

# Digital consumer perspectives on data access in an emerging market

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**Background:** Various data access types influence online purchasing in South Africa, contributing to a digital divide. Literature on consumers' perceptions of data access and its influence on online consumer decision-making is scant.

**Objectives:** This study explores South African consumers' perceptions of data access and its influence on online consumer decision-making.

**Method:** Plowright's Framework for Integrated Methodology (FraIM) guided the study's methodological choices. Through purposive sampling, 25 participants who purchased online 6 months before data collection participated in four virtual focus group discussions. Tesch's eight steps guided the data analysis procedure.

**Results:** Access to data lies on a continuum from limited to sufficient data access, impacted by location, infrastructure, affordability, time spent online, data usage and device, and supporting factors. Limited data access impedes online consumer decision-making, whereas sufficient data access supports online consumer decision-making. With better data access, consumers can spend more time online deliberating risks by searching for information, reading reviews, comparing alternatives, tracking purchases and influencing other consumers to purchase online.

**Conclusion:** A lack of data access impedes, while sufficient data access supports online consumer decision-making.

**Contribution:** This study adds to the limited knowledge of data access and its implications for decision-making in South Africa. Using the FraIM in a marketing-related study provides novel methodological insights for future research.

**Keywords:** data access; digital divide; decision-making; online buying; emerging markets; framework for integrated methodology (FraIM); digital consumers; internet access.

## Introduction

Zou and Cheshmehzangi (2022) argue that the coronavirus disease 2019 (COVID-19) pandemic has catalysed a digital revolution, specifically for adopting e-commerce globally. The pandemic accelerated global e-commerce growth by 4–6 years (Koetsier 2020). Internet usage has increased to 5 billion internet users, comprising 63% of the global population (Statista 2022a). Despite this surge, at least 2.9 billion people worldwide are still not connected to the Internet, most of whom live in emerging markets (Kemp 2022).

The pandemic amplified the digital divide and resultant inequalities among consumers, emphasising the significance of internet access in the digital economy (Natalia 2022). Internet access requires access to data offered by internet service providers (ISPs) (Kinabo, Mwangama & Lysko 2021). The quality of telecommunications infrastructure and the ability of consumers in a particular market to afford data to access the internet are the most prominent factors of data access and internet penetration (Makhitha, Van Scheers & Mogashoa 2019; Rey-Moreno & Pather 2020).

Developed markets, including Europe, the United States of America (USA) and Oceania, have internet penetration rates above 70%, as most consumers can afford access to data. In South Africa, consumers live on or below the poverty line and have minimal income for their basic needs, such as food and transport (Statistics South Africa 2021). Therefore, for many South Africans, connecting to the internet is perceived as a luxury (Kemp 2022). In a post-pandemic digital economy where business and marketing strategies are geared towards a hybrid approach

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in reaching consumers through omnichannel strategies, the necessity of internet access further magnifies the digital divide between developed and emerging markets (Faloye & Ajayi 2021; Zou & Cheshmehzangi 2022).

Nevertheless, South Africa is among the top four countries in Africa with the highest number of internet users, accounting for 68.2% of the total population (Statista 2022b). Evidence abounds of e-commerce adoption by South African consumers since the pandemic (Anakpo & Mishi 2021). Statistics by First National Bank (FNB) Merchant Services indicate that online sales reached R500 million in 2020 and are expected to increase by 150% in 2025, reaching R225 billion. Despite increased online sales because of digitisation, South Africa ranks low compared to other countries on the Digital Ecosystem Development Index in conjunction with some of its Brazil, Russia, India and China (BRIC) counterparts (Emara & Zhang 2021).

South Africa's low ranking could be attributed to significant variations in income groups impacting consumers' ability to afford data to access the internet, levels of digital literacy and the growing digital divide, which affect data and internet access (Froehlich, Ringas & Wilson 2020; Lembani et al. 2020; Makhitha et al. 2019; Rey-Moreno & Pather 2020). This study answers the call from Faloye and Ajayi (2021) to uncover explanations for the significant gaps in data and internet access. It is imperative to bridge the digital divide that could contribute to alleviating inequalities between South Africans. Furthermore, Emara and Zhang (2021) argued that appropriate digital infrastructure is a key e-commerce enabler in building the South African digital ecosystem. However, there are substantial data access, infrastructural challenges and affordability issues.

Consumers' perceptions around South African data access are undefined and appear to be a prominent socio-economic issue affecting activities related to economic growth, including online shopping (Makhitha et al. 2019). Lembani et al. (2020) proved that internet access varies in the South African market. However, few studies have explored what leads to varying types of internet access. This study proposes that the variations in internet access are influenced by the quality and type of data access yet explored (Chuah & Lee 2020). The paucity of existing literature on data access motivates the need to conduct this study to understand what the concept means to emerging market digital consumers and to determine how to describe and categorise varying types of data access. This knowledge can assist marketers in adapting their digital strategies to promote more online purchasing and contribute to economic growth in an emerging market (Kumari & Ahmed 2022). Against this background, the overall research question is: 'What are digital consumers' perceptions of data access for online decision-making in an emerging market?'

Three sub-research questions (SRQ) are subsequently proposed:

- SRQ1: What are digital consumers' perceptions of the meaning of data access when purchasing online in an emerging market?
- SRQ2: How can the varying types of data access for online decision-making in an emerging market be categorised and described?
- SRQ3: How do digital consumers perceive the implications of data access for online decision-making in an emerging market?

This article first delineates the theory grounding the study and discusses the contextual foci of the study in relation to the research questions. Using Plowright's Framework for Integrated Methodology (FralM), the methodology is explained, and is followed by the claims and findings, recommendations, practical implications and conclusion.

## Review of literature

### Theory of neo-evolutionism

The worldview guiding the study is based on the theory of neo-evolutionism, which argues that the variations between societies, such as external or environmental issues, impact the rate at which societies and cultures evolve based on sociological, ideological and technological sub-systems (Diah et al. 2014). The technologies in developed markets are assumed to be far more advanced than those in emerging markets (Diah et al. 2014). However, the theory of neo-evolutionism maintains that these markets are not deemed 'better' than their emerging markets counterparts. Instead, the theory posits that external issues influence the rate at which societies evolve (Smith 2010). Concerning this study, poor telecommunications infrastructure (Rey-Moreno & Pather 2020), inadequate education (Froehlich et al. 2020), digital illiteracy (Lembani et al. 2020) and variations in income groups (Mzekendaba 2022a) in emerging markets impact the evolution of technologies. The theory postulates that the technological sub-system (access to data) plays the primary role in shaping culture (emerging market digital consumer 'culture', specifically online decision-making) (Smith 2010).

### Online consumer decision-making or buying process

A review of existing online consumer decision-making or buying processes, including those by Arshi, Morande and Tewari (2017), Karimi (2013), Lee (2002), Pauwels and Van Ewijk (2020), and Smith and Rupp (2003), was conducted to understand how consumers purchase online. All buying processes involve identifying a need, searching for information, comparing alternatives, and purchasing and post-purchase behaviour. Of these models, Pauwels and Van Ewijk (2020) considered the influence of involvement on consumer decision-making, while Smith and Rupp (2002) considered additional variables, such as sociocultural and socio-economic variables, that affect consumer decision-making, which could include 'data access' in the context of this study. Another model (Lee 2002) argues the importance

of establishing trust first, which influences online purchases and is relevant in the context of emerging market consumers who are sceptical about purchasing online (Jain et al. 2021).

Although the research mentioned above provides some grounding to understanding how consumers make online purchases, these studies were conducted in developed markets where good-quality, sufficient data are accessible to most consumers, which is lacking in emerging markets.

### Data access in developed and emerging markets

Consumers in developed markets use cable and digital subscriber lines (DSL) at work or home to connect to the internet. In contrast, wireless broadband is primarily used through Wi-Fi in public places like shops, public transport and restaurants (Chuah & Lee 2020). Therefore, developed market consumers always have some internet connection. With the range of data access technologies available, consumers have better, more consistent, quality internet access with faster download speeds (Akpan, Udoh & Adebisi 2022).

Contrastingly, emerging markets have fewer data access technologies because of the large consumer dispersion as customers reside in cities and rural areas (GSMA 2021; Independent Communications Authority of South Africa [ICASA] 2019). Consumers in cities tend to have better telecommunications infrastructure and more data access technologies that enable better-quality internet (Rey-Moreno & Pather 2020). Consumers in rural areas are typically low-income earners and mainly have access to mobile broadband coverage and use mobile data to access the internet (Mzekendaba 2022b). However, mobile data are perceived as expensive, and consumers residing in rural areas cannot afford large amounts of mobile data, which limits data-intensive tasks such as online shopping (Murthy, Kalsie & Shankar 2021; Olise et al. 2019). A significant data access discrepancy exists between developed and emerging markets – the digital divide between nations (Murthy et al. 2021).

### Data access in South Africa

South Africa's internet user penetration is expected to grow from 79.3% to over 90.0% in 2027 (Statista 2022b) because of investments in telecommunications infrastructure and other strategic developments within the telecommunications industry (Odendaal 2022). Sutherland (2021) postulated that, since 2018, implementing strategic plans to improve telecommunication and data access has accelerated in South Africa. Demand for better digital services and broadband infrastructure increased during the pandemic as many consumers relied on the internet for work, school, entertainment and shopping (Kechiche 2022). The South African government obtained a new spectrum licence, which enables ISPs to connect to 5G networks, allows more consumers to connect to the internet and offers faster speeds at reduced data costs (Sutherland 2021). During the pandemic, the Competition Commission found that ISPs charged inflated

prices for data and instructed providers to reduce their prices by 30%–50% (Chinembiri 2020). With better telecommunications infrastructure and reduced data costs, South Africa's internet usage has increased, including consumers' online purchasing (Odendaal 2022). However, several issues still prevent all South African consumers from having similar levels of data access.

Although the internet penetration rate in South Africa is greater than the global average (Statista 2022b), most internet usage and internet penetration are prevalent in the Western Cape (68.5%) and Gauteng (72.2%) (ICASA 2019). The gross domestic product (GDP) per capita in the Western Cape and Gauteng is the highest among the nine provinces, which implies that consumers in these provinces have a higher income than those in other provinces (ICASA 2019). Middle-to high-income earners are likely to have better internet access based on better infrastructure available in these areas, consequently spending a significant portion of their salaries on data access (PwC 2022).

Conversely, consumers classified as below-the-poverty-line or low-income earners reside in provinces with low GDP per capita, such as Eastern Cape and Limpopo. In these provinces, telecommunications infrastructure is generally of a lower standard, and salaries are prioritised for food, groceries and transport, instead of data (PwC 2022; Statistics South Africa 2021). Although the Competition Commission directed ISPs to reduce mobile data costs (Chinembiri 2020), interest rates, fuel and food costs have increased significantly. According to Mzekendaba (2022a), this has led to many consumers reconsidering their household spending, with some unable to afford data. Some South African consumers' inability to afford data to access the internet and the lack of consistently functioning telecommunications infrastructure across all provinces to offer equal data access add to the digital divide in the country (Faloye & Ajayi 2021; Lembani et al. 2020). The education issue adds to the existing South African digital divide as many low-income earners need to be sufficiently literate and skilled to read and comprehend information posted and shared online, which is often not the case (Matli & Ngoepe 2020).

Therefore, data access is an ongoing, broader socio-economic issue affected by political, economic, and technological forces (Makhitha et al. 2019). Having such varied data access to use the internet proves challenging to equal engagement in online shopping.

### Influence of data access on online consumer decision-making

Akpan et al. (2021) posited that after South Africa obtained the spectrum licence and improved 5G network coverage, faster download speeds and consistent and quality internet access facilitated a more straightforward, efficient, and convenient online shopping process. With improved access to data to use the internet, consumers can spend more time browsing, searching for information, and deliberating risk

online (Pauwels & Van Eijwik 2020). However, mainly the middle to upper-income earners in South Africa have good-quality and sufficient access to data, and more than half the total population comprises low-income earners with limited access to data (Faloye & Ajayi 2021; Lembani et al. 2020; Matli & Ngoepe 2020).

Despite having limited access to data, the recent 'South African township customer experience report' (Rogerwilco 2022) found that since the pandemic, online shopping among township consumers, classified as low-income earners, increased notably in the grocery and fast-food delivery sectors. The report findings indicated that township consumers tend to purchase smaller data bundles to complete their online purchases and prefer to make small transactions online. (Mzekendaba 2022a). Consequently, the online purchase process is implicated. Pentz, Du Preez and Swiegers (2020) explained that limited access to data and the internet impede online consumer decision-making, as consumers are unable to spend time online searching for information, browsing, comparing alternatives and deliberating risk, which Jain et al. (2021) affirmed is imperative to emerging market consumers purchasing online.

## Research methods and design

This study using the Plowright's (2011) FraIM aims to uncover multiple truths through a non-conventional framework and challenge truths to address the research question (Anderson et al. 2011; Plowright 2011). The FraIM components and its application to this research are presented in the following sections.

### Research questions

Ladenika (2021) argued that the research question or questions should determine the type of research methods used and is central to the pragmatic research paradigm employed in the FraIM. Using the research question as the starting point promotes flexibility and open-mindedness, and distinguishes the FraIM from traditional mixed-method research designs (Anderson et al. 2011; Plowright 2019). The research questions were presented at the end of the introduction. The next step in the FraIM is to prescribe the cases that provide data and information to address the research questions (Plowright 2011).

### Cases

When selecting cases for the study, data source management and sampling decisions should be considered (Coetzee 2019). Data source management requires the consideration of the researcher's degree of control (the researcher's involvement in allocating individual cases) and naturalness (the ecological validity of the groupings) of the part played by cases (participants) in the research (Plowright 2011). Campbell et al. (2020) maintained that the degree of control enables the researcher to identify and select cases specific to the study that address the research question. Thus, the inclusion criteria included that the participant: (1) had access to data to

access the internet and (2) made an online purchase 6 months prior to the data collection. Twenty-five cases were selected based on the data collection methods discussed in the next step of the FraIM.

## Methods of data collection

To determine the data collection methods, Plowright (2011) suggested that the degree of structure (how structured the data collection methods need to be) and the level of mediation (which refers to the distance or location in time and space of the researcher to the study) be considered. In this study, a moderate degree of structure was employed because of the exploratory and descriptive nature of this study (Makri & Neely 2021). Similarly, a low-moderate level of mediation was most apt for this study as it needed the researchers to be close to the phenomena under study. In this case, the researchers facilitated the group discussions to probe participants and gathered richer data, yet allowed the participants to share their insights and perceptions as authentically as possible (Coetzee 2019). Based on the study's degree of structure and level of mediation, virtual focus group discussions were used as a data collection method (Marques et al. 2021). This method was selected for data collection in 2021 when social distancing regulations were still enforced (Lathen & Laestadius 2021). This promoted flexibility and convenience, as participants were more comfortable participating from home. This also ensured that participants from various geographic locations around South Africa could participate, enhancing the geographical representation (Marques et al. 2021).

## Data

Plowright (2011) postulated that three generic data collection methods exist within the FraIM: observation, asking questions, and artefact analysis. As mentioned, data was collected by asking questions through virtual focus group discussions to obtain narrative data. Nel (2020) argued that narrative data are often ambiguous and associated with text and words. However, ambiguity enables more than one interpretation, which is aligned with the open-ended, flexible nature of the FraIM (Leech & Onwuegbuzie 2009). Narrative data explore research phenomena in depth, offering a more fluid and subjective understanding of the topic (Nel 2020). A third-party data collection agency was used to secure the participants who met the inclusion criteria, with the Google Meet link then emailed to these participants. Four virtual focus group discussions comprising six participants each were held and video-recorded, field notes were taken, and participants were probed to ensure a rich discussion and engagement. Each virtual focus group discussion took approximately 90 min.

## Data analysis

The eight steps of Tesch adopted from Theron (2015) were employed to analyse the narrative data. Tesch's eight steps for coding aim to identify codes from raw data and group



access. Participants mentioned that locations with poor infrastructure limit data access to connect to the internet and vice versa. One participant mentioned:

‘If you are from an area that does not have much infrastructure that allows Wi-Fi, or ... maybe you stay in the rural areas and you are more limited as compared to a person who’s from the suburbs who has access to fibre ...’ (Participant 2, group discussion 1)

### Affordability

Most participants believe that having access to the internet is costly, specifically when using mobile data. Participants mentioned terms including ‘money’, ‘cost’ and ‘pricing’, implying that affordability is critical in determining the type of access to data. Participants attributed specific spending on data to assess limited versus sufficient data access. Amounts between R10.00 per day, R20.00 per day and R200.00 per month translate into having limited data, whereas R500.00–R600.00 monthly translates into having adequate data access. In most cases of limited data access, airtime is used to purchase data. Wi-Fi and fibre access were regarded as sufficient data access. Some participants opined that purchasing daily mobile data bundles is more expensive than a monthly Wi-Fi contract:

‘I would think that someone who has limited access to the internet spends maybe R10.00–R20.00 a day on mobile data and maybe R200.00 a month on mobile data.’ (Participant 2, group discussion 1)

### Time and activities online

Participants mentioned that data-intensive activities, such as browsing online, require more data to access the internet:

‘... spending time online shopping and browsing requires one to have sufficient access to data as these are activities that require a lot more data to be able to see photos, images, videos, read reviews and browse websites.’ (Participant 3, group discussion 1)

### Data usage and devices

The study’s participants concurred that the type of data access depends on online data usage. Participants view sufficient data access in megabytes (MB) and gigabytes (GB). Generally, participants agreed that access to 200MB–500MB daily, 5GB–6GB monthly and 10GB (day and night data) monthly equated to having sufficient access to data. Furthermore, participants mentioned that the type of network (2G, 3G, 4G or 5G) enables better-quality data and internet access, influencing data consumption and usage. Participants also identified that accessing the internet anywhere and anytime affects the data access type. Some participants mentioned that the type of device determines the ability to access internet data. For instance, more advanced networks (4G or 5G) were assumed to provide better-quality internet access, enabling consumers to have sufficient access to data. The excerpt below provides a contextual explanation of these views:

‘Having about 200 megabytes a day means you don’t have to worry about being able to access and use the Internet. In terms of

monthly data, 5 gigabytes –6 gigabytes of data would suffice ... Some service providers provide 10 gigabytes of data a month for daily surfing and 10 gigabytes of data a night for nightly surfing, this would constitute sufficient data access for me.’ (Participant 6, group discussion 3)

### Additional factors influencing data access

A few participants felt that limited versus sufficient data access is a perception that differs for each consumer. For example, 500MB a day for a consumer working from home might seem limited compared to a student who uses data for instant messaging. One participant mentioned that it is essential to ask: ‘Is it enough for me and what I am doing with it?’ and concluded that data access is context-dependent. Other factors that could impact access to data include the weather (as this affects some infrastructure) and technical interruptions, such as scheduled maintenance, which limit data access:

‘This idea of data access seems subjective. For some people, 500 megabytes of data a day seems limited, yet someone who cannot afford mobile data will feel that 500 megabytes of a day is sufficient ... In my area, the weather really plays a part in affecting the quality of the network provided for me to be able to access the internet. We also tend to have scheduled maintenance in my area, which interrupts internet connectivity and restricts my access to data and to the internet.’ (Participant 1, group discussion 1)

**TABLE 1:** Summary of findings related to varying types of data access and its influence on online consumer decision-making.

Type of data access	Claims	Supporting excerpts
Limited data access and online consumer decision-making	<ul style="list-style-type: none"> <li>• Having limited access to data hinders online purchasing</li> <li>• Less time is spent online searching for lower prices, reading other consumers’ experiences and comparing alternatives</li> <li>• Consumers opt for the first best option</li> <li>• Limited data access perceived risks from being mitigated</li> <li>• Tracking was perceived as essential but hindered as consumers cannot log in as often as possible to track their purchase</li> </ul>	<p>‘... having limited access to data affects my ability to search for information and reviews online ... it also restricts me from comparing, and I’ll end up taking what comes first, this is risky when shopping online ... I feel that my overall purchase process is restricted ... I cannot log in to track my purchase as often as I’d like to ...’</p>
Sufficient data access and online consumer decision-making	<ul style="list-style-type: none"> <li>• Having sufficient access to data enabled consumers to spend more time online reading the reviews to determine whether the website, brand and app can be trusted, thus mitigating the perceived risk when shopping online</li> <li>• Participants spend more time adding and updating carts and wish lists based on the best deals</li> <li>• Participants suggested that having stable internet access when checking out is essential, as inserting personal and banking information is risky</li> <li>• Participants check social media for reviews and constantly log into apps and the internet to source the best deals possible</li> <li>• Tracking deliveries after checking out requires sufficient access to data to log into the app or check emails constantly</li> </ul>	<p>‘With data, I can read the reviews so that I trust that the site is legit ... also access more information about the site or product before I decide to purchase ... I can spend time comparing prices, delivery dates and costs.... Also, to check out, I need to have good, stable internet and data access as I am putting in my personal and credit card information; one can’t afford any glitches during this process because you are risking your information.... With sufficient data, I am also able to log in whenever and however many times in order to track my parcel ....’</p>

## Claims related to the influence of data access on online consumer decision-making

This section presents claims related to participants' perceptions regarding their access to data and how they perceived their data access to influence the online consumer decision-making process, summarised in Table 1. At first, the findings related to limited data access are presented, followed by the findings related to sufficient data access.

To visualise claims related to how to classify types of data access and claims related to the influence of data access on online consumer decision-making, axial coding was employed. To get to the axial code, first-cycle coding was applied, namely, through *in vivo*, descriptive and initial coding (Saldaña 2021). Similar codes were grouped together to form the axial codes that represented each of the factors that influence access to data and summarised how data access influenced online consumer decision-making.

This study found that location and infrastructure, affordability, time spent online, data usage and device, and additional supporting factors, including weather and scheduled maintenance, impact the type of data access. Spending R20.00 a day and R200.00 a month on data was used to classify a consumer with limited data access, meaning consumers cannot spend time online searching for information, reading reviews, comparing alternatives or tracking their purchases. Makhitha et al. (2019) and Olise et al. (2019) supported this finding. The finding on limited data access was compared to consumers who reside in areas with better infrastructure, can afford to spend R500.00–R600.00 on data, and have access to at least 200MB daily and 5GB–10GB monthly. Consumers with sufficient data access spend more time online to reduce the risk associated with online purchases, which was validated by Pentz et al. (2020) and Swiegers (2018).

## Recommendations

Against the backdrop of the findings and claims, marketers could consider the following insights and recommendations:

- Market segmentation and targeting strategies should include access to data as a variable. With access to data, marketers can include segmentation variables related to online consumer decision-making to decipher any limitations or opportunities for better targeting.
- E-commerce websites and applications should be optimised to suit the needs of consumers with varying types of data access. Offering 'lite' versions of the website or applications consumes less data, enabling consumers with limited data access to perform essential activities related to online purchase decisions.
- Various touchpoints can be integrated into the online consumer decision-making process for consumers to engage with the e-commerce site or application without logging in. This can be fostered through WhatsApp Business as it uses only 0.5KB of data to send text messages,

thus being influential among consumers with limited access to data (Labuschagne 2021). WhatsApp Business chatbots can be programmed to provide automated responses regarding finding out more information about the product, tracking delivery, checkout and payment-related queries. Furthermore, zero-rated sites can enable consumers to utilise a specific website without incurring data-related costs.

- Because of the higher perceived risks encountered online – especially during the checkout stage, where it was discovered that good-quality access to data is crucial – marketers can consider offering other types of payment methods, such as cash on delivery, Zapper or SnapScan, and payment via SMS or unstructured supplementary service data.

## Practical implications

The study's practical implications are threefold:

- The insights obtained in this study aim to help marketers understand how data access influences online consumer decision-making, and digital or online strategies can be customised to suit consumers with varying types of data access.
- The study added to the limited academic literature on data access in South Africa. Insights into data access not only benefit the marketing industry, which was the focus of this study, but have broader implications on the economic, social and political environments, which future studies can explore.
- Findings from this study might also assist ISPs, industry bodies like ICASA and the South African government in improving data access for all South Africans by implementing better-quality telecommunications infrastructure in remote and rural areas and reducing data costs.

## Conclusion

The conclusion forms part of the last step in FraIM and determines whether the research question was addressed (Plowright 2011). To address RQ1, consumers believed that data access enables access to and use of the internet and lies on a continuum from limited to sufficient access to data. The categories used to classify and describe varying types of access to data pertaining to RQ2 include location and infrastructure, affordability, time spent online, data usage and device, and additional supporting factors, including weather and scheduled maintenance. Regarding RQ3, it was discovered that varying data access influences online purchasing. Consumers with limited data access feel that their online consumer decision-making process is rushed and cannot spend time searching for information search, comparing alternatives, reading reviews and tracking their purchases. At the same time, consumers with sufficient data access spend more time online deliberating risks by searching for information, reading reviews and tracking their parcels.

This study adds value to marketing and economic fields by better understanding consumer perceptions regarding data

access. Using the study's findings, marketers can better segment, target and appeal to the needs of South African consumers with various types of data access to improve the overall online consumer decision-making process. Increased online purchases lead to enhanced economic growth and could enable South Africa to remain one of the leading emerging markets globally (Kumari & Ahmed 2022).

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The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

### Authors' contributions

S.P. confirms responsibility for the study conception and design, data collection, analysis and interpretation of results, and manuscript preparation. I.S. confirms responsibility for the study conception, design, writing, reviewing, editing and supervision.

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### Data availability

Data that support the findings of this research are available upon request from the corresponding author, S.P.

### Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official quality or position of any affiliated agency of authors, and the publisher.

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