-trust.

H3:Customer e-trust in e-commerce is positively influenced by platform design

H4: Customer e-satisfaction in e-commerce positively influenced platform design.

3.4.2 Fulfillment/Reliability

Fulfillment/reliability is the possibility of a retailer to deliver the right product as per the promise and in good condition (Parasuraman et al., 2005; Zeithaml et al., 2002; Blut, 2016; Wolfinbarger & Gilly, 2003). It also involves key function areas such as correct order processing, on-time delivery and accurate product details. On the eTailQ scale, the dimensions of fulfillment/reliability are evaluated in two aspects: (1) consistency of the representations of the product online and the goods that the customer actually receives, (2) the compliance with the stated delivery schedule (Wolfinbarger & Gilly, 2003). M. Blut (2016) also emphasizes that it is necessary to supply the product in decent conditions in addition to accuracy and timeliness, which will further deliver customer expectations. Thus, the retailer should offer correct and specific data and pictures of the products, and make sure that ordered goods are presented to the customer at the right time, as it was promised, and without any harm.

Semeijn et al. (2005) highlight that fulfillment/reliability is one of the determinants of overall assessment of online shopping experiences by consumers especially where physical delivery of products is applied. When an online transaction is reliably fulfilled, customers feel

that the retailer is reliable, which decreases the perceived risk and contributes to trust in the brand as well.

Fulfillment/reliability is another factor that has been noted by researchers as one of the strongest elements that influence e-satisfaction as well as e-trust. Rita et al. (2009) uphold that reliability has a direct impact on the overall service quality and indirectly on e-satisfaction and e-trust. In case an online retailer manages to provide the appropriate product, at the appropriate time, and in a good condition, consumers will feel more satisfied and will have increased e-trust (Kim et al., 2009; Li et al., 2015; Celik, 2021, Saoula et al. 2023). It guarantees the customers what they expect during the buying process, which leads to the development of positive emotions and a positive attitude towards the e-commerce platform (Li et al., 2015). According to Kim et al. (2009), the four dimensions of eTail quality were found to have different impact on e-satisfaction and e-trust, fulfillment/reliability as the best predictor of both constructs. According to them, online customers do usually fear not receiving the product that they ordered, or receiving a damaged one, and even multichannel retailers that operate with physical stores cannot fully exclude these issues. Precise delivery also lowers the risks of uncertainty and makes customers trust the retailer more and develop a long-term relationship with the platform.

H5: Fulfillment/reliability positively influences customer e-trust in e-commerce

H6: Fulfillment/reliability positively influences customer e- satisfaction in e-commerce

3.4.3 Customer service/Responsiveness

Customer service, also known as responsiveness, is a measure of how effective, prompt, and timely the service of a retailer is to the customer in terms of their responsiveness to customer questions, returns, or complaints over the course of the purchase process (Wolfinbarger & Gilly, 2003, Blut, 2016). It is a measure of the quality of service provided by a retailer in terms of how effective, prompt, and timely the response to customer questions, returns, or complaints can be throughout or after the process of purchase (Kassim & Abdullah, 2010).

Wolfinbarger & Gilly (2003) hold that the issue of customer service is particularly critical in online retailing settings whereby customers can be exposed to more uncertainty. Holloway & Beatty (2008) also indicate that to build on customer satisfaction, it is vital that service support is reliable and transparent especially when there are clear and equitable return or exchange policies.

The immediate reaction to the queries makes it seem more convenient and lessen the uncertainty.Good customer service during shopping experience does not only elevate instant satisfaction, but also promotes customer loyalty in the long-run due to the quality service recovery and commitment to customer care (Gummerus et al., 2004, Kassim & Abdullah, 2010).

Nevertheless, previous studies have also indicated varying outcomes on the effects of customer service/responsiveness towards e-satisfaction and e-trust. Responsiveness has been found by a number of studies as an important antecedent of e-satisfaction (Lee & Lin, 2005; Ribbink et al., 2004; Celik, 2021). Li (2015) and Kim et al. (2009), on the contrary, gave empirical results that customer service/responsiveness has no considerable influence on either e-satisfaction or e-trust. On the issue of the formation of trust, Gummerus (2003), Konradut (2004) and Kassim & Abdullah (2010) indicated that the relationship between customer service responsiveness and e-trust development is positive and significant.

H7: Customer service positively influences customer e-trust in e-commerce.

H8: Customer service positively influences customer e-satisfaction in e-commerce.

3.4.4 Social Influence

According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), the behavior of a person is influenced not only by the individual judgment and beliefs but by the social norms that represent the expectations of the important individuals and the desire to follow them. This means that personal judgment as well as the social environment affects the decisions of the consumers. Such social norms in this study are conceptualized as social influence which is significant especially when engaging in online shopping. Joen (2019) offers an example of social influence via word-of-mouth (WOM) in the social group or online community.

Consumers tend to utilize reviews, rating, and recommendations of friends, family members, or other members of society to evaluate e-commerce platforms and tend to rely more on WOM than traditional media (Cheung & Thadani, 2012; Kim &Srivastava, 2007). It has been demonstrated that social influence lowers the perceived risk, boosts consumer confidence, and improves platform trustworthiness perceptions (Lazaroiu et al., 2020; Kim & Srivastava, 2007). Favorable reviews and group opinions make the consumers feel more confident in their decision

and build more trust in the platform. Empirical observations also prove that social influence is very powerful in enhancing e-trust, with consumers more likely to trust sites that are positively reviewed by peers and online communities (Awad & Ragowsky, 2008, Kristina & Sugartio, 2020). In this regard, we focus on the necessity to study this effect within the context of online shopping, taking into consideration the earlier studies and the cultural background of the Azerbaijan country. On this ground, the hypothesis below is put forward:

H9: Social influence positively influence on customer e-trust in e-commerce

3.4.5 Perceived value

A number of studies have proved that perceived value has a significant impact on customer satisfaction particularly in the case of online shopping. The perception of value has the greatest role in the derivation of e-satisfaction as a consumer will be more satisfied when they perceive greater value in the online shopping experience (Li et al., 2015; Wang & Prompanyo, 2020; Hu et al, 2009). As it was concluded by McDougall & Levesque (2000), customer satisfaction models should include both the perceived value and the service quality dimension to give a more comprehensive view of the drivers of customer satisfaction. This implies that the perceptions of value by the customers are the direct determinants of the level of satisfaction of the customers with the online service. Thus, the perceived value as well as the service quality dimensions are implemented in this study, and the special focus is on the price-quality balance.

H10: Perceived value positively influences customer e-satisfaction in e-commerce

4 Methodology

The following section outlines the research methodology. First, the research paradigm and design are described. Additionally, the survey design, including all measurement instruments and the conducted pre-test, is presented in more detail. This is followed by a description of the sample selection and data collection. Lastly, this chapter discusses methodological biases, ethical considerations.

4.1 Research paradigm and design

This research adopts a post-positivist paradigm because of its quantitative and theory-driven nature. The post-positivism is a response to the limitations of a positivist paradigm which believes absolute truth exists and science could find absolute truth through observation and reason, and regardless of values (Creswell&Creswell, 2018; Saunders et al., 2019) Like positivism, post-positivism accepts that reality exists independently from human perception, however, the understanding of reality is inherently imperfect, shaped by different factors such as individuals' backgrounds, personal experiences, perceptions and context.(Guba & Lincoln, 1994; Phillips & Burbules, 2000; Ryan, 2006; Saunders et al., 2019). Additionally, the phonemes may be influenced by the researcher's beliefs, prior knowledge, measurement limitations (Robson, 2002; Maksimović & Evtimov, 2023). As a result, within post positivism, knowledge is considered as conjectural rather than absolute and research doesn't look at universal truth, it is a process of making claims, testing them, and refining them based on evidence, data (Phillips & Burbules, 2000; Ryan,2006). Post-positivism strikes a balance between the rigor of positivism and the flexibility of interpretivism, which values understanding complexity and subjectivity (Panihwar, 2017).

Aligned with this philosophical stance, this study seeks to examine the factors that affect the development of loyalty. In this study, loyalty was defined from a relational perspective, as defined by Toufaily (2013), which develops in four successive stages, as in the model proposed by Oliver (1997,1999). Across these stages, cognitive, affective, and conative/action, different variables interact with one another. Variables in the cognitive stage are considered independent variables, while the variable in the conative/action stage, loyalty, functions as the dependent

variable. Variables within the affective stage can act as either independent or dependent variables (mediating), depending on their position within the model.

This research uses quantitative, deductive methodologies, in which all hypotheses are constructed based on theory and existing literature (Van de Ven, 2007), because of the post-positivism, knowledge is developed through systematic observation, measurement, and testing of hypotheses derived from existing theories and previous literature (Creswell&Creswell, 2018; Saunders et al., 2019). All hypotheses are directional, meaning that they specify the expected relationship between variables (Van de Ven, 2007), and are considered tentative rather than absolute, as post-positivism recognizes (Phillips & Burbules, 2000; Ryan, 2006). For this study, data were gathered using a structured, cross-sectional survey to capture participants' responses at a single point in time.

This kind of quantitative design is well-suited for the aim of research, understanding factors that affect the development of e-loyalty in the context of the Azerbaijan e-commerce market.

4.2 Survey design

In this study, a structured survey instrument was developed to collect data about consumers' perceptions and behaviors regarding e-commerce platforms. The survey was conducted online though Google Forms, which allowed participants to complete it easily and anonymously. The questionnaire consisted of ten main sections. The first section collected demographic information from respondents such as gender, age, monthly income, and education level. The second section focused on online shopping behavior, with questions about general behavioral patterns such as the frequency of online purchases, preferred e-commerce platforms, average spending per transaction, and length of online shopping experience. This section was aimed to provide contextual insights and ensure that participants met the inclusion criteria, serving a control in the research design. Only respondents who reported making at least four online purchases in a year were considered active online shoppers and included in the analysis.

The remaining sections measured the study's key constructs: Platform design, Social influence, Perceived value, E-trust, E-satisfaction, Fulfillment/Reliability, Customer

service/Responsivenes and E-loyalty. All constructs were measured using closed-ended items and adapted from previously validated scales in the literature to ensure that they are conceptually accurate and reliable. All questionnaire items were translated into Azerbaijani and checked for grammatical and contextual clarity to improve participant understanding.

Participants rated all items on a five-point Likert scale, which ranged from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). This standard method ensured consistency in responses and supported the quantitative analysis of the relationships among concepts (Bryman & Bell, 2015). Using established measurement scales adapted for the Azerbaijani context improved the validity and reliability of the survey, making it suitable for testing the proposed model. This approach aligns with prior studies that emphasize the importance of validated instruments and Likert-type scales for ensuring data quality and comparability (Hair et al., 2019).

4.2.1 Measurements

The dimensions of all six variables were briefly presented above. Table 1 provides a summary of all measurement scales, including the number of items and their corresponding sources. All individual scale items are presented in Appendix A.

Table 1

Summary of measurement

Construct	**N of items**	**Source(s)**
Platform Design		
Information quality	3	*Wolfinbarger&Gilly 2003), Blut(2016)*
Platform ease of use	3	*Wolfinbarger & Gilly, (2003); Zeithaml et al. (2002), Blut(2016)*
Platform aesthetics	2	*Wolfinbarger&Gilly 2003), Blut(2016)*
Product Offerings	3	*Blut (2016), Wolfinbarger&Gilly (2003)*
Personalization	3	*Wolfinbarger&Gilly 2003), Blut (2016)*
Perceived Value	4	*Yang & Peterson (2004), Li (2015)*
Social Influence	3	*Fishbein&Ajzen(1975), Erkan & Evans (2016)*
Fulfillment/Reliability	4	*Blut (2016), Zeithaml* et al. (2002), *Wolfinbarger & Gilly (2003)*

Construct	N of items	Source(s)
Customer Service/Responsiveness	4	*Blut(2016), Zeithaml* et al. (2002), *Wolfinbarger & Gilly, (2003).*
E-trust	4	*López-Miguens & Vázquez(2017), Kim et al. (2009).*
E-satisfaction	4	*López-Miguens & Vázquez(2017), , Kim et al. (2009)*
E-loyalty	4	*Toufaily et al. (2013), López-Miguens & Vázquez(2017), Kim et al. (2009).*

Website Design was the only construct conceptualized as multidimensional in this study. It was measured by drawing on e-service quality frameworks proposed by Blut (2016), Wolfinbarger and Gilly (2003), and Zeithaml et al. (2002) Blut (2016) identified website design as a higher-order construct comprising nine sub-dimensions: information quality, website aesthetics, purchase process, website convenience, product selection, product availability, price offers, website personalization, and system availability. While this multidimensional approach provides a comprehensive understanding of online service attributes, incorporating all nine sub-dimensions poses the risk of excessive model complexity. As noted by Hair et al. (2019) and Kline (2016), overly fragmented constructs may undermine discriminant validity, reduce interpretability, and lead to model misspecification in factor analysis.

Therefore, in accordance with the principle of parsimony, the present study reconceptualized the Website Design construct into five broader and theoretically coherent dimensions. This refinement was guided by established e-service quality frameworks, including the E-S-QUAL model (Zeithaml et al., 2002) and the E-TailQ model (Wolfinbarger & Gilly, 2003), both of which operationalize website design using fewer, conceptually distinct dimensions. Additionally, the term “website design” was replaced with “platform design” to better capture both website and mobile app shopping environments.

Specifically, platform ease of use was developed by integrating purchase process, website convenience, and system availability, and fits with the efficiency and system availability dimensions identified by Zeithaml et al. (2002). This dimension was measured using three items. Similarly, offerings were formed by merging product selection and merchandise availability, reflecting product-related aspects of online retail environments, and were measured with three items. The remaining dimensions, information quality, platform aesthetics, and personalization,

were retained as originally defined by Blut (2016) but refined using elements from the E-TailQ model. Information quality was measured with three items, platform aesthetics with two items, and personalization with three items.

Price offerings were excluded from the Platform Design construct, as Perceived Value was separately incorporated into the research model to capture consumers' overall value assessments. Perceived Value was measured using four items, adapted from Yang & Peterson (2004) and Li (2015). Fulfillment/Reliability (four items), Customer Service (four items), were measured based on scales adapted from Blut (2016), Zeithaml et al. (2002), and Wolfinbarger & Gilly (2003). Social Influence was measured using three items adapted from Fishbein and Ajzen (1975) and Erkan & Evans (2016). These items captured the perceived influence of close social circles and online recommendations on consumers' platform usage and purchase decisions. Finally, E-Trust, E-Satisfaction, and E-Loyalty were each measured with four items, adapted from Toufaily et al. (2013), López-Miguens & Vázquez (2017), and Kim et al. (2009). In all constructs, the number of items was minimized to preserve meaning and context. Given the large number of variables in this model, this approach helped reduce participant fatigue and improve response quality.

4.2.2 Pre-test

Before launching the final survey, a pre-test was conducted to ensure that all questionnaire items were clear, understandable, and relevant to the target population. Two experts, each working at a different e-commerce company in Azerbaijan, reviewed the survey items. Their goal was to confirm that the questions were clear, relevant, and suitable for the online retail setting.

After this expert review, the pre-test was conducted among 30 respondents. They were peers of the researcher and regular online shoppers in Azerbaijan, which ensured that the feedback was informed and relevant. During the pre-test, participants evaluated the clarity, wording, structure, and overall understandability of each survey item. They also reported the time it took to complete the survey, which ranged from about 5 to 10 minutes, confirming that the questionnaire length was appropriate.

Based on feedback from the specialists and participants, minor adjustments were made to improve phrasing, remove unclear elements, and enhance the overall flow of the questionnaire. These changes ensured that the final survey would be user-friendly and effectively capture the intended concepts in the Azerbaijani context.

4.3 Sample selection and data collection

The aim of this research is to investigate the main factors influencing electronic customer loyalty in the context of Azerbaijan's rapidly growing e-commerce sector. As online shopping grows in popularity, understanding the determinants of e-loyalty provides both academic and managerial insights into how digital businesses can build stronger and more sustainable customer relationships.

The target population for this study includes individual consumers in Azerbaijan who have experience purchasing goods through e-commerce platforms including both website and mobile app users. This population includes both users of local online stores and international shopping websites. To ensure relevance and data quality, only respondents who reported making at least four online purchases per year were included in the analysis. This criterion identifies active online shoppers who have enough experience to evaluate e-commerce platforms.

Due to the practical limitations of obtaining a complete and reliable sampling frame of all online shoppers in Azerbaijan, the study adopted a non-probability convenience sampling method. Convenience sampling was considered the most appropriate approach, given its effectiveness in collecting data quickly and efficiently from a relevant audience, particularly in online contexts where probability sampling is rarely feasible (Etikan et al., 2016; Saunders et al., 2019).

Data were collected through a self-administered online survey created in Google Forms and shared through various digital channels, including social media platforms like Facebook, Instagram, and LinkedIn. Participants were invited to join the study, and to widen the reach, a snowball sampling technique was used. Participants were encouraged to share the survey link within their networks of online shoppers. This approach allowed for gathering responses from a diverse group of individuals with different ages, genders, education levels, and online shopping habits, which enriched the dataset and improved the representation of consumer behavior patterns.

Non-probability convenience sampling is widely used in quantitative research for testing proposed relationships (Etikan et al., 2016). Since our research is aimed at understanding the loyalty behavior of active e-commerce users, convenience samples are a suitable way to collect useful information from active online shoppers.

Data was collected over a two-week period, from 27 October to 15 November, resulting in a total of 382 valid responses.

4.4 Considering bias

As with any research, this study recognizes the possibility of various biases that could affect the validity and reliability of its findings. Several potential biases were taken into consideration to ensure that the collected data and results are as valid and reliable as possible.

One concern relates to sampling bias, which may occur from using a non-probability convenience sampling method. Although efforts were made to involve existing e-commerce companies in the research, none agreed to participate. As a result, data were collected through an online survey shared within the researcher's personal network. To improve diversity, participants were encouraged to share the survey with their circles. Consequently, the sample mainly consisted of young and digitally active consumers. Globally, younger generations, such as Generation Z and Millennials, make up the main segment of online shoppers, even in digitally mature markets. For instance, according to Eurostat (2025), 77% of internet users in the EU bought goods or services online in 2024, with the 25–34 age group being the primary driver of e-commerce activity. Therefore, while the ability to generalize to the entire population may be limited, the sample remains relevant and suitable for the study's goals.

Other potential issues include response bias and recall bias. Response bias occurs when participants give socially desirable answers instead of their true opinions (Borgers & Landrock, 2016). Recall bias, which is closely related, happens when respondents may not accurately remember past behaviors (Coughlin, 1990), like online shopping frequency or spending. Both biases can affect the accuracy of self-reported data. To reduce these risks, the survey used neutral, non-leading language, urged respondents to recall their past experiences thoughtfully, and highlighted anonymity to encourage honest reporting.

The study also considers common method bias and measurement error. Common method bias (CMB) can occur when both independent and dependent variables come from the same

respondents at one point in time. This may distort relationships among variables (Podsakoff et al., 2003). To address these concerns, several steps were taken, such as ensuring respondent anonymity and randomizing question order. Measurement error, defined as the difference between the true value of a variable and the observed value, can stem from various sources, including the respondent, the survey tool, data collection method, or questionnaire design (Bavdaž, 2009). To minimize such errors, the questionnaire was developed by using developed, valid scales and reviewed, pre-tested, and refined for clarity, relevance, and contextual accuracy.

4.5 Ethical consideration

This research followed standard ethical practices for social science studies. The main ethical concerns included informed consent, voluntary participation, anonymity, and data confidentiality (Bhandari, 2024, Israel & Hay, 2006, Saunders et al., 2019).

Before the survey began, all participants received a brief information in the introduction section of the survey. This explained the study's purpose, the estimated time needed to complete the questionnaire, and how their data would be used. They were informed that their participation was completely voluntary and that they could withdraw from the survey at any time without giving a reason.

Informed consent is also an ethical and legal requirement (Israel & Hay, 2006, Nijhawan, 2013), to ensure informed consent, the introductory section at the start of the Google Form clearly stated that moving forward with the survey meant agreeing to participate.

The survey didn’t gather any personal information, such as names, contact details such as email, phone number, or IP addresses. Participants’ identities remained fully anonymous throughout the study. All responses were kept confidential and stored securely, with access limited to the researcher for analysis (Creswell & Creswell, 2018).

Additionally, the research posed no physical, psychological, or social risks to participants since it only involved voluntary self-reporting about online shopping experiences. The language used in the questionnaire was neutral and non-discriminatory to minimize any potential discomfort.

Overall, the study followed ethical research practices, respecting individuals and ensuring fairness, as outlined in established ethical guidelines for social research (Israel & Hay, 2006).

The study also met the ethical standards from Lund University, ensuring transparency, integrity, and the protection of participants' rights throughout the research process.

5 Quantitative analysis and empirical result

This chapter includes the quantitative analysis and empirical results that seek to establish the relationships among the identified factors and e-loyalty. Data analysis was done using IBM SPSS Statistics 30, and all tests were performed at the α = .05 significance level. The important SPSS outputs are given in the Appendix B.

5.1 Primary analysis

Initially, all primary analyses, such as data cleaning, sample characteristics, factor analysis, internal consistency, and descriptive statistics, will be outlined.

5.1.1 Data cleaning

Before conducting the statistical analysis, the data was checked for quality. This involved looking at responses based on online shopping frequency and checking for outliers. Participants who said they shop online "rarely" were excluded from further analysis. After this data cleaning process, the final sample included N = 309 valid cases out of a total of 382 respondents.

To find potential univariate outliers, z-standardized values were calculated for all items across the measurement scales. Following Field's recommendation from 2018, observations with absolute Z-values greater than ±3.29 were marked as potential outliers. The results showed that 24 respondents (7.77%) had at least one extreme value on one of the scale items.

All identified cases were carefully checked for data entry errors, careless responses, and systematic issues. Since no invalid or unreliable response patterns were found, the extreme values were seen as reflecting real consumer perceptions. Therefore, all 24 cases were kept for further analysis.

5.1.2 Sample characteristics

The sample included 309 participants. In terms of gender, 133 participants (43.0%) identified as male, 175 participants (56.6%) identified as female, and 1 participant (0.3%) chose not to disclose their gender.

Most participants were between 25 and 34 years old (207 participants, 67.0%). The next largest groups were 18 to 24 years old (57 participants, 18.4%), 35 to 44 years old (41

participants, 13.3%), 45 to 54 years old (3 participants, 1.0%), and over 55 years old (1 participant, 0.3%).

Participants had different levels of education: 146 participants (47.2%) held a bachelor's degree, 136 participants (44.0%) held a master's degree, 15 participants (4.9%) held a doctoral degree (PhD), and 12 participants (3.9%) had completed secondary school.

The distribution of participants' monthly income was as follows: 33 participants (10.7%) earned less than 500 AZN, 44 participants (14.2%) earned between 500 and 999 AZN, 95 participants (30.7%) earned between 1,000 and 1,999 AZN, 55 participants (17.8%) earned between 2,000 and 2,999 AZN, and 82 participants (26.5%) earned more than 3,000 AZN.

5.1.3 Online consumer behavior

This research also examined online shopping behavior in terms of shopping frequency, platform preference, average expenditure, and online shopping experience.

The findings indicate that most respondents shop online on a monthly basis (56.0%), while 5.2% shop weekly. About 38.8% reported shopping more than four times per year. Participants showed clear loyalty to specific platforms. Trendyol was the most frequently used platform (52.8%), followed by Temu (23.3%) and Amazon (10.7%). Other platforms, such as AliExpress, Zalando, Alibaba, and Birmarket (Umico), were used less frequently. Some respondents also reported using multiple platforms or brand-specific websites. Regarding spending patterns, most consumers preferred moderate spending per purchase. Nearly half of the respondents (44.7%) spent between 51–100 AZN, 25.2% spent 101–200 AZN, 14.9% spent less than 50 AZN, and 15.2% spent over 200 AZN per purchase. The duration of online shopping experience varied among respondents. The largest group (33.7%) had 4–6 years of experience, followed by 1–3 years (29.1%) and more than 6 years (27.5%). Only 9.7% had less than one year of experience. This indicates that most participants are familiar with online shopping, which likely affects their platform loyalty, purchasing decisions, and confidence in e-commerce transactions.

5.1.4 Factor Analysis

Exploratory Factor Analysis (EFA) was conducted to evaluate the construct validity of the study scales. This ensured that each set of items represented its underlying latent construct well.The analysis was performed separately for each construct, which included e-loyalty,

e-satisfaction, e-trust, perceived value, fulfilment, customer service, social influence and all sub-dimensions of platform design. Principal Axis Factoring (PAF) was chosen as the extraction method because it considers only the common variance among items and accounts for measurement error, making it suitable for validating theoretical constructs in social science research (Fabrigar et al., 1999; Field, 2018). An oblique rotation was applied to allow for potential correlations between factors, which is common in marketing constructs (Costello & Osborne, 2005). The suitability of the data for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity (Kaiser, 1974), while anti-image correlations were examined to confirm that all items had sufficient sampling adequacy for inclusion.

For the loyalty construct, the KMO value was 0.825 and Bartlett's test was statistically significant ($\chi^2 = 541.766$, $df = 6$, $p < .001$). All individual Measures of Sampling Adequacy (MSA) exceeded 0.80. The extracted factor explained 60.5% of the total common variance. Communalities for the four items ranged from 0.511 to 0.651, and all items loaded cleanly onto a single factor.

For the satisfaction construct, the KMO value was 0.842 and Bartlett's test was statistically significant ($\chi^2 = 736.649$, $df = 6$, $p < .001$). All individual MSA values were above 0.80. The extracted factor explained 68.86% of the total common variance. Communalities ranged from 0.645 to 0.777, with factor loadings between 0.803 and 0.881, showing strong loadings on a single factor.

For the trust construct, the KMO value was 0.828 and Bartlett's test was statistically significant ($\chi^2 = 712.235$, $df = 6$, $p < .001$). All individual MSAs exceeded 0.78. The extracted factor explained 67.41% of the total common variance. Communalities ranged from 0.586 to 0.788, and factor loadings were between 0.766 and 0.888, indicating a strong single-factor structure.

For the perceived value construct, the KMO value was 0.807 and Bartlett's test was statistically significant ($\chi^2 = 480.935$, $df = 6$, $p < .001$). All individual MSAs exceeded 0.78. The extracted factor explained 57.11% of the total common variance. Communalities ranged from 0.492 to 0.651, and factor loadings were between 0.701 and 0.807, confirming that all items loaded strongly onto a single factor.

For the social influence construct, the KMO value was 0.653 and Bartlett's test was significant ($\chi^2 = 117.291$, $df = 3$, $p < .001$), indicating that the data were suitable for factor analysis. A single factor was extracted, explaining 37.7% of the variance. Factor loadings ranged from 0.593 to 0.651, and communalities ranged from 0.352 to 0.424, suggesting that all items contributed meaningfully to the construct. Although communalities were slightly below the conventional threshold, items were retained due to their theoretical relevance, indicating a relatively weaker factor compared to other constructs.

For the customer service construct, the KMO value was 0.817 and Bartlett's test was significant ($\chi^2 = 699.550$, $df = 6$, $p < .001$). All individual MSAs exceeded 0.78. The extracted factor explained 65.59% of the variance, with communalities ranging from 0.380 to 0.801 and factor loadings from 0.616 to 0.895. While most items had good communalities above 0.6, one item ("Product return and exchange process is convenient with customer service") had a lower communality (0.380), which is slightly below the conventional threshold of 0.4. However, it was retained due to its theoretical importance for capturing the full scope of customer service.

For the fulfillment construct, the KMO value was 0.798 and Bartlett's test was significant ($\chi^2 = 493.546$, $df = 6$, $p < .001$). All MSAs exceeded 0.75. The extracted factor explained 57.42% of the variance, with communalities between 0.452 and 0.703 and loadings from 0.673 to 0.838. One item had slightly lower communality of 0.452 but was retained for its theoretical relevance for measuring delivery performance.

Since platform design is a multidimensional construct, factor analysis was conducted separately for each sub-dimension in order to examine their underlying structure and ensure construct validity. The results of the factor analyses show that all sub-dimensions of platform design exhibit a clear one-factor structure. For information quality, the three items loaded strongly on a single factor with loadings above 0.79, and the factor explained 67.57% of the total variance. The KMO value for this sub-dimension was 0.728, indicating good sampling adequacy. For the platform aesthetics, both items exhibited strong and identical factor loadings of 0.783, and the extracted factor explained 61.25% of the total variance. Although the KMO value was at the minimum acceptable threshold (0.500), Bartlett's test of sphericity was statistically significant ($p < .001$), indicating sufficient inter-item correlations for factor extraction. The relatively low KMO value can be attributed to the small number of items used to measure the

construct (Davis, 1993); nevertheless, the high factor loadings and substantial variance explained support the adequacy and interpretability of this factor. The platform usability sub-dimension also demonstrated a single-factor solution. The factor loadings ranged from 0.636 to 0.792, and the extracted factor explained 52.03% of the total variance. The KMO value was 0.685, indicating acceptable sampling adequacy. For personalization, the results revealed a strong unidimensional structure with factor loadings between 0.695 and 0.861. The extracted factor explained 59.30% of the total variance, and the KMO value was 0.699, confirming adequate sampling suitability. Finally, the Product Offerings sub-dimension exhibited a one-factor structure with factor loadings ranging from 0.646 to 0.729. The KMO value was 0.678, and Bartlett's test was statistically significant, indicating acceptable factorability of the data. Factor analysis for all constructs has been shown in Appendix B.

5.1.5 Internal Consistency

The internal consistency of the measurement scales was checked using Cronbach's alpha coefficient. According to common standards, alpha values of 0.70 and above show acceptable reliability, values over 0.80 show good reliability, and values above 0.90 show excellent reliability (Hair et al., 2019).

Before moving on to other statistical analyses, Cronbach's alpha was calculated for each construct in the study. This ensured that all measurement scales met the minimum reliability requirements. Reliabilities for constructs that did not meet the recommended thresholds were carefully examined to determine if item-level statistics indicated that the removal of a certain item would increase the overall reliability of the scale.

The reliability analysis showed that the constructs of loyalty, satisfaction, trust, perceived value, fulfillment, and customer service all demonstrated good internal consistency, with Cronbach's alpha values above 0.80. The social influence construct produced an alpha value of 0.64, which is below the conventional threshold. However, for constructs with a small number of items, Cronbach's alpha may underestimate internal consistency. In such cases, the mean inter-item correlation is a more appropriate indicator, with values between 0.20 and 0.40 considered acceptable (Briggs & Cheek, 1986). The mean inter-item correlation for the social influence construct was 0.38, indicating adequate internal consistency. Therefore, the construct was retained for further analysis.

In addition, the platform design subfactor demonstrated satisfactory internal consistency. Although the platform aesthetics construct showed a relatively low KMO value in factor analysis, its Cronbach's alpha exceeded 0.70, indicating acceptable reliability, and therefore it was retained for further analysis. Cronbach Alpha for all construct has been shown the Table 2

Table 2

Internal Consistency of Model Construct

Construct	**N of items**	**Cronbach's Alpha**
E-loyalty	4	0.86
E-satisfaction	4	0.88
E-trust	4	0.89
Perceived value	4	0.84
Fulfilment/Reliability	4	0.84
Customer service/responsiveness	4	0.87
Social influence	3	0.64
Information quality	3	0.86
Product offerings	3	0.72
Platform aesthetics	2	0.76
Personalization	3	0.81
Platform ease of use	3	0.76

5.1.6 Descriptive Statistic

Descriptive statistical analyses were conducted for all research variables to assess central tendency, dispersion, and distribution properties of the data. The results showed that the mean values ranged from 3.72 to 4.25. This indicates a generally high level of respondents' perceptions toward the measured constructs. Specifically, the highest mean score was for platform ease of use (M = 4.25), while customer service had the lowest mean (M = 3.72). The standard deviation values ranged between 0.57 and 0.87. This reflects a moderate and acceptable level of variability, suggesting that responses were reasonably spread around the mean.

Additionally, the skewness and kurtosis statistics for all variables fell within the recommended range of ±2 (Hair et al.,2019). This means there were minimal departures from normality and that the assumption of approximately normal distribution was met. This distributional adequacy supports the use of parametric statistical methods in future multivariate analyses. Furthermore, no missing values were found in the dataset, and all statistical analyses used a complete sample of 309 observations (N = 309).

Table 3

Descriptive Statistics of Key Variables

Constract	**Mean**	**SD**	**Max**	**Min**	**Skewness**	**Kurtosis**
E-loyalty	4.21	0.66	5	2	-0.447	-0.487
E-satisfaction	4.20	0.67	5	1.25	-0.508	0.215
E-trust	3.92	0.76	5	1.5	-0.249	-0.363
Perceived value	3.83	0.77	5	1.75	-0.124	-0.52
Customer service	3.72	0.87	5	1.25	-0.236	-0.441
Fulfillment	3.91	0.77	5	1.25	-0.377	-0.296
Social influence	3.98	0.64	5	2	-0.137	-0.184
Platform design	4.01	0.57	5	2.33	-0.127	-0.35
Platform ease of use	4.25	0.69	5	1.67	-0.796	0.218
platform aesthetics	3.88	0.81	5	1.5	-0.37	-0.501
personalization	3.90	0.82	5	1.33	-0.423	-0.219
product offerings	3.99	0.74	5	1	-0.529	0.304
information quality	4.03	0.74	5	2	-0.367	-0.584

Note: N=309

5.1.7 Regression Analysis

Six multiple regressions were done to test the hypotheses. The main hypotheses were tested by three of such analyses. The other two regressions tested the sub-dimensions of the platform design to determine the respective influences on e-trust and e-satisfaction. In this way,

the creation of loyalty is explained in a more detailed way. All regression analysis detailed information has been shown in Appendix B.

A multiple regression was performed to test hypotheses H1 and H2 keeping the loyalty as a dependent variable. All assumptions of regression were assessed before interpolating the analysis. The analysis of normal probability plot and histogram did not suggest any violation of normality. The homoscedasticity assessment revealed that the residuals were evenly spread except that there were a few extreme residuals. Eight standardized residuals that were greater than +-3 were dropped in order to enhance assumptions of the model. Homoscedasticity and linearity was met reasonably after their removal. The predictors showed a correlation of r = 0.688, which is less than 0.70 and the value of VIF was less than 5 and tolerances were greater than 0.1, and thus, multicollinearity was not a factor.

The multiple regression model proved to be statistically significant with a value of F(2, 298) = 298.03 and p <.001 with a variance of 66.7 (R^2 = .667, adjusted R^2 = .664)). Regression coefficients indicated that e-satisfaction was a predictive variable which was strong and significant in predicting loyalty (B = 0.762, β = 0.749, t = 16.26, p <.001), meaning that increased e-satisfaction is related to increased loyalty. E-trust was also a significant predictor of loyalty but with a smaller effect (B = 0.082, β = 0.094, t = 2.045, p =.042) meaning that trust has a positive effect on loyalty after accounting for satisfaction. In general, these findings confirm H1and H2 as they demonstrate that e-satisfaction and e-trust positively affect customer loyalty.

Table 4

Correlations among E-satisfaction, E-trust, and E-loyalty

Variables	**1**	**2**	**3**
E-loyalty	-		
E-satisfaction	0.814	-	
E-trust	0.609	0.688	-

Note: **p < .001 (one-tailed). N = 301

In order to verify the hypothesis H4, H6, H8, and H10, it was tested using a multiple regression model where the dependent variable (e-satisfaction) was specified, and the independent variables were perceived value, customer service, fulfillment and platform design.

The major assumptions of linearity, normality, homoscedasticity and multicollinearity were explored before analyzing the results. As demonstrated in the visual analysis of the residual plots and diagnostic statistics, the relationship between the independent variables and e-satisfaction were near-linear. It proved homoscedasticity and the variance of the residuals was the same in the predicted values, which were normally spread.

Additionally, the diagnostics of multicollinearity revealed that all the VIF values were less than 2.2, and thus there were no severe cases of multicollinearity between the variables (59.2) explained the variance of e-satisfaction (R^2 =.592, Adjusted R^2 =.586), which means that the overall model-fit is satisfactory. Findings indicate that perceived value (B = 0.330, β = 0.376, t = 7.536, p <. 001), fulfillment (B = 0.196, β = 0.225, t = 4.221, p <.001), and platform design (B = 0.271, β = 0.232, t = 4.636, p <.001) significantly impact e-satisfaction in the positive way The customer service however is not found to be significantly predictive of e-satisfaction, even after holding all the other variables constant (B = 0.061, β = 0.079, t = 1.561, p =.120).

Table 4

Correlations among E-satisfaction and its predictors

Variables	**1**	**2**	**3**	**4**	**5**
E-satisfaction	-				
Perceived value	0.690	-			
Customer service	0.552	0.553	-		
Fulfillment	0.630	0.583	0.653	-	
Platform design	0.632	0.604	0.542	0.576	-

Note: ***p* < .001 (one-tailed). N = 309

A multiple regression analysis was made to test H3, H5, H7 and H9 where e-trust was taken as a dependent variable and platform design, fulfillment, customer service and social influence as independent variables. The main assumptions of a multiple regression were reviewed before the interpretation of the results. All the assumptions of linearity, normality of residues, homoscedasticity, and multicollinearity had been met, meaning that the data were appropriate to run regression analysis, and the R^2 of the overall regression model was.511, which

implies that the four predictors explain 51.1 percent of the variance of e-trust. Adjusted R^2 (.505) also indicates that the model is very powerful in explaining and being stable. Concerning the individual predictors, platform design (β =.259, p =.001), fulfillment (β =.247, p =.001), and customer service (β =.310, p =.001), all of them were found to have significant positive impacts on e-trust, thus supporting H3, H5, and H7. Customer service was the best predictor of e- trust amongst them, then platform design, and fulfillment. On the other hand, social influence was not statistically significant on e-trust (β = .043, p=.330), causing the rejection of H9. On the whole, these findings show that functional and service-related variables have a more significant influence on the development of e-trust compared to external social variables, which means that the reliability of service performance and high-quality platform design are the key elements of the consumer trust development in the online setting.

Table 5

Correlations among E-trust and its predictors

Variables	1	2	3	4	5
E-trust	-				
Social influence	0.316	-			
Customer service	0.626	0.316	-		
Fulfillment	0.613	0.311	0.653	-	
Platform design	0.586	0.378	0.542	0.576	-

Note: **p < .001 (one-tailed). N = 309*

Whereas there were no hypotheses along these lines in the study, the findings indicated that the platform design has a significant and statistically significant influence on e-trust as well as e-satisfaction. Two further multiple regressions were performed to examine the role of platform design sub-dimensions on e-trust and e-satisfaction.

In the case of the e-trust regression, the full model was statistically significant (R =.617, R^2 =.381, Adjusted R^2 =.370, F(5, 303) =37.248, p <.001) and the platform design sub-dimensions have a joint significant effect on explaining the variance that e-trust has. Some of the predictors such as product offerings (β =.243, p <.001), platform ease of use (β=.227, p

<.001), and information quality (β=.241, p <.001) significantly influenced e-trust. Conversely, the effects of personalization (β =.064, p =.300) and platform aesthetics (β = -.007, p =.901) were not statistically significant. These results indicate that the functional and informational details of the platform design have a stronger effect in creating consumer trust compared to personalization and visual look.

The overall model was also significant in the case of the e-satisfaction regression (R = .668, R^2 =.446, Adjusted R^2 =.437, F(5, 303) = 48.722, p =.001), meaning that the platform design sub-dimensions used in the model explain 44.6 percent of the variance in e-satisfaction. Of the predictors, product offerings (β =.397, p =.001) was the best predictor of e-satisfaction, then platform ease of use (β =.240, p =.001) and information quality (β =.116, p =.031) were found to have significant positive influences. Personalization (β = -.006, p = .922), on the other hand, did not influence e-satisfaction significantly, whereas platform aesthetics had an insignificant but non-statistically significant influence (β=.093, p =.067). These results suggest that like e-trust, functional and informational platform design characteristics are more decisive to determine customer satisfaction as opposed to personalization and aesthetic appeal.

Table 6

Correlations among E-trust and platform design's sub dimensions

Variables	**1**	**2**	**3**	**4**	**5**
E-trust	-				
Product offerings	0.495	-			
Personalization	0.433	0.573	-		
Platform ease of use	0.501	0.457	0.579	-	
Platform aesthetic	0.300	0.298	0.410	0.500	-
Information quality	0.500	0.466	0.415	0.533	0.391

*Note. **p < .001 (one-tailed). N = 309*

Table 7

Correlations among E-satisfaction and platform design sub dimensions

Variables	**1**	**2**	**3**	**4**	**5**
E-satisfaction	-				
Product offerings	0.586	-			
Personalization	0.448	0.573	-		
Platform ease of use	0.527	0.457	0.579	-	
Platform aesthetic	0.375	0.298	0.410	0.500	-
Information quality	0.464	0.466	0.415	0.533	0.391

Note. **p < .001 (one-tailed). N = 309

6 Discussion

This chapter discusses the main findings of the study by interpreting the results in relation to the research goals and suitable theoretical frameworks. The results are analyzed alongside existing literature on e-loyalty, e-service quality, e-trust, and e-satisfaction, pointing out both similarities and differences. The discussion focuses on the importance of the identified factors that influence e-loyalty in Azerbaijan's growing e-commerce market. The chapter also covers what these findings mean for theory and practice.

Finding Discussion

The initial two hypotheses were that significant relationships exist between e-satisfaction, e-trust and e-loyalty. The analysis supports both hypotheses. To begin with, H1, which proposes the significant positive relationship between e-satisfaction and e-loyalty, is justified. Second, H2, which supposes a significant positive relation between e-trust and e-loyalty, is also supported. Besides the hypothesized relationships, the analysis also indicates that the e-trust plays a significant positive impact on the e-satisfaction, implying that another important relationship exists between these two constructs.

The outcome shows that e-satisfaction and e-trust are important variables in shaping e-loyalty in the e-realm. Satisfied Azerbaijani customers who have confidence in online shopping and the online shopping platform will create long-term loyalty with the e-retailer. In addition, satisfaction is a stronger contributor to the model than e-trust; however, another result also indicates that e-trust positively affects e-satisfaction. Maslow's hierarchy of needs can be used to describe this relationship as Li et al. (2015) used this model. E-trust in the context of online shopping includes the security concerns of the consumers, including valid transactions and the reliability of the platform. After these basic needs are met, the consumers can develop higher-level emotional judgments, which are e-satisfaction. E-satisfaction is a higher state of emotion and this makes it affect behavioral consequences more including e-loyalty. Therefore, e-satisfaction exists on the premise of e-trust and e-satisfaction is the foremost aspect of e-loyalty. This indicates that e-trust not only serves as a direct contributor to loyalty, but also indirectly contributes to strengthening loyalty since it increases customer e-satisfaction.

These findings are in line with the findings of the previous studies that have highlighted the central role of both e-satisfaction and e-trust in the formation of online loyalty (Anderson, 2003, Christodoulides & Michaelidou, 2010; Giovanis & Athanasopoulou, 2014; Kim et al., 2009; Ribbink et al., 2004). The findings can also be compared to the findings of Gummerus (2004), which showed that trust was a predictor of e-satisfaction and this also confirms the dual role of trust in the satisfaction-loyalty association. Also, the positive effect of the loyalty-satisfaction-trust relationship appears to be consistent with the loyalty model provided by Oliver, as trust and satisfaction are the determinant elements of affective perception and thus lead to loyalty behavior.

The second hypothesis was an analysis of the determinants of e-satisfaction. In particular, H4, H6, H8, and H10 provided that there are significant relations between perceived value, customer service, fulfillment, platform design, and e-satisfaction. These hypotheses are partially confirmed by the results of the regression analysis.

H10, which postulated a significant positive correlation between the perceived value and the e-satisfaction, H6, which postulated a significant positive correlation between the fulfillment and the e-satisfaction, and H4, which postulated a significant positive correlation between the platform design and the e-satisfaction are all supported. Perceived value is the predictor that exhibits the highest positive impact on e-satisfaction.

These confirmations have led to the conclusion that value-based and functional factors are the main drivers of e-satisfaction among the Azerbaijani online shoppers. Once customers feel that they get good value for money, they are provided with reliability and timely fulfillment, and are exposed to a well-developed platform, their e-satisfaction level goes high. Among these variables, the factor of perceived value is the most significant contributor to the level of e-satisfaction and therefore, price fairness, benefits received, and general cost-benefit analysis plays a significant role in determining customer satisfaction in Azerbaijan.

Conversely, the insignificant role of customer service indicates that, in the framework of this study, service relations are of less determining influence on the development of overall e-satisfaction than value-based and platform-related aspects. The implication of such a result is that online consumers might focus more on value, efficient delivery, and usability on the

platform rather than actual service interactions particularly when major service issues do not arise.

The findings are mostly in line with the previous studies showing that the key determinants of online customer satisfaction are perceived value (Yang, 2004; Hu et al., 2009; Wang & Prompanyo, 2020), fulfillment (Celik, 2021; Kim et al., 2009; Kasim & Abdulah, 2010; Rita et al., 2019), and platform design (Kim et al., 2009;Li et al., 2015). Li et al. (2015) also discovered that perceived value and fulfillment are also good predictors of e-satisfaction, which confirm the current results. Though Kim et al. (2009) did not include the perceived value in their research model, they discovered fulfillment as the most significant predictor of e-satisfaction, which is congruent with the research in emphasizing the vital role of performance on delivery. In addition, the findings are consistent with the previous Azerbaijani research. Huseynli & Maharramov(2022) focus on price as one of the key factors affecting the behavior of online buyers, whereas the fear of receiving the wrong products is noted by Asadli (2019) as one of the key obstacles impeding the uptake of online shopping in Azerbaijan. These findings support the significance of the perceived value and credible delivery in the Azerbaijan market. Consumers highly emphasize price-value comparison and proper and timely delivery which directly affect their satisfaction.

In the aspect of customer service, the findings show that customer service does not statistically significantly influence e-satisfaction, and hence H8 is rejected. This holds in line with Kim et al. (2009) and Li et al. (2015), who also found that customer service was not a strong predictor of e-satisfaction implying that in cases where core transactional predictors like fulfillment\reliability and system performance was performing well, customer service influence was less decisive in overall satisfaction. When this happens, the interactions between the service and its clients are not experience-enhancing, but are mostly reactive.

This result however differs with several preceding studies that have found customer service as one of the major determinants of e-satisfaction. As an example, Celik (2021) discovered that e-satisfaction was strongly positively influenced by customer service/responsiveness in the Turkish e-commerce market. This contradiction can be justified in terms of the hierarchy of needs and taking into account the market maturity created by Maslow. Consumers living in developing markets like Azerbaijan would focus on firstly the simple and

useful needs instead of service interactions, such as fair prices, accuracy in deliveries, and the design of the platform. Customer service also tends to be pertinent during issues arising and because the consumer is not usually in anticipation of an issue, the service contact has little effect on general e-satisfaction. However, customer service remains a significant factor as the mechanism of dissatisfaction-prevention that allows addressing the problems and preserving trust in the case of appearance.

The following set of hypotheses addressed determinants of e-trust. In particular, H3, H5, H7, and H9 stated that there were significant interrelations among social influence, customer service, fulfillment, platform design, and e-trust. These hypotheses are partly backed up in the findings of the regression.

On the whole, H3, H5, and H7 will be supported, which means that customer service, fulfillment, and platform design have a significant positive impact on e-trust. Customer service is the best of these predictors that have a positive impact on e-trust. This result is opposite to previous literature by Li (2015) and Kim et al. (2009) stating that there is no significant customer service impact on e-trust. The difference can be explained by the contrast in the specification of the model because the two studies consider the security/privacy as independent variables and stipulate it as important determinants of trust, which may diminish the observed impact of customer service. The findings of this paper however resonate with Gummerus (2003), Konradut (2004), and Kassim & Abdullah (2010) that reported customer service as a predictive factor of e-trust when a problem occurs. Since customer service is mostly sought after in case of a problem, customer service responsiveness will have a more significant influence on e-trust during this period. This underscores the essence of responsive, helpful, and reliable support when it comes to alleviating perceived risk, building consumer trust in online transactions.

Moreover, e-trust is also strongly impacted by fulfillment and platform design, as it is not foreign to the conclusions by Kim et al. (2009). Nevertheless, Li (2015) discovered that only fulfillment/reliability caused significant impact on e-trust. Combined, these findings indicate that customer service quality, reliable delivery and platform-related functional qualities are the major determinants of e-trust among Azerbaijani online shoppers. As soon as the consumers develop a perception that an online platform has good customer support, it is available 24 hours a day, it is capable of delivering goods accurately and on time, and has a well-developed platform, they

develop trust in the platform to a greater extent. In less technical terms, platform design is an indicator of the retailer being concerned with privacy and security, fulfillment is a sign of competence and benevolence of the company, and customer service is a sign of honesty and benevolence of the company.

Surprisingly, H9 is rejected since social influence does not have a statistically significant effect of e-trust in the presence of other variables that are contained in the model. This result does not support the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and other studies that have found a positive association between them (Awad & Ragowsky, 2008, Kristina & Sugartio, 2020). Nevertheless, this outcome can be justified by the contextual features of the e-commerce market and the specifics of trust-building in the virtual space.

In this regard, consumers seem to base more on personal experience with the platforms instead of other individuals' recommendations or WOM. Recommendations and WOM might play a significant role in the initial phases of the platform adoption process, assisting consumers to choose between trying an online retailer or not, but the formation of e-trust and the establishment of prolonged relationships appears to be largely determined by the personal experience of the consumers over time. On the same note, this is expected when considering the UTAUT framework (Venkatesh et al., 2003) where the impact of the social influence is theorized to diminish with experience in using a technology.

The sample profile confirms this finding since the majority of the respondents are seasoned online buyers who have already made several previous purchases. To such users, e-trust is determined mainly by their own experience and not external views and thus the social factors have less power.

No specific hypotheses were defined, but since the platform design is multidimensional and has a substantial impact on e-satisfaction and e-trust, further regression analysis was performed because this study is exploratory. These findings show that the product offerings, the platform ease of use, and the quality of information make a significant improvement in both. This is in line with the earlier studies which reinforce the need to focus on usability, quality of information and variety of products in online settings (Chang & Chen, 2008; Ribbink et al., 2004; Aladwani & Palvia, 2002; McKnight et al., 2002; Szymanski & Hise, 2000; Srinivasan et al., 2002). These findings can be interpreted through the UTAUT2 framework (Venkatesh et al.,

2012), so a broad and diverse product offering enhances performance expectancy, as greater variety increases consumers' perceptions of the platform's usefulness. The ease of use of the platform, convenience relates to the expectancy of effort, which involves facilitating easier navigation, decreasing waiting time, and cognitive effort, whereas the high-quality information is associated with facilitating conditions giving the needed support to the confident decision-making. A combination of these functional features would minimize perceived risk and at the same time enhance satisfaction and trust. This indicates that product assortment and availability, the high number of merchants within the platform, the general ease of use, and the quality of information as a whole are important.

On the other hand, personalization and platform aesthetics do not have statistically significant impacts on both e-satisfaction and e-trust. These factors are connected to hedonic motivation in UTAUT2 terminology, which is not enough to directly affect e-trust and e-satisfaction in a functional e-commerce environment in Azerbaijan, but which can be used to enhance the user experience. In general, the results indicate that the affective outcomes like e-satisfaction and e-trust are mainly influenced by the utilitarian platform attributes instead of hedonic or symbolic values among the Azerbaijan consumers.

Overall, the findings demonstrate that e-satisfaction is the best predictor of e-loyalty, then e-trust. E-satisfaction is most driven by perceived value and customer service/responsiveness is the most compelling driver of e-trust. Overall, the process of loyalty formation in the e-commerce market in Azerbaijan is based on values and is primarily determined by functional and operational, but not hedonic and symbolic factors.

6.1 Theoretical implications & Practical implications

This research paper adds to the body of literature on e-loyalty because it establishes the fact that e-satisfaction and e-trust are the fundamental factors that determine e-loyalty in the Azerbaijan e-commerce sector, with e-satisfaction being the most power-driven factors. These findings confirm the loyalty model of Oliver since they show that affective evaluations, and, in particular, satisfaction, dominate in the implementation of online experiences into loyal behavior.

Findings further elaborate and build on the available theory by summarizing the individual contribution of e-trust and e-satisfaction. Not only does the study indicate that the direct effect of e-trust on e-loyalty is evident, but also that perceived value is the greatest

determinant of e-satisfaction, whereas the customer service is the largest determinant of e-trust, providing further elaboration on the existing models, which tend to equate antecedents of satisfaction and trust. Along with this, the study has established the functions of the service quality attributes(website design, fulfilment/reliability, customer service/responsiveness) in the process of forming loyalty based on the influence they have on e-trust and e-satisfaction.

Notably, the findings help to offer the context of the new e-commerce environment and note that utilitarian and functional variables, including fulfillment and the design of websites(product offerings, information quality, platform ease of use) have more significant impact than hedonic and symbolic ones. The role of social influence in trust formation is also limited, which also supports UTAUT2 according to which its role decreases as consumers experience.

To practitioners, the findings indicate that the strategy of enhancing customer satisfaction would be the major factor to promote e-loyalty in Azerbaijan. The e-retailer would be required to be concerned with the perceived value through fair pricing, open cost, and good value proposition.

As e-trust is primarily fuelled by customer service, companies must invest into supportive and reliable customer service systems, primarily on delivery problems and feedback. Customer service does not increase the level of satisfaction directly, but it is also significant in establishing trust and perceived risk reduction.

Finally, the factors that will increase both satisfaction and trust are the performance of fulfillment and functional Web design, that is, ease of use, high-quality information, and product assortments. In general, the results imply that a value-based and operation-oriented approach is the key to the sustainable e-loyalty within the Azerbaijan e-commerce market.

6.2 Limitations

Regardless of its contributions, this study has some limitations that researchers must keep in mind when considering these results.

To begin with, the study takes the cross-sectional survey design, which represents the views of the respondents at a given point in time. The study is therefore not able to draw any causal relationship between the variables and is not able to explain the change in consumer

behavior through time. Second, the research employs convenience sampling; this sampling method might be limited in some way since it might not be fully representative of the sample used to gather the data. It also implies that this data is potentially not fully representative of the behavior of the population with regard to online consumption patterns. Third, the analysis uses SPSS regression analysis tools, which are suitable for direct relationship testing but do not allow for simultaneous assessment of complex interactions between multiple constructs. The use of Structural Equation Modeling in future studies may facilitate a full evaluation of both measurement and structural models and offer solid support for the proposed theoretical framework. Finally, one of the constructs (social influence) in the model had comparatively weak measurement characteristics or less explanatory power. This can either be because of the scale constraints or variation in the context, or because the e-commerce market in Azerbaijan is dynamic and this could be one source of variations in intensities of relationships between constructs in this model.

7 Conclusion

Specifically, the purpose of this research was to examine what factors underlie the consumer's attitude to e-loyalty at the prospective online market in Azerbaijan, with special focus on the significance of e-satisfaction, e-trust, and determinants of such, in ensuring the loyalty of the online buyers.

In general, the study's findings reveal a high level of evidence indicating a dominant influence of e-satisfaction on consumers' e-loyalty, and secondly, e-trust, respectively. This is because affect-oriented factors are critical in determining online loyalty.

This data also indicates the mediating and moderating influence of e-trust on the total process of developing loyalty since it plays a dual role in this process. In addition to playing an important and direct role in the development of e-loyalty, e-trust plays an important and strong role in growing levels of e-satisfaction, which demonstrates the presence of a precondition for a lesser level to experience a greater level of emotions.

With regards to the antecedents of e-satisfaction, the current study indicates that the strongest predicting factor is perceived value, then fulfillment/reliability and platform design. This means that the Azerbaijani Internet shoppers feel most content with an e-commerce site that is premised on the value-for-money and functionality considerations. Regarding e-trust construction, it seems that customer service is the most important predictor, and fulfillment and web design are also important. It is worth noting that e-trust and e-loyalty are defined without necessarily applying social influence.

Overall, the evidence indicates that the development of e-loyalty in Azerbaijan is inherently based on e-satisfaction and e-trust that is established by the values perceived in the operation and functioning of the platform and is not so much preoccupied with hedonic and symbolic factors. By explaining the difference and complementing roles of the constructs of satisfaction and trust, the present study aims to offer an understanding of customer loyalty generation.

Suggestion for future research

The results of the present study suggest several directions for future research.Future research should consider longitudinal or experimental methods to assess causality and time-based relationships between e-loyalty and its determinants. Furthermore, future research could incorporate platform or industry-specific objective data (e.g., types of e-commerce platforms, product categories, or service sectors, local or international platforms), as these may reveal contextual factors that influence e-loyalty and its antecedents. In addition, researchers could explore individual differences, such as digital literacy, age, gender, or personality traits, using validated scales to gain a more nuanced understanding of how these factors influence the overall loyalty formation process. Furthermore, this study considered certain predictors and found limited effects of some factors, suggesting that future research could consider other variables (perceived risk, brand image, reputation) and develop and test relatively weak constructs. Additionally, considering the limitations of the study, researchers could improve the knowledge about e-loyalty.

8 References

Akrin, M. (2021, June 18). *How consumers compare prices to make purchase decisions. Forbes*. https://www.forbes.com/sites/forbesbusinesscouncil/2021/06/18/how-consumers-compare-price s-to-make-purchase-decisions

Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management, 39(6)*, 467–476. https://doi.org/10.1016/S0378-7206(01)00113-6

Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & Marketing, 20*(2), 123–138. https://doi.org/10.1002/mar.10063

Awad, N. F., & Ragowsky, A. (2008). Establishing trust in electronic commerce through online word of mouth: An examination across genders. *Journal of Management Information Systems, 24(4)*, 101–121. https://doi.org/10.2753/MIS0742-1222240404

Azerbaijan State News Agency (AZERTAG). (n.d.). *Development concept "Azerbaijan — 2020: Outlook for the Future"* [PDF].https://azertag.az/media/news-files/Siyaset/DEVELOPMENT%20CONCEPT_en.pdf

Balabanis, G., Reynolds, N., & Simintiras, A. (2006). Bases of e-store loyalty: Perceived switching barriers and satisfaction. *Journal of Business Research, 59*(2), 214–224. https://doi.org/10.1016/j.jbusres.2005.06.001

Bavdaž, M. (2010). *Sources of measurement errors in business surveys* (Journal of Official Statistics, Vol. 26, No. 1, pp. 25–42). Statistics Sweden. https://www.scb.se/contentassets/ca21efb41fee47d293bbee5bf7be7fb3/sources-of-measurement-errors-in-business-surveys.pdf

Bhandari, P. (2024, October 1). *Ethical considerations in research: Types & examples*. Scribbr. https://www.scribbr.com/methodology/ethical-considerations-in-research/

Bhattacherjee, A. (2002). Individual trust in online firms: Scale development and initial test. *Journal of Management Information Systems, 19*(1), 211–241. https://doi.org/10.1080/07421222.2002.11045715

Blut, M. (2016). E-service quality: Development of a hierarchical model. *Journal of Retailing, 92(4)*, 500–517. https://doi.org/10.1016/j.jretai.2016.09.002

Blut, M., Chaney, D., Lunardo, R., Mencarelli, R., & Grewal, D. (2023). Customer perceived value: A comprehensive meta-analysis. *Journal of Service Research, 27*(4), 1–24. https://doi.org/10.1177/10946705231222295

Bogner, K., & Landrock, U. (2016). Response Biases in Standardised Surveys. *GESIS Survey Guidelines*. Mannheim, Germany: GESIS – Leibniz Institute for the Social Sciences. https://www.gesis.org/fileadmin/admin/Dateikatalog/pdf/guidelines/response_biases_standardiz ed_surveys_bogner_landrock_2016.pdf

Borgers, N., & Landrock, U. (2016). Response biases in surveys. In C. Wolf, D. Joye, T. W. Smith, & Y. C. Fu (Eds.), The SAGE Handbook of Survey Methodology (pp. 342–356). SAGE Publications.

Briggs, S. R., & Cheek, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. Journal of Personality, 54(1), 106–148.

Bryman, A., & Bell, E. (2015). Business Research Methods (4th ed.). Oxford University Press.

Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science, 31*(2), 109–126. https://doi.org/10.1177/0092070302250897

Centre for Analysis of Economic Reforms and Communication. (2023). *Haqqımızda* [About Azexport.az]. Azexport.az. https://azexport.az/haqqimizda

Centre for Analysis of Economic Reforms and Communication. (2025, October 27). *Digital Trade Hub*. https://ereforms.gov.az/en/page/reqemsal-ticaret-qovsaqi-9

Chang, C. (2011). The effect of the number of product subcategories on perceived variety and shopping experience in an online store. *Journal of Interactive Marketing, 25(3)*, 159–168. https://doi.org/10.1016/j.intmar.2011.04.001

Chang, H. H., & Chen, S. W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator. *Computers in Human Behavior, 24*(6), 2927–2944. https://doi.org/10.1016/j.chb.2008.04.014

Chang, H. H., Wang, Y. H., & Yang, W. Y. (2009). The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value. *Total Quality Management & Business Excellence, 20*(4), 423–443. https://doi.org/10.1080/14783360902781923

Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems, 54(1)*, 461–470. https://doi.org/10.1016/j.dss.2012.06.008

Choi, D. H., Kim, C. M., Kim, S. I., & Kim, S. H. (2006). Customer loyalty and disloyalty in internet retail stores: Its antecedents and its effect on customer price sensitivity. *International Journal of Management, 23*(4), 925–936

Christodoulides, G., & Michaelidou, N. (2010). Shopping motives as antecedents of e-satisfaction and e-loyalty.*Journal of Marketing Management, 27(1–2)*, 181–197.

Chung, K. H., & Shin, J. I. (2008). The relationship among e-retailing attributes, e-satisfaction and e-loyalty. *Management Review: An International Journal, 3(1), 23-45*

Corbitt, B. J., Thanasankit, T., & Yi, H. (2003). Trust and e-commerce: A study of consumer perceptions. *Electronic Commerce Research and Applications, 2*(3), 203–215. https://doi.org/10.1016/S1567-4223(03)00024-3

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10(7)*, 1–9.

Coughlin, S. S. (1990). Recall bias in epidemiologic studies. Journal of Clinical

Epidemiology, 43(1), 87–91. https://doi.org/10.1016/0895-4356(90)90060-3

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Cristobal, E., Flavián, C., & Guinalíu, M. (2007). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality, 17*(3), 317–340. https://doi.org/10.1108/09604520710744326

Cyr, D. (2008). Modeling web site design across cultures: Relationships to trust, satisfaction, and e-loyalty. *Journal of Management Information Systems, 24*(4), 47–72. https://doi.org/10.2753/MIS0742-1222240402

Davis, W. R. (1993). The FC1 Rule of Identification for Confirmatory Factor Analysis: A General Sufficient Condition: A General Sufficient Condition. Sociological Methods & Research, 21(4), 403-437. https://doi.org/10.1177/0049124193021004001 (Original work published 1993)

Day, G. S. (1969). A two-dimensional concept of brand loyalty. *Journal of Advertising Research, 9*(3), 29–35.

Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science, 22*(2), 99–113. https://doi.org/10.1177/0092070394222001

Donio, J., Massari, P., & Passiante, G. (2006). Customer satisfaction and loyalty in a digital environment: An empirical test. *Journal of Consumer Marketing, 23*(7), 445–457. https://doi.org/10.1108/07363760610712993

Doong, H., Wang, H., & Shih, H. (2008). Exploring loyalty intention in the electronic marketplace. *Electronic Markets, 18*(2), 142–149. https://doi.org/10.1080/10196780802044792

Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior, 61*, 47–55. https://doi.org/10.1016/j.chb.2016.03.003

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

EU4Digital. (n.d.). *Azerbaijan* — EU4Digital initiative: Supporting the digital economy and society. EU4Digital. https://eufordigital.eu/countries/azerbaijan/

Eurostat. (2025, February). *E-commerce statistics for individuals.* European Commission. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_ind ividuals

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*(3), 272–299.

Falkheimer, J., & Heide, M. (2022). *Strategic communication: An introduction to theory and global practice* (2nd ed.). Routledge. https://doi.org/10.4324/9781003168997

Ferguson, J. L. (2014). Implementing price increases in turbulent economies: Pricing approaches for reducing perceptions of price unfairness. *Journal of Business Research, 67*(1), 2732–2737

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed.). Sage. Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31–36.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.*Addison-Wesley.

Floh, A., & Treiblmaier, H. (2006). What keeps the e-banking customer loyal? A multigroup analysis of the moderating role of consumer characteristics on e-loyalty in the financial service industry (SSRN Scholarly Paper No. 2585491). *Social Science Research Network*. https://doi.org/10.2139/ssrn.2585491

Gefen, D. (2002). Customer loyalty in e-commerce. *Journal of the association for information systems*, *3*(1), 2.

Giovanis, A. N., & Athanasopoulou, P. (2014). Gaining customer loyalty in the e-tailing marketplace: The role of e-service quality, e-satisfaction and e-trust. International *Journal of Technology Marketing, 9*(3), 288–304. https://doi.org/10.1504/IJTMKT.2014.063857

Gommans, M., Krishnan, K. S., & Scheffold, K. B. (2001). From brand loyalty to e-loyalty: A conceptual framework. *Journal of Economic and Social Research, 3*(1), 43–58.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 105–117). SAGE Publications.

Gummerus, J., Liljander, V., Pura, M., & van Riel, A. (2004). Customer loyalty to content‐based web sites: The case of an online health‐care service. *Journal of Services Marketing, 18*(3), 175–186. https://doi.org/10.1108/08876040410536486

Gupta, S., Kushwaha, P. S., Badhera, U., Chatterjee, P., & Santibanez Gonzalez, E. D. R. (2023). Identification of benefits, challenges, and pathways in e-commerce industries: An integrated two-phase decision-making model. *Sustainable Operations and Computers, 4*, 200–218. https://doi.org/10.1016/j.susoc.2023.08.005

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis (8th ed.). Cengage Learning.

Hajiyeva, L. (2021). The prospects and problems of e-commerce in Azerbaijan in the context of globalization. *SHS Web of Conferences, 92*, 06010. https://doi.org/10.1051/shsconf/20219206010

Hallahan, K., Holtzhausen, D., Van Ruler, B., Verčič, D., & Sriramesh, K. (2007). Defining strategic communication. *International Journal of Strategic Communication*, 1(1), 3– 35. https://doi.org/10.1080/15531180701285244

Hanaysha, J. R., Ramadan, H. I., & Alhyasat, K. M. K. (2025). Exploring the impact of customer reviews, website quality, perceived service quality, and product assortment on online purchase intention: The mediating role of trust.*Telematics and Informatics Reports, 19,* 100236. https://doi.org/10.1016/j.teler.2025.100236

Harris, L. C., & Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: A study of online service dynamics. *Journal of Retailing, 80*(2), 139–158. https://doi.org/10.1016/j.jretai.2004.04.002

Hasanova, J. V., Nadjafova, K. A., & Dilyard, J. R. (2023). Changed e-commerce behaviors of Azerbaijani consumers during the pandemic period. *Journal of Eastern European and Central Asian Research (JEECAR), 10*(7), 977–988. https://doi.org/10.15549/jeecar.v10i7.1287

Hermenegildo-Chávez, M. V., Martín-Ruiz, D., & Rondán-Cataluña, F. J. (2023). Point-of-sale loyalty analysis considering store environment (online and offline) and recency of purchase. *Revista Brasileira de Gestão de Negócios, 25*(4), 480–497. https://doi.org/10.7819/rbgn.v25i4.4246

Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. *Communications of the ACM, 42*(4), 80–85. https://doi.org/10.1145/299157.299175

Hsu, C. L., Wu, C. C., & Chen, M. C. (2013). An empirical analysis of the antecedents of e-satisfaction and e-loyalty: Focusing on the role of flow and its antecedents. *Information Systems and e-Business Management, 11*, 287–311. https://doi.org/10.1007/s10257-012-0194-8

Hu, H.-H., Kandampully, J., & Juwaheer, T. D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: An empirical study. *Service Industries Journal, 29*(2), 111–125. https://doi.org/10.1080/02642060802292932

Huseynli, B., & Maharramov, R. (2022). Determination of factors affecting the online shopping in Azerbaijan. *TURAN-CSR International Scientific, Peer-Reviewed & Refereed Journal*, 14(Special Issue)

Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. SAGE Publications. https://doi.org/10.4135/9781849209779

International Telecommunication Union. (2024). *Azerbaijan digital skills assessment 2023-2024*

https://www.itu.int/dms_pub/itu-d/opb/phcb/D-PHCB-CAP_BLD.05-2024-PDF-E.pdf

Jeon, M. (2009). *Impact of perceived website service quality on customer e-loyalty on a lodging website* (Master's thesis, Iowa State University). Iowa State University Digital Repository. https://lib.dr.iastate.edu/etd/11068

Jin, B., Yong Park, J., & Kim, J. (2008). Cross‐cultural examination of the relationships among firm reputation, e‐satisfaction, e‐trust, and e‐loyalty. *International Marketing Review, 25*(3), 324-337.

Jones, T. O., & Sasser, W. E. (1995). Why satisfied customers defect. *Harvard Business Review,* November–December.

Kassim, N. M., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross-cultural analysis. *Asia Pacific Journal of Marketing and Logistics, 22*(3), 351–371. https://doi.org/10.1108/13555851011062269

Kaya, B., Behravesh, E., Abubakar, A. M., Kaya, O. S., & Orús, C. (2019). The moderating role of website familiarity in the relationships between e-service quality, e-satisfaction and e-loyalty. *Journal of Internet Commerce, 18*(4), 369–394. https://doi.org/10.1080/15332861.2019.1668658

Kim, H.-W., Xu, Y., & Gupta, S. (2012). Which is more important in Internet shopping, perceived price or trust? *Electronic Commerce Research and Applications, 11*(3), 241–252. https://doi.org/10.1016/j.elerap.2011.06.003

Kim, J., Jin, B., & Swinney, J. L. (2009). The role of e‐tail quality, e‐satisfaction and e‐trust in online loyalty development process. *Journal of Retailing and Consumer Services, 16*, 239–247. https://doi.org/10.1016/j.jretconser.2008.11.019

Kim, Y. A., & Srivastava, J. (2007, August). Impact of social influence in e-commerce decision making. *In Proceedings of the Ninth International Conference on Electronic Commerce (ICEC '07)* (pp. 293–302). ACM. https://doi.org/10.1145/1282100.1282157

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.

Konradt, U., Wandke, H., Balazs, B., & Christophersen, T. (2003). Usability in online shops: Scale construction, validation and the influence on the buyers' intention and decision.*Behaviour & Information Technology, 22*(3), 165–174. https://doi.org/10.1080/0144929031000107072

Kotler, P., & Armstrong, G. (2014). *Principles of Marketing (15th ed.)*. New York: Pearson Publishing.

Lăzăroiu, G., Neguriță, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' decision-making process on social commerce platforms: Online trust, perceived risk, and purchase intentions. *Frontiers in Psychology, 11*, Article 890. https://doi.org/10.3389/fpsyg.2020.00890

Lee, G.-G., & Lin, H.-F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management, 33*(2), 161–176. https://doi.org/10.1108/09590550510581485

Li, H., Aham‐Anyanwu, N., Tevrizci, C., & Luo, X. R. (2015). The interplay between value and service quality experience: E‐loyalty development process through the eTailQ scale and value perception. *Electronic Commerce Research, 15*(4), 585–615.https://doi.org/10.1007/s10660-015-9202-7

Liang, C.-J., & Chen, H.-J. (2009). A study of the impacts of website quality on customer relationship performance. *Total Quality Management & Business Excellence, 20*(9), 971–988. https://doi.org/10.1080/14783360903181784

Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002). *WebQual™: A measure of website quality*. *Marketing Theory and Applications, 13*(3), 432–438.

López-Miguens, M. J., & González Vázquez, E. (2017). An integral model of e-loyalty from the consumer's perspective. *Computers in Human Behavior, 72*, 397–411. https://doi.org/10.1016/j.chb.2017.02.003

Lu, H., & Lin, J. C.-C. (2002). Predicting customer behavior in the market-space: A study of Rayport and Sviokla's framework. *Information & Management, 39*(6), 431–440. https://doi.org/10.1016/S0378-7206(01)00131-8

Luarn, P., & Lin, H. H. (2003). A customer loyalty model for e-service context. *Journal of Electronic Commerce Research, 4*(4), 156–167.

Maksimović, J., & Evtimov, J. (2023). Positivism and post-positivism as the basis of quantitative research in pedagogy. *Research in Pedagogy, 13*(1), 208–218. https://-doi.org/10.5937/IstrPed2301208M

Mammadova, K. (2024). *Assessment of e-commerce in Azerbaijan from context of resource course and perspectives*[Preprint]. *SSRN*. https://doi.org/10.2139/ssrn.4957366

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academyof Management Review, 20*(3), 709–734. https://doi.org/10.5465/amr.1995.9508080335

McDougall, G. H. G., & Levesque, T. (2000). Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing, 14*(5), 392–410. https://doi.org/10.1108/08876040010340937

McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research, 13*(3), 334–359. https://doi.org/10.1287/isre.13.3.334.81

Morgan, R. M., & Hunt, S. D. (1994). The commitment–trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20–38. https://doi.org/10.1177/002224299405800302

Nijhawan, L. P., Janodia, M. D., Muddukrishna, B. S., Bhat, K. M., Bairy, K. L., Udupa, N., & Musmade, P. B. (2013). Informed consent: Issues and challenges. *Journal of Advanced Pharmaceutical Technology & Research, 4*(3), 134–140. https://doi.org/10.4103/2231-4040.116779

Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, *63*, 33–44. https://doi.org/10.2307/1252099

Oliver, R.L. (1997) *Satisfaction: A Behavioral Perspective on the Consumer.* The McGraw-Hill Companies, Inc., New York.

Ordóñez, L. D. (1998). *The effect of correlation between price and quality on consumer choice*. *Organizational Behavior and Human Decision Processes, 75*(3), 258–273. https://doi.org/10.1006/obhd.1998.2794

Palvia, P. (2009). The role of trust in e-commerce relational exchange: A unified model. *Information & Management, 46*(4), 213–220. https://doi.org/10.1016/j.im.2009.02.003

Panihwar, A. W. (2017). Post-positivism: An effective paradigm for social and educational research. *International Research Journal of Arts & Humanities, 45*(45), 253–259.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40

Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research, 7*(3), 213–233. https://doi.org/10.1177/1094670504271156

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce, 7*(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275

Phillips, D. C., & Burbules, N. C. (2000). *Postpositivism and educational research.* Rowman & Littlefield.

Pitta, D. A., Franzak, F., & Fowler, D. (2006). A strategic approach to building online customer loyalty: Integrating customer profitability tiers. *Journal of Consumer Marketing, 23*(7), 421–429. https://doi.org/10.1108/07363760610712966

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

President of the Republic of Azerbaijan. (2014). *Official website of the President of the Republic of Azerbaijan*. https://president.az

Reichheld, F. F., & Sasser, W. E. (1990). Zero defections: Quality comes to services. *Harvard Business Review, 68*(5), 105–111. https://hbr.org/1990/09/zero-defections-quality-comes-to-services

Reichheld, F. F., & Schefter, P. (2000). E-loyalty: Your secret weapon on the web. *Harvard Business Review, 78*(4), 105–113. https://hbr.org/2000/07/e-loyalty-your-secret-weapon-on-the-webReinartz, W.,

Thomas, J. S., & Kumar, V. (2005). Balancing acquisition and retention resources to maximize customer profitability. *Journal of Marketing, 69*(1), 63–79. https://doi.org/10.1509/jmkg.69.1.63.55570

Report.az. (2025, August 15). Consumer market in Azerbaijan grows by 5%. https://report.az/en/business/consumer-market-in-azerbaijan-grows-by-5

Ribbink, D., van Riel, A. C., Liljander, V., & Streukens, S. (2004). Comfort your online customer: Quality, trust and loyalty on the internet. *Managing Service Quality, 14*(6), 446–456. https://doi.org/10.1108/09604520410569784

Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon, 5*(10), e02690. https://doi.org/10.1016/j.heliyon.2019.e02690

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers (2nd ed.)*. Blackwell Publishing.

Ryan, A. B. (2006). Post-positivist approaches to research. In M. Antonesa et al. (Eds.), *Researching and writing your thesis: A guide for postgraduate students* (pp. 12–26). MACE, Maynooth University.

Safa, N. S., & Ismail, M. A. (2013). A customer loyalty formation model in electronic commerce. *Economic Modelling, 35*, 559–564. https://doi.org/10.1016/j.econmod.2013.08.011

Saoula, O., Shamim, A., Mohd Suki, N., Ahmad, M. J., Abid, M. F., Patwary, A. K., & Abbasi,

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education Limited.

Schaupp, L. C., & Belanger, F. (2005). A conjoint analysis of online consumer satisfaction. *Journal of Electronic Commerce Research*, *6*(2), 95–111.

Semeijn, J., Van Riel, A. C., & Ambrosini, D. (2005). E-services and offline fulfillment: How e-loyalty is created. *Managing Service Quality, 15*(2), 182–194. https://doi.org/10.1108/09604520510585361

Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing, 20*(2), 153–175. https://doi.org/10.1016/S0167-8116(03)00016-8

Shi, S., Mu, R., Lin, L., Chen, Y., Kou, G., & Chen, X. J. (2018). The impact of perceived online service quality on swift guanxi: Implications for customer repurchase intention. *Internet Research, 28*(2), 432–455. https://doi.org/10.1108/IntR-10-2016-0279

Srinivasan, S. S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing, 78*(1), 41–50. https://doi.org/10.1016/S0022-4359(01)00065-3

Statista. (2025). *E-commerce market in Azerbaijan: Revenue and user projections* [Dataset]. Statista. Retrieved October 27, 2025, from https://www.statista.com/outlook/emo/ecommerce/azerbaijan

Szymanski, D. M., & Hise, R. T. (2000). E-satisfaction: An initial examination. *Journal of Retailing, 76*(3), 309–322. https://doi.org/10.1016/S0022-4359(00)00035-X

The State Statistical Committee of the Republic of Azerbaijan. (2025, September 16). *Digital development* [Statistical database]. https://www.stat.gov.az/source/digital_development/?lang=en

Toufaily, E., Ricard, L., & Perrien, J. (2013). Customer loyalty to a commercial website: Descriptive meta-analysis of the empirical literature and proposal of an integrative model. *Journal of Business Research, 66*(9), 1436–1447. https://doi.org/10.1016/j.jbusres.2012.05.011

Tsai, H.-T., & Huang, H.-C. (2007). Determinants of e-repurchase intentions: An integrative model of quadruple retention drivers. *Information & Management, 44*(3), 231–239. https://doi.org/10.1016/j.im.2006.11.006

U.S. Department of Commerce, International Trade Administration. (2023, November 22). *Azerbaijan – eCommerce*. Trade.gov. https://www.trade.gov/country-commercial-guides/azerbaijan-ecommerce

Valvi, A. C., & Fragkos, K. C. (2012). Critical review of the e-loyalty literature: A purchase-centred framework. *Electronic Commerce Research, 12*, 331–378. https://doi.org/10.1007/s10660-012-9097-5

Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research.* Oxford University Press.

Venkatesh V., Morris M. G., Davis G. B., Davis F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Q.* 27, 425–478. 10.2307/30036540 [DOI] [Google Scholar]

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly, 36*(1), 157–178.

Wang, L., & Prompanyo, M. (2020). Modeling the relationship between perceived values, e-satisfaction, and e-loyalty.*Management Science Letters, 10*(11), 2609–2616. https://doi.org/10.5267/j.msl.2020.3.032

We Are Social & Meltwater. (2025). *Digital 2025: Azerbaijan* [Report]. DataReportal. https://datareportal.com/reports/digital-2025-azerbaijan

Wirtz, B. W., & Lihotzky, N. (2003). Customer retention management in the B2C electronic business. *Long Range Planning, 36*(6), 517–532. https://doi.org/10.1016/j.lrp.2003.08.010

Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: Dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, *79*(3), 183–198. https://doi.org/10.1016/S0022-4359(03)00034-4

World Bank. (2025). *Macro Poverty Outlook for Azerbaijan: October 2025* [PDF]. World Bank. https://thedocs.worldbank.org/en/doc/d5f32ef28464d01f195827b7e020a3e8-0500022021/relate d/mpo-aze.pdf

World Bank. (n.d.). *Internet users (per 100 people) – Azerbaijan* [Dataset]. World Bank. https://data.worldbank.org/indicator/IT.NET.USER.ZS?end=2023&locations=AZ&start=1990&vie w=chart

Wu, J.-J., Hwang, J.-N., Sharkhuu, O., & Tsogt-Ochir, B. (2018). Shopping online and off-line? Complementary service quality and image congruence. *Asia Pacific Management Review, 23*(1), 30–36. https://doi.org/10.1016/j.apmrv.2017.01.004

Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Psychology & Marketing, 21*(10), 799–822. https://doi.org/10.1002/mar.20030

Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly Journal of Electronic Commerce, 2*(1), 31–45.

Yoon, C. (2009). The effects of national culture values on consumer acceptance of e-commerce: Online shoppers in China. *Information & Management, 46*(5), 294–301. https://doi.org/10.1016/j.im.2009.06.001

Yousafzai, S., Pallister, J., & Foxall, G. (2009). Multi-dimensional role of trust in Internet banking adoption. *The Service Industries Journal*, *29*(5), 591-605.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence.*Journal of Marketing, 52*(3), 2–22. https://doi.org/10.1177/002224298805200302

Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science, 30*(4), 362–375. https://doi.org/10.1177/009207002236911

Zeithaml, V. A., Malhotra, A., & Parasuraman, A. (2000). *E-service quality: Definition, dimensions and conceptual model*(Working paper). Marketing Science Institute.Cambridge,

Zerfass, A., & Huck, S. (2007). Innovation, communication, and leadership: New developments in strategic communication. *International Journal of Strategic Communication, 1*(2), 107–122. https://doi.org/10.1080/15531180701298908

Zerfass, A., Verčič, D., Nothhaft, H., & Werder, K. P. (2018). Strategic communication: Defining the field and its contribution to research and practice. *International Journal of Strategic Communication, 12*(4), 487–505. https://doi.org/10.1080/1553118X.2018.1493485

Ziaullah, M., Feng, Y., & Akhter, S. N. (2014). E-Loyalty: The influence of product quality and delivery services on e-trust and e-satisfaction in China. *International Journal of Advancements in Research & Technology, 3*(10), 20–31.

9 APPENDİX

Appendix A-Complete survey

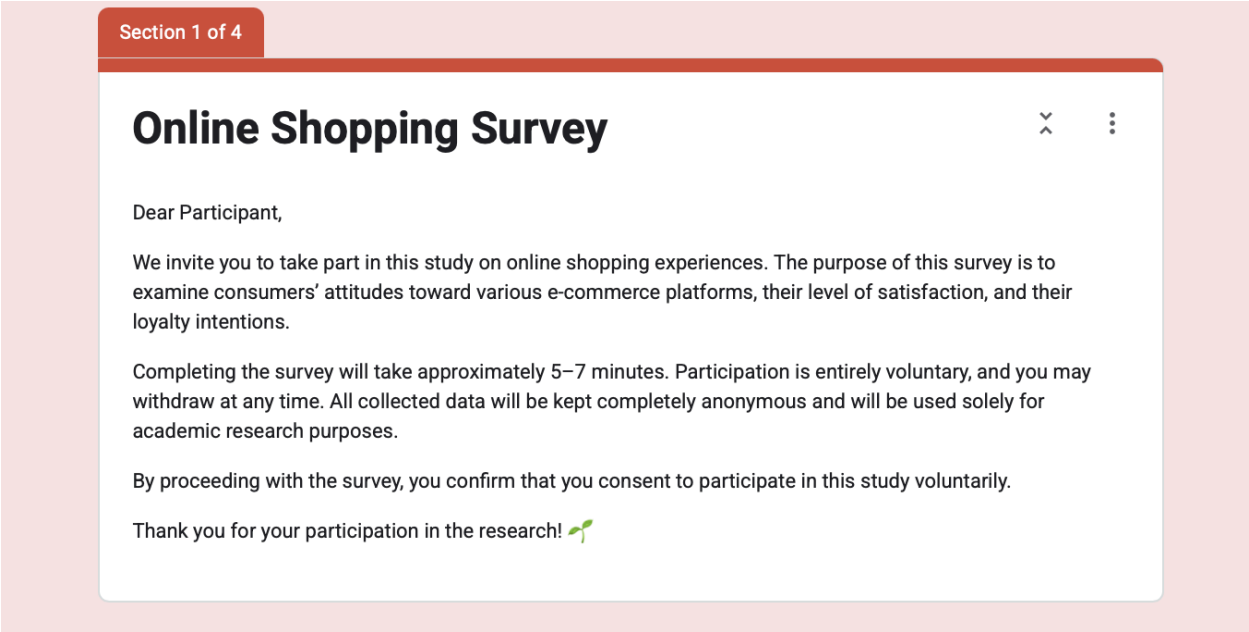


Figure A1. Questionnaire - Procedure, data protection, contact & consent (Page 1)

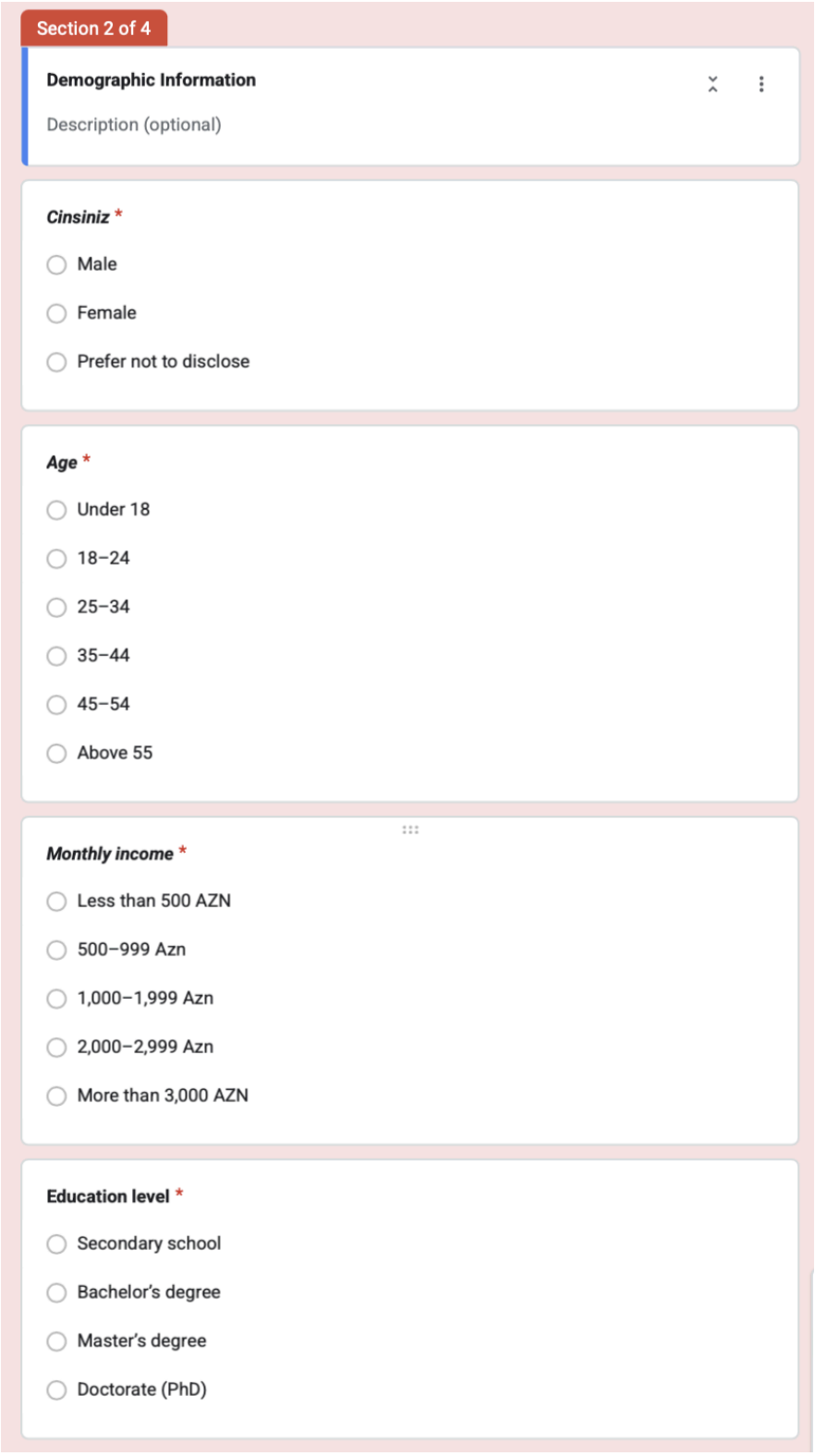


Figure A2. Questionnaire - Demographic questions(Page 2)

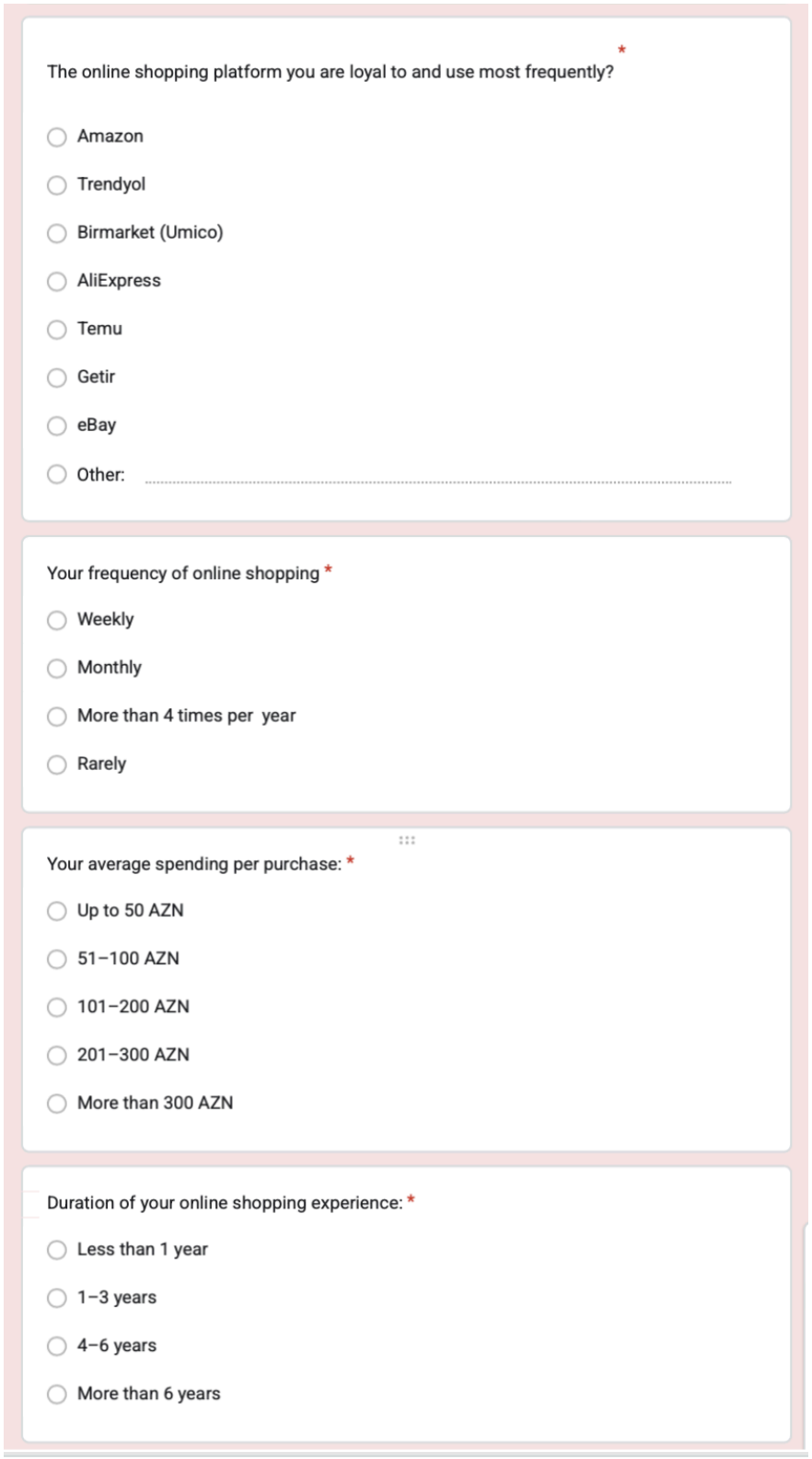


Figure A2. Questionnaire - Consumer's online behavior data (Page 3)

Figure A2. Questionnaire - Information quality and Platform aesthetics

Figure A2. Questionnaire - Platform ease of use and Personalization

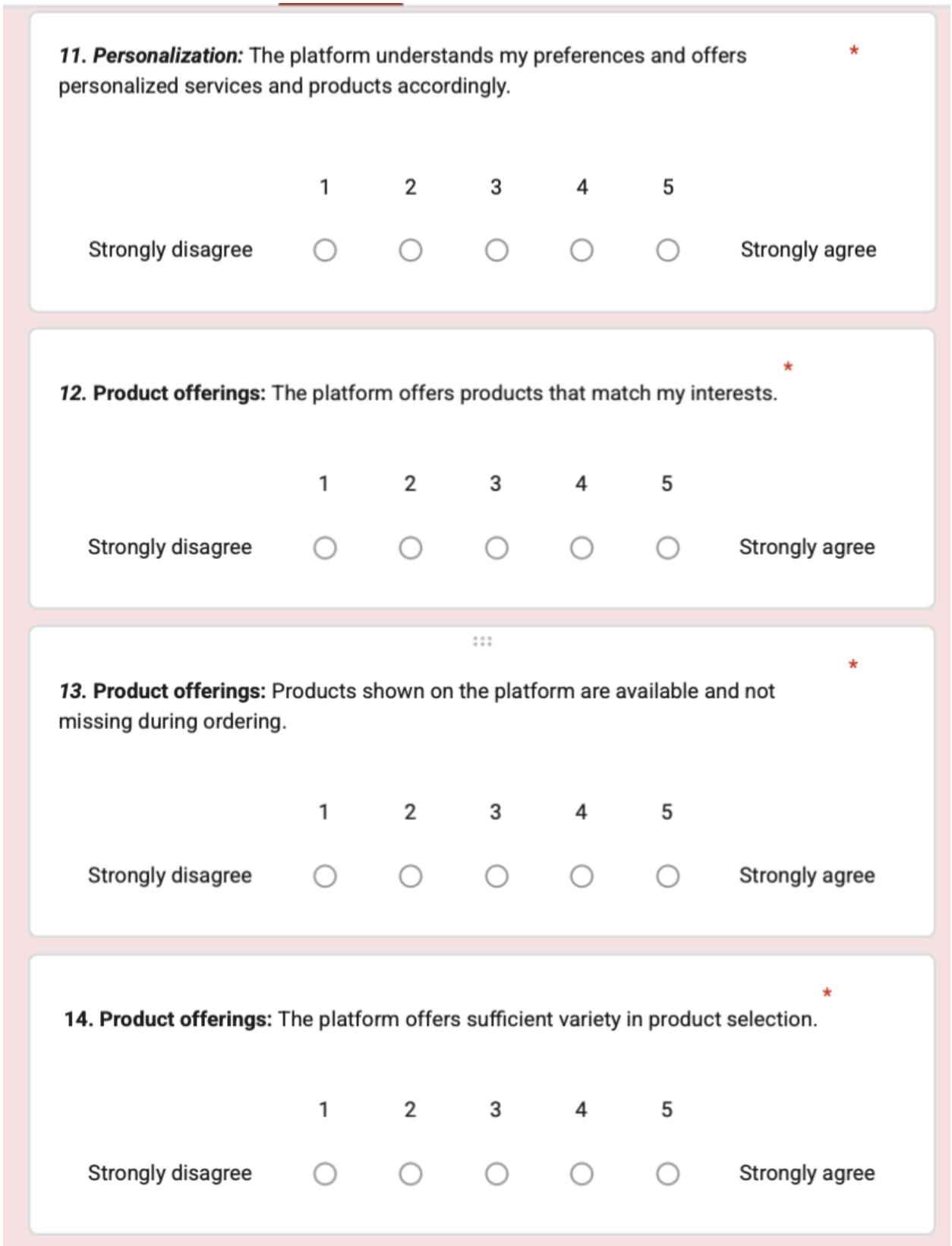


Figure A2. Questionnaire - Personalization and Product Offerings

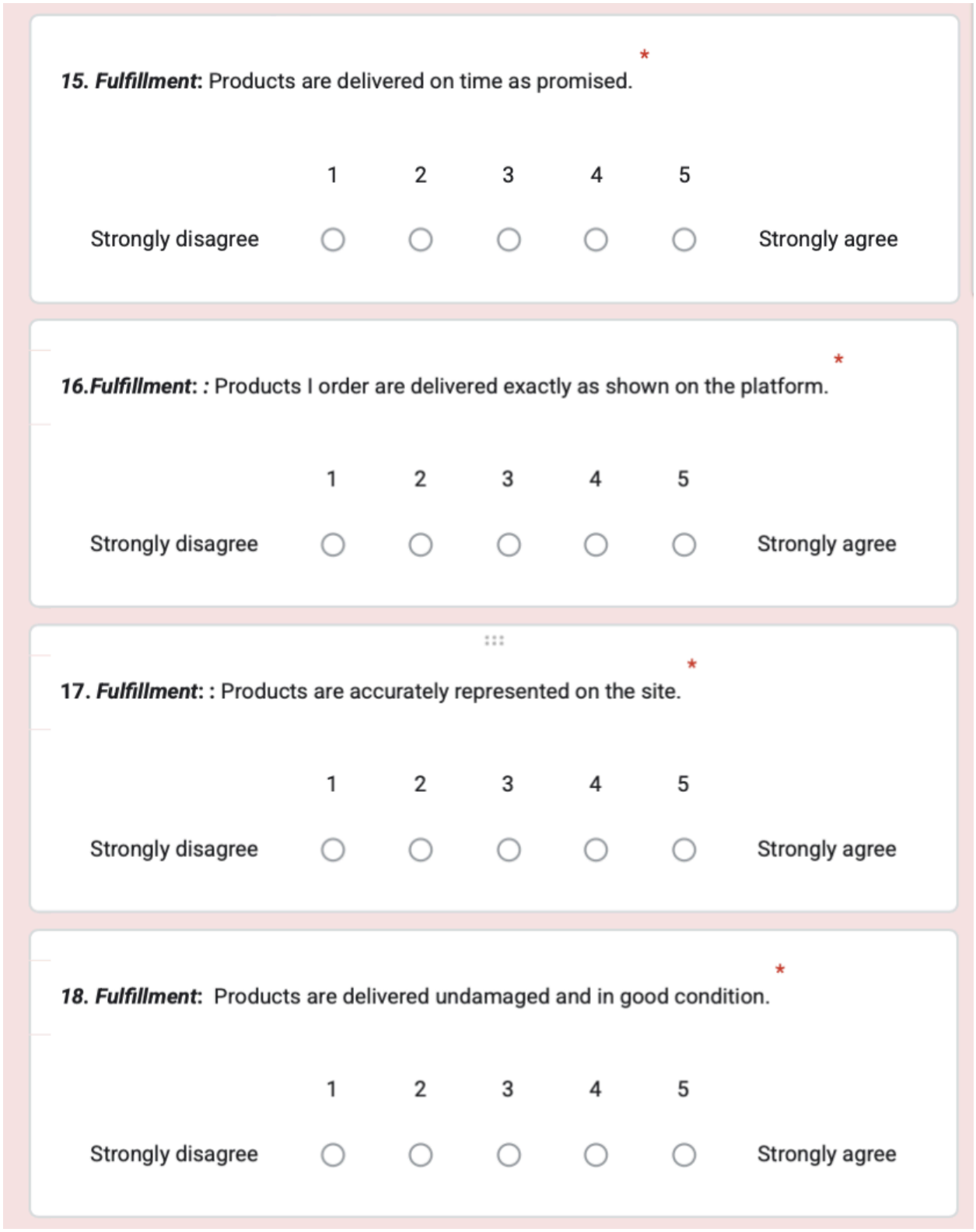


Figure A2. Questionnaire - Fulfilment (delivery)

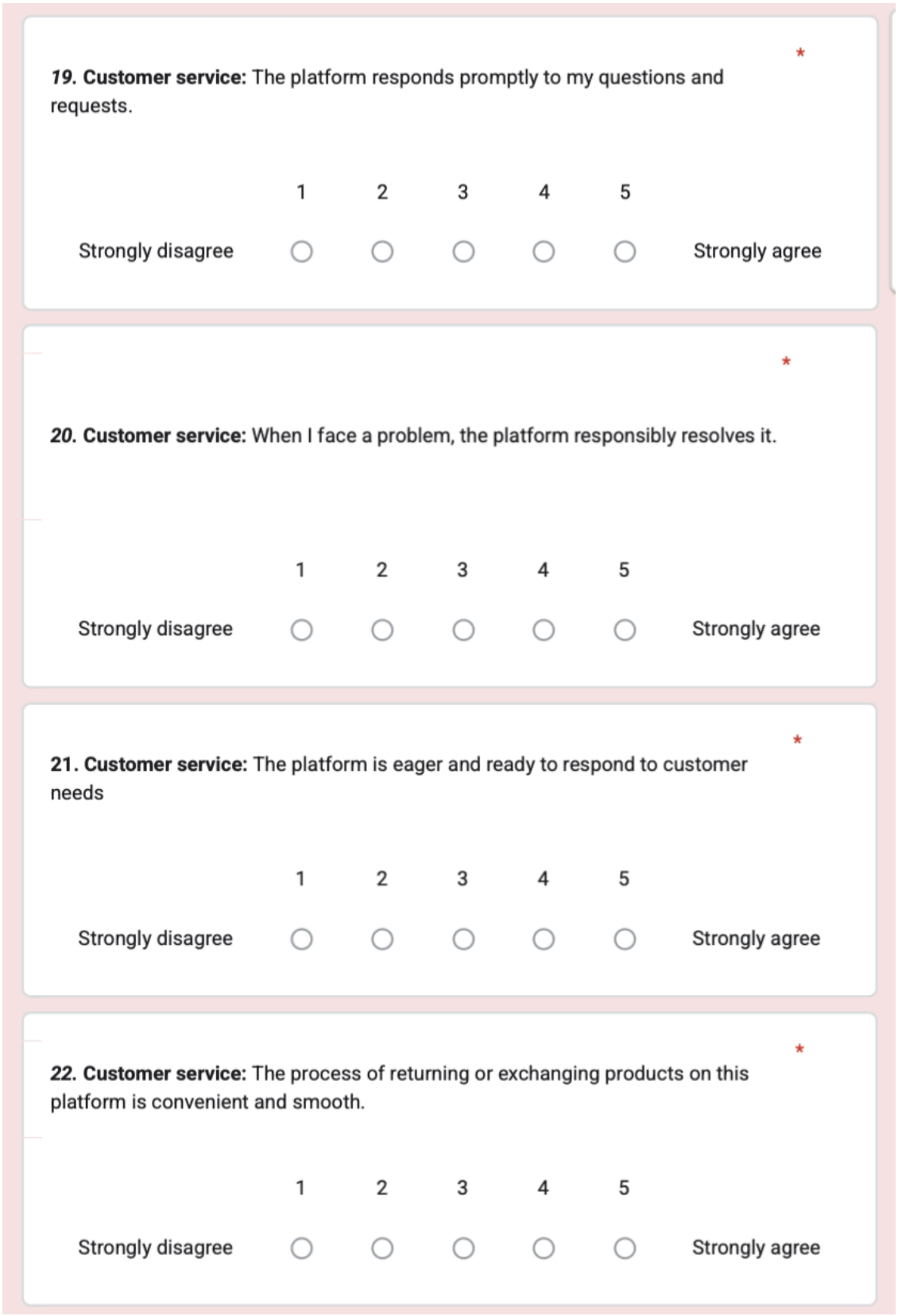


Figure A2. Questionnaire - Customer service/Responsiveness

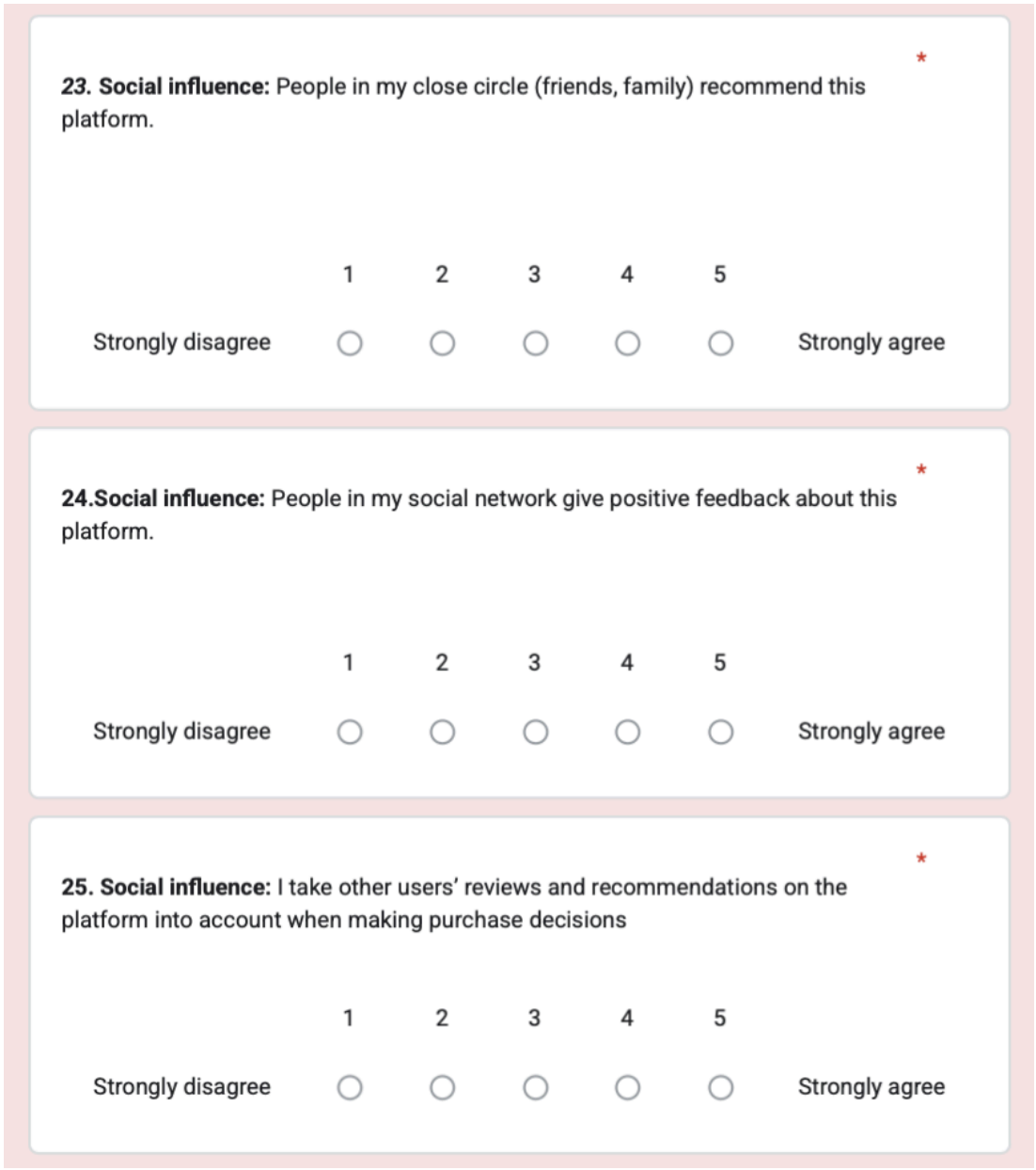


Figure A2. Questionnaire - Social influence

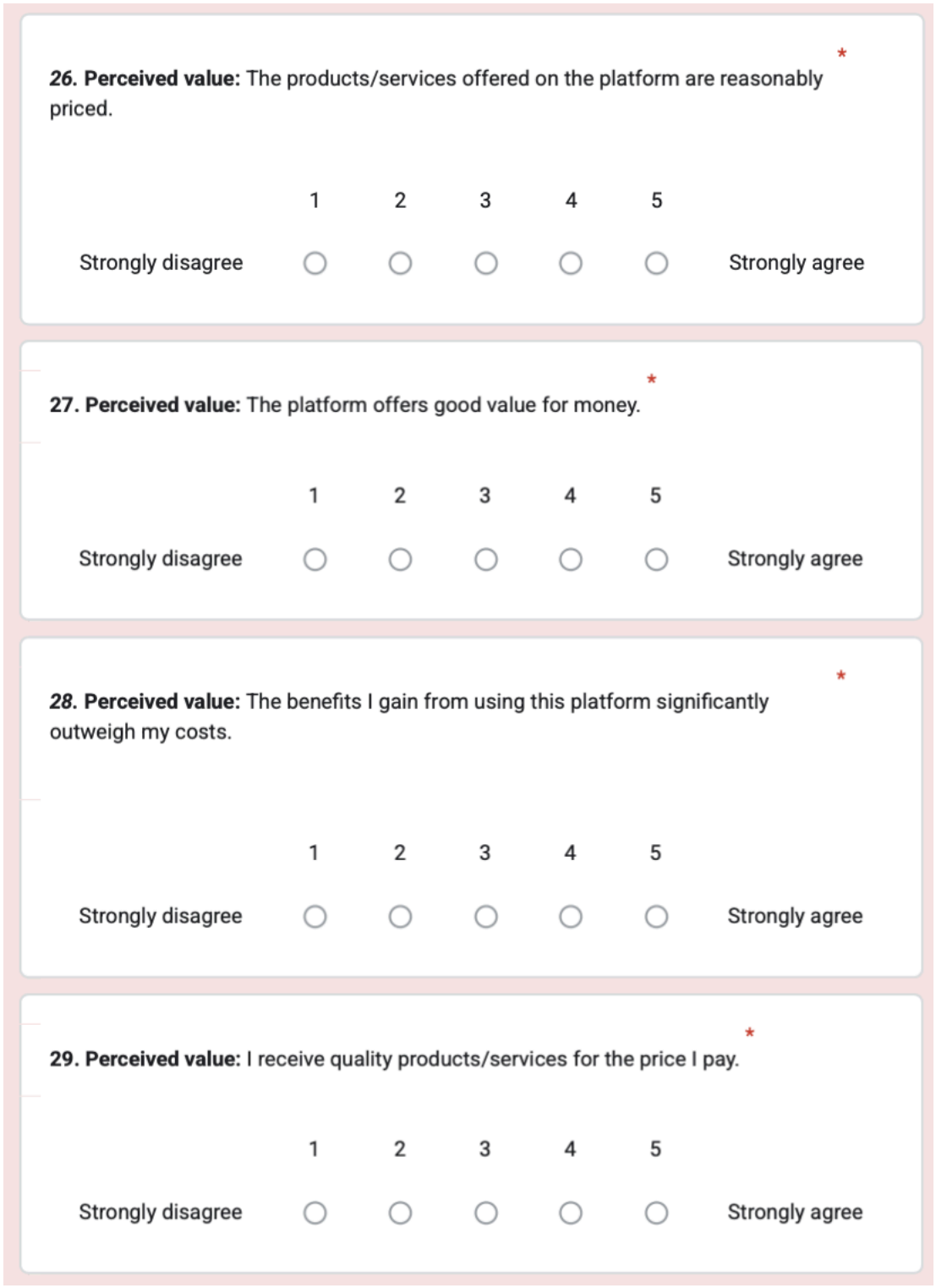


Figure A2. Questionnaire - Perceived value

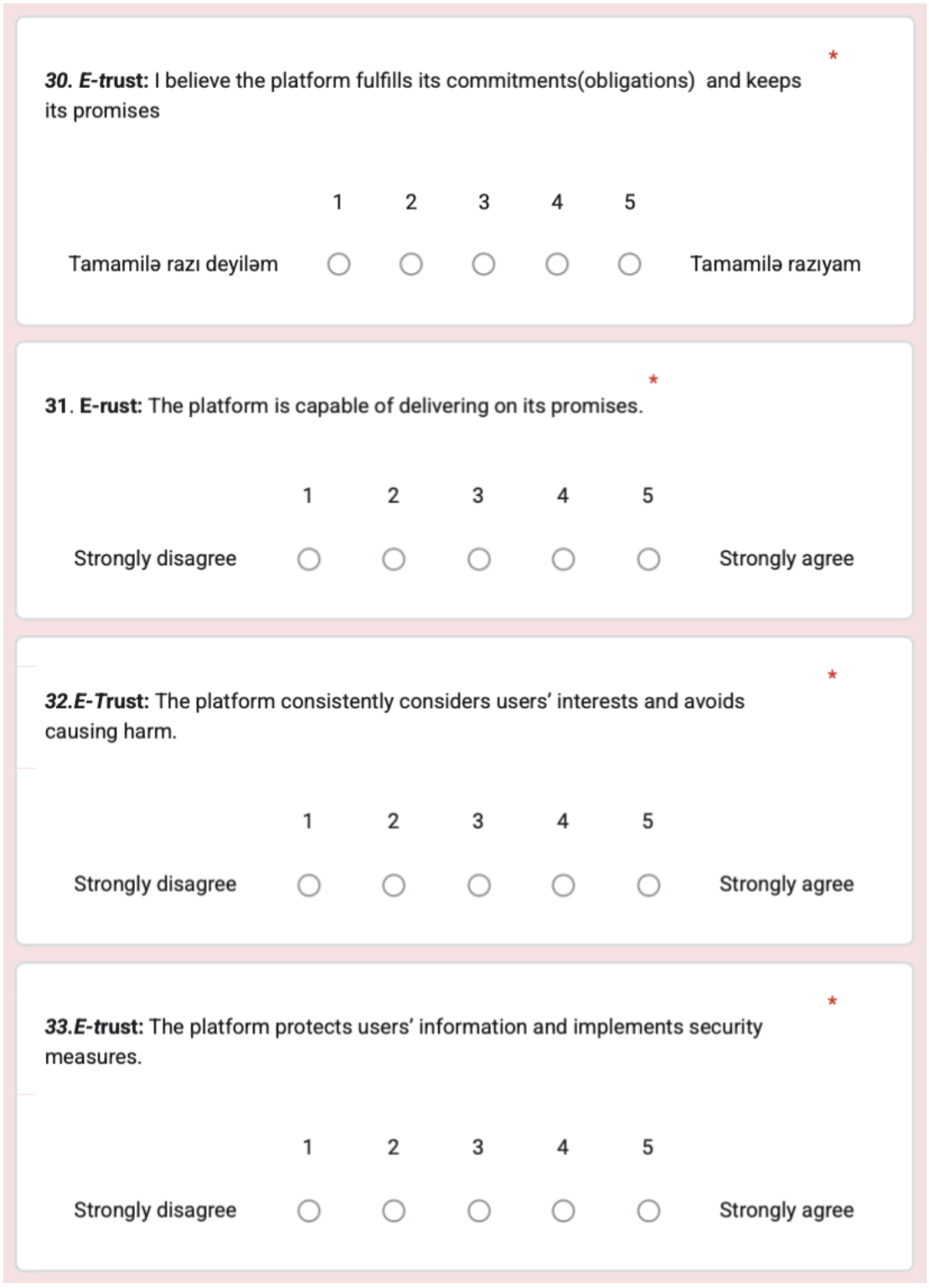


Figure A2. Questionnaire - E-trust

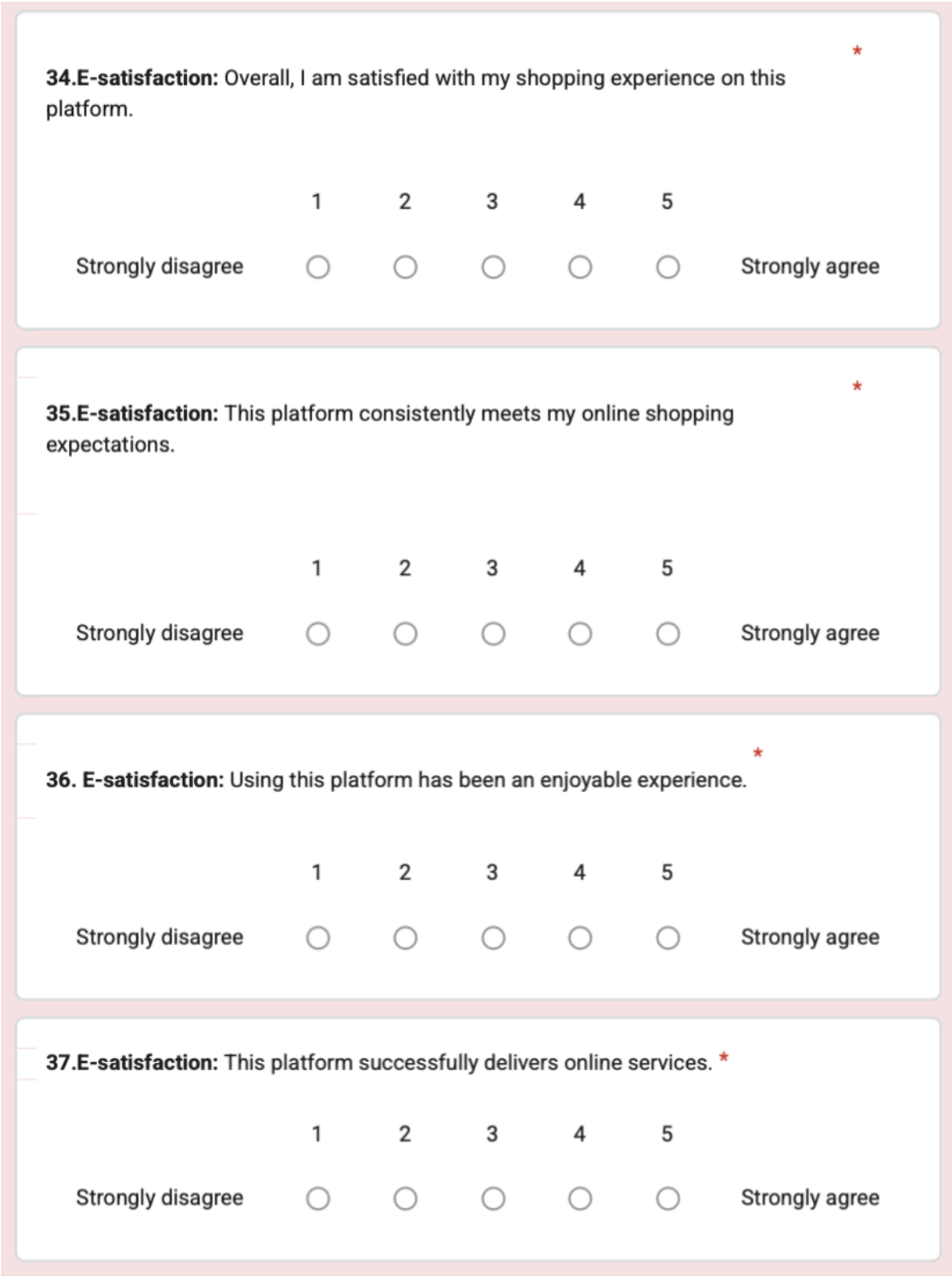


Figure A2. Questionnaire - E-satisfaction

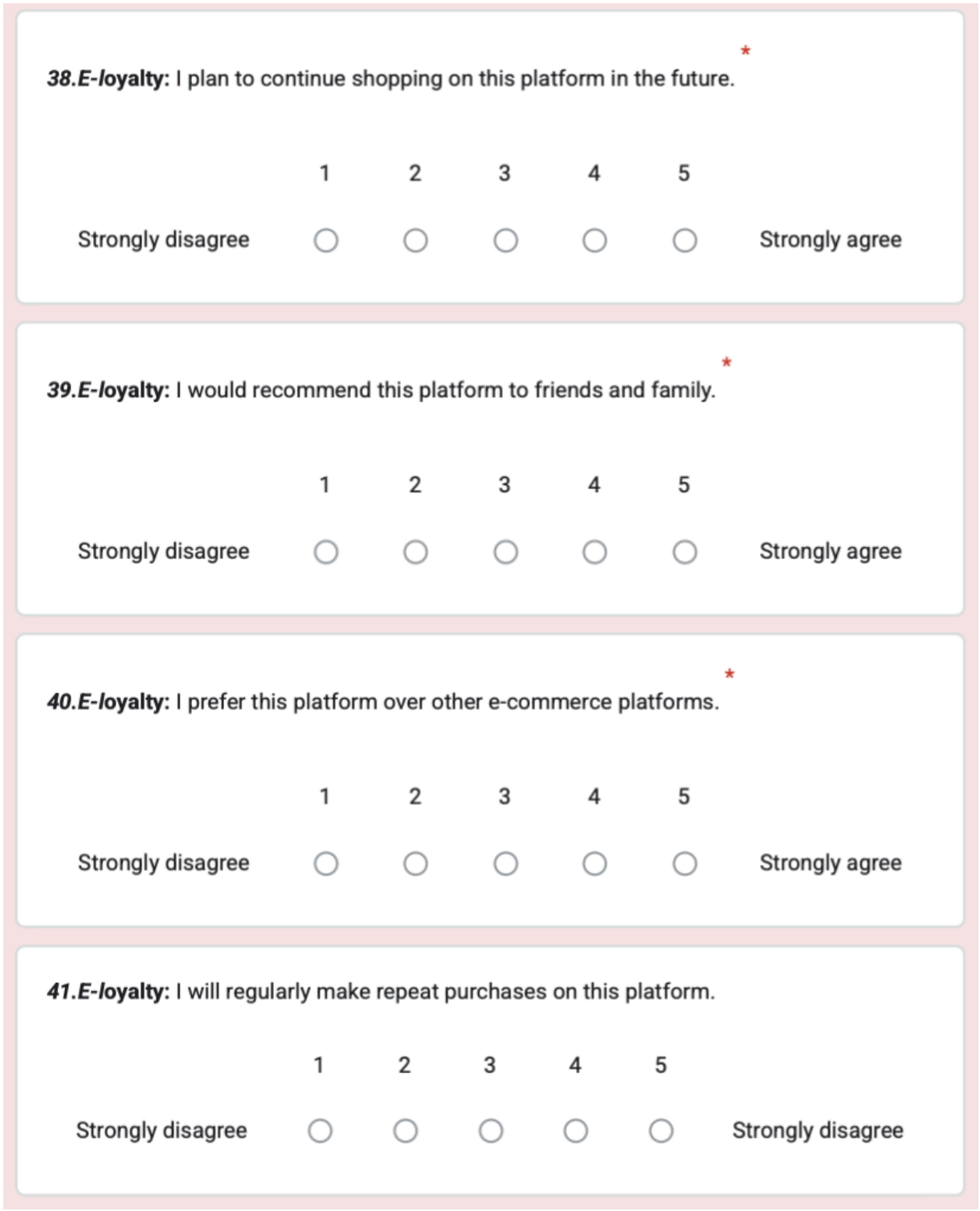


Figure A2. Questionnaire - E-loyalty

Appendix B SPSS OUTPUT

KMO and Barlett's Test: E-loyalty

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.825*
Bartlett's Test of Sphericity	*Approx χ^2*	*541.766*
	df	*6*
	p	*<0.001*

Note: *Extraction method: Principal Axis Factoring. Sample size (N) = 309*

Factor Matrix & Communalities: E-loyalty

Construct	*Items*	*Factor Loading*	*Communalities*
Loyalty	*L1*	*0.797*	*0.635*
	L2	*0.807*	*0.651*
	L3	*0.715*	*0.511*
	L4	*0.791*	*0.625*

Note: 309, a. 1 factor extracted. 5 iterations required

KMO and Barlett's Test: E-satisfaction

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.842*
Bartlett's Test of Sphericity	*Approx χ^2*	*736.649*
	df	*6*

	p	*<0.001*

Note: *Extraction method: Principal Axis Factoring.* ***Sample size (N) = 309***

Factor Matrix & Communalities: E-satisfaction

Construct	*Items*	*Factor Loading*	*Communalities*
Satisfaction	*S1*	*0.826*	*0.683*
	S2	*0.806*	*0.649*
	S3	*0.881*	*0.777*
	S4	*0.803*	*0.645*

Note: 309, a. 1 factor extracted. 6 iterations required.

KMO and Barlett's Test: E-trust

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.828*
Bartlett's Test of Sphericity	*Approx* χ^2	*712.235*
	df	*6*
	p	*<0.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: E-Trust

Construct	*Items*	*Factor Loading*	*Communalities*
E-trust	*T1*	*0.888*	*0.788*

	T2	*0.847*	*0.718*
	T3	*0.777*	*0.586*
	T4	*0.766*	*0.604*

Note: 309, a. 1 factor extracted. 6 iterations required.

KMO and Barlett's Test: Perceived Value

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.804*
Bartlett's Test of Sphericity	*Approx χ^2*	*480.935*
	df	*6*
	p	*<0.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Perceived Value

Construct	*Items*	*Factor Loading*	*Communalities*
Perceived Value	*PV1*	*0.807*	*0.5*
	PV2	*0.801*	*0.641*
	PV3	*0.707*	*0.651*
	PV4	*0.701*	*0.492*

Note: 309, a. 1 factor extracted. 6 iterations required.

KMO and Barlett's Test: Social Influence

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	*0.653*

Bartlett's Test of Sphericity	*Approx χ²*	*117.291*
	df	*3*
	p	*<0.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Social Influence

Construct	*Items*	*Factor Loading*	*Communalities*
Social Influence	*SI1*	*0.651*	*0.424*
	SI2	*0.595*	*0.352*
	SI3	*0.593*	*0.354*

Note: 309, a. 1 factor extracted. 9 iterations required.

KMO and Barlett's Test: Customer Service

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.817*
Bartlett's Test of Sphericity	*Approx χ²*	*699.55*
	df	*6*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Customer Service

Construct	*Items*	*Factor Loading*	*Communalities*

Customer Service	*CS1*	*0.895*	*0.659*
	CS2	*0.885*	*0.801*
	CS3	*0.812*	*0.784*
	CS4	*0.616*	*0.380*

Note: 309, a. 1 factor extracted. 6 iterations required.

KMO and Barlett's Test: Fulfillment

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.798*
Bartlett's Test of Sphericity	*Approx χ^2*	*493.546*
	df	*6*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Fulfillment

Construct	*Items*	*Factor Loading*	*Communalities*
Fulfillment	*F1*	*0.838*	*0.537*
	F2	*0.778*	*0.703*
	F3	*0.733*	*0.605*
	F4	*0.673*	*0.452*

Note: 309, a. 1 factor extracted. 6 iterations required.

KMO and Barlett's Test: Product Offerings

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.678*
Bartlett's Test of Sphericity	*Approx χ^2*	*180.688*
	df	*3*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Product Offerings

Construct	*Items*	*Factor Loading*	*Communalities*
Product Offerings	*PO1*	*0.729*	*0.418*
	PO2	*0.665*	*0.442*
	PO3	*0.646*	*0.532*

Note: 309, a. 1 factor extracted. 9 iterations required.

KMO and Barlett's Test: Personalization

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.699*
Bartlett's Test of Sphericity	*Approx χ^2*	*313.01*
	df	*3*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Personalization

Construct	*Items*	*Factor Loading*	*Communalities*
Personalization	*P1*	*0.861*	*0.742*
	P2	*0.744*	*0.482*
	P3	*0.695*	*0.554*

Note: 309, a. 1 factor extracted. 9 iterations required.

KMO and Barlett's Test: Platform ease of use

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.685*
Bartlett's Test of Sphericity	*Approx χ^2*	*232.117*
	df	*3*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Platform ease of use

Construct	*Items*	*Factor Loading*	*Communalities*
Platform ease of use	*PC1*	*0.792*	*0.529*
	PC2	*0.728*	*0.628*
	PC3	*0.636*	*0.404*

Note: 309, a. 1 factor extracted. 9 iterations required

KMO and Barlett's Test: Platform aesthetics

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.5*
Bartlett's Test of Sphericity	*Approx χ^2*	*144.682*
	df	*1*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Platform ease of use

Construct	*Items*	*Factor Loading*	*Communalities*
Platform aesthetics	*PA1*	*0.783*	*0.612*
	PA2	*0.783*	*0.612*

Note: 309, a. 1 factor extracted. 9 iterations required

KMO and Barlett's Test: Information quality

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*0.728*
Bartlett's Test of Sphericity	*Approx χ^2*	*430.573*
	df	*3*
	p	*<.001*

Note: Extraction method: Principal Axis Factoring. Sample size (N) = 309

Factor Matrix&Communalities: Information quality

Construct	*Items*	*Factor Loading*	*Communalities*
Information quality	*IQ1*	*0.879*	*0.625*

	IQ2	*0.794*	*0.772*
	IQ3	*0.790*	*0.63*

Note: 309, a. 1 factor extracted. 9 iterations required

Multiple Regression Analysis

Model Summaries Multiple Linear Regression Predicting E-loyalty, E-satisfaction, E-Trust

	R	***R²***	***Adjusted R²***	***Std.Error of Estimate***
E-loyalty	*.817a*	*0.667*	*0.664*	*0.38056*
E-satisfaction	*.769b*	*0.592*	*0.586*	*0.43144*
E-trust	*.715c*	*0.511*	*0.505*	*0.53487*
E-satisfaction	*.668d*	*0.446*	*0.437*	*0.50343*
E-trust	*.617e*	*0.381*	*0.37*	*0.60307*

Notes: a. Predictors: (Constant), etrust_index12, esatisfaction_index12

b. Predictors: (Constant), pltdesign_index12, customerservice_index12, perceivedvalue_index12, fulfillment_index12

c. Predictors: (Constant), pltdesign_index12, socialinfluence_index12, customerservice_index12, fulfillment_index12

d. Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12 , personalization_index12, pltconvenience_index12

e. Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12, personalization_index12, pltconvenience_index12

ANOVA Results of Multiple Linear Regression Predicting E-loyalty, E-satisfaction, E-Trust

		Sum Squares	*df*	*Mean*	*F*	*p*
E-loyalty(a)	*Regression*	*86.324*	*2*	*43.162*	*298.033*	*<.001a*
	Residual	*43.157*	*298*	*0.145*		
	Total	*129.481*	*300*			
E-satisfaction(b)	*Regression*	*81.944*	*4*	*20.486*		*<.001b*
	Residual	*56.588*	*304*	*0.186*	*110.055*	
	Total	*138.532*	*308*			
E-trust(c)	*Regression*	*90.961*	*4*	*22.74*	*79.487*	*<.001c*
	Residual	*86.971*	*304*	*0.286*		
	Total	*177.932*	*308*			
E-satisfaction(d)	*Regression*	*61.74*	*5*	*12.348*	*48.722*	*<.001d*
	Residual	*76.792*	*303*	*0.253*		
	Total	*138.532*	*308*			
E-trust(e)	*Regression*	*67.734*	*5*	*13.547*	*79.487*	*<.001e*
	Residual	*110.199*	*303*	*0.364*		
	Total	*177.932*	*308*	*37.248*		

Notes: a. Predictors: (Constant), etrust_index12, esatisfaction_index12

b. Predictors: (Constant), pltdesign_index12, customerservice_index12, perceivedvalue_index12, fulfillment_index12

c. Predictors: (Constant), pltdesign_index12, socialinfluence_index12, customerservice_index12, fulfillment_index12

d. Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12 , personalization_index12, pltconvenience_index12

e. Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12, personalization_index12, pltconvenience_index12

Regression Coefficients for E -loyalty, E-satisfaction, E-Trust

							95% CI for B		Collinearity Statistics	
		B	*SE*	*β*	*t*	*p*	*LB*	*UP*	*Tolerance*	*VIF*
E-loyalty[a]	*(Constant)*	*0.685*	*0.146*	*-*	*4.681*	*< .001*	*0.397*	*0.973*		
	E-satisfaction	*0.762*	*0.047*	*0.749*	*16.260*	*< .001*	*0.670*	*0.854*	*0.527*	*1.896*
	E-trust	*0.082*	*0.040*	*0.094*	*2.045*	*0.042*	*0.003*	*0.162*	*0.527*	*1.896*
E-satisfaction[b]	*(Constant)*	*0.838*	*0.177*	*-*	*4.730*	*< .001*	*0.489*	*1.187*		
	Perceived value	*0.330*	*0.044*	*0.376*	*7.536*	*< .001*	*0.244*	*0.416*	*0.540*	*1.853*
	Customer service	*0.061*	*0.039*	*0.079*	*1.561*	*0.120*	*-0.016*	*0.138*	*0.520*	*1.925*
	Fulfilment	*0.196*	*0.046*	*0.225*	*4.221*	*< .001*	*0.104*	*0.287*	*0.471*	*2.123*
	Platform design	*0.271*	*0.059*	*0.232*	*4.636*	*< .001*	*0.156*	*0.386*	*0.538*	*1.858*
E-trust[c]	*(Constant)*	*0.384*	*0.248*	*-*	*1.550*	*0.122*	*-0.104*	*0.872*	*-*	

	Social influence	*0.051*	*0.052*	*0.043*	*0.976*	*0.330*	*-0.052*	*0.154*	*0.837*	*1.195*
	Customer service	*0.270*	*0.048*	*0.310*	*5.618*	*< .001*	*0.175*	*0.364*	*0.527*	*1.896*
	Fulfilment	*0.243*	*0.056*	*0.247*	*4.371*	*< .001*	*0.134*	*0.353*	*0.501*	*1.994*
	Platform design	*0.344*	*0.069*	*0.259*	*4.956*	*< .001*	*0.207*	*0.480*	*0.588*	*1.700*
E-satisfaction[d]	*(Constant)*	*1.034*	*0.208*	*-*	*4.960*	*< .001*	*0.624*	*1.444*		
	Product offerings	*0.362*	*0.050*	*0.397*	*7.218*	*< .001*	*0.264*	*0.461*	*0.604*	*1.655*
	Personalization	*-0.005*	*0.048*	*-0.006*	*-0.098*	*0.922*	*-0.099*	*0.090*	*0.532*	*1.879*
	Platform ease of use	*0.234*	*0.058*	*0.240*	*4.024*	*< .001*	*0.120*	*0.349*	*0.513*	*1.948*
	Platform aesthetics	*0.077*	*0.042*	*0.093*	*1.841*	*0.067*	*-0.005*	*0.159*	*0.712*	*1.405*
	Information quality	*0.105*	*0.048*	*0.116*	*2.171*	*< .001*	*0.010*	*0.200*	*0.638*	*1.567*
E-trust[e]	*(Constant)*	*0.646*	*0.250*		*2.587*	*0.010*	*0.155*	*1.137*		
	Product offerings	*0.251*	*0.060*	*0.243*	*4.180*	*< .001*	*0.133*	*0.370*	*0.604*	*1.655*
	Personalization	*0.060*	*0.058*	*0.064*	*1.039*	*0.300*	*-0.053*	*0.173*	*0.532*	*1.879*
	Platform ease of use	*0.251*	*0.070*	*0.227*	*3.600*	*< .001*	*0.114*	*0.388*	*0.513*	*1.948*
	Platform aesthetics	*-0.006*	*0.050*	*-0.007*	*-0.125*	*0.901*	*-0.105*	*0.092*	*0.712*	*1.405*
	Information quality	*0.247*	*0.058*	*0.241*	*4.266*	*< .001*	*0.133*	*0.360*	*0.638*	*1.567*

Notes: The coefficients table reflects separate multiple regression models, each with a different dependent variable.

a.Dependent Variable: loyalty_index; Predictors: (Constant), etrust_index12, esatisfaction_index12

b.Dependent Variable: satisfaction_index; Predictors: (Constant), pltdesign_index12, customerservice_index12, perceivedvalue_index12, fulfillment_index12

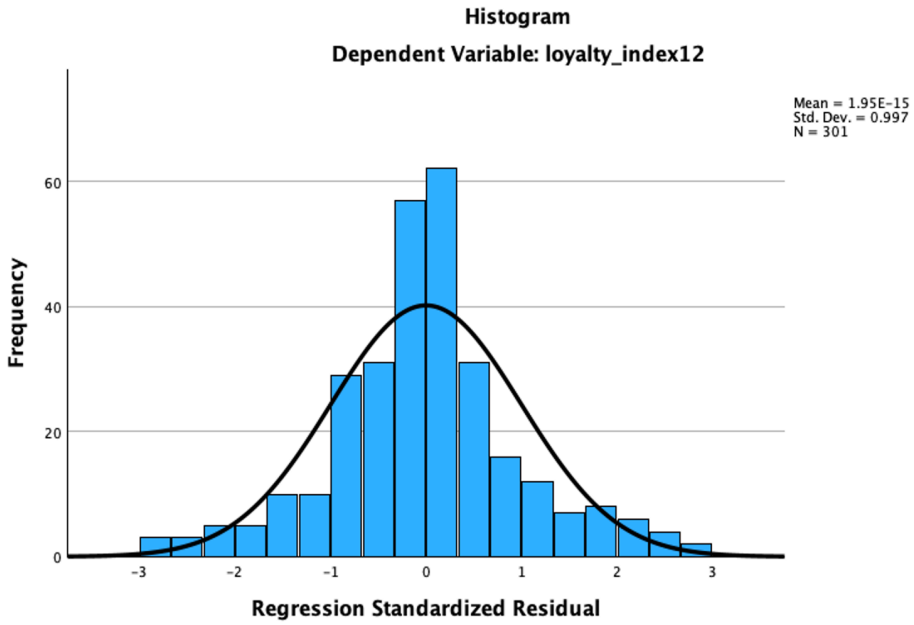
c. Dependent Variable: trust_index;Predictors: (Constant), pltdesign_index12, socialinfluence_index12, customerservice_index12, fulfillment_index12

d. Dependent Variable: satisfaction_index;Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12 , personalization_index12, pltconvenience_index12

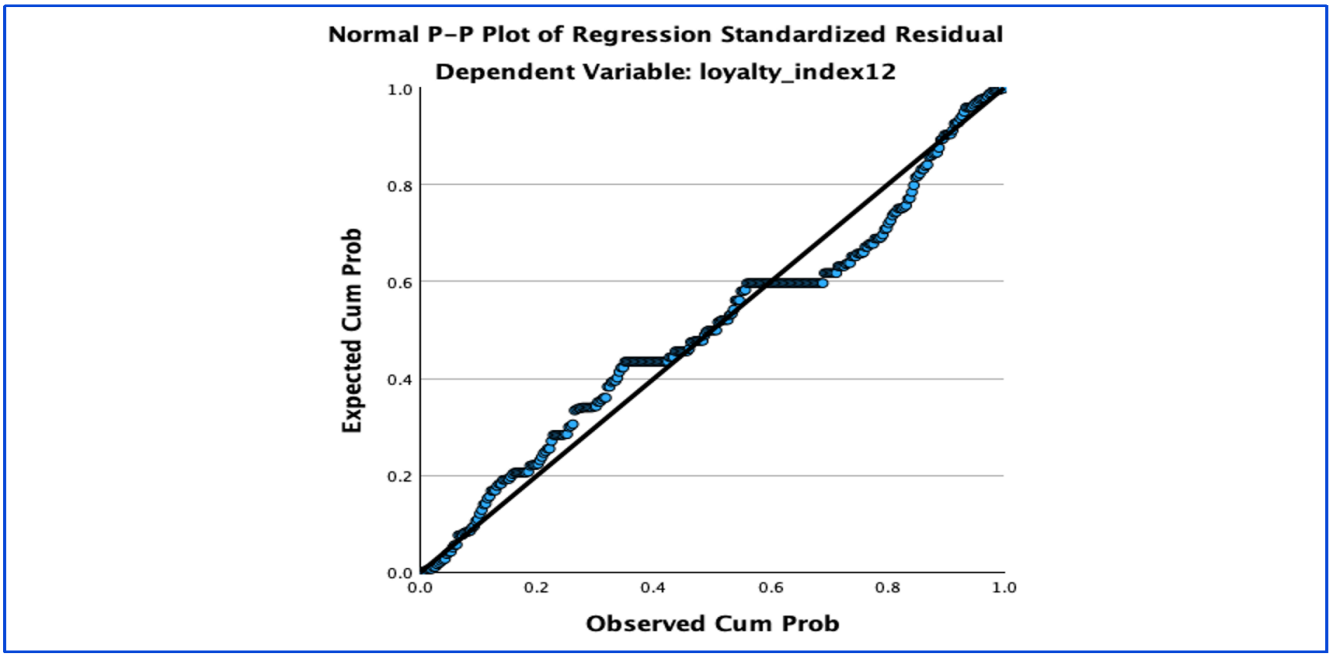
e. Dependent Variable: trust_index; Predictors: (Constant), informationquality_index12, pltaesthetic_index12, productoffer_index12, personalization_index12, pltconvenience_index12

B = Unstandardized Coefficients; SE = standard error (Unstandardized Coefficients); β = Standardized Coefficients; Cl = confidence interval; LB = Lower Bound; UB = Upper Bound; VIF = variance inflation factor

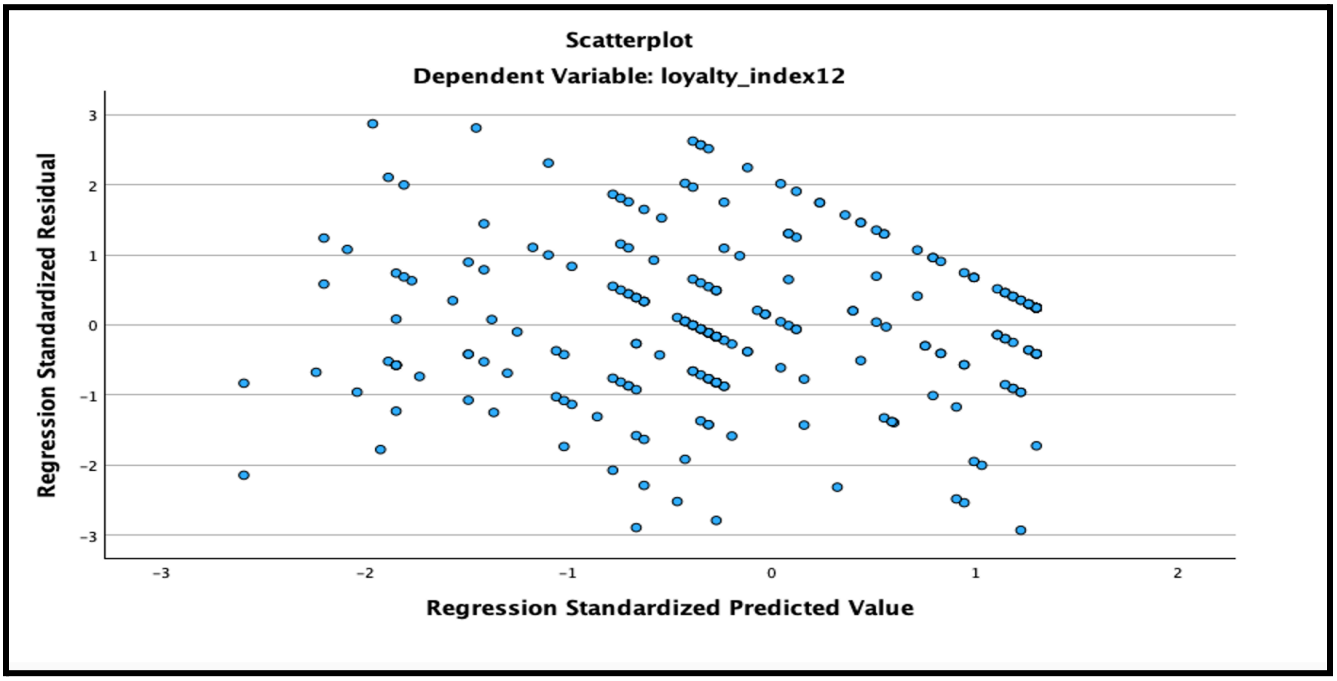
Diagnostic Plots (Histogram, P-P Plot, Scatterplot):E-loyalty (H1, H2)



Histogram of Regression Standardized Residual: E-loyalty

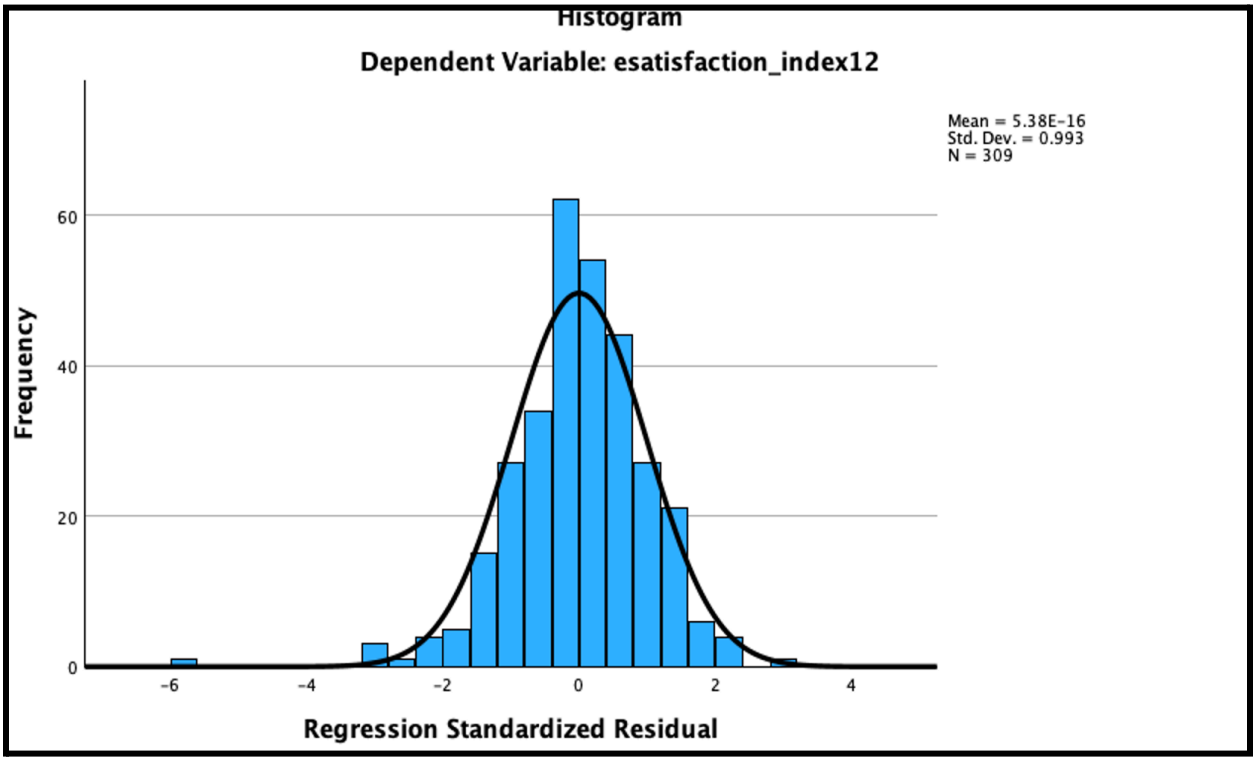


Normal P-P Plot of Regression Standardized Residual: E-loyalty

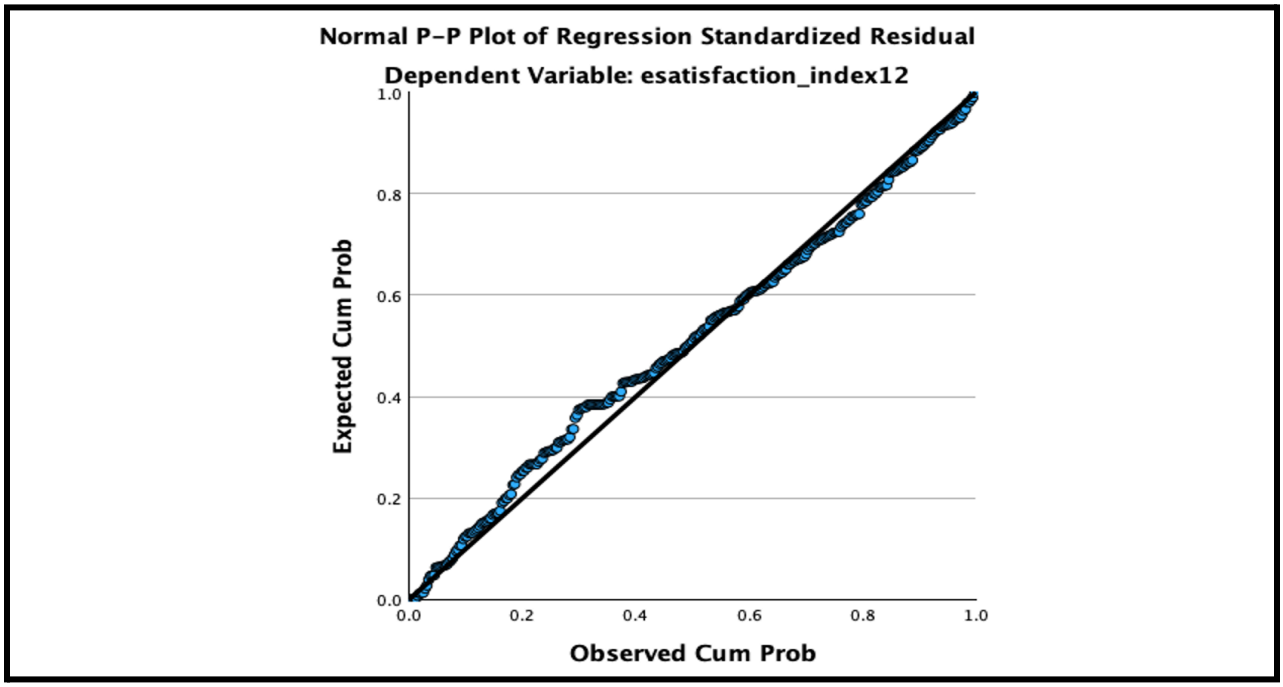


Histogram of Regression Standardized Residual:E-loyalty

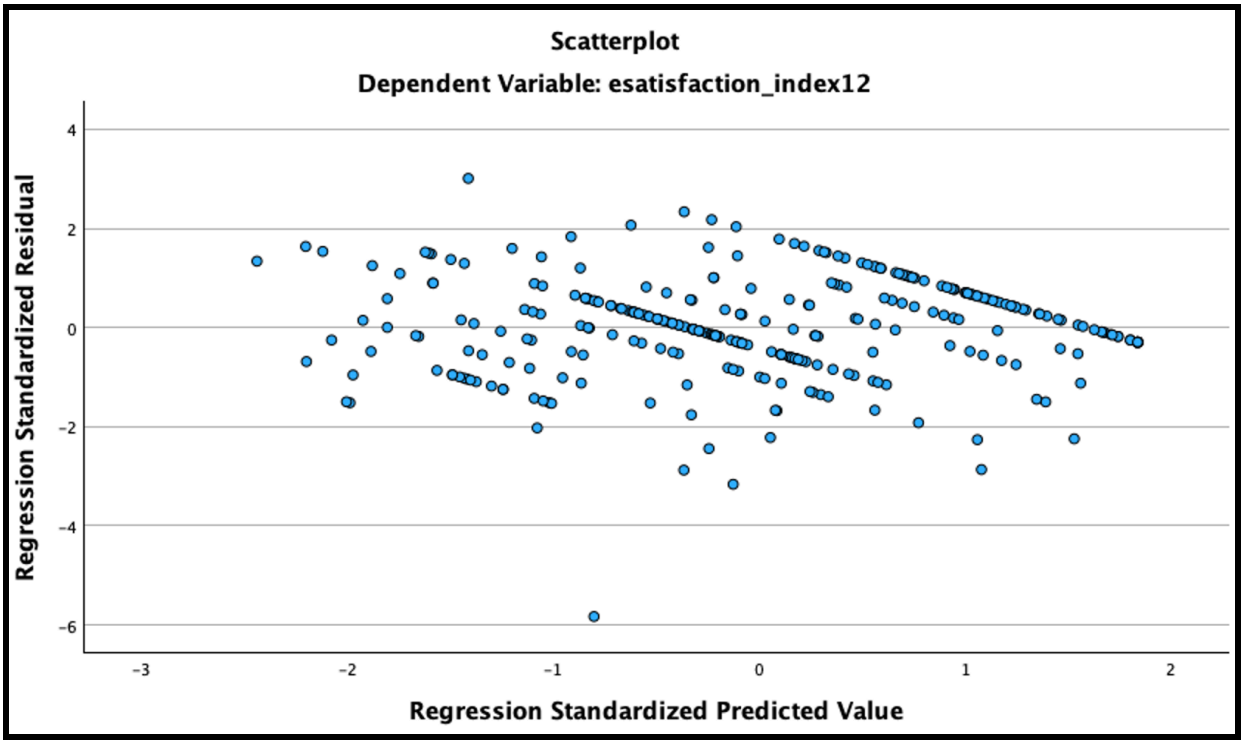
Diagnostic Plots (Histogram, P-P Plot, Scatterplot):E-satisfaction (H3, H5,H7)



Histogram of Regression Standardized Residual: E-satisfaction

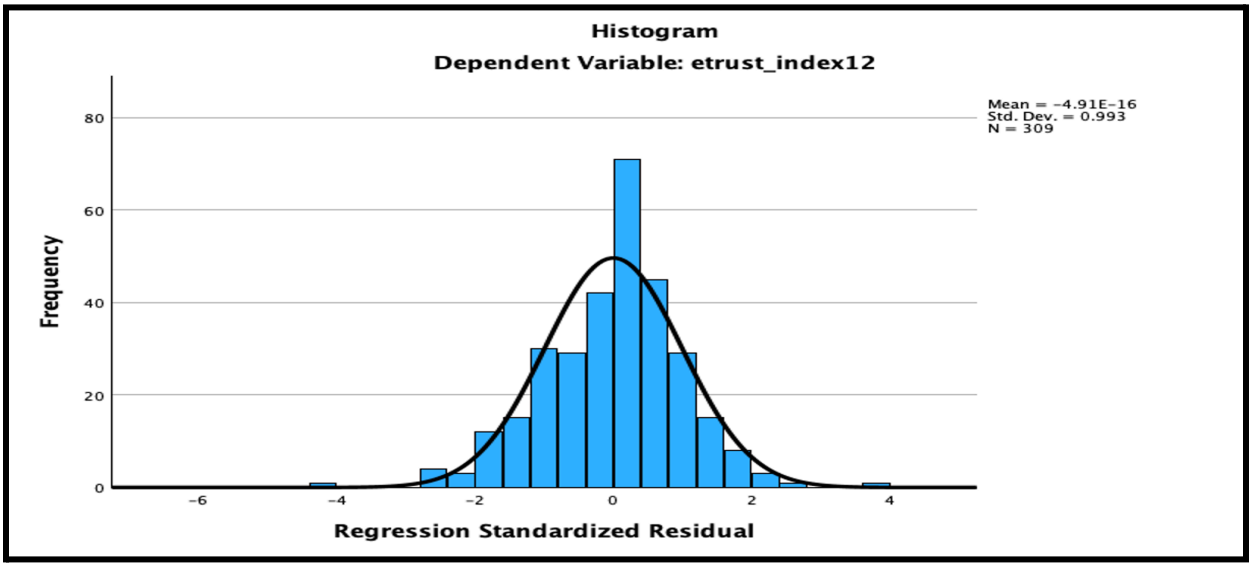


Normal P-P Plot of Regression Standardized Residual: E-satisfaction

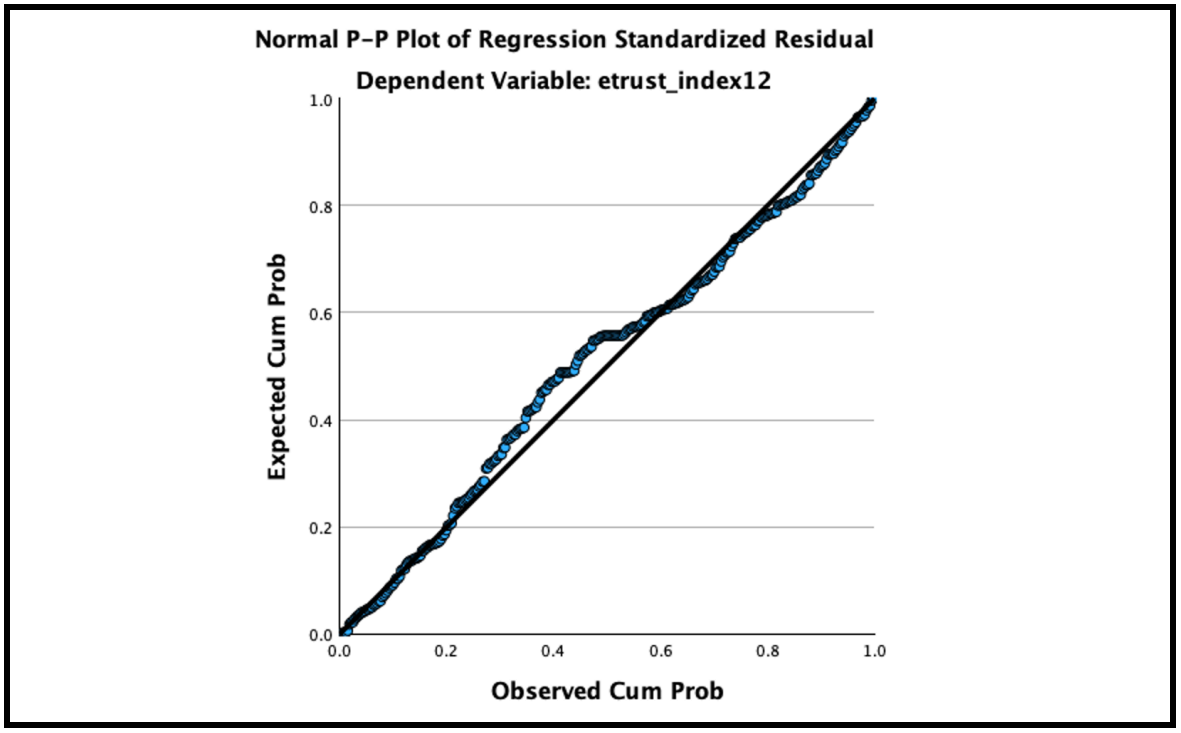


Histogram of Regression Standardized Residual:E-satisfaction

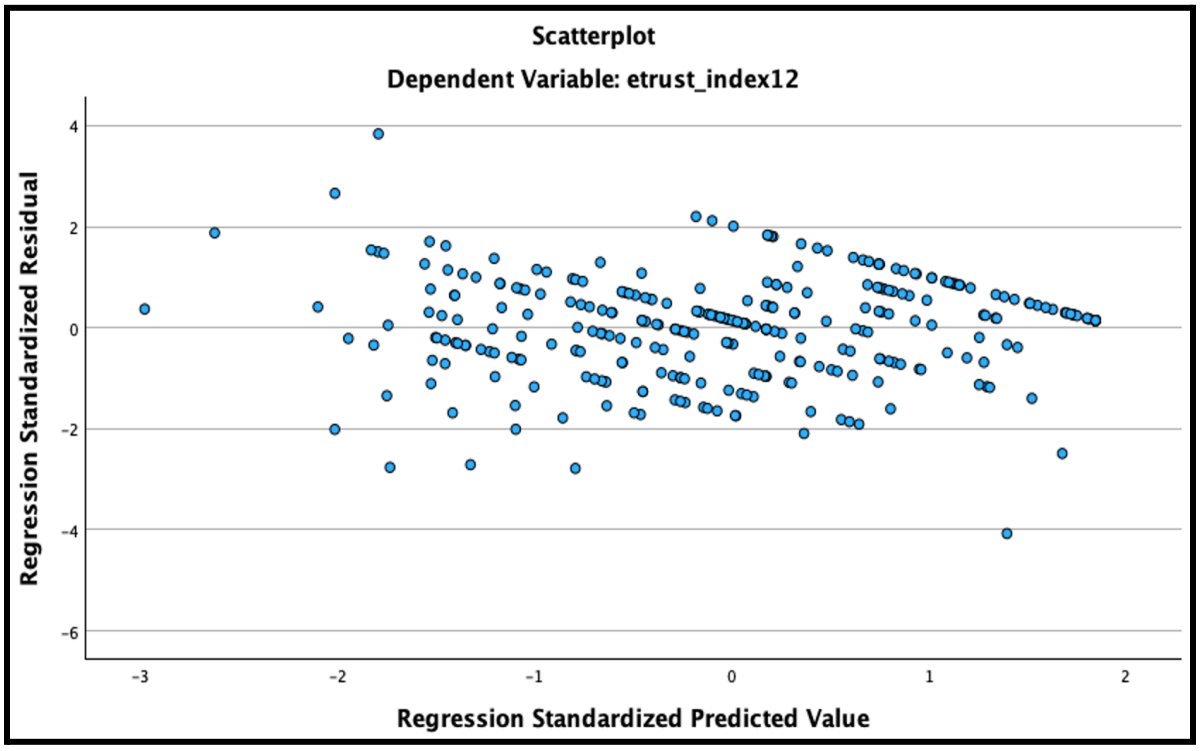
Diagnostic Plots (Histogram, P-P Plot, Scatterplot): E-trust(H4,H6,H8)



Histogram of Regression Standardized Residual: E-trust



Normal P-P Plot of Regression Standardized Residual: E-satisfaction



Histogram of Regression Standardized Residual:E-satisfaction