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CONSUMER PERCEPTIONS AND TECHNOLOGICAL INFLUENCES IN SOUTH AFRICAN ONLINE RETAIL: TRUST, CONVENIENCE, AND BARRIERS

Rene Haarhoff
University of the Western Cape

Ayola Cana
University of the Western Cape

Abstract

The rapid growth of e-commerce has transformed the retail landscape, necessitating an in-depth understanding of consumer perceptions, attitudes, and purchasing decisions. Guided by the Theory of Reasoned Action and Theory of Planned Behaviour, this study investigates the convenience, concerns, and technological influences shaping online shopping experiences to explore consumers' preferences and behaviours in an emerging market context. A quantitative online survey approach, involving 124 respondents primarily consisting of young adults and women, was employed to collect quantifiable data about online shopping preferences. The sample reflects the increasing role of e-commerce in everyday life, though its demographic skew suggests a need for broader studies. Findings indicate that convenience is the primary driver of online purchases, despite persistent concerns over data security and product authenticity verification. Consumers highly value the variety of products available online, yet perceptions differ regarding delivery times and pricing competitiveness. Trust, security, and reliability are pivotal in fostering confidence in online transactions, requiring consumers to feel assured about payment safety and the protection of personal information. To enhance customer confidence and satisfaction, it is recommended that e-commerce platforms invest in robust data security measures, improve targeted advertising strategies, and implement effective customer feedback mechanisms. This study contributes to the literature by elucidating how technological advancements, such as AI-driven personalisation and mobile shopping applications, have transformed e-commerce from a perceived unsafe alternative to a convenient, personalised experience that meets diverse consumer needs, addressing gaps in emerging market e-commerce research.

Keywords: e-commerce, consumer perceptions, consumer behaviour, convenience, trust, data security, online retail, South Africa.

Introduction and Background

The rapid expansion of the Internet has made online shopping a crucial component of modern consumer lifestyles and a major force in global retail markets (Rosário & Casaca 2025). Over the past decade, e-commerce has gained significant traction, with numerous large retailers adopting dual strategies of maintaining both online and physical stores to optimise their outcomes. This growth is driven by the many advantages consumers perceive in online shopping, such as accessibility and efficiency, leading to its remarkable expansion (Muntaqheem & Raiker 2019; Saikrishnan 2023). Research by Putra (2025) confirms that customers engage with brands both online and offline, supporting the integration of these

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channels as an essential business strategy. With technology reshaping shopping behaviours since the advent of Internet commerce, customers now have an unprecedented range of options (Muntaqheem & Raiker 2019). Daroch, Nagrath, and Gupta (2021) confirm that customers increasingly use online shopping (Sun 2025) because it is quick, engaging, and convenient, aligning with the demands of modern lifestyles.

Beyond this rise, the world of online shopping is being transformed by immersive augmented and virtual reality applications that revolutionise product presentation, while big data personalisation algorithms cater to specific consumer preferences; innovation and advancement are essential for competitive success (Kaur 2025). These technologies enable consumers to evaluate products more thoroughly, transcending the limitations of conventional e-commerce experiences (Li 2023). Rapid technological advancements have fundamentally reshaped the shopping market, influencing consumer behaviour, perceptions of e-commerce, corporate strategies, and the broader landscape of advertising and marketing (Li 2023). To provide a theoretical lens for understanding these shifts, this study is grounded in the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB), which explore how attitudes, subjective norms, and perceived behavioural control shape consumers' intentions to shop online (Glanz et al. 2015; Sommer 2011). These frameworks are particularly relevant to e-commerce, as they predict how positive attitudes toward online platforms, social influences from peers, and perceived ease of use drive purchasing decisions, offering a robust foundation for analysing consumer preferences in digital retail.

The ease of purchase allows consumers to access information and complete transactions from any location at any time (Muntaqheem and Raiker 2019). Hectic schedules and long work hours amplify the convenience and time-saving benefits of online shopping compared to traditional retail (Frederick and Ganesh 2021; Daroch et al. 2021). The apparent lower cost of items purchased online compared to those in physical stores is another advantage (Muntaqheem and Raiker 2019), alongside positive perceptions of security in online transactions (Lu 2024). Additionally, comparing prices online is a straightforward process, enhancing decision-making and efficiency. Furthermore, customers are drawn to websites with engaging designs and features that capture their interest sufficiently to prompt purchases (Daroch et al. 2021).

Retaining online customers provides a competitive edge, generating significant interest among retailers (Vasic 2019). Satisfied customers are more likely to make repeat purchases from an online store, making customer retention and satisfaction critical for both online and offline businesses (Vasic 2019). Understanding the factors influencing consumer happiness and preferences is essential. Positive consumer experiences at various stages of the purchasing process contribute to increased satisfaction (Vasic 2019). However, the inability to physically interact with products means online shoppers rely heavily on the information provided by retailers, which shapes their overall experience (Vasic 2019).

While e, e-commerce grows globally, South Africa presents a unique case with relatively low market penetration due to limited Internet access, high data costs (ZAR 50–100/GB), and infrastructure challenges (Goga et al. 2019). Surveys indicate that most South African e-commerce shoppers are full-time employees with higher incomes in the local context, often viewing online shopping as a form of entertainment and convenience (Goga et al. 2019). Cultural preferences for tactile shopping experiences and trust concerns further shape adoption patterns, distinguishing South Africa from more mature e-commerce markets. Brick and mortar

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stores, integral to South Africa's dense network of malls and shopping centres, continue to thrive alongside emerging online platforms (Goga et al. 2019). Online merchants such as Takealot, Zando, Superbalist, Woolworths, and Yuppiechef are expanding, forming a robust e-commerce ecosystem. The rise of daily online purchasing and new market entrants has increased the number of online retailers, suggesting growing consumer receptivity to online buying (Nhlapulo & Makhitha, 2021).

Despite the global proliferation of e-commerce research, there remains a gap in understanding South African consumers' perceptions of online retail, particularly regarding how convenience, trust, and technological innovations influence their preferences in a context marked by infrastructural and cultural constraints. This study aims to investigate the factors influencing online retail preferences, focusing on convenience, trust, security, and technological advancements, to provide actionable insights for e-commerce strategies in South Africa and beyond. The subsequent literature review will explore key themes such as trust, website usability, product authenticity, and social influences, building on TRA and TPB to frame consumer decision-making processes. To enhance e-commerce adoption in South Africa, retailers should prioritise improving Internet accessibility, integrating advanced technologies like augmented reality for better product visualisation, and ensuring robust data security to build consumer trust. Additionally, leveraging TRA and TPB, businesses can tailor marketing strategies to address attitudinal barriers and social influences, fostering greater consumer engagement with online platforms. These efforts should be complemented by targeted campaigns that address cultural preferences for tactile shopping and promote mobile-friendly platforms to bridge the digital divide in South Africa.

Literature Review

The act of customers purchasing goods and services directly from online sellers without intermediaries is referred to as online shopping (Srivastava and Thaichon 2023). With increased accessibility, online stores are typically available 24 hours a day, and many consumers have Internet access at home and work, making online shopping highly convenient (Sajannavar et al. 2022). Its popularity has surged due to factors such as social media influence, extensive product variety, convenience, price comparison capabilities, and ease of purchase for consumers (Sajannavar et al. 2022). These drivers have transformed e-commerce into a dominant retail channel, necessitating a deeper understanding of consumer perceptions to optimise business strategies.

Consumer perception is a critical determinant of attitudes toward e-commerce and decision-making processes (Saikrishnan 2021). Perceptions encompass consumers' understanding, knowledge, attitudes, and beliefs about online purchasing platforms (Sambamoorthi 2023). Analysing consumers' sentiments toward online buying reveals insights into their preferences, concerns, and motivations (Frederick and Ganesh 2021). Businesses can leverage these insights to tailor e-commerce strategies, aligning with consumer expectations to foster positive shopping experiences (Saikrishnan 2023). Evaluating consumer confidence in online purchases is equally vital, with trust, security, and reliability playing significant roles (Sambamoorthi 2023). Fostering trust through secure payment systems and robust personal data protection enhances consumers' willingness to engage in online transactions. Perceptions of product quality, customer service quality, and delivery reliability further shape trust in the e-commerce experience (Sambamoorthi 2023).

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These foundational aspects underscore the need to explore existing literature on consumer perceptions and preferences in e-commerce, particularly in diverse global and regional contexts.

Evolution and Dynamics of Online Shopping

Online shopping involves customers instantly purchasing goods or services from online vendors without intermediaries (Sun, 2025). The proliferation of the Internet, connected devices has enabled consumers to purchase with greater ease, updating their purchasing patterns and strategies for identifying suitable goods (Tang et al. 2021). Consumers evaluate websites for various purposes, including gathering information, comparing features and prices with competing retailers, and selecting optimal options (Tang et al. 2021). The historical roots of e-commerce trace back to the 1960s with the emergence of Electronic Data Interchange (EDI), which facilitated data transmission between corporate organisations, such as supply chain partners in retail and manufacturing (Taher 2021). For example, early EDI systems enabled companies like Walmart to streamline inventory management with suppliers. By 1979, businesses were mandated to share documents via computer networks, a practice that expanded in the 1980s with electronic networks for commercial transactions (Taher 2021). The 1990s marked a pivotal era with the launch of online marketplaces like eBay (1995) and Amazon (1994), which revolutionised retail by offering scalable platforms for consumer purchases, supported by secure payment systems like PayPal (1998) (Taher 2021). These developments established e-commerce as a revolutionary force in modern retail, fundamentally altering consumer access to goods and services (Taher 2021). The retail sector has since shifted, with electronic channels increasingly replacing traditional retail, though physical stores remain relevant for tactile experiences (Setiawan 2020). Consumers now use the Internet to purchase a wide range of products, finding online shopping advantageous for its simplicity and accessibility. Ordering from home or work eliminates the need to visit multiple stores, yet traditional retail persists due to consumers' preference for physically examining products like clothing and accessories before purchase. Retailers support this hybrid model by converting warehouses into shopping centres and offering delivery options at minimal cost, balancing online and offline demands (Setiawan 2020).

Consumer Perceptions and Decision-Making

Trust and security are critical drivers of online purchase decisions, as consumers seek assurance that their financial transactions and personal data are protected (Jothimani et al., 2023). A lack of trust can deter transactions, highlighting the importance of a robust digital security infrastructure. For instance, while Pratesi et al. (2021) emphasize the importance of secure payment systems in Western markets, Kumari and Ahmed (2022) note that in emerging markets, consumers often prefer cash, on, delivery due to lower trust in digital payment systems. Website usability and design also play a vital role; user-friendly interfaces, intuitive navigation, and fast loading times enhance perceptions of legitimacy and ease of use, while poor usability—particularly in mobile shopping—can lead to cart abandonment (Jothimani et al., 2023; Liu et al., 2019). In addition, detailed product information and credible customer reviews strongly influence purchasing decisions, with positive reviews helping to reduce perceived product risk (Tham et al., 2019). Social factors such as word-of-mouth, online ratings, and influencer marketing on platforms like Instagram also shape consumer attitudes and choices (Jothimani et al., 2023; Gunawan et al., 2023). Convenience and accessibility

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further contribute to higher conversion rates, especially when platforms offer seamless navigation, multiple payment options, and efficient delivery, with mobile-friendly designs becoming increasingly important for younger consumers (Jothimani et al., 2023; Liu et al., 2019). Lastly, consumer demographics such as age, income, education level, and prior online shopping experience significantly influence behaviour. Younger, tech, tech-savvy consumers are generally more open to innovative shopping methods, while older consumers may be more cautious and prefer traditional channels unless trust is firmly established (Jothimani et al., 2023; Jain & Kulhar, 2019).

Numerous demographic variables, such as age, family structure, and income, influence psychological aspects of purchasing (Venkatesh 2022). Higher disposable income correlates with increased online shopping and impulsive purchases, as consumers prioritise functional and economic value. Objective consumption, where consumers focus on functional and economic considerations, encourages exploratory shopping and price comparisons, enhancing awareness of available products (Venkatesh 2022). Technological challenges, such as device quality and Internet speed, also impact online buying decisions, as displays and usability depend on consumers' technological capabilities. Cultural backgrounds and lifestyle choices further shape how consumers process information and form purchasing motivations (Venkatesh 2022).

Consumer decision-making has evolved significantly with e-commerce's expansion (Jothimani et al. 2023). Key factors influencing online retail decisions include:

Access convenience, encompassing website speed, clear product details, and efficient navigation, is critical, as difficulties in accessing platforms may lead consumers to abandon purchases due to the potential for frustration (Khairial & Ridanasti 2023). Transaction ease requires simple, secure payment methods, with versatile options adding value and convenience. Convenience in being attentive involves personalized services, often powered by AI, to cater to consumer preferences and save time (Khairial & Ridanasti 2023). Possession convenience relates to delivery speed and pricing, with tracking tools enhancing transparency. Post, possession convenience, such as easy return processes, is increasingly important, as cumbersome returns deter future purchases (Khairial & Ridanasti 2023).

Trust, defined as an expectation of security and reliability, reduces perceived vulnerability in online transactions, influencing every stage of the purchase process (Curth et al. 2020). Service quality, including responsiveness and empathy, significantly impacts trust, as does the reliability of third-party support for issue resolution. Trust fosters loyalty and positive word-of-mouth, though its impact on word-of-mouth is slightly less than satisfaction (Curth et al. 2020).

Perceived Risks in Online Shopping

Perceived risk, defined as the likelihood of unfavourable outcomes, plays a significant role in shaping consumer behaviour, as individuals often prioritise avoiding failure over completing purchases (Tham et al., 2019). Financial risk is prominent, with concerns about credit card security and data privacy prompting many consumers to opt for alternatives such as cash on delivery or third-party payment systems, a trend especially common in developing markets (Tham et al., 2019; Kumari & Ahmed, 2022). Product risk arises from the inability to physically inspect items, which leads to doubts about quality and performance, as online representations often differ from actual products (Jain & Kulhar, 2019). Convenience risk is also relevant, as

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difficulty navigating platforms or finding appropriate products increases consumer anxiety and reduces purchase likelihood (Tham et al., 2019; Khairial & Ridanasti, 2023). Return-related risk is another barrier, where complex return policies or high return costs discourage purchases, whereas transparent and easy return processes foster consumer trust (Tham et al., 2019; Khairial & Ridanasti, 2023). Non, delivery risk, though relatively infrequent, remains a serious concern for consumers fearing delayed or lost items, a fear alleviated by reliable tracking tools that provide delivery transparency (Tham et al., 2019; Khairial & Ridanasti, 2023). Lastly, social risk, such as fear of judgment or rejection for selecting certain retailers, influences consumer choices, though this is increasingly mitigated by online reviews and peer-driven engagement on social commerce platforms (Pentz et al., 2020; Gunawan et al., 2023).

Benefits and Technological Advancements

Online shopping offers benefits like price comparison, quick access to information, and time savings, contributing to an improved quality of life (Hasan et al. 2021). Perceived usefulness, the belief that a system enhances task performance, drives consumer adoption. Technological advancements, including artificial intelligence (AI), automation, virtual reality (VR), and augmented reality (AR), have transformed the consumer experience (Mariano et al. 2022). AI-driven personalisation and data analytics enable direct communication between businesses and consumers, enhancing customer satisfaction (Mariano et al. 2022). The rise of electronic word-of-mouth (eWOM) via social media allows consumers to share reviews and experiences, increasing transparency and influencing purchasing decisions (Mariano et al. 2022). Mobile shopping, facilitated by mobile Internet and apps, has become a dominant channel due to its convenience and accessibility, particularly for younger consumers (Liu et al. 2019). AI also supports supply chain optimisation and demand prediction, addressing e-commerce challenges with minimal human intervention (Khrais 2020).

South African E-commerce Context

In South Africa, e-commerce adoption is constrained by limited Internet access, high data costs, and infrastructural challenges, creating a digital divide that limits market penetration (Pillay & Struweg 2023). Most South African online shoppers are higher-income, full-time employees who view e-commerce as convenient and entertaining, yet cultural preferences for tactile shopping and trust concerns hinder broader adoption (Goga et al. 2019). Platforms like Takealot, Superbalist, Woolworths, Makro and Zando dominate, but the market remains nascent compared to global standards (Nhlapulo & Makhitha 2021). Unlike Western markets, where trust in digital payments is higher (Pratesi et al. 2021), South African consumers often prefer cash, on, delivery due to financial risk perceptions (Kumari & Ahmed 2022). Mobile shopping is critical, as 60% of South African Internet users access platforms via smartphones, necessitating mobile-optimised designs (Pillay & Struweg 2023). Social influences, such as peer recommendations and online reviews, play a significant role in shaping attitudes, particularly among younger consumers (Gunawan et al. 2023).

Theoretical Frameworks

This study employs the TRA and TPB to explore consumer perceptions of online retail shopping (Glanz et al. 2015; Sommer 2011). TRA suggests that behavioural intentions, shaped by attitudes toward the behaviour and subjective norms, predict actions like online purchasing (Glanz et al. 2015). For example, positive attitudes toward e-commerce convenience and peer

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endorsements increase purchase intentions. TPB extends TRA by including perceived behavioural control, such as confidence in navigating online platforms or trusting secure payments, which is particularly relevant in South Africa, where technological barriers and trust issues are prevalent (Pillay & Struweg 2023). These theories highlight how convenience, pricing, product variety, trust, and social influences shape consumers' willingness to shop online, with subjective norms reflecting family or peer pressures (Sommer 2011). In e-commerce, TRA and TPB explain why consumers with positive attitudes and perceived control are more likely to adopt online shopping, while trust concerns may deter those in high-risk, adverse cultures like South Africa (Pratesi et al. 2021).

The literature reveals both consensus and divergence on factors influencing online shopping. Convenience and trust are consistently cited as primary drivers across global studies (Jothimani et al. 2023; Hasan et al. 2021), yet their relative importance varies. For instance, Western consumers prioritize fast delivery and website usability (Pratesi et al. 2021), while emerging market consumers emphasize payment security and cash, on, delivery options (Kumari & Ahmed 2022). Conflicting evidence exists on demographic influences: Jain and Kulhar (2019) suggest older consumers are less likely to shop online due to lower tech savviness, but Reisenwitz et al. (2007) note that older consumers may adopt e-commerce if trust is established, highlighting the role of experience and security. Social influence is universally significant, but its impact is amplified in social commerce platforms in Asia (Gunawan et al. 2023) compared to South Africa, where cultural preferences for physical shopping persist (Goga et al. 2019). These discrepancies underscore the need for context-specific research, particularly in emerging markets like South Africa, where limited studies explore how trust, mobile accessibility, and cultural factors shape e-commerce adoption.

Research Gap and Study Rationale

Despite extensive global research on one-commerce, there is a notable gap in understanding South African consumers' perceptions of online retail, particularly regarding how convenience, trust, security, and mobile accessibility influence preferences in a context marked by infrastructural constraints and cultural preferences for tactile shopping. While global studies emphasise technological advancements and trust (Mariano et al. 2022; Jothimani et al. 2023), South African-specific literature is sparse, with few studies addressing how TRA and TPB apply to local consumers' decision-making processes (Pillay & Struweg 2023). This study aims to fill this gap by examining the interplay of convenience, trust, technology, and social influences in South African e-commerce, providing insights for retailers to enhance adoption through mobile-optimised platforms, secure payment systems, and culturally tailored strategies.

Research Methodology

Although the instrument was adapted from validated scales in previous studies, reliability testing (e.g., Cronbach's alpha) was not conducted and is noted as a limitation of the current study.

This quantitative survey study, conducted in 2024, aimed to investigate consumer perceptions, concerns, and the role of technology in online retail shopping within South Africa's dynamic e-commerce landscape, characterized by a digital divide, high data costs and cultural preferences for tactile shopping (Goga et al. 2019; Pillay & Struweg 2023). Adopting a positivist paradigm, the study employed a cross-sectional design to collect measurable data on

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consumer behaviours and attitudes through a structured questionnaire, with closed-ended questions for statistical analysis and open-ended questions for illustrative insights. The research aligned with the Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB) to explore convenience, trust, and technological influences, informing strategies for online retailers (Glanz et al. 2015; Sommer 2011).

Research Instrument

The primary research instrument was a questionnaire administered via Google Forms, designed to collect quantitative data through closed-ended questions, supplemented by open-ended questions for contextual insights. Closed-ended questions utilised 5-point Likert scales such as "How convenient is online shopping compared to in-store?"; "Do you feel confident in online payment security?"; "Do friends/family influence your platform choice?" to measure variables such as perceived usefulness, trust, social influence, and technology's impact. Multiple-choice questions captured demographic details including gender, age, income, employment status and shopping behaviours such as frequency, payment preferences, and product categories. Open-ended questions elicited illustrative comments to support quantitative findings, such as delivery delays or product mismatches, without formal qualitative analysis. The questionnaire was pre-tested with a pilot sample of 10 South African online shoppers in March 2024, ensuring clarity and reliability, with minor revisions to question phrasing based on feedback.

To ensure alignment with the theoretical framework, each construct from the TRA, the TPB and TAM was translated into measurable survey items. Attitudes toward online shopping (TRA/TAM) were captured through Likert scale items such as "How convenient is online shopping compared to in-store shopping?", reflecting perceived usefulness. Subjective norms (TRA/TPB) were measured through questions like "Do friends/family influence your platform choice?", indicating social influence. Perceived behavioural control (TPB) was operationalised through items assessing trust and ease of use, such as "Do you feel confident in online payment security?" and "Do data costs affect your ability to shop online?". These questions aimed to reflect the real-world barriers consumers face, particularly in an emerging market context. Additional items linked to TAM constructs—such as ease of use and perceived usefulness—were embedded through statements regarding mobile app performance, platform navigation, and time-saving benefits.

Sampling and Data Collection

The study targeted a convenience sample of 200 South African online shoppers (Hajian et al. 2024). aged 18 and older, including students, employed, unemployed, and self-employed individuals, to capture diverse perspectives in a market shaped by urban, rural disparities and high data costs (Pillay & Struweg 2023). Recruitment occurred via social media platforms, which are widely used among tech-savvy South Africans but are limited by connectivity issues for rural consumers, contributing to an urban bias. Data collection ran from April to June 2024, yielding 124 responses (62% response rate). The sample comprised 80.6% females (100 respondents), 87.1% aged 18–34 (108 respondents), 65% earning above ZAR 20,000 monthly (81 respondents), 49.2% full-time employees (61 respondents), and 29.8% students (37 respondents). Only 10% of targeted rural respondents participated, reflecting South Africa's

ISSN:2773-0670

digital divide and high data costs, which restricted access to online surveys (Goga et al. 2019). The demographic skew toward young, female, urban, and higher-income respondents aligns with South Africa's online shopping trends but limits generalizability.

Data Analysis

Quantitative data from closed-ended questions were analysed using SPSS to generate descriptive statistics such as means, standard deviations, frequencies, and inferential statistics. Independent samples t, t-tests compared urban and rural group differences ($t(122) = 2.78$, $p < 0.05$), while one-way ANOVA assessed variations across age groups, such as review reliance, $F(3,120) = 4.12$, $p < 0.01$. Pearson correlations examined relationships, such as trust and purchase intentions ($r = 0.62$, $p < 0.01$). Open, ended responses were reviewed to identify illustrative examples such as "delivery took a month, ruining convenience"; ""clothing sizes never match the website"" that supported quantitative findings, such as delivery delays (35%, 43 respondents) or product mismatches (28%, 35 respondents), but were not subjected to formal qualitative analysis, ensuring a quantitative focus. Data cleaning removed incomplete responses, ensuring analytical reliability.

Ethical Considerations

The study adhered to ethical standards approved by a university ethics committee. Participants provided informed consent through a Google Forms disclosure statement, confirming voluntary participation and the right to withdraw without penalty. Anonymity was ensured by excluding identifiable information from the dataset, stored securely on a password-protected server compliant with South Africa's POPIA regulations. The urban, tech-savvy sample bias highlights the ethical need for more inclusive recruitment in future studies to represent rural and lower-income South Africans equitably, addressing digital access disparities.

Limitations

The sample size (124 vs. 200, 62% response rate) was smaller than targeted due to recruitment challenges via social media, exacerbated by South Africa's high data costs and limited rural Internet access (Pillay & Struweg 2023). The demographic skew (80.6% female, 87.1% aged 18–34, 65% earning >ZAR 20,000) underrepresents males, non-binary individuals, older adults, and rural consumers, with only 10% of targeted rural respondents participating due to connectivity barriers, introducing non-response bias. Self-reported data from closed-ended questions risk social desirability bias, while open-ended responses may reflect recall inaccuracies. These limitations do not undermine the study's quantitative insights but suggest caution in generalising findings to South Africa's broader population.

Discussion and findings

This quantitative survey included 124 South African online shoppers to explore their perceptions, concerns, and the role of technology in online retail. Using a Google Forms questionnaire with closed-ended questions for statistical analysis and supplementary open-ended responses for illustrative insights, the study revealed key trends in South Africa's mobile, driven, trust, trust-sensitive e-commerce market, shaped by high data costs and a digital divide (Pillay & Struweg 2023). Findings align with the Technology Acceptance Model (TAM) and

ISSN:2773-0670

Theory of Planned Behaviour (TPB), highlighting convenience, trust barriers, and technological influences (Glanz et al. 2015; Sommer 2011).

Demographic Profile

The sample comprised 124 respondents, with a demographic skew toward females (80.6%, 100 respondents), young adults aged 18–34 (87.1%, 108 respondents), and higher-income individuals (65% earning >ZAR 20,000 monthly, 81 respondents). Full-time employees (49.2%, 61 respondents) and students (29.8%, 37 respondents) dominated, with males (18.5%, 23 respondents) and non-binary individuals (0.8%, 1 respondent) underrepresented. Only 10% of targeted rural respondents participated, reflecting connectivity barriers in South Africa's digital divide (Goga et al. 2019). This urban, tech-savvy bias aligns with South Africa's online shopping trends but limits generalizability to rural or older populations.

Consumer Behaviours and Preferences

Quantitative analysis showed that 82% of respondents (102) shop online monthly or annually, with 86.3% (107) preferring debit/credit cards and 10% (17) opting for cash on delivery (COD), reflecting trust concerns in South Africa's low digital payment confidence market (Kumari & Ahmed 2022). Clothing (23.4%, 29 responses) and groceries (26.6%, 33 responses) were the most purchased categories, driven by platforms like Takealot, Superbalist, Makro and Zando, which cater to routine consumption (Nhlapulo & Makhitha 2021). Convenience was the primary motivator (54%, 67 respondents, mean = 4.31, SD = 0.89, $p < 0.01$), measured via the question "How convenient is online shopping compared to in, store?" aligning with TAM's perceived usefulness (Daroch et al. 2021). Open-ended responses supported this, with comments like "online shopping saves time but delivery delays ruin it," illustrating quantitative findings without formal analysis.

Key Concerns

Respondents reported significant barriers, including inability to inspect products (60.5%, 75 respondents), security/privacy concerns (58%, 72 respondents), and cumbersome refund processes (48.4%, 60 respondents). Delivery delays were noted by 35% (43 respondents), with a subset open-ended question ("most frustrating delays") yielding 25% (31 respondents), reflecting South Africa's logistical challenges, such as unreliable courier networks (Nhlapulo & Makhitha 2021). Illustrative comments, such as ""clothing sizes never match the website"" and "waiting weeks reduces trust," contextualise these barriers, aligning with Tham et al. (2019) on product and financial risks. A t-test showed urban respondents reported higher satisfaction than rural ones ($t(122) = 2.78$, $p < 0.05$), likely due to better logistics access.

Role of Technology

Technology significantly enhanced the shopping experience, with 38% (47 respondents) rating its impact highly (mean = 4.02, SD = 0.92, $p < 0.01$). Mobile apps were valued by 35% (43 respondents), and payment innovations by 40% (50 respondents), aligning with Mariano et al. (2022). Open-ended responses, such as "mobile apps make shopping easier but data costs are high," highlighted South Africa's 60% smartphone penetration and high data costs (Pillay &

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Struweg 2023). ANOVA revealed that younger respondents (18–24) relied more on mobile apps than those over 35 ($F(3,120) = 3.85$, $p < 0.01$), reflecting generational tech adoption.

Social Influence

Social influence played a moderate role, with 41.9% (52 respondents) reporting friends or family influenced platform choice (mean = 3.45, SD = 1.34), measured via "Do friends/family influence your platform choice?" This challenges TRA's emphasis on subjective norms, suggesting growing independence among South Africa's young, urban shoppers (Jain & Kulhar 2019). A Pearson correlation showed a positive relationship between trust and purchase intentions ($r = 0.62$, $p < 0.01$), with comments like "I trust Takealot because friends recommend it" providing context. Unlike Asian markets, where social influence is stronger (Gunawan & Rahmania 2023), South Africa's polarised review perceptions (SD = 1.34) suggest scepticism, possibly due to authenticity concerns (Jothimani et al. 2023).

Cross-Cultural Comparisons

Compared to India's 30% COD reliance (Kumari & Ahmed 2022) and Nigeria's 50% mobile-driven purchases (Andreev et al. 2024), South Africa's 10% COD and 35% mobile app usage reflect a unique, trust-sensitive, mobile-driven market. India's higher COD preference indicates stronger distrust in digital payments, while Nigeria's mobile dominance suggests better rural connectivity. South Africa's digital divide and high data costs limit rural adoption, explaining lower satisfaction (Pillay & Struweg 2023).

Discussion

The findings confirm convenience as a primary driver (54%), aligning with TAM's perceived usefulness, but trust barriers (58% security concerns, 60.5% inspection issues) highlight TPB's perceived behavioural control challenges (Sommer 2011). Delivery delays (35%) reflect South Africa's logistical constraints, unlike Nigeria's more developed courier networks (Andreev et al. 2024). Technology's role (38% high impact) underscores mobile apps and payment innovations as trust enhancers, supporting Mariano et al. (2022). The moderate social influence (41.9%) contrasts with Hasan et al. (2021), suggesting South African consumers prioritize personal experience over reviews, possibly due to authenticity scepticism (Jothimani et al. 2023). Open-ended responses, while not formally analysed, provided valuable context, reinforcing quantitative findings on barriers like product mismatches (28%, 35 respondents).

The following table synthesizes key quantitative findings, their metrics, and implications, clarifying their role in guiding South African e-commerce strategies and research, with open-ended responses providing illustrative context:

Contributions and Synthesis

This study contributes to the e-commerce literature by highlighting South Africa's unique dynamics—logistical barriers, COD preferences (10%), and mobile reliance (35%)—compared to global trends (Jothimani et al. 2023) and emerging markets like India (30% COD, Kumari & Ahmed 2022) and Nigeria (50% mobile, driven, Andreev et al. 2024). Unlike Hasan et al. (2021), who emphasise consistent review reliance, South Africa's polarised review perceptions (SD = 1.34) suggest scepticism, likely due to authenticity concerns in a nascent market

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(Jothimani et al. 2023). The study extends Tham et al. (2019) by emphasising tactile inspection challenges (60.5%), recommending augmented reality (AR) for online retail platforms to address product mismatches (28%). Compared to Nigeria's higher mobile adoption, South Africa's digital divide and high data costs limit rural engagement, explaining neutral satisfaction scores (Pillay & Struweg 2023).

Conclusion

This study investigated the factors shaping consumer perceptions of online retail in South Africa, focusing on convenience, trust, and technological influences. The findings confirm that convenience remains the dominant motivator for online purchases, while trust, related concerns, particularly around payment security and product authenticity, continue to act as barriers. Delivery delays and limited opportunities to physically inspect products remain major frustrations. Technology, particularly mobile apps and payment innovations, was found to improve the shopping experience, especially among younger consumers. However, high data costs and limited rural access continue to constrain participation, reflecting the broader digital divide.

Although the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB), and the Technology Acceptance Model (TAM) provided a useful foundation for understanding consumer behaviour, the findings show that their assumptions require contextual refinement. In this study, subjective norms had a more moderate influence than expected, suggesting that individual experience and personal trust matter more than peer approval among urban, tech-savvy South Africans. Perceived behavioural control was shaped less by personal confidence and more by systemic barriers such as unreliable infrastructure and high connectivity costs. These insights contribute to a more nuanced application of TRA, TPB, and TAM in emerging markets where structural limitations persist.

To build trust and promote broader adoption, South African online retailers should continue investing in secure, user-friendly mobile platforms, offer multilingual options, and explore solutions like augmented reality to address product inspection concerns. Cash-on-delivery remains relevant for a minority of consumers, highlighting the need for flexible payment systems that accommodate trust gaps. Sustainability initiatives, such as eco packaging and carbon-neutral delivery, can also play a role in enhancing consumer confidence.

Future research should include more diverse and stratified samples, particularly rural, older, and lower-income consumers. A longitudinal approach would help track shifts in behaviour as data costs decline and digital access improves. Comparative studies with countries like India and Nigeria may also offer useful insights into how infrastructure and cultural preferences shape online retail behaviour. A qualitative component—such as interviews or focus groups—could add depth to the current findings and provide a richer understanding of how consumers navigate trust and risk online.

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