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Exploring factors that influence e-commerce customer experience in South Africa

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WITS Business School

Ethics protocol number: WBS/BA471852/260

Thesis presented in partial fulfilment for the degree of Master of Business Administration to the Faculty of Commerce, Law, and Management, University of the Witwatersrand

February 2020

DECLARATION

I Palesa Mahange declare that this research report entitled "Exploring factors that influence e-commerce customer experience in South Africa" is my own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements of the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

Palesa Mahange

Signed at Johannesburg on 20th April 2020

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DEDICATION

I dedicate this thesis devotedly to the following:

To my late grandparents, Emma Mihloti Mahange and Godfrey Nkurhi Mahange. Although they are no longer of this world, their memories continue to regulate my life.

Next, A special feeling of gratitude to my amazing parents, Rose Nomsa Mahange and John Mahange, whose love for me knows no boundaries and, who continue to be my source of inspiration. I will always appreciate all they have done and continue to do, especially you papa, for you have sacrificed so much for me and you have taught me the value of hard work and resilience. You have both definitely been my best cheerleaders.

ABSTRACT

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Thesis title: Exploring factors that influence e-commerce customer experience in South Africa

Johannesburg, April 2020

Purpose - The world of business has noticed an important shift in the way trade activities are done with the universal retail landscape continuously changing due to the evolution of e-commerce, challenging sellers and creating a competitive environment. The South African online customer base is still gradually growing with low penetration and currently a small target market. However, the South African online market is slow in growth when compared to its developed counterparts, impacting the ambitious growth plans for the online South African market and making it more challenging. Highlighting the role of customer experience and expanding on the value add to consumers are unquestionably important aspects for the long-term survival of any business. Therefore, the purpose of the study is to examine the influence of online store factors on e-commerce customer experience in the context of the online landscape in South Africa.

Design/methodology – Qualtrics was used for the online survey, 252 valid responses were collected from males and females who are e-commerce users and non-users for the past 12 months between the ages of 18 – 64 years in South Africa. MATLAB modelling was used to test the hypothesis of this study.

Findings – Results revealed that e-commerce customer experience is influenced by online communication, online interpersonal communication and loyalty programmes. In contrast online merchandise, online post-transactional services and online store atmosphere were found to have non-significant influence on e-commerce customer experience.

Research limitations - The area where the research is conducted is a limitation as it is considered a developing country. However, the researcher urges other researchers to replicate the study from other different countries. The research is limited to consumers who are users and non-users of e-commerce platforms for the past 12 months. There may be delays in response time for the online questionnaire from the randomly selected participants. The randomly selected participants may pose a constraint to the research and not consent to taking part in the online survey. Distribution of questionnaire (E.g.

email, WhatsApp and LinkedIn), survey could end up in junk mail or ignored. The study focuses on certain aspects that lead to the influence of e-commerce customer experience and not the adoption.

Originality/value – Marketing, retail and distribution researchers recognize little knowledge on the contribution on online store factors to e-commerce customer experience. This study represents original research that encourages online businesses to employ the adopted model as a new marketing thought in designing robust online customer experience strategies to capture the South African market.

Keywords: Customer experience (CX), E-commerce, Loyalty programme, Online Store factors

Paper type – Research paper

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ACKNOWLEDGEMENTS

First and foremost, praises and thanks to God, the Almighty, for His showers of blessings during my master's journey and to be able to complete my research successfully - Philippians 4:13 "I can do all things through Christ who strengthens me". Thank you Almighty, you have made this journey worthwhile.

I am extremely grateful to my mother and father, Nomsa Mahange and John Mahange for their abundant love, prayers, and sacrifices. I am very thankful to my father, for educating and preparing me for my future. Your reassurance through the difficult times were much appreciated. It was always such a great comfort and relief to know that you were always there every step of the way and still are.

I would like to express my sincere appreciation to my research supervisor, Mr. Garth Balabanoff for providing me with invaluable supervision throughout this research. His motivation has extremely inspired me, and I am extremely thankful for what he has offered me. It was a great privilege and honour to research and study under his supervision.

My sincere thanks also go to Mr. Witness Maake, your assistance with the data analysis for this research is highly appreciated and acknowledged. Thank you for your time, guidance and amazing completion of the work.

My special thanks go to my family and friends. Thank you all for allowing me the time away from you to study, research and write but most importantly your love, prayers and support.

Finally, in all humbleness and gratefulness, I want to acknowledge all my research participants who have helped me to complete the research directly and indirectly. This research could not have been accomplished without your support.

DEFINITION OF KEY TERMS AND CONCEPTS

Keywords: Customer experience (CX), E-commerce, Loyalty programme, Online Store factors

Customer experience (CX): A customer's general perception and view of their experience with a brand associated to the business as a result from every interaction the customer has with the business

E-commerce: "A process of electronically buying and selling of products or providing services over the internet and the transfer of money and data to perform these transactions" (Shopify).

Loyalty programme: "A designed marketing strategy controlled by sellers to encourage customers to continue using the services of business linked with a programme"(Berry, 1995).

Online Store factors: The underlying components of a stores image or website for an online store

List of abbreviations

B2B: Business-to-business xii
B2C: Business-to-consumer xii
B2G: Business-to-government xii
C2C: Consumer-to-consumer xii
E.g.: Example xii
E-commerce: Electronic commerce xii
M-commerce: Mobile commerce xii

1 INTRODUCTION TO THE RESEARCH

The world of business is experiencing an important shift in trade activities with the universal retail landscape continuously changing with the evolution of e-commerce challenging sellers and creating a competitive environment (Burt, Sparks, & services, 2003).

Highlighting the role of customer experience and expanding on the value add to consumers are unquestionably important aspects for the survival of any business in today's competitive environment (Wiraeus & Creelman, 2019). With the substantial growth that is being experienced by e-commerce platforms and the competition being a click away from being better than your business, the effort has shifted from providing serviceable information sites to making e-commerce platforms usable with the best experience.

Research on e-commerce customer experience and the impact on businesses today, continues to be at its highest relevance when it comes to the retail sector (Srinivasan, Anderson, & Ponnavolu, 2002). According to Bilgihan, Okumus, Nusair, Bujisic (2014), "there is a literature gap that is focused on the online shopper experience in the e-commerce context and unfortunately, e-commerce scholars including experts still pay attention on the singularity of online customer experience" (pp. 49-71) .

With the knowledge gap in marketing literature, businesses are continuously searching for shopper experience solutions for this growing era of e-commerce to close the gap between their brand strategy and shopper experience (Fatma & Commerce, 2014). Saeed, Grover, and Hwang (2003) suggests there is also a gap in the retail and distribution literature, in creating an interaction with a click and mortar approach and this imposes many challenges for retailers like management of distribution channel gaps.

E-commerce has changed the meaning of the value propositions that businesses now offer to their customers as it offers unique opportunities to both businesses and consumers (Ritter & Pedersen, 2019). Online customer experience is a crucial element to succeed in the online business world (Singh, 2019).

According to Bilgihan, Okumus, Nusair, Bujisic, et al. (2014), a positive operational customer experience can result to productive managerial implications such as growth in financial performance, improved brand equity, a larger customer loyalty base , improved customer satisfaction and confident shopper word of mouth.

The researcher understands that, one of the key goals of e-commerce platforms is to satisfy the shopping requirements of customers and exploring the factors that may influence e-commerce customer experience, for it is becoming more important and relevant for the growth of South African online businesses.
It is imperative that South African businesses are connected and are able to recognise many other key influencing online store factors on e-commerce customer experience, particularly as competition continues to increase amongst businesses for the customer's attention.

1.1 Context of and background to the study

According to Dixon and Marston (2002) the clash between the impact of e-commerce and the internet on retailing was being separated. It was until the dot.com word erupted in the early 2000's, where retailers saw a destruction emerging when the Internet took over. From that moment e-commerce was taken over by online retailing including multi-channel retailers from that moment (Quader & Quader, 2008).

According to Rose, Clark, Samouel, and Hair (2012) through the use of multi-channel, retailers can increase the reach of customers. The increasing density of e-retail, together with the ranking of customer experience relevant to the business performance requires retailers to understand how to ensure the best e-commerce customer experience for shoppers (Rose et al., 2012). With the surge in number of people online, it is demonstrating that e-commerce is fast growing (Chong, Chan, & Ooi, 2012; Sofres, 2002).

Globally the confidence in e-commerce remains at a stable level, with 62,7% of internet users who have either shopped online or plan to do so (Sofres, 2002; Stats, 2019). The growth in internet penetration means that more people in real terms are shopping or browsing for information online (Pentina & Hasty, 2009; Sofres, 2002).
The primary growth option is to focus on followers of e-commerce and late adopters specifically in developed countries like the USA and developing countries like Nigeria (Ma'aruf & Abdulkadir, 2012; Sofres, 2002).

There are still many consumers who continue to purchase from both traditional outlets and e-commerce platforms (Verhagen, Van Dolen, & Management, 2009). A considerable number of consumers first browse through traditional stores and then purchase online. By implication, it is observed that there exists a relationship between online buying behaviour and offline experience of consumers (Verhagen et al., 2009). According to J. Kim, Park, and Journal (2005), retailers that are well recognised in the traditional channel provide consumers with the confidence to shop on their e-commerce platform.

The observation on the continuous growth of the number of users, transaction volumes on the Internet and business penetration is not surprising (Constantinides, 2004). "Emerging countries have become the destination for the increased usage of e-commerce" (Molla & Heeks, 2007, pp. 95-108). According to Molla and Heeks (2007), past research shows the potential of e-commerce adoption with benefits for emerging countries, with e-commerce steadily progressing in the South African market where most traditional retailers have moved towards e-commerce presence (Administration, 2019). However, there is little empirical research on the outcomes of e-commerce execution (Molla & Heeks, 2007).

There is currently an estimated internet user penetration of 39,8% in Africa and South Africa 47% (Stats, 2019). With the South African market, consumers are spending more time on e-commerce platforms seeking for affordable prices and purchasing recommendations on certain goods

(Administration, 2019). The enhanced efficiency in e-commerce appears to be inherent with the potential of price reduction and improved decision making for consumers (Goga, Paelo, & Nyamwena, 2019).

In the South African market, e-commerce is growing swiftly but at 1% to 2%, accounting for an insignificant percentage of total retail spend with technological advances are shifting the ways of operating globally (Goga et al., 2019). According to Chiliya, Chikandiwa, and Bola Afolabi (2011), “South Africa has the potential to become the best in the expansion and implementation of information, communication and technology which could result in economic growth” (p.28).

Online retailing is one element of the bigger concept for digital revolution of the economy and these technological advances have an effect on how businesses operate within the South African market (Goga et al., 2019).
Recent research shows that even though the e-commerce platforms could potentially shift the traditional retailers with employment and stores reduced, this could potentially increase employment in delivery and logistics (Goga et al., 2019).

Scholars, like Von Wallpach, Voyer, Kastanakis, and Mühlbacher (2017); Y. Wang, Hsiao, Yang, and Hajli (2016) found that interactions and collaboration between sellers and customers online will improve the experience with the brand through co-creation activities on accelerating innovation and brand awareness in an online community.

The setting of e-commerce retail, and the e-commerce store factors are independently considered as key backgrounds of market response results in emerging markets (Jin & Park, 2006). Regardless of the significance of these concepts, there is still a gap in relevant literature as it impacts the factors for online adoption on customer experience (Mohd-Ramly & Omar, 2017). In past research conducted, Salehi (2012) investigated the factors influencing consumers towards online shopping in Malaysia and found that majority of

the Malaysian population specially the young people, 76% preferred online presence for non-shopping activities.

There is emphasis on the importance of online store factors in previous literature, as an impactful experience for customer trust and satisfaction including store loyalty (Jin & Park, 2006). Currently, there is minimal research being conducted to identify store factors and their impact on the relationship formation between the retailer and consumer (C.-H. Wang, 2011).

Previous studies have suggested that a store goes together with various scopes of store factors and stores are different in groupings according to the store factors (Y. Wang et al., 2016). Furthermore, there is minimal attention spurring from the creation of customer satisfaction from outcomes of e-commerce shopper interactions with the online vendor (Rose et al., 2012).
With most research being restricted to theoretical papers, there's little focus in its early stages which lacks empirical testing (Jin & Park, 2006; Mohd-Ramly et al., 2017). This paper will focus on e-commerce customer experience specifically, to show how the value of co-creation can be birthed when the consumption is experienced, used up, and evaluated by customers through feedback.

1.2 Research conceptualisation

1.2.1 The research problem statement

This research paper will seek to explore the following problem statement: An adopted model on what factors influence e-commerce customer experience specifically in the setting of the online landscape in South Africa.

Similar studies have been conducted including Lorenzo, Constantinides, and Gomez-Borja (2009) study, on the effects of factors on web experience on virtual retail purchase preference in Spain, Europe. Lorenzo et al. (2009), suggest that from visiting a website, customer experience is documented as a critical factor of all. Jin and Park (2006), in their research studied the effect

on e-commerce purchase experience of online store attributes in South Korea, Asia. In recent studies, Hasan (2016) investigated the factors that capture specific online factors focused on the store atmosphere and developed a model to map physical store atmospheric factors online.

Several studies (Grewal, Levy, & Kumar,2009 ; Mohd-Ramly et al. 2017), identified a knowledge gap still exists with researchers attempting to understand the effect of store factors on customer experience. In a previous study, Sundström and Radon (2015) documented there it is a critical knowledge gap which requires an exploration of analysis, on how shopping motives are influenced by the decision on the retail channel used among internet users in emerging markets.

Online shoppers are defined according to their groups which is based on the shopper's expectations, intents and requirements (Huseynov & Özkan Yıldırım, 2019). It is suggested by (Huseynov & Özkan Yıldırım, 2019; Zoovu, 2016) that these groupings can be divided into the following:

- "Shoppers who already know what exactly they are looking for
- Shoppers who generally browse the e-commerce websites are looking at their purchases with a benefit mindset and trust that the store will provide guidance for them on what they really like and want.
- Shoppers who have an explicit criterion for their product search, but they usually have no idea of exactly what they want and therefore require assistance in filtering products"

There is a diverse group of customers visiting e-commerce websites and online purchasing should allow these customers a personalized search, purchasing and payment experience leading to a customized experience (Huseynov & Özkan Yıldırım, 2019; Zoovu, 2016).

A fundamental theoretical influence of this study comes from uncovering the importance of various online store factors that may improve e-commerce customer experience (Jin & Park, 2006). In previous literature, much of the research focused on internet penetration rather than on e-commerce as an extension from the traditional to online retail (J. Kim et al., 2005).

In addition, Moodley, Morris, and Barnes (2001) suggest that in South Africa, technology businesses sell e-commerce as a technology solution only and the required knowledge-based skills and the changing business environment are ignored which are essential to leverage on the potential value of e-commerce.

According to Lawrence and Tar (2010) prospects accessible by Internet technologies as a need for e-commerce appears to have prompted emerging markets to believe that e-commerce will grow fast and assist them with overcoming the global exclusion syndrome. Chelule, Herselman, and Van Greunen (2010), examined the adaptability of e-commerce platforms that deters e-commerce growth and regardless of the potential e-commerce has on the South African retail market, it has not realised its full potential.

With the change in the economic environment, businesses need to adapt to the change in order to maintain competitive advantage over competitors and still make money (De Klerk & Kroon, 2005). Inherent benefits accruing from the expansion of e-commerce in South Africa according to Ndayizigamiye and McArthur (2014) is motivated by the growing rate in cell mobile usage together with the increase in online shopping behaviour which shows that a great number of South Africans can harness the potentials inherent in businesses that are online.

1.2.2 The research purpose statement

The purpose of this research will apply an adopted model focusing on the factors that influence e-commerce customer experience in South Africa. With the change from conventional store to e-commerce based experiences, a question arises as to whether the same factors that influence the brick and mortar experience in the same way influences e-commerce based experiences (Blázquez, 2014; Bodhani, 2012; Dillon & Reif, 2004).

This study seeks to explore the following statement by the objectives:

1. Examine existing research that identifies the store factors;
2. Adopt a model on customer experience influenced by the store factors from the collected findings; and
3. Test the adopted model in the e-commerce environment through data analysis (Dillon & Reif, 2004).

According to Rose, Hair, and Clark (2011), little attention has been given to exploring the concept of the adopted model on what factors may influence customer experience in the online context. Hence, the study will be taking a general approach for e-commerce platforms as they will have an impact on the data exploration, by not limiting the respondents into not only responding based a type of e-commerce. The researcher will apply a quantitative methodology using an online structured questionnaire with a view to present discussions and implications of the study.

1.2.3 The research objectives and questions

The store factor dimensions were adopted from C.-H. Wang et al. (2011) and Jin and Park (2006), compromising of the “store atmosphere, convenience, merchandise, promotions, post-transaction service direct mail interpersonal communication, preferential treatment and tangible rewards” (Mohd-Ramly et al., 2017). The store factors are adopted to specifically make them more applicable to e-commerce customer experience (Verhagen et al., 2009).

By integrating the online store factors and respondent results, it is envisaged that the potential will assist the researcher in determining the influence of online store factors (Jin & Park, 2006). According to (Hayes & MacLeod, 2007), meaningful online and offline store experience appears inherent with benefits that can develop connections between the customer and the store from a good experience. Keh and Lee (2006) also specified how the success of a loyalty programme is dependent on the good or bad customer experience from a purchase. Eid (2011) in Saudi Arabia for instance explored the determinants of e-commerce. Findings revealed that e-retailers struggle

to maintain customer loyalty regardless of the topical swift increase in e-commerce applications in the region (Eid, 2011).

Chinomona, Masinge, and Sandada (2014) examined the factors that influence online shopping behaviour in Gauteng, South Africa. The paper suggested that perceived value and satisfaction of consumers including e-service quality were critical factors for e-commerce consumers shopping experience. It is apparent that few studies have focused on Africa; an example is South Africa where factors that influence e-commerce customer experience tend to have been overlooked.

Based on the above, pertinent research questions are raised. Prior to these sub questions, the main research question is:
What factors influence e-commerce customer experience in South Africa?

To investigate and support the above research question, the following secondary questions will be addressed:

- What role do online store factors play on e-commerce platforms?
- What impact do online store factors have on e-commerce customer experience?
- What framework can be applied to promote online store factors on e-commerce platforms?
- How does the socio-demographics (gender, age, income and occupation) affect e-commerce customer experience?
- Do proposed factors have a significant impact on e-commerce customer experience?
- What are the adoption strategies that South African e-commerce vendors can put in place?

1.3 Delimitations and assumptions of the research study

There are limitations in the generalizability of the findings in this study by assuming that all respondents are users and non-users of in e-commerce

platforms. The sample size for both the pilot and larger study, is not a true reflection of the South African population but the assumption is, that the sample is a representative of the population the researcher wishes to make inferences to.

The assumption is that participants will answer the survey truthfully and anonymity and confidentiality will be preserved and that the participants are volunteers who may withdraw from the study at any time and with no ramifications.

The main delimitation is the questionnaire will be drafted from the adopted study results. The model was adopted from Mohd-Ramly et al. (2017) applying it to the context of South African e-commerce landscape and changing the specific time zones. The original model includes customer engagement but for the purpose of the study, customer engagement will be excluded.

1.4 Significance of the research study

The way an online vendor sets up and monitors its websites differentiates a positive e-commerce customer experience from a negative one. The experience of most online retail is not so bad because some will simply be maddening, and others will be okay. The point of the above is too show that just because dealings with a brand takes place remotely on a device, well the experience customers have online is just as important and tangible for online retailers to take into consideration as those in-store. Mohd-Ramly et al. (2017) have added value for businesses with minimal information on the influence of in-store factors to customer experience.

The adopted model has been tested in Malaysia but looking at traditional in-store factors not e-commerce. E-commerce trends specifically in the communication and transport sector in South Africa has offered benefits through the elimination of the duration between the time of ordering, delivery, invoicing and payment to both e-commerce vendors and buyers improving customer relationships (Jobodwana, 2009).

Interestingly, it is observed that sales of online airline tickets is the leading e-commerce business and it appears online banking is fast increasing in South Africa (Jobodwana, 2009).

1.5 Preface to the research report

In totality, the research paper will consist of six chapters. Chapter 1, being this introductory preface. Chapter 2 provides a literature review unpacking the research problem, the evolution of e-commerce, customer experience (CX), online store factors, the adopted model. Chapter 3 discusses the research strategy, design, procedures, reliability and validity measures as well as limitations. Chapter 4 and chapter 5 presents and discusses the findings, respectively, to interrogating our research questions while Chapter 6 summarises and concludes the research, providing limitations and recommendations to the study.

1.6 Conclusion

The aim of the study is presented in addition to the primary research question to be addressed including the secondary questions. The significance and limitation of the study is also outlined. The next chapter will review available literature covering the research topic on past research findings.

2 LITERATURE REVIEW

Previously, the context and background of study on e-commerce was discussed. In chapter 1, it was deliberated, how e-commerce can provide possibilities to be enhancing with increasing internet user penetration. This chapter will review past and present literature on knowledge sharing on what other researches have discussed regarding the topic. Further, we review the theory of e-commerce even as we will expand on academic issues that are related to the aspects that impact online customer experience in South Africa.

The chapter also describes the development of the adopted model of e-commerce customer experience and the proposed research strategy and design.

2.1 Introduction

The literature review looks at existing literature and all relevant publications of journals and books that have mentioned and discussed how e-commerce customer experience is impacted from critical elements. This chapter discusses the evolution of e-commerce focusing on past studies done. However, Molla and Heeks (2007) tend to assume that having internet access will increase e-commerce in those countries because of more access to global markets.

The following sections will provide a brief review on the relevant research regarding e-commerce adoption globally and nationally in a country. The major online players, the notion of shopper experience, and in addition exploring the influence several online store factors from which a developed research model is applied.

2.2 Evolution of e-commerce

Amazon.com CEO, once said "If I have 3 million customers on the Web, I should have 3 million stores on the Web."(Nasraoui, 2005, pp. 1235-1241)

Over time, the dynamics of e-commerce have continued to change. Even though e-commerce awareness has increased only in the past decade, it is observed that it has enjoyed presence for the last three decades and was developed from the concept of “electronic data interchange, which is the exchange of business papers from this computer to another one in a standard format” (Tian & Stewart, 2006, pp. 559-564). The beginning of e-commerce commenced in 1995 with the first sale of banner advertisements and since then, e-commerce has become the fastest growing form of business (Laudon & Traver, 2010).



Figure 1: E-commerce evolution (Kamaruzaman, Handrich, & Sullivan, 2010)

According to Bilgihan, Kandampully, and Zhang (2016), more consumers are using the Internet to shop and browse for information by using several devices in the buying and search process. The competitive e-commerce environment has demonstrated that survival and advantage of how business need to harness the potentials of e-commerce platforms as well as finding ways to offer customers a unique experience (Bilgihan, Kandampully, & Zhang, 2016).

The term e-commerce to people means shopping on the internet but it extends to other things such as commercial trading between businesses and provides the support in market transactions (Mbatha, 2013). E-commerce is the unified application of information and communication technology from end-to-end along the entire value chain of the business processes conducted electronically and is designed to enable the business goal success”.

Laudon and Traver (2010) suggests that business transactions are aided using online platforms as it also ensures that commercial transactions are

made possible digitally between organizations and customers. On the other hand Fichter (2002) argued it as an online transaction which aids the possibilities of market transactions among different relevant stakeholders and in the paper, it was noted that despite the online presence, payments, goods and services delivery may be done online or offline.

Chaffey, Hemphill, and Edmundson-Bird (2019), suggest “e-commerce is an central service of Internet and offers social benefits, promotes competition, and advances in the direction of the objective of a digital market”. McKnight and Chervany (2001) suggest that e-commerce signifies an excursion beyond the mysterious into the enigmatic to many consumers.

According to Mathew, Sarker, and Varshney (2004), e-commerce has motivated a transformation of business in which individuals are able to perform businesses on their personal computers at any time, while m-commerce provides an innovative level of service accessibility, by eliminating almost all place-related limitations linked with conducting business. With the stiff competition in business survival, it is observed that customer online experience should include every point of contact on these online channel formats which are used by customers to interact with businesses (Bilgihan, Kandampully, & Zhang, 2016).

The development of the online presence has been the one of the most intriguing inventions around the space of information and communications technology over the decade (Goga et al., 2019). There are diverse e-commerce models that can define practically every deal between the shopper and the seller. These include the following: “business-to-business (B2B); business to- consumer (B2C); business-to-government (B2G); consumer-to-consumer (C2C); and mobile commerce” (Chanana & Goele, 2012).

The growing numbers for online shopping consumers is influenced by the sellers innovation and site improvements (Xiao & Benbasat, 2007). Additionally, Chiu, Tzeng, and Li (2013) states that currently many consumers buy their products and access theirs services online, hence it is

important that e-stores examine measures through which consumers' shopping behaviour may be enhanced by providing optimum satisfaction and value to them particularly, their website visitors (Chanana & Goele, 2012).

2.2.1 South African e-commerce landscape

The movement towards e-commerce has developed diverse strategies for businesses that have resulted in the access of online purchasing (Schafer, Konstan, & Riedl, 1999). E-commerce has changed the meaning of the value propositions that businesses now offer to their customers (Hughes & Beukes, 2012).

Hughes and Beukes (2012) documented that, the growth of e-commerce regarding traditional retail channels revealed that e-commerce grows 5 times the rate of its traditional counterpart. Further, this has been able to increase inherent potentials for businesses, its accessibility to future and present customers, providing access to personalize preferences, lower prices and enhancing consumer experiences (Goga et al., 2019).

Ibam, Boyinbode, and Afolabi (2018) suggests, e-commerce on the African continent has made a positive impact but due to a lack of trust on dealings within and from the continent, it becomes a challenge. Ibam et al. (2018), suggest that e-commerce investment in infrastructure on the continent could bring endless possibilities and has the potential to result in fast economic development.

The South African business market is fast changing and has increasingly provided shopper's with an inclusive assortment of offerings to select from but the nations online marketplace is growing slow when equated to their technologically advanced counterparts (Agnelli, 2015). The South African volumes in e-commerce has risen in the last few years and the rise in product and services growth from the variety of offerings that vendors provide and Takealot is by far the country's leading online player in the country (Goga et al., 2019).

The South African online retail lags behind markets like China (Goga et al., 2019). Many South Africa retailers are doing well though and include the rise of a well-known online retailer, known as Zando (Goga et al., 2019). Zando operates as an online fashion store based in Cape Town, South Africa and offers its consumers local and international fashion (Agnelli, 2015). Their goal is to provide shoppers with unsurpassed online shopping experience with the latest fashion. According to Gill (2013), Zando was successful with adopting a mobile-optimised and structured online presence, easing the stress of consumers in a seamless experience when they search for relevant products.

The travel and tourism industry are also dominating the online setting with transactions continuously increasing in South Africa and the country being one of the most popular tourist destination (Mbatha, 2013). This is not the same with other sectors who are yet to adequately adopt e-commerce for doing business. For the last two decades, e-commerce was mainly focused on the innovators across industries such as Kalahari, Net florist, and more recently Takealot and Zando (A. Smith, 2018). In the retail space, organizations like Pick n Pay and Woolworths have adopted the e-commerce as an option in driving their market in South Africa (Johnson & Iyamu, 2019).

The online customer base in South Africa is still gradually rising with low penetration and Goga et al. (2019), reasons behind this include the trust customers have with payment instruments and options, and delivery rates.
According to (Goga et al., 2019; C. Smith, 2017), consumers in South Africa use online services for a variety of e-products and download tunes and eBooks. C. Smith (2017) states, that there has been 53% South African consumers over the last 12 months who have accessed online platforms, as well as purchased from four e-commerce categories, which include event tickets at 47%, and clothing and apparel at 45%; and other downable items such as educational materials.

The main trends in South Africa are motivated by the increased mobile penetration and an increase in consumers utilizing cross border shopping (C.

Smith, 2017). This supports the reason and importance of businesses to strategically position their mobile penetration, observing an evolving nation and the increase in accessibility to a mobile phone is easier for South Africans than other devices (Hutton, 2011).

In South Africa online activities occurs across mobile phones and computer devices, with most online purchases and delivery being made from metro areas and despite its penetration in the South African market, the ability to shop using mobile phones and tablets has also risen (Goga et al., 2019). With the countries rise in the degree of mobile penetration, there has also been a spurred an increase in online shoppers choosing to purchases using their mobile phones and this has resulted in an estimated 65% growth where consumers have bought products and services (C. Smith, 2017).

The everyday use of social media by South Africans has been observed and is on the increase through access to fast internet services; hence, local retailers have to realise that they are not just competing against their local competitors, but also the fastest websites and apps that exist. Many South African entrants into e-commerce need to understand the results of them under-investing in their website designs and experience (Investec, 2017).

2.2.2 Adoption of e-commerce

Since the internet emergence, predictions foreseen are that the era would in the end represent the most vital paradigm shift (Doherty & Ellis-Chadwick, 2010); and so it proved to be. Many businesses appear to be driven by global standards in alignment with the pressures of e-commerce adoption (Kraemer, Gibbs, & Dedrick, 2002).

Schafer et al. (1999) argues that, even though e-commerce hasn't made businesses to produce more products, the provision of variety in products and services has been made possible. However it is critical to note that, not every business is fit for e-commerce, due to its product and services offerings

and taking into consideration the pattern of consumer behaviour (Klumpp & Jasper, 2008).

According to Kraemer et al. (2002), a framework for the adoption of e-commerce at a global and local level taking into consideration the national policy elements as shown in Figure 1. The investigation conducted by Kraemer et al. (2002) addresses the effect of different nations' decisions on the choice of online adoption in accordance to global forces.

The framework provides a way to organise the main factors impacting online penetration. Additionally, the study suggests that digital gaps are still evident in industrialised and evolving nations and there's online difference locally within the country; by implication, their findings reveal that this is possible through the interplay of national environments and policy factors (Kraemer et al., 2002).

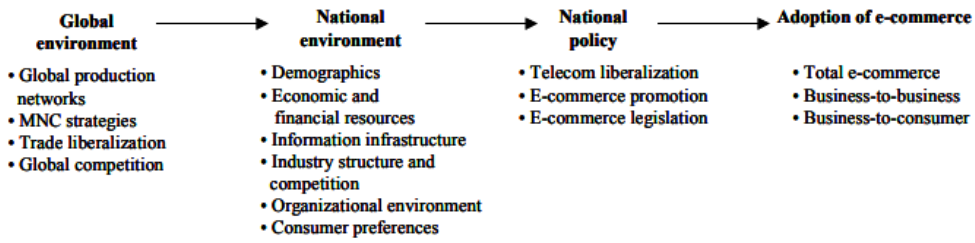


Figure 2: framework for the implementation of e-commerce (Kraemer et al., 2002).

An even more limiting factor of e-commerce implementation for businesses is the level of preparedness of their ecommerce platforms in addressing product and service delivery for existing and potential customers during the global epidemic COVID-19 (King, 2020). The latest statistics on online blogging shows that Amazon has now employed an extra hundred thousand people, the demand for Zoom has increased as the demand for video-conferencing tech has increased, Microsoft Teams handles 44 million events daily from businesses working from home and WhatsApp traffic has doubles (Konrad, 2020).

2.2.3 The global e-commerce landscape and major players

Looking back to the duration of online presence, it is seen and observed that the retail sector has managed to make substantial progress (Doherty & Ellis-Chadwick, 2010). The previous years have witnessed the Internet as a channel where retailers to conduct businesses with consumers; however, the past few years the internet has become of value to retailers to the extent that the platform is used to purchase and pay for offerings, sponsor the offerings, gather market research information, and for tracking the consumers orders (Doherty & Ellis-Chadwick, 2010).

The impact of the COVID-19 global pandemic has hurled it into a hyper drive. Meyer (2020) argues that the e-commerce sales are not higher across the board though except for online sellers of household goods and groceries. Fortunately there are industries who appear well positioned for e-commerce and undoubtedly have an advantage (Hofsetter, 2020). However, there are other challenges especially with e-commerce adoption amongst the lower-income consumers (King, 2020). Globally, businesses and consumers will experience different effects from the COVID-19 and according to King (2020) what is clear though is that user behaviour is definitely changing online, and occasionally quite fast. According to Bourlier and Gomez (2017) e-commerce will become the major channel globally by the year 2021.

- USA e-commerce market

According to Kamaruzaman et al. (2010), the USA continues to be the market leader, constituting of nearly 40% of global market share of the e-commerce value. The dominant industry in the USA e-commerce market continues to be the retail sector with one of the best known e-commerce brands, Amazon (Burt et al., 2003).

According to Savrul, Kılıç, and Sciences (2011), in the year 2007 e-commerce was a strategical tool adopted with a view to ensuring a recovery from the global recession. The Unites States of America is the destination of opportunities; a leading player in online market transactions (Kulach, 2020).

An outline of the United States ecommerce market in figures, there are currently “282.1 million active internet users; 87.9% internet penetration; 209.6 million of the population are shopping online and 27% of the proportion are shopping online from both local and international suppliers” (Statista, 2019).

Businesses in the United States sell more when they bid sale transactions (E.g. Holiday season, Black Friday and cyber Monday) (Kulach, 2020); And Amazon remains ahead in the US e-commerce sales but is experiencing competition from Walmart (Lipsman, 2019). With PayPal, being removed from eBay, the company has taken a strong position for online payments landscape (Flatraaker, 2013). In the USA, social media is the biggest influence on purchasing decisions online and mobile marketing is also growing in importance (Wearepentagon, 2016)

- Asian e-commerce market

Asia continues to have solid growth in e-commerce over recent years and this rapid growth was led by strong dynamism, particularly in China (Kinda, 2019). It is clear that China’s dominance online is unmatched, resulting from them having the world’s biggest internet population and an increase from using mobile payments (Kinda, 2019). Asia’s stellar growth in e-commerce is not restricted to China, but consists of India and Japan among the economies with the major shares of e-commerce sales specifically in retail sales global (Kinda, 2019).

It is observed that the Asian market proved as a destination for e-commerce due to a number of variables including financial, political and high-tech expertise and stability (Lafond & Sinha, 2005). The Asian e-commerce landscape continues to rise with the fastest growing e-commerce platform known as, Alibaba express but the e-commerce landscape is far from being evenly distributed (Lafond & Sinha, 2005).

The increase and advancement of e-commerce activity in China has been rapid with active initiatives employed by the government and private sector initiatives in the region aimed at supporting the emerging digital economy of Asia (Männistö, 1999). Making China's domination in e-commerce unmatched (Kinda, 2019).

The leading platform company in East Asia, known as Alibaba is a central entity in the e-commerce industry (Kwak, Zhang, Yu, & Change, 2019). Alibaba, a B2B e-commerce leader connects buyers and sellers globally (Naidu, Widhianingtyas, Alenzi, & Alfahad, 2019). The e-commerce platform, Alibaba is not only a profit-seeking firm, but a leader in influencing the way of life, as online transactions are now a substantial part of economic activities resulting in Alibaba having sold merchandise which more than eBay and Amazon combined in 2013 (Kwak et al., 2019; Naidu et al., 2019).

The main benefits of using Alibaba.com is to connect Chinese suppliers with international buyers, other benefits include affordability, a larger supplier and buyer base and speedy business (Naidu et al., 2019). It is evident, Alibaba's online expertise resulted in a favourable environment and convenient for many suppliers and consumers (Naidu et al., 2019)

2.3 Customer experience (CX)

Conferring to Srinivasan et al. (2002), the Internet is a good market and offers customer information on product and service immediately and this allows customers to compare these offerings of vendors worldwide. According to Mohd-Ramly et al. (2017) producing a unique customer experience is important in current times of selling. A distinctive customer experience is likely to result in advantage in the competitive world (Bagdare, Jain, & Management, 2013). In addition, customer experience results from a purchasing interaction with the seller where the customer can reach a certain level of emotional awareness (Wenwei & Tongtong, 2010).

Many different researchers have described customer experience also known as CX (Mohd-Ramly et al., 2017). It is seen as a procedure as well as a result from some sort of action. Shopper experience, “an experience that occurs when a customer has any sensation or knowledge attainment resulting from some level of interaction with different elements of the setting formed by the service provider” (Bagdare et al., 2013, pp. 790-804). Gilmore, Pine, and Leadership (2002) suggest, that documenting events with memorable experiences is important for the purpose of being thoughtful about the shopper involvement.

Customer experience is an individual and subjective reaction that a customer might have directly or indirectly from an interaction with the seller; Direct interaction typically happens when a purchase is made or during the usage of the amenity and this is normally initiated by the shopper; Indirect interaction encompasses unexpected encounters with the sellers products or services, and word-of-mouth recommendations or criticisms (Enzmann & Schneider, 2005). LaValle et al. (2011) states, it is imperative for vendors to be alert about, what is likely to happen next and what actions should be taken to get the best results.

An experience from an individual on an e-commerce atmosphere ranges not just from the website engagement but also ensures a linear relationship between consumer experience and value derivable from the website (Petre, Minocha, Roberts, & Technology, 2006). Thus, describing the consumption experience as involving various components such as relaxation, sensual pleasures and emotional responses.

There is an increase in competition amongst businesses for the shoppers attention, making customer experience a critical for management to consider the customer relationship across the entire journey with the brand including all the different channels the business chooses to reach its consumers (Fryer, 2020).

2.4 Online store factors

These factors are seen to spur customers in forming perceptions of a store. Researchers have previously synthesized the following store factors, namely “merchandise, service, clientele, physical facilities, convenience, promotion, store atmosphere, institutional factors, and post-transaction satisfaction”.

Over the years, additional store factor scopes are counted in marketing writings and thus, considering the above mentioned nine categories and incorporating online specific factors from concentrated literature review. Jin and Park (2006), considered six aspects of online store factors: “merchandise, post-transaction service, interpersonal communication, Loyalty programme, communication and online store atmosphere”.

Building customer loyalty is continuously growing amongst researchers including loyalty programme as part of store factors. Thus, the interest of online retailers should be more on loyalty programme than their real-world counterparts (Enzmann & Schneider, 2005).

2.4.1 Online Merchandise

Merchandising has become a considerable issue with e-commerce (Burt et al., 2003). Jin and Park (2006) argues that stock is the most central feature to attracting the trust of customer and satisfying them.

Ko, Kincade, and Management (1997) suggest that providing quality merchandise creates an appropriate and welcoming online store atmosphere that customers prefer. Online retailers try to have volumes of the correct stock to accommodate shoppers. Well-spaced merchandise on the website allows consumers to find products easily and see through the use of stock control systems, online stores can condense the time for time between looking for what shoppers want and ordering.

2.4.2 Online Post-Transaction Service

Shoppers will always assess the seller together with their offerings then make a decision if they want to form an ongoing relationship with the retailer (Yun & Good, 2007).

Post-transaction services include services relating to the product after buying online when the goods have been delivered with information on product warranties, product exchanges and monetary refunds (C.-H. Wang et al., 2011). In the travel industry, post-transaction services provided by travel representatives who communicate final information to the customer and offer after-sales assistance (Van Riel, Semeijn, & Pauwels, 2004).

The travel industry is mostly information-driven and it is not astonishing that online travel services have advanced into one of the main e-commerce platforms (Van Riel et al., 2004).

2.4.3 Online Store Communication

Communication is a powerful marketing tool and Lee, Park, Han, and applications (2008) suggest, communication between the seller, and the buyer can influence the buyers final decision positively or negatively.

Customers are provided with a platform to communicate their sentiments, observations and views on specific goods and exchange product information with the seller as well as with other customers (Lee et al., 2008).

2.4.4 Online Interpersonal Communication

Online interactions with retailers help customers relate better and understand the e-commerce platform (Huang, 2012). Interestingly, it is observed that online retailers have started to develop rating systems on their websites for products and services; these allows customers to give feedback as a form of interpersonal communication (Liu, Zhang, & Management, 2010). According to Subrahmanyam and Greenfield (2008), online interpersonal communication differ both in the extent to which the seller and customer content is public or private and in the extent to which both users can keep content private.

2.4.5 Online store atmosphere

Martineau (1958) explains store atmosphere by “the way in which a customer perceives the store partly by the functional qualities and environmental factors” (pp. 121-130). Additionally, it is also a way in which a customer senses the online business environment and atmosphere, (Wenwei & Tongtong, 2010). According to Abrar, Zaman, Satti, and Studies (2017), store atmosphere in a traditional retail store is, “the cognisant designing of the space to create specific effects on consumers” (pp. 22-43).

The inability to physically touch or try on the product when shopping online results in consumers often using the store name and associated brands to simplify their purchasing decision as consumers.

However, the impact of online store atmosphere on customer experience has not been widely examined. Although there are a few studies that have linked the hypothesis of online store atmosphere and image to purchase intentions (Aghekyan-Simonian, Forsythe, Kwon, Chattaraman, & Services, 2012).

2.4.6 Loyalty Programme

A loyalty programme is a designed marketing tool in the effort of rewarding customers, and therefore encouraging, repeat purchase activities from customers, which is in turn beneficial to the vendor (Enzmann & Schneider, 2005). It is also important to take into consideration that, not all loyalty programme are easy to understand or well planned, thus, not bringing any positive effect (Tahal, 2014).

Loyalty programmes provide the opportunity for businesses to create and drive customer relationship management with the customer with many of these sellers applying the loyalty programme as a platform used for the collection of specific information on the shopper (Enzmann & Schneider, 2005).

On the other hand, besides some of the rewards from signing up for loyalty programme, some people prefer to protect their confidentiality, and probably refuse to take part in such loyalty programmes (Enzmann & Schneider, 2005).

Tahal (2014) also states that businesses often build their loyalty programme without taking consideration the insights of the customers´ leading to the decision-making process. Therefore, many loyalty programmes turn into unclear marketing communication. Rewarding schemes and virtual societies are regarded as some type of loyalty programmes (Enzmann & Schneider, 2005).

Many loyalty programmes put effort on rewarding the customers who buy often and in high volumes, then using the collected data regarding the shoppers concern from the purchase and try to tailor the product offering on those basis (Tahal, 2014). Research has also revealed that there is a challenge for retailers whether online or store based, where most of the customers prefer remuneration in order for them to sign up for a loyalty programme (Tahal, 2014).

2.5 Adopted Model

There have been other models proposed by other researchers. However, for the purpose of this study, the researcher has chosen to apply the adopted model as it relates to customer experience.

New theoretical expansion of shopper experience identifies the importance of shopper perception and emotion.

Touch points are encountered and developed during the service delivery process influencing future customer experience.

Customer experience is not restricted to the service but incorporates each feature of the retailer's offerings (Ren, Qiu, Wang, & Lin, 2016).

Preceding studies identify the status of online shopping factors in impacting the shopping atmosphere in the retail industry (Jin & Park, 2006). Previous studies constructed by (Jin & Park, 2006) recognised “website design, order fulfilment, communication, merchandising, customer privacy and promotion” as online store factors that may have potential effect on a customer’s online store experience. Verhoef et al. (2009) suggested possible influences of shopper experience like, community setting, amenity boundary, store atmosphere, product and service range and price.

Gilmore et al. (2002) constructed an experience model, showing that businesses are advised to have a well-defined shopper experience supervision solution carried out with an appropriate knowledge centre. According to Wenwei and Tongtong (2010), “customer experience is a management tool and not only a marketing concept”.
The importance of customer experience in marketing literature has become of interest as a new thought (Mohd-Ramly et al., 2017).

2.5.1 Adopted model

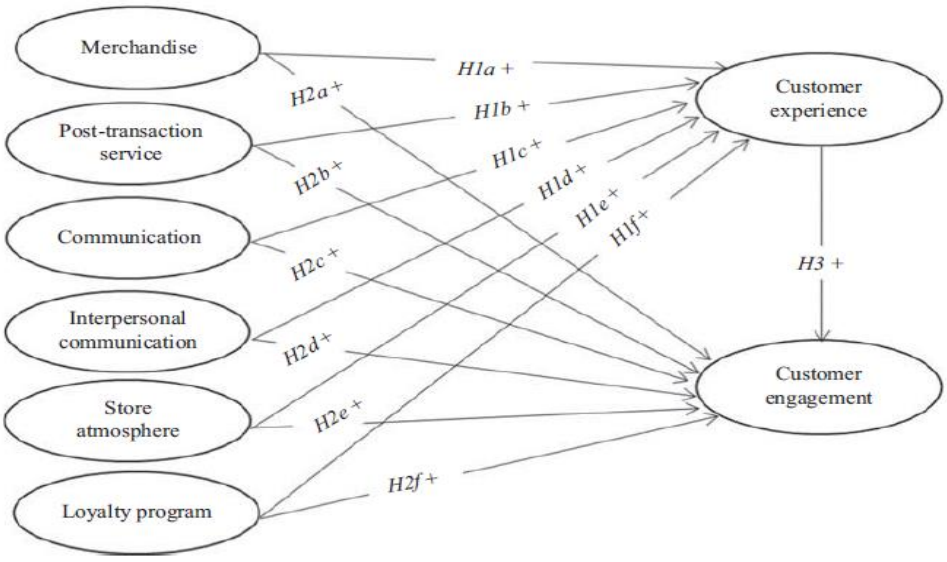


Figure 3: Adopted model (Mohd-Ramly et al., 2017, pp. 1138-1158)

The adopted model suggests that customer experience and interaction are influenced by store features in department stores (Mohd-Ramly et al., 2017). This paper also notes the existing connection between shopper experience and engagement. Further, the study also included loyalty programme features to be explored with other store factors recommended by scholars.

2.5.2 Revised adopted research model

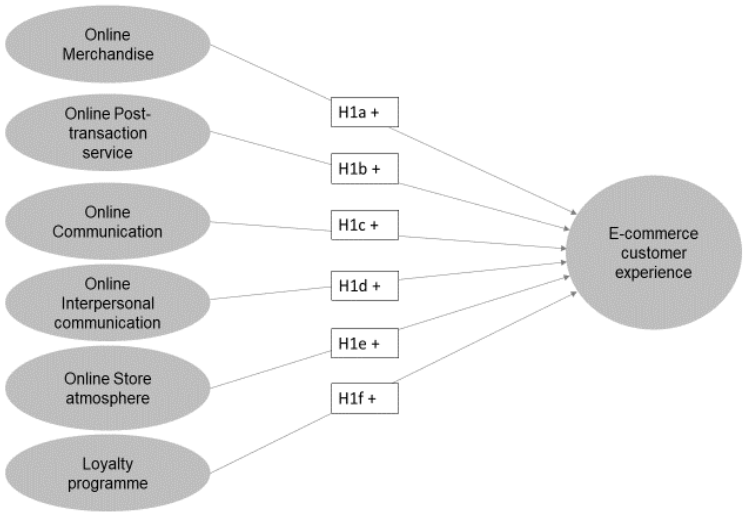


Figure 4: Revised adopted research model

The adopted model was chosen as it relates to customer experience and is useful to fit the setting of the online South African landscape. Examining the effect of the above online store factors they have on online customer experience. Customer engagement has been excluded from the adopted model.

The paper suggests the subsequent theory:

“H1: Online store factors have a positive influence on e-commerce customer experience:

H1a. Online Merchandise has a significant relationship to influence e-commerce customer experience

H1b. Online Post-Transaction Service has a significant relationship to influence e-commerce customer experience

H1c. Online Store Communication has a significant relationship to influence e-commerce customer experience

H1d. Online Interpersonal Communication has a significant relationship to influence e-commerce customer experience

H1e. Online Store Atmosphere has a significant relationship to influence e-commerce customer experience

H1f. Loyalty Programmes has a significant relationship to influence e-commerce customer experience"

2.6 Summary and conclusion

2.6.1 Summary of literature reviewed

Retail and marketing literature provide a wide range of e-commerce, customer experience and loyalty programme studies but the usefulness of the information depends on the researcher's study objective. The world of business has detected a radical shift in the way trade activities are conducted since the evolution of e-commerce. More consumers are using the internet to shop and browse for information by using mobile devices in the search process and buying process. Across industries, business have been revolutionised by e-commerce, providing prospects for industries to access a wider range of consumers, offer personalised favourites, ultimately enhancing customer experiences. E-commerce will continue to become the major channel for both mobile and traditional internet devices globally.

2.6.2 Conclusion

The literature outlined the evolution of e-commerce presented by past researchers. In addition, South Africa's e-commerce background was highlighted focusing on an adopted model encompassing online store factors. The next chapter will describe the research methodology assumed in the study to explore factors that influencing South African e-commerce customer.

3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

In the previous chapter, past and present literature was reviewed on what other researches have discussed regarding potential attributes that may impact online customer experience specifically in the context of South Africa. This chapter will provide the study practice to be used in this research. The applicable methods for the chosen methodology related to the research strategy, sampling and information gathering technique will be discussed in throughout the chapter.

3.1 Research strategy

The applied study method in this investigation, was the quantitative approach using Qualtrics for the questionnaire design, applying a “5 Likert scale ranging from 1 = strongly disagree to 5 = Strongly agree”, for answers on the questionnaire (Chatzopoulou & Tsimonis, 2010). Muijs (2010) defines quantitative research as “A technique for explanation of a phenomena through arithmetical information that is examined using statistically based methods” (p.1). Quantitative research approach ensures validity and reliability, through the use of statistical tests (Atieno, 2009). The quantitative method is usually empirical and is known as a descriptive report about what “is” the circumstance looks like in the “real world” relatively to what “should” be the case (Sukamolson, 2007). Quantitative methods can further be sub-categorized into four groups: “inferential, experimental and simulation approaches to the research” (Atieno, 2009).

The benefit of the quantitative strategy to the researcher is that the strategy allowed the researcher to better understand the cause and effect also known as causality of the tested hypothesis looking at which factors influence e-commerce customer experience.

3.2 Research design

An online survey was applied for the research design which allowed the researcher to reduce the response time from respondents, lower cost from not having to print out questionnaires, ease of data entry due to advances in technology and the ability to acquire extra response-set data. In past research Dillon and Reif (2004) utilised a questionnaire tool which was established for the gathering of data from college students about their recent online textbook purchases. This research design allowed the researcher to control the order in which respondents answer the questions effortlessness unlike completing questionnaires by pen and paper (Granello, Wheaton, & Development, 2004).

3.3 Research procedure and methods

This section documents the actual procedure and the methods that were employed in this investigation to gather, classify, process, and examine experiential evidence. This section largely, details the statistics and material gathering method, the target population and sampling of respondents, the ethical considerations during the research process, the data and information collection process and storage, the statistics and material processing and breakdown as well as the background description of the respondents who provided empirical evidence for this research study.

3.3.1 Research data and information collection instrument(s)

This section describes methods to be applied for the research data collection. According to Nurani (2009), the collection of the suitable data is a crucial step in research because the decided data collection instrument will control whether the data collected is reliable and fairly truthful.

There are three main structures:
Quantitative research strategies, often use assessments and closed-ended surveys to gather, examine and understand the information (Zohrabi, 2013).

This research used primary data, gathered through an online structured survey using Qualtrics.

Surveys are common methods for information collection in evaluation research and are without a doubt are a simple form of acquiring information in any research effort (Zohrabi, 2013). It is of importance to develop an organised questionnaire for data collection is vital to minimize measurement errors (Radhakrishna, 2007).

Table 1: Online survey pro's and con's (Jamsen & Corley, 2007)

Approach	Pro's	Con's
Web-based	• "Quick turnaround time for delivery and easy return • Ease of reaching a large number of respondents • Can capture data directly in database • Can use different questionnaire formats • Allows for data quality checking • Ease of ensuring participants confidentiality	• Time-consuming development • Potential for limited access within target population • Potential to decrease of return rate due to technology issues • Security issues may impact on the validity • Lack of control over sample • Potential for bias in sample
E-mail based	• Short turnaround time • Ease of reaching large number of potential respondents	• Potential for limited access to target population • Confidentiality issues may decrease return rates • Possibility of incomplete email address
Point of contact	• No software compatibility issues • Access to population without computer • Potential to capture data directly to database	• Scheduling time with respondents • Find the right location • May be time consuming for data collection process • Potentially may not reach large population"

3.3.2 Research target population and selection of respondents

3.3.2.1 Research population

The researcher selected a simple random sample for the gathering of information. Joag-Dev and Proschan (1983), explained that a "simple random sample" is a sample obtained by a random method when the sampling is done without addition from a limited population. The simple random sample

comprised of males and females who are users and non-users of e-commerce during the last 12 months, are between the ages of 18-64 years and who live, study and work in South Africa.

The evaluation of measurement involves exploratory of the relationship between the hypothesis and items. The measure of factors that influence e-commerce customer experience was assumed from (Mohd-Ramly et al., 2017), adjusted to fit the South African online environment and changing the specific time zones (Verhagen et al., 2009).

3.3.2.2 Sampling and selecting respondents from the target population

Due to the researcher having distributed the online questionnaire via email, WhatsApp and LinkedIn, none reports can occur. The simple random sample responses were all volunteer, putting a limitation on getting an honest response. Selecting random people eliminated any bias responses although bias could have occurred because of the respondent's education levels and interest in the topic so that also eliminated bias.

The online structured survey was conducted on a simple random sample size of 252 random consumers, with 228 random consumer's for the larger study and 24 random consumer's for the pilot study, who reside, work and study in in South Africa, who are users and non-users of e-commerce for the past 12 months.

Wamuyu and Maharaj (2011), past study proposed a theoretical model on factors impacting the use of mobile technologies to enable e-commerce in small business" and the study selected a sample using the stratified sampling instrument within distinct geographic cluster.

3.3.3 Ethical considerations when collecting research data

The following principled deliberations remain observed in this research:

- **Informed consent:** Respondents of the online survey were informed in advance regarding the nature and aim of the investigation to decide whether they want to part-take or not
- **Privacy:** The right to discretion of the personals were kept confidential in the study and the researcher ensure that the obtained data from the online survey responses was strictly kept private.
- **Honesty with participants:** The researcher reported all findings from the study without misinterpreting and misleading others.
- **Information confidentiality:** All information obtained from participants was only used for the purpose of this study and kept everything confidential to eliminant bias.
- **Security:** The researcher restricted access to only those participants who were asked to participate and gave consent to part-take in the online survey.

3.3.4 Research data and information collection process

The researcher used an online survey to be distributed via email, WhatsApp, LinkedIn and this involved the respondent having to fill out an online survey. The online survey in a form of a questionnaire comprised of two sections, section A was the respondent demographic questions and section B comprised of the study questions to test the suggested hypothesis.

Jusoh and Ling (2012a) used a survey questionnaire to assess knowledge of factors influencing online purchasing. The study was conducted by convenience sampling method and there were 100 participants in the study (Jusoh & Ling, 2012a). The utilisation of the questionnaire is an efficient way of collecting data (Kazi & Khalid, 2012).

3.3.5 Research data and information processing and analysis

3.3.5.1 Research data and information processing

Information processing is the conversion of the data gathered into meaning information applied in this study. Research data processing entails of:

(i) data coding involves creating and applying codes to data and turn the data into meaningful information that can be analysed and interpreted (Blair, 2015).
(ii) data entry onto computer has effects on the statistical analysis (Barchard, Scott, Weintraub, & Pace, 2008)
(iii) Data cleaning, detects inconsistencies and errors by removing it from the data to improve the quality of information (Xiang & Min, 2010)

3.3.5.2 Research data and information analysis

Information breakdown is the most multifaceted and enigmatic phase in research (Kazi & Khalid, 2012). There are many forms of data analysis approaches for example for quantitative research, descriptive analysis is one approach that researchers can employ to analyse their data.

The data was analysed in MATLAB. The main statistical analysis was descriptive analysis to analyse the occurrence, ratio and average to define the respondents "demographic background, levels of internet usage and online buying behaviour". To measure the relationship between independent variables such as e-commerce customer experience, time spent on e-commerce platforms, customer online store factors perception, Pearson's Correlation was used.

This study used the following analysis – Composite reliability, Cronbach alpha, Item factor loading analysis, Average Variance Extracted (AVE), Linear regression, and T-test analysis.

Composite Reliability was used to measure true reliability, calculated in grouping of the structural calculation method (Peterson & Kim, 2013). Lee Cronbach in 1951 developed Cronbach Alpha to make available a measurement of the internal consistency of a study and is represented as a number between 0 and 1 (Tavakol & Dennick, 2011). Cronbach's coefficient alpha is commonly used to estimate the reliability of assessments and weighing (Peterson & Kim, 2013).

“Item factor loading analysis is a method of modelling the covariation between a set of observed variables as a function of one or more dormant constructs” (Bandalos & Finney, 2018, pp. 98-122). Average variance extracted (AVE) deals with “the level of variance captured by a construct versus the level due to measurement error, values above 0.7 are considered very good, whereas, the level of 0.5 is acceptable” (Alarcón, Sánchez, & De Olavide, 2015). “Linear regression is a statistical method recommended for the effect of covariates on the intensity function” (Aalen, 1989, pp. 907-925).
“T-test analysis is appropriate for testing the significance of the deviation of the first experimental value beyond the observed point” (Thistlethwaite & Campbell, 1960, p.309).

Respondents will be asked to answer on a “5 Likert scale ranging from 1 = strongly disagree to 5 = strongly agree” in the form of an online survey to be sent out using Qualtrics.

The adopted study, Mohd-Ramly et al. (2017) used SPSS 21 for data analysis and standard procedures for examining missing values, outliers and distribution. To assess the reliability of their information and hypothesis, the researchers used the PLS-SEM system which also involved the study of potential significant relationship between variables.

3.3.6 Description of the research respondents

A simple random sample of males and females who are between the ages of 18 and 64 years, reside and work in South Africa. They may either own a smart phone, tablet or computer to access e-commerce platforms and the researcher assumed that they are users and non-users of online platforms in the past 12 months. These respondents are either employed in the private sector, public sector, are entrepreneurs, university students and some are unemployed.

3.4 Research strengthens—reliability and validity measures applied

The hypothesis used in this paper were from (Mohd-Ramly et al., 2017). In their study, Mohd-Ramly et al. (2017) also conducted reliability of their construct from their questionnaire, resulted in the Cronbach alpha between 0.7 and 0.9

It must be taken into consideration that the study was conducted instore and as a result content validity of using such a scale in this study is established and valid.

Talking into account the minimum Cronbach alpha of 0.6 is good, this scale was fitting and satisfactory reliability calculating the construct of this framework. In both the pilot study test and larger study, the proposed Cronbach alpha controlled the reliability and validity in the research.

According to Zohrabi (2013) before and after collecting the information, the student has to consider the validity and reliability of their information. Wamuyu and Maharaj (2011, p. 48) defines reliability as “an assessment of the internal consistency of the measurement instrument and it is the assessment of whether the study instrument would give similar results in different situations”.

Heale and Twycross (2015, p. 66) defined consistency as “the reliability of a measure and the extent to which the research instrument consistently has the same results if used in the same situation on repeated occasions”.

There are three attributes of reliability Heale and Twycross (2015, p. 66) identified in their research:

- The extent to which measurements remains the same regardless of how many times its repeated.
- Stability of measurement.
- The consistency of measurements within a certain time period.

A simple random sample of 24 respondents who have accessed and not used e-commerce platforms for the past 12 months was used for the 24 random respondents for the pilot study test and then rerun again on 228 different respondents for the larger study to ensure consistency and accuracy among respondents and be able to compare. The results from the pilot study test was used to re-design and format the online structured questionnaire and ensure that the online structured questionnaire is aligned to the proposed objectives of the larger study of the 228 respondents.

Wamuyu and Maharaj (2011, p. 57) defines validity as “the assessment of whether the study instrument will give similar results in different situations implying that the instrument is actually measuring the concept it purports to measure”. To ensure validity, the researcher developed their own questionnaire, which was based on established findings of previous study of the adopted model from (Mohd-Ramly et al., 2017). The questions were carefully and precisely worded.

In quantitative research, cogency is described as “the degree to which an idea is correctly measured” (Heale & Twycross, 2015, pp. 66-67). There are four main types of validating research covering quantifiable research—that is, “measurement validity, internal validity, external validity, and ecological validity”.

Heale and Twycross (2015) suggests three forms of validity exist, “content validity, criterion related validity, and construct validity” (pp. 66-67). These terms are explained in the paragraphs that follow:

- **Content validity:** The correctness measure of the exploration instrument on all features of the construct.
- **Construct validity:** The degree to which the intended hypothesis is measured by the research instrument of the study.
- **Criterion validity:** The scope of the relativeness between the investigation tools and other instruments that calculate the similar variables. The researcher will apply the ordinal measurement validity

to the study. Measurement validity is an organised, replicable process by which the measured objects in the study are quantified and this is generally attained by the assignment of numerical values (Weiner, 2007).

3.5 Research weaknesses—technical and administrative limitations

Limitations affecting this study are:

- The research was limited to consumers who have either used or not used e-commerce platforms for the past 12 months.
- The area where the research was conducted is a limitation as it is considered a developing country.
- Delays in response time for the online questionnaires from the randomly selected participants.
- The randomly selected participants may pose a constraint to the research and not consent to taking part in the online survey.
- Distribution of the online questionnaire (E.g. email, WhatsApp), survey could end up in junk mail or ignored.
- The study focused on certain aspects that lead to the effect of online customer experience not the adoption.
- A model from the adopted research has been revised and the original model is not being used.

3.6 Conclusion

The applied study methodology including the types of techniques were covered in this chapter. In the next chapter, the statistical breakdown techniques and the results alongside the deliberation of the findings are discussed. Results from this paper show the results of the significant and non-significant relationships that influence e-commerce customer experience in South Africa.

4 PRESENTATION OF RESEARCH RESULTS

4.1 Introduction

In the previous chapter, the study methodology was discussed, and this method provided a technique of scientifically solving the explored hypothesis by reviewing the several steps carried out by the researcher. The quantitative method was the applied technique and according to Sukamolson (2007) “quantitative data analysis is the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect” (pp. 7-21).

Chapter 4 presents a summary of the collected statistics, the gathering of and analysis of the survey results. This research explores the following problem: An adopted model of online store factors that impact e-commerce customer experience in South Africa.

4.2 Operational measures

In this paper, a quantitative framework was applied to the factors that influence e-commerce customer experience. The data used was gathered from a simple random sample through an online consumer survey using Qualtrics to measure the proposed constructs.

The questionnaire compromised of section A, B and C with a total of 48 questions. Section A focused on the descriptive statistics with 18 questions, section B had 26 questions relating to each construct within the revised adopted study model and section C had 4 questions measuring e-commerce customer experience. The items of hypothesis were measured on a “5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree” (Chatzopoulou & Tsimonis, 2010).

The hypotheses were revised from the previous study by (Mohd-Ramly et al., 2017). Store attributes measurement were adopted from C.-H. Wang et al.

(2011) and compromised of “merchandise (four items), post-transactional services (five items), communication (four items), interpersonal communication (five items), store atmosphere (four items)” and “loyalty programs with four items” assumed from Bridson, Evans, Hickman, and Services (2008). Shopper experience was calculated from four items revised from Brakus, Schmitt, and Zarantonello (2009).

4.3 Pilot study

A pilot study was conducted prior to the larger study. Conferring to Hassan, Schattner, and Mazza (2006), a trial study is defined as a “small study to test research protocols, data collection instruments, and other research techniques in preparation for a larger study”.

Thabane et al. (2010) suggests the basis for a trial study can be gathered under several broad groupings such as process, resources, management and science. For the objective of this research, the motive for conducting a pilot test study was for management purposes.

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Due to the nature of the survey, the Windows-based quantitative data analysis software package called MATLAB was used. This software package allowed the researcher to elicit data from simple descriptive statistics to multivariate conditions (Arkkelin, 2014). The researcher used MATLAB to analyse, graphically display and report information.

4.3.1 Statistical data analysis of responses from pilot study

In total, 27 respondents to the survey were received for the pilot study however, the researcher analysed only 24 responses after the removal of missing values. The data was analysed in MATLAB with 24 valid responses obtained.

As illustrated in table 2 to 7, for the pilot study one item from merchandise (ME1), communication (COM3), store atmosphere (SA1) and loyalty program

(LP2) attributes were removed for the larger study due to low loadings and factor analysis was repeated in the larger study.

In addition, three item loadings for post-transactional services were replaced with new questions for the larger study. The items with loading above 0.6 were retained for their convergent validity and constructs were questioned sufficiently (Del Greco, Walop, & McCarthy, 1987). The retained item loadings were used for the larger study.

The Average variance extraction (AVE) was below the acceptable value of 0.5 for all six constructs, whereas the composite reliability had an average of 0.8 which confirms that the 6 constructs are reliable to test the hypothesis.

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Merchandise	ME1	0,33221673	0,889632044	0,834573226	0,464160669	0,809980877
	ME2	0,7070845	0,500031511			
	ME3	0,778456389	0,39400565			
	ME4	0,99042582	0,019056696			
	ME5	0,694206422	0,518077444			

Table 2: Merchandise constructs, items, indicators of reliability and AVE (Pilot Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Post-transaction service	PT1	0,514933035	0,73484396	0,816213739	0,463010966	0,780579173
	PT2	0,496886166	0,75310412			
	PT3	0,49883877	0,751159882			
	PT4	0,997501341	0,005			
	PT5	0,963874023	0,070946868			

Table 3: Post-transactional service constructs, items, indicators of reliability and AVE (Pilot Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Communication	COM1	0,674132271	0,545545681	0,837495948	0,472916374	0,822814039
	COM2	0,681694285	0,535292902			
	COM3	0,464498892	0,78424078			
	COM4	0,740011153	0,452383494			

	COM5	0,97615623	0,047119014

Table 4: Communication constructs, items, indicators of reliability and AVE (Pilot Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Interpersonal communication	IC1	0,660249856	0,564070128	0,905120231	0,31109701	0,900972338
	IC2	0,987611911	0,024622712			
	IC3	0,635307835	0,596383955			
	IC4	0,979703639	0,040180779			
	IC5	0,818396312	0,330227476			

Table 5: Interpersonal communication constructs, items, indicators of reliability and AVE (Pilot Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Store atmosphere	SA1	0,476496049	0,772951515	0,880532725	0,372140713	0,868505948
	SA2	0,958292953	0,081674616			
	SA3	0,916728656	0,159608572			
	SA4	0,697341216	0,513715228			
	SA5	0,816851496	0,332753634			

Table 6: Store atmosphere constructs, items, indicators of reliability and AVE (Pilot Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Loyalty program	LP1	0,647643183	0,580558308	0,851594521	0,434238278	0,839061804
	LP2	0,542654308	0,705526295			
	LP3	0,752436467	0,433839362			
	LP4	0,997503128	0,005			
	LP5	0,744132093	0,446267427			

Table 7: Loyalty programme constructs, items, indicators of reliability and AVE (Pilot Study)

As revealed in table 8, the outcomes of six constructs of the adopted model do satisfy the Claes Fornell and David F Larcker (1981) criterion, in which the square roots of AVE of all the constructs are higher than the correlation with

the other constructs. This proves that the six constructs are not related to each other.

Construct	MER	PT	COMM	INT	ST	LP
Merchandise	0,68129338					
Post-transaction service	0,500675072	0,680449091				
Communication	0,443843422	0,489229444	0,687689155			
Interpersonal communication	0,37473209	0,377700256	0,46412758	0,55776071		
Store atmosphere	0,448645123	0,437943871	0,469324913	0,461639312	0,61003337	
Loyalty program	0,443358084	0,489975233	0,404965023	0,503868264	0,555690176	0,658967585

Table 8: Discriminant validity- Fornell-Larcker criterion (Pilot Study)

The significance of the relationship between the 6 constructs and customer experience was not measured in the pilot study. This was due to the customer experience construct not being added as the 7th construct making it the dependent variable in the pilot study.

4.3.2 Descriptive data interpretation of responses from pilot study

The responses were derived solely from a simple random sample of users and non-users of online platforms who participated in the pilot study.
Below is a detailed interpretation of the 24 responses received on each demographic question of the online survey.

- Respondents gender

Variable	Level	Frequency	Percentage
Gender	Male	7	29,2%
	Female	17	70,8%

Table 9: Respondents gender (Pilot Study)

Out of the 24 respondents, 29.2% were males and 70.8% were females.

- Respondents age

Variable	Level	Frequency	Percentage
Age	18 - 24	0	0,0%
	25 - 34	19	79,2%
	35 - 44	5	20,8%
	45 - 54	0	0,0%
	55 - 64	0	0,0%

Table 10: Respondents age (Pilot Study)

The two major age groups included mostly 25- to 34-year-olds which was 79.2%, followed by 20.8% for those in the age group of 35- to 44-year-olds.

- Employment status

Variable	Level	Frequency	Percentage
Employment Status	Employed Private Sector	21	87,5%
	Employed Public Sector	1	4,2%
	Business owner/Entrepreneur	2	8,3%
	Student	0	0,0%
	Unemployed	0	0,0%

Table 11: Respondents employment status (Pilot Study)

A significant 87.5% of the respondents work in the private sector.

- Respondents with a smart phone

Variable	Level	Frequency	Percentage
Do you own a smart phone	Yes	24	100%
	No	0	0%

Table 12: Respondents with a smart phone (Pilot Study)

From the sampled respondent's 89.5% own a smart phone and 79.8% own a computer which they use to access e-commerce platforms, but 61.4% of these respondents do not own a tablet.

- Respondents with a computer

Variable	Level	Frequency	Percentage
Do you own a computer	Yes	22	91,7%
	No	2	8,3%

Table 13: Respondents with a computer (Pilot Study)

- Respondents with a tablet

Variable	Level	Frequency	Percentage
Do you own a tablet	Yes	7	29,2%
	No	17	70,8%

Table 14: Respondents with a tablet (Pilot Study)

- Computer literacy level

Variable	Level	Frequency	Percentage
Computer literacy rating	Expert	16	66,7%
	Moderate	8	33,3%
	Slight Knowledge	0	0,0%
	Extreme beginner	0	0,0%

Table 15: Respondents computer literacy level (Pilot Study)

The computer literacy of 66.7% respondents are experts which suggests that they can navigate e-commerce platforms. As shown in, Table 16 and table 17 that 100% of the respondents have heard of e-commerce platforms and have used e-commerce platforms which supports the 66.7% computer literacy expert level.

- Respondents who are aware of e-commerce platforms

Variable	Level	Frequency	Percentage
Have you heard about e-commerce	Yes	24	100%
	No	0	0%

Table 16: Respondents who are aware of e-commerce platforms (Pilot Study)

- Respondents who have used e-commerce platforms

Variable	Level	Frequency	Percentage
Have you used e-commerce platforms	Yes	24	100%
	No	0	0%

Table 17: Respondents who have used e-commerce platforms in the past 12 months (Pilot Study)

- Preferred e-commerce platform

Variable	Level	Frequency	Percentage
Preferred e-commerce platform	Clothing & Apparel	15	62,5%
	Groceries	2	8,3%
	Gadgets	2	8,3%
	Professional services	1	4,2%
	Entertainment	4	16,7%

Table 18: Preferred e-commerce platform (Pilot Study)

The most preferred e-commerce platform is clothing & apparel with 62.5% followed by entertainment at 16.7%.

- Frequency use of e-commerce platforms

Variable	Level	Frequency	Percentage
Frequency use of e-commerce platforms	Daily	2	8,3%
	Weekly	5	20,8%
	Monthly	9	37,5%
	Semi-annually	8	33,3%
	Annually	0	0,0%
	Never	0	0,0%

Table 19: Frequency use of e-commerce platform (Pilot Study)

The frequency use of the use of e-commerce platforms for most of the respondents is on a monthly basis 37.5% and semi-annually 33.3%.

- Average online basket size

Variable	Level	Frequency	Percentage
Average typical online basket size	R0 - R99	1	4,2%
	R100 - R499	5	20,8%
	R500 - R999	10	41,7%
	R1000 - R1499	4	16,7%
	R1500 and above	4	16,7%

Table 20: Average online basket size (Pilot Study)

The typical basket size of R500 – R999 for respondents when actually using e-commerce platforms is aligned to the frequency use of e-commerce platforms monthly by the respondents.

- Respondents that belong to a loyalty programme

Variable	Level	Frequency	Percentage
Belong to a loyalty programme	Yes	22	91,7%
	No	2	8,3%

Table 21: Respondents who belong to a loyalty programme (Pilot Study)

91.7% of the respondents belong to a loyalty programme. Their most preferred loyalty programme incentive being cash back incentives 58.2% as shown in Table 23 and they expect to earn these incentives on a monthly basis and semi-annually as also shown in Table 24.

- Preferred loyalty programme incentive

Variable	Level	Frequency	Percentage
Preferred loyalty programme incentive	Cash back	14	58,2%
	Discount	5	20,8%
	Points	5	20,8%

Table 22: Preferred loyalty programme incentive (Pilot Study)

- Time expectation to earn loyalty rewards

Variable	Level	Frequency	Percentage
Time expectation to earn loyalty rewards	Monthly	23	95,8%
	Quarterly	0	0,0%
	Semi-annually	1	4,2%
	Annually	0	0,0%

Table 23: Time expectation to ear loyalty reward (Pilot Study)

4.4 Larger study

4.4.1 Data analysis of responses from larger study

The data was analysed in MATLAB and exposed various calculation measurements such as investigative for absent values, outliers, and data distribution. Sivanandam, Sumathi, and Deepa (2007) commented that MATLAB assimilates graphic diagrams with detailed mathematical controls by performing all kinds of computations and scientific data visualization and is a powerful and all-inclusive tool.

In Total, 24 valid responses were obtained for the pilot study. Changes were made to the questionnaire taking into consideration the impact and results from the pilot study and in total, 228 valid responses were obtained for the larger study excluding the 24 respondents from the pilot study.

4.4.2 Descriptive data interpretation of responses

The use of descriptive statistics and measurement scales to categorise and sort data is an approach which provides a descriptive summary of the participant's opinions and points of view; however, it signifies some degree of interpretation.

Descriptive data summarises the demographic statistics of the respondents (Greasley, 2007). According to Thompson (2009) descriptive information are figures that summarize the information with the aim of evaluating what occurred in the sample and also aids researchers to spot sample characteristics that may impact their decisions. The responses were derived solely from a simple random sample of users and non-users of online platforms in the past 12 months.

Respondents were requested to evaluate the most ideal online store factors that could possibly influence their e-commerce customer experience.

Below is a detailed interpretation of the 228 respondents' profile and responses on each demographic question of the online survey.

- Respondents gender

Variable	Level	Frequency	Percentage
Gender	Male	87	38,2%
	Female	141	61,8%

Table 24: Respondents gender (Larger Study)

Out of the 228 respondents, 38.2% were males and 61.8% were females. According to Kaplan and Haenlein (2011) more women are engaged in e-commerce platforms due to the development of social networks presenting the opportunity of chatting, liking and giving feedback about products and services more easily and successfully. The high numbers both the pilot study and the larger study, of female respondents was fitting.

- Respondents age

Variable	Level	Frequency	Percentage
Age	18 - 24	26	11,4%
	25 - 34	154	67,5%
	35 - 44	36	15,8%
	45 - 54	8	3,5%
	55 - 64	4	1,8%

Table 25: Respondents age (Larger Study)

The major age group was comprised of mostly 25- to 34-year-olds which was 67.5%, followed by 15.8% for those in the age group of 35- to 44-year-olds, and 11.4% for the age group of 18-24 years which this age group was not dominate in the pilot study.

- Employment status

Variable	Level	Frequency	Percentage
Employment status	Employed Private Sector	148	64,9%
	Employed Public Sector	46	20,2%
	Business owner/Entrepreneur	13	5,7%
	Student	17	7,5%
	Unemployed	4	1,8%

Table 26: Respondents employment status (Larger Study)

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A significant 64.9% of the respondents work in the private sector, 20.2% work in the public sector and 7.5% are students. These employment statuses are aligned to the major three age groups in Table 25.

- Respondents with a smart phone

Variable	Level	Frequency	Percentage
Do you own a smart phone	Yes	204	89,5%
	No	24	10,5%

Table 27: Respondents with a smart phone (Larger Study)

From the sampled respondents 89.5% own a smart phone which supports the literature in chapter two suggesting, the rise in South Africans having access to a mobile phone which they use to access e-commerce platforms (Hutton, 2011).

- Respondents with a computer

Variable	Level	Frequency	Percentage
Do you own a computer	Yes	182	79,8%
	No	46	20,2%

Table 28: Respondents with a computer (Larger Study)

- Respondents with a tablet

Variable	Level	Frequency	Percentage
Do you own a tablet	Yes	88	38,6%
	No	140	61,4%

Table 29: Respondents with a tablet (Larger Study)

Table 28 illustrates that 79.8% own a computer and in Table 29 similar to the pilot study 61.4% of these respondents do not own a tablet.

- Computer literacy level

Variable	Level	Frequency	Percentage
Computer literacy rating	Expert	118	51,8%
	Moderate	104	45,6%
	Slight Knowledge	6	2,6%

	Extreme beginner	0	0,0%

Table 30: Respondents computer literacy level (Larger Study)

The computer literacy of 51.8% respondents are experts but also in the larger study there is a 2.6% of respondents who have slight knowledge of computer literacy which is inconsistent to Ziphorah (2011), suggesting computer is a technology that has emerged, and globally been adopted quickly.

- Respondents who are aware of e-commerce platforms

Variable	Level	Frequency	Percentage
Have you heard about e-commerce	Yes	203	89,0%
	No	25	11,0%

Table 31: Respondents who are aware of e-commerce platforms (Larger Study)

Table 31 shows that 89.0% of the respondents are aware about online platforms. Unfortunately, there is the 11.0% who are not aware of online platforms. According to Njeje (2008), e-commerce is gaining immediate attention in South Africa, as an accepted commercial model and more industries are employing websites for consumers that provide functionality for carrying out commercial transactions online.

In Table 32, 89.5% have used e-commerce platforms. In the larger study, there is a consistency and similarity between respondents who know of online platforms and have used them in the past 12 months.

- Respondents who have used e-commerce platforms

Variable	Level	Frequency	Percentage
Have you used e-commerce platforms	Yes	204	89,5%
	No	24	10,5%

Table 32: Respondents who have used e-commerce platforms in the past 12 months (Larger Study)

- Preferred e-commerce platform

Variable	Level	Frequency	Percentage
Preferred e-commerce platform	Clothing & Apparel	99	43,4%
	Groceries	42	18,4%
	Gadgets	34	14,9%
	Professional services	24	10,5%
	Entertainment	29	12,7%

Table 33: Preferred e-commerce platform (Larger Study)

In the larger study, the most preferred e-commerce platform is clothing & apparel with 43.4% followed by groceries at 18.4%. It is also evident that all other types of e-commerce platforms are just as preferred and accessed for different purposes and consumer needs.

- Frequency use of e-commerce platforms

Variable	Level	Frequency	Percentage
Frequency use of e-commerce platforms	Daily	20	8,8%
	Weekly	76	33,3%
	Monthly	85	37,3%
	Semi-annually	41	18,0%
	Annually	4	1,8%
	Never	2	0,9%

Table 34: Frequency use of e-commerce platform (Larger Study)

Similar to the pilot study, the frequency of using online platforms monthly by the respondents is 37.3% and according to a study conducted by Szymkowiak and Garczarek-Bąk (2018) more women shopped online within 30 days, as compared to men. It is reasonable to say that the process of shopping online is becoming a commonplace (Njeje, 2008).

- Average online basket size

Variable	Level	Frequency	Percentage
Average typical online basket size	R0 - R99	6	2,6%
	R100 - R499	91	39,9%
	R500 - R999	87	38,2%

	R1000 - R1499	21	9,2%
	R1500 and above	23	10,1%

Table 35: Average online basket size (Larger Study)

The typical basket size of R100 – R499 for respondents when using e-commerce platforms is aligned to the preferred e-commerce platforms clothing & apparel and groceries.

- Respondents that belong to a loyalty programme

Variable	Level	Frequency	Percentage
Belong to a loyalty programme	Yes	193	84,6%
	No	35	15,4%

Table 36: Respondents who belong to a loyalty programme (Larger Study)

84.6% of the respondents belong to a loyalty programme. Their most preferred loyalty programme incentive being cash back incentives 31.1% as shown in Table 37 and they expect to earn these incentives on a monthly basis and quarterly as also shown in Table 38.

- Preferred loyalty programme incentive

Variable	Level	Frequency	Percentage
Preferred loyalty programme incentive	Cash back	71	31,1%
	Discount	51	22,4%
	Points	14	6,1%
	All of the above	92	40,4%

Table 37: Preferred loyalty programme incentive (Larger Study)

- Time expectation to earn loyalty rewards

Variable	Level	Frequency	Percentage
Time expectation to earn loyalty rewards	Monthly	166	72,8%
	Quarterly	51	22,4%
	Semi-annually	7	3,1%
	Annually	4	1,8%

Table 38: Time expectation to ear loyalty rewards (Larger Study)

4.5 Measurement model: Larger Study

The measurement model, for the current study of constructs was grounded by the evaluation of a simple random sample of males and females who are users and non-users of online platforms. The data was collected from the same questionnaire instrument for both pilot study and larger study but not from the same respondents, hence the probability of common method bias could not exist in the data.

The evaluation measurement model encompasses investigating the relationship between the construct and items. The principle of Claes Fornell and David F Larcker (1981) “has been commonly used to measure the degree of shared variance between the latent variables of the model.”

Conferring to Yong and Pearce (2013), factor analysis works on the concept that quantifiable and evident variables can be condensed to less hidden variables that have a shared variance and are unobservable.
Factor loading is used to discover and understand various factors manipulating variables and to investigate which variables fit together (Yong & Pearce, 2013).

The factor loading for Table 39 to 45, and related factors were derived from factoran algorithm of (MATLAB, 2016) and the item loading is 0.7 or higher (Claes Fornell & David F Larcker, 1981). However, rendering to Hair, Ringle, and Sarstedt (2013), “it is appropriate to remove items with low loadings of less than 0.7 and this has to be done with care because it may have an impact on the convergent validity of the constructs” (pp. 1-12). Alarcón et al. (2015) defined convergent validity as, “the level of confidence in the study that a construct is well measured by its indicators”.

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Merchandise	ME1	0,83866913	0,29663409	0,906997738	0,274916634	0,898556457
	ME2	0,88682522	0,213541029			
	ME3	0,706624071	0,500682422			
	ME4	0,954563253	0,088808997			

Table 39: Merchandise constructs, items, indicators of reliability and AVE (Larger Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Post-transaction service	PT1	0,412713717	0,829667384	0,889996426	0,35527241	0,890988494
	PT2	0,650171149	0,577277477			
	PT3	0,882259977	0,221617333			
	PT4	0,958180984	0,081889202			
	PT5	0,966482977	0,065910655			

Table 40: Post-transactional services constructs, items, indicators of reliability and AVE (Larger Study)

In the larger study as shown on Table 40, Post-transaction service has one item (PT1) with a low loading of 0.4 which is below the acceptable value of 0.5 and the condition of the cut-off value of 0.7.

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Communication	COM1	0,823344774	0,322103384	0,920419681	0,249095405	0,92050414
	COM2	0,780742269	0,39044151			
	COM3	0,962883591	0,072855191			
	COM4	0,888267114	0,210981535			

Table 41: Communication constructs, items, indicators of reliability and AVE (Larger Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Interpersonal communication	IC1	0,859006085	0,262108546	0,930590421	0,265794142	0,931295526
	IC2	0,933212547	0,129114342			
	IC3	0,711874668	0,493234457			
	IC4	0,938735552	0,118775563			
	IC5	0,821134701	0,325737804			

Table 42: Interpersonal communication constructs, items, indicators of reliability and AVE (Larger Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Store atmosphere	SA1	0,932462787	0,13051315	0,946495555	0,182471451	0,946600498
	SA2	0,843589787	0,288356271			
	SA3	0,903372548	0,183918039			
	SA4	0,93429206	0,127098346			

Table 43: Store atmosphere constructs, items, indicators of reliability and AVE (Larger Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Loyalty program	LP1	0,875274314	0,233894876	0,883355427	0,341742088	0,882815525
	LP2	0,751225611	0,435660082			
	LP3	0,82998548	0,311124103			
	LP4	0,783396904	0,38628929			

Table 44: Loyalty programme constructs, items, indicators of reliability and AVE (Larger Study)

Construct	Item	Factor Loading	Indicator	Cronbachs_alpha	AVE	CR
Customer experience	CE1	0,780483906	0,390844872	0,902920886	0,299188187	0,902279467
	CE2	0,867402326	0,247613205			
	CE3	0,885702375	0,215531303			
	CE4	0,81070132	0,342763369			

Table 45: Customer experience constructs, items, indicators of reliability and AVE (Larger Study)

In addition, on Table 45, customer experience as the dependent variable was included with four item loadings.

With regard to reliability, Cronbach's coefficient alpha is a commonly used measure of the reliability of assessments and weighing, but it has been disapproved to miscalculating true reliability and hence, an alternate to coefficient alpha is composite reliability (Peterson & Kim, 2013).

According to Alarcón et al. (2015), composite reliability is a less prejudiced indicator of reliability than Cronbach's alpha and the satisfactory value of composite reliability is 0.7 and above. The investigation of the composite reliability revealed the acceptable cut-off value of 0.7,, however the average variance extracted (AVE) calculates the level of variance taken by a construct versus the level due to calculation error (Alarcón et al., 2015).

Table 39 to 45, shows all Average variance extracted (AVE) values are within 0.182 and 0.355 which is below the acceptable value of 0.5, whereas, values above 0.7 are considered very good (Alarcón et al., 2015).
But as suggested by Claes Fornell and David F Larcker (1981), "if AVE is less than 0.5, but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate."
Table 39 to 45 confirm a composite reliability of the seven hypotheses in this study have a high level of internal consistent reliability.

Table 46, the correlation matrix was calculated using the Pearson CorrCoef algorithm to measure the relevance between two variables
(Kijsipongse, Suriya, Ngamphiw, & Tongsima, 2011).
The diagonals were adjusted in line with the recommendations in the adopted study and the discriminant validity was evaluated by using cross-loading of indicator applying the Claes Fornell and David F Larcker (1981) criterion.

Construct	MERC	SERV	COMM	IN_COMM	ATM	LP	CE
Merchandise	0,524324932						
Post-transaction service	0,260124961	0,596047322					
Communication	0,349633744	0,216965692	0,499094585				
Interpersonal communication	0,338693444	0,424422927	0,458768092	0,515552269			
Store atmosphere	0,338187394	0,194685083	0,531532898	0,593117399	0,427166772		
Loyalty programmes	0,325366847	0,232217541	0,367941363	0,454515801	0,441580158	0,584587109	
Customer experience	0,228991448	0,193035546	0,221398787	0,353765322	0,384768331	0,3647823	0,546980975

Table 46: Discriminant validity- Fornell-Larcker criterion (Larger Study)

Discriminant validity refers to the extent in which the constructs differ from one another empirically and it calculates the variances between the overlapping constructs (Ab Hamid, Sami, & Sidek, 2017). The reliability of individual items was further observed for its cross-loading. Ab Hamid et al. (2017) suggest examining all item loadings to be checked to confirm that the factor loading indicators on the assigned construct are higher than all loading of other constructs.

The discriminant validity was assessed using (Fornell & Cha, 1994) principles. “The comparison of the square root of the AVE for each construct in the diagonal was compared with the correlation coefficients for each construct in the related rows and columns” (Ab Hamid et al., 2017, pp. 22-34). As recommended, the results of seven constructs of the adopted model do not satisfy the rule of Claes Fornell and David F Larcker (1981) .Where each of the “square roots of AVE for all constructs are higher than the correlation with the other constructs” (Ab Hamid et al., 2017, pp. 22-34).

The results suggest rejection of discriminant validity of the hypotheses and items examined in this paper (Mohd-Ramly et al., 2017). This is due to store atmosphere does not satisfy the Fornell’s rule (see table 46). According to Chin (2010) the construct in query is not able to distinguish if it fits into the hypothesis it was proposed to test or not (E.g. there may be a discriminant validity problem). Hence, the findings on the construct suggest cross-loadings criteria is not met.

Another suggested measure for discriminant validity is Heterotrait-monotrait (HTMT) ratio of correlation (Ab Hamid et al., 2017). This measure was not used and analysed in this study. However, the HTMT measure is proposed due to low-sensitivity issue of cross-loading and Claes Fornell and David F Larcker (1981) principle, that works well in situations with mixed loading forms and large sample sizes (Henseler, Ringle, & Sarstedt, 2015).

4.6 Structural model: Larger Study

The assessment of structural model involves testing the relationship among latent variables and determines how well the data supports the theory by deciding if the theory is empirically verified for the predicted hypothesis.
Collinearity is a linear association between two predictor variables (Akinwande, Dikko, & Samson, 2015).

The collinearity among predicator constructs in this study is acceptable, as the Variance Inflation Factor (VIF) output for each construct was less than the rules of thumb and threshold value of 5 as shown in Table 47.

Predictor	Dependent variable E-commerce Customer Experience
Merchandise	2,259789029
Post-transaction service	2,303945542
Communication	1,790554958
Interpersonal communication	1,637702506
Store atmosphere	1,751761795
Loyalty programme	2,026867777

Table 47: VIF values among model predictors (Larger Study)

For the general linear regression model the coefficient of determination, R-squared is a widely used goodness-of-fit measure (Cameron & Windmeijer, 1997). According to Miles (2014), *R*-squared represents the proportion of variance in the outcome variable which is explained by the predictor variables.

Endogenous latent variable	R-Squared	Q-Squared
customer experience	0,222230805	0,217051432

Table 48: Results of R-squared and Q-squared measures (Larger Study)

The R-squared value for e-commerce customer experience is 0.222, as shown on Table 48, which displays a small to moderate portion of the variance in the endogenous

construct. While R-squared provides an assessment of the strength of the relationship between the conceptual model and the response variable, it does not provide a formal hypothesis test for this relationship (Frost, 2013b). Q-squared indicates how well a regression model predicts relevance of the model (Frost, 2013a). A positive Q-squared value of 0.217 is yielded for the dependent construct as illustrated in Table 48.

Next, Table 49, three out of six hypotheses were statistically significant at 0.05 levels. Online Communication indicates a small *p*-value of (0.03 < 0.05), Online Interpersonal communication indicates a p-value of (0,00<0.05) and Loyalty programmes has a p-value of (0.006<0.05) which suggests strong evidence against the null hypothesis (H0), so the researcher rejects the null hypothesis (H0).

Hypo	Hypothesized path		Path Coefficient	SE	t-Stat	p-Value	Significance	Decision
H1a	Merchandise	Customer experience	0,027043093	0,017437355	1,550871303	0,121283692	Not significant	Not Supported
H1b	Post-transaction service	Customer experience	-0,073861145	0,029724825	-2,484830315	0,013141878	Not significant	Not Supported
H1c	Communication	Customer experience	0,076385151	0,036748754	2,078578011	0,037938653	*Significant	Supported
H1d	Interpersonal communication	Customer experience	0,218651702	0,034612498	6,31713144	4,18181E-10	*Significant	Supported
H1e	Store atmosphere	Customer experience	0,053262779	0,038436367	1,385739154	0,166169462	Not significant	Not Supported
H1f	Loyalty program	Customer experience	0,081144268	0,029561366	2,74494314	0,006172563	*Significant	Supported

Table 49: Significance testing results of the structural model path coefficients (Larger Study)

Notes: * p < .05

The path coefficient was statistically significant for the effect of Online communication (β = 0.076), Online Interpersonal communication (β = 0.281)

and Loyalty programmes (β = 0.081) on customer experience respectively. Thus, H1c, H1d and H1f were supported.

However, the effects of Online merchandise (β = 0.027, not supported), Online Post-transaction service (β = 0.073, not supported) and Online Store atmosphere (β = 0.053, not supported) on e-commerce customer experience were not significant. Thus H1a, H1b and H1e were not supported. Online Interpersonal communication indicates the largest path coefficient on e-commerce customer experience compared to the other factors of online store factors.

4.7 Conclusion

In this chapter, the data analysis and the study results alongside the discussion of the pilot and larger study results were presented. Verdicts from this paper show opposite the larger study results from the adopted study and the reason for this could be that the adopted study focused on “instore factors that influence customer experience and engagement” and this study focused on “online store factors that influence e-commerce customer experience.” In addition, the influence of socio-demographic data aspects that influence e-commerce customer experience, have been examined. The data results were discussed and correlations to the variables were presented as tabulations. In the next chapter 5, the discussion of the research findings will be explored.

5 DISCUSSION OF RESEARCH FINDINGS

5.1 Introduction

In the preceding chapter, the data analysis and results were presented taking into consideration socio-demographic impact. The purpose of the study was to explore and encourage South African online vendors to employ an adopted model on the elements that may encourage forming solid e-commerce customer experience for their consumers. These results are also deliberated in the light of adopted study results and existing literature, where relevant, for the researcher to categorise resemblances and changes between this paper and adopted study.

5.2 Research objective

The main objective of the study, as stated in Chapter 1, was to reveal that online store factors have a significant relationship to influence e-commerce customer experience. Subsequent, to the literature review in chapter 2 and the findings from chapter 4, recommendations and implications based on the above can be drawn. In this section, the main findings from the study will be discussed, a conclusion from each finding will be drawn and the implication of the finding will be provided.

5.3 Main findings

The findings from the research results show that 11.0% of the sampled respondents have not heard of “e-commerce” and due to this, they have not used any e-commerce platforms. An average of 0.9 for Cronbach alpha across all constructs implies the questionnaire of the study was reliable.

The Average Variance Extracted (AVE) for all six constructs is below 0.5 which is the acceptable minimum value although an AVE value on the lower end may be accepted however it is a limitation and may have an influence on the variable under question in more analytical techniques.

The construct results for online store atmosphere “do not satisfy the Fornell-Larcker criterion, in which the square roots of AVE of the construct is lower than the correlation with the other constructs” (Claes Fornell & David F Larcker, 1981). Therefore, discriminant validity is not met due to the online store atmosphere construct.

According to Cohen (1992) r-square value between 0.13 to 0.25 indicate medium effect size. The r-square value for this study indicates a value of 0.22 which implies the adopted model is a medium effect size. This could be a result that the study was conducted under the cross-sectional design, which the common r-square values are around 0.30.

There were six hypothesis which were statistically tested, and three of the six online store factors have a significant relationship to influence e-commerce customer experience with a (p-value<0.05) which means that there is strong evidence in favour of the alternative hypothesis (H1) and reject the null hypothesis (Ho). Online merchandise, online post transactional services and online store atmosphere “do not have a significant relationship with e-commerce customer experience” and the alternative hypothesis (H1) was rejected.

Thus, consideration of the influences on online customer experience is key.
“H1: The following online store factors have a significant relationship and influence on e-commerce customer experience”:

- “H1a. Online Merchandise does not have a significant relationship to influence e-commerce customer experience.”

Assessing aspects associated to stock, such as variety and mixture of products, styling and fashion, product quality and the pricing that appears to be noticeable to customers (Yun & Good, 2007). Mishra and Das (2019) revealed that e-merchandise elements were negatively associated with e-purchasing intentions. In support of the insignificant relationship between online merchandise and e-commerce customer experience, Yun

and Good (2007) study states that the belief of e-commerce platforms being simple to use and simplifies the finding of online stock being a measurement that is different and measured differently to instore-merchandise. In the adopted study Mohd-Ramly et al. (2017), merchandise and customer experience were significant and this study contradicts with the adopted study results, due to the differences of the environments the two studies were conducted. According to Jin and Park (2006), despite the importance of merchandising, this factor has not received attention in previous e-tailing studies.

- "H1b. Online Post-transaction service does not have a significant relationship to influence e-commerce customer experience".

The results for online post-transaction services were consistent with C.-H. Wang et al. (2011), which confirms that post-transaction services whether in a departmental store or online is not significant. Yun and Good (2007) suggests post-transaction, the customer assesses the seller and their offerings and makes their final decision continue to grow an ongoing relationship with the seller.

In view of the customer loyalty intentions to an online store, customers will choose to stay or stop the association with the online vendor after buying (Yun & Good, 2007).

- "H1c. Online Store communication has a significant relationship to influence e-commerce customer experience."

The significant relationship for online store communication and e-commerce shopper experience supports, Jain and Kumar (2017) study. In their study, Jain and Kumar (2017) suggest most e-commerce vendors encourage customers to express and communicate their opinions, attitudes and emotions using reviews. The focus of any kind of communication is to sharing information (Steffes & Burgee, 2009).

Jain and Kumar (2017), suggest that for businesses to be sustainable in the long-term they must always consider customer feedbacks. According to Berger (2013), online communication not only influences social reasoning but

opens up new ways to study interpersonal communication more generally. However, the significant relationship between online communication and e-commerce customer experience is inconsistent with Molla and Heeks (2007) who suggest, e-commerce has provided minimum communication benefits and improvements.

- "H1d. Online Interpersonal communication has a significant relationship to influence e-commerce customer experience."

The significant relationship between online interpersonal communication and e-commerce customer experience is consistent with (Godes & Mayzlin, 2004) study. Godes and Mayzlin (2004) suggests that amongst the many and mixed forms of channels through which a consumer can receive information, interpersonal communication carries credibility is of the most importance. The usage of internet interpersonal communication carries credibility is of the most importance. The usage of internet allows the seller and buyer to interact (Riegner, 2007). Hence according to Berger (2013) technology has an important impact on interpersonal communication in comparison to actually live communication, interpersonal communication online differs in ways that it can be written, it is undirected, it involves a bigger audience and there is reduced social presence.

- "H1e. Online Store atmosphere does not have a significant relationship to influence e-commerce customer experience."

As defined by Yun and Good (2007), store setting is the physical amenities, ease of buying, friendliness of workforce, and fulfilment of shopping.
Wu, Lee, Fu, and Wang (2014), suggest the most key component of online atmosphere is convenient website plan and the simplicity and use.

- "H1f. Loyalty programmes has a significant relationship to influence e-commerce customer experience."

A relationship between the seller and the buyer is enhanced by a loyalty programme and it is a strategic tools for keeping in contact with the shopper (Meyer-Waarden, 2008). This significant relationship is also in accordance with prior loyalty programme study Keh and Lee (2006), indicating the

success of compensation programmes not strong and is reliant on the interchange among the service experience received by the consumer.

Despite the role and importance of online merchandise, online post-transaction services and online store atmosphere, these hypotheses non-significantly associated to e-commerce customer experience.
This can be justifiable by the non-self-service nature of using an online platform to do business transactions (E.g. shopping online) which is the context of this study.

5.4 A reviewed theoretical model

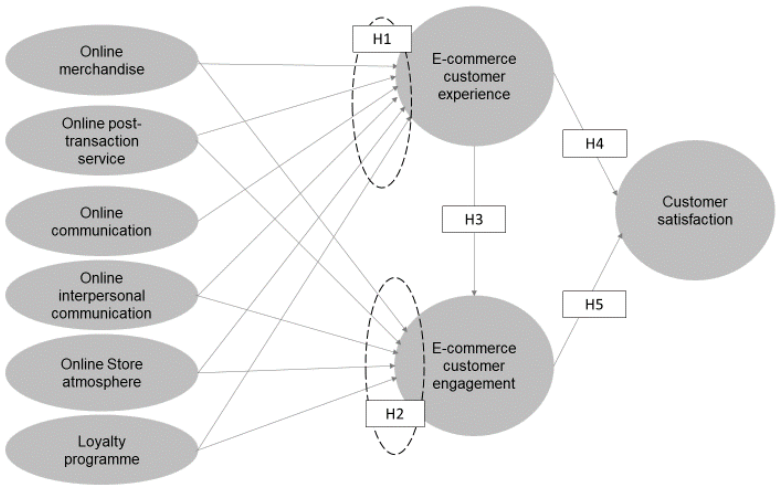


Figure 5: A reviewed theoretical model

5.4.1 Reviewed theoretical model

E-commerce is a plan for fast growth for all businesses (Grandón, Nasco, & Mykytyn Jr, 2011). The objective of the reviewed theoretical framework is to find the existing information gaps in relative to the submission of the adopted model and use those gaps to outline an approach for forthcoming research (Boateng, Molla, & Heeks, 2009).
The online store factors and customer engagement were adopted from (Mohd-Ramly et al., 2017). The element of satisfaction was adopted from (Jin & Park, 2006).

5.4.2 Theory and research hypothesis

- Online store factors and e-commerce customer experience

(Giese & Cote, 2000) defines customer experience, “as a response to an evaluation process.” It is important for online vendors to know how their shopper groups and being able to outline their satisfaction strategy to the shoppers and then meet the shopper’s satisfaction desires.
Prior studies show that satisfaction towards the online vendor is subject to the shopper’s assessment and thoughts on the online store factors.

Specifically, the relationship of online store atmosphere and satisfaction has received reasonable attention. The online platform design impact on the shoppers e-satisfaction(Szymanski & Hise, 2000).
Providing the customer with information is a central part to enhance customer satisfaction towards the online seller. Shankar, Smith, and Rangaswamy (2000) also found that the ease getting information by the consumer from the online seller, increases the general satisfaction.
The effect of online stock on customer satisfaction has remained unexplored. This reviewed theoretical model assumes that the online vendor’s successful e-merchandising has an influence on the customers e-satisfaction levels, taking into consideration that shoppers seek online stock that will meet their wants and needs.

“H1: The following online store factors have a significant relationship and influence on e-commerce customer experience:”
“H1a. Online merchandise has a significant relationship and influence on e-commerce customer experience.
H1b. Online post-transactional services have a significant relationship and influence on e-commerce customer experience.
H1c. Online communication has a significant relationship and influence on e-commerce customer experience.

H1d. Online interpersonal communication has a significant relationship and influence on e-commerce customer experience.
H1e. Online store atmosphere has a significant relationship and influence on e-commerce customer experience.
H1f. Loyalty Programme have a significant relationship and influence on e-commerce customer experience."

- Online store factors and e-commerce customer engagement

H2: The following online store factors have a significant relationship and influence on e-commerce customer engagement.
"H2a. Online merchandise has a significant relationship and influence on e-commerce customer engagement.
H2b. Online post-transactional services have a significant relationship and influence on e-commerce customer engagement.
H2c. Online communication has a significant relationship and influence on e-commerce customer engagement.
H2d. Online interpersonal communication has a significant relationship and influence on e-commerce customer engagement.
H2e. Online store atmosphere has a significant relationship and influence on e-commerce customer engagement.
H2f. Loyalty Programme have a significant relationship and influence on e-commerce customer engagement."

- Online customer experience and customer engagement

"H3. E-commerce customer experience has a significant relationship and influence on e-commerce customer engagement."
Bowden (2009) defines shopper engagement "as an emotional connection which shopper loyalty stems from, for a particular product or service."
Businesses are progressively identifying the relevance of creating a great online experience and engagement (Grewal, Roggeveen, Sisodia, & Nordfält, 2017). Bowden (2009) identified "shopper experience as a precursor to shopper involvement."

Shopper experience is a form of approach where shoppers engage with full involvement and concentration when browsing and buying goods, which triggers loyal connections between the shopper and the seller (Carù & Cova, 2003). From the adopted study, Mohd-Ramly et al. (2017) suggest that a good experience for shoppers connecting with the features of the store, is likely to inspire shoppers to engage further with the store. Some scholars argue shopper interaction is a resultant from repeated and pleasant meeting experiences flanked by shoppers and association with the product (Zhang, Hu, Guo, & Liu, 2017).

- E-commerce customer experience and customer satisfaction

"H4. E-commerce customer experience has a significant relationship and influence on customer satisfaction."

According to Iglesias, Markovic, and Rialp (2019), some papers reveal possible factors that influence satisfaction and most of these papers assume it might due to some level of customer experience. Jin, Park, and Kim (2008) propose that experience must be studied as an arbiter of the outcome on fulfilment and shopper loyalty.

Outcomes of online experience include trust, fulfilment, buying intent and eventually the intent to use or return the goods (Bilgihan, Okumus, Nusair, & Bujisic, 2014).

- E-commerce customer engagement and customer satisfaction

"H5. E-commerce customer engagement has a significant relationship and influence on customer satisfaction."

To have good customer relationship, businesses should consider satisfaction as an central element in experience (D. J. Kim, Ferrin, & Rao, 2009).

E-satisfaction as a hypothesis has increased in status specifically in marketing literature over the years (Evanschitzky, Iyer, Hesse, & Ahlert, 2004). As a customer, when you get the level of service that you desire, and

it just happens to be realized online that is an enabler of satisfaction in e-commerce settings (C. C. Lin, 2003).

Customer engagement may be enabled by satisfaction (E.g. a satisfied customer is likely to engage with a positive online review especially if his/her expectations were met) (Van Doorn et al., 2010).

5.4.3 Research objective and questions

The intention of the reviewed study is to reveal that online store factors are connected to online customer experience, online customer engagement and online customer satisfaction.

- Do online store factors directly impact online customer experience and online engagement?
- Are online store factors the primary determinants of customer satisfaction?
- Establish if online customer experience and engagement have a substantial relationship and impact on online shopper satisfaction?
- Test the proposed hypothesis.

5.4.4 Managerial implications

For future research, e-commerce management and experts should look at online payments and user experience as constructs in the reviewed theoretical model. How you pay for products and services online is important and according to Zhou (2013), shopper's expect to use safe and efficient mobile payments. However, these payments should be with a trusted party especially for big volume payments (Sharma, 2006).

5.5 Conclusion

In this chapter, the research objective, key results relative to the adopted study, executive suggestions and recommendation were discussed. The

theoretical framework was presented with e-commerce customer engagement from the adopted study included and customer satisfaction as proposed new measurement that could potentially be influenced by online store factors. Next, chapter presents the summary, conclusion, limitation and recommendations relating to this study

6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 Summary

E-commerce is a plan for fast growth for all businesses. According to (De Klerk & Kroon, 2005) the implementation of e-commerce within South African organisations can derive substantial value (E.g. trade in the global economy) if businesses understood the application of e-commerce. Unfortunately, there are still business on the African continent who point their absence of e-commerce implementation to factors such as unsafe online security, lack of information technology infrastructure, a high illiteracy rate, and non-existence of implementation outlines (Park & Kang, 2014).

The achievement of e-commerce implementation is subject to a series of execution problems such as the business plan, shopper e-readiness, and backing from e-commerce creators and public regulations (Boateng et al., 2009)

Businesses operating in South Africa need to always keep in mind that South African consumers can purchase anything that they desire on multiple devices and wherever they are, thus the e-commerce experience has radically changed. According to Srivastava and Bagale (2019) e-commerce is indicating tremendous business development in developing markets and this is backed by an increasing online user base and mobile phone penetration. It is imperative for South African organisations to recognise and take into consideration that e-commerce is no longer considered an additional feature to a lifestyle, but it is viewed as a need for growth and remaining relevant in an ever-evolving and a progressively growing mobile-driven world.

South African online businesses must dedicate themselves to providing the best ‘‘experiences’’ for shoppers to win their hearts. Management can apply effective online strategies that are focused on creating exceptional online

customer experience, which in due course can result to the overall business financial growth and fruitful outcomes.

6.2 Conclusions

The basis for this study was initially stemmed from the researcher's passion for understanding the operation of online platforms specifically for business operating in South Africa and what is important to South African consumers through their online experience. As the world continues to move further into the digital age, there will be a greater need for consumers to access online platforms as this will form part of their new lifestyle.

The research results and findings show that, there is great potential for online platforms in evolving nations has it brings about tangible rewards for South African shoppers in understanding the influence and role played by online store factors on a consumer's online experience is key to ensure the appropriate selection of e-commerce platforms and support decisions for the consumer which made this study an interesting area of research.

It is important to note that, there are other numerous key influencing factors on customer experience dimensions (Wenwei & Tongtong, 2010). South African online businesses must formulate an appealing mix of discounts, good deals and incentives for loyalty programmes that will keep consumers coming back for repeat purchases. This is very important considering that the price of consumer acquisition is higher than that of retention as a result of customer experience (Stahl, Heitmann, Lehmann, & Neslin, 2012).

With regards to e-commerce development, it has been segmented into phases: "readiness, intensity and effect" (Allman, 2001). Many developing countries like South Africa are either at the readiness phase or intensity phase of e-commerce development (Allman, 2001); And since e-commerce is available for 24 hours a day and never close even for a minute allowing consumer's the opportunity to experience and enjoy online platforms. Furthermore, e-commerce has also extended topographical range and

customers can buy various goods and services at any point in time and from across the world the world (Jusoh & Ling, 2012b).

Past studies show that in South Africa, the top ten retailers are leading the online clothing marketplace and account for roughly 80% of all online trading sales (Warden & Motjolopane, 2007). Basically, e-commerce adoption has expanded rapidly across South Africa especially with the coronavirus pandemic which is causing massive changes online in a short period. The pandemic, which has shut down brick-and-mortar retail, has pushed consumers online for all of their needs (Holman, 2020).

6.3 Limitations

The study has strengths but despite these strengths, there are certain limitations. The results of this paper are specific to South African online users and non-users. Thus, the results may yield different outcomes if tested in another country.

Next, the research is constructed from a simple random sample of 252 respondents which does not represent the overall population of South Africa and the survey was conducted through Qualtrics online questionnaire and distributed via email, WhatsApp and posted on LinkedIn.

Moreover, the researcher has only investigated six influencing factors of online customer experience in South African out of many other influencing factors. Furthermore, this research does not categorize the online platforms into types (E.g. retail, banking etc) and these online platforms may have unalike target markets and marketing plans for their products and services. Another limitation is the time it took to get the large number of respondents and for them to complete the survey within the required time.

6.4 Recommendations and management implications

Taking the results of this study into consideration and comparing them to the adopted study results, it is imperative to evaluate the implications on the

significant and non-significant constructs. Based on the findings of this research, e-commerce customer experience context relates to six factors: “online merchandise, online post-transactional services, online communication, online interpersonal communication, online store atmosphere and loyalty programme.”

The results show that three out of the six constructs were significant. The 3 significant constructs were, communication, interpersonal communication and loyalty programme and noticeable, in the adopted study these 3 constructs were non-significant. This is due to the area where the adopted study was conducted, which was at a department store in Malaysia. It is clear that online and in-store settings result in different shopping observations and experiences even when the same products and services are accessible for buying (Zaveri, 2004).

Even though, merchandise, post-transactional services and store atmosphere were non-significant, the researcher still believes that these constructs are important. The next section provides reasons why all six constructs are important focusing on the managerial implications and recommendations:

There is an increasing growth of access to e-commerce by customers due to the rising buying power and internet diffusion, specifically on mobile devices (Statista, 2020). Thus, e-commerce will become destructively competitive amongst industries in South Africa. The level of computer literacy influences the use of e-commerce platforms and whether consumers buy goods on the net. Thus, for consumers to be able to satisfy their needs, it is restricted only by their ability to use online platforms. In addition to this, respondents who have not used online shopping platforms, as a result from not knowing about e-commerce platforms.

Innovative mobility and connectivity are influencing the online scenery (Bilgihan, Kandampully, Zhang, & Sciences, 2016) . From the research results, it is believed that customers have various devices (smartphones,

computers, tablets) and assuming they always have their smartphones and tablets close by and check them regularly. As suggested in (Murtagh, 2014) study, many businesses struggle to leverage the digital landscape particularly integrating m-commerce and e-commerce and meet their customers' expectations.

E-commerce has provided many positive outcomes like, consumers buying products and services beyond geographic barriers. E-commerce has created extraordinary business growth and expansion across industries but there is still a gap with e-commerce platforms which remains to be filled in order to realize its true potential. Management of online businesses in South Africa must identify key online variables and work to improve and expand them for consumers to remain satisfied and loyal.

An improved description and integration of e-commerce customer experience research which also benefit the managerial practice. There is an increasing importance of customer experience as it encompasses diverse forms of customer feedback and reactions that can vary in nature (Becker & Jaakkola). Furthermore Badgett, Boyce, and Kleinberger (2007) recognised shopper experience as a crucial part to use in forming loyalty towards products, networks and services. Depending on the business value proposition, management can control which customer feedback and reactions they would like to trigger (Becker & Jaakkola). The improvement and envisioned strategy of online platforms is imperative and thus developing unique e-commerce customer experience measures to capture consumers.

Managers need to consider developing plans to keep online shoppers, which are not only superior online platforms with good features but include marketing aspects (E.g. quality of goods, reliability of delivery, and reasonable pricing of products and services, which can potentially influence the consumers e-commerce experience.

Managerial implications stem from past literature where there are a few studies on exploring online store factors that have been observed in

marketing, retail and distribution literature. Though previous studies have explained the impact of e-loyalty and not loyalty programmes as part of online store factors (Jin & Kim, 2010). The recommendation to take into account loyalty programmes and test the component with other online store features is suggested by retail and distribution researchers (Z. Lin & Bennett, 2014; Yun & Good, 2007).

Sarode (2015), stressed that e-commerce is absolutely an alternative for companies, that one should explore in the future because e-commerce is allegedly going to achieve change in perspective on the planet for exchanging. Most important, there is also financial aspect to this and as any investment to online store delays there is a return on investment, and it is important to always remember that bad experience and unsatisfied customers can also delay the profits. Ultimately, managers must think of the financial implication as well, regarding investing in the right go-to-market online strategies to get rewarding returns for the business.

It is recommended that future studies should determine other factors outside of online merchandise, online post-transaction services, online communication, online interpersonal communication, online store atmosphere and loyalty programmes. The study could be extended to assess the role of demographics of shoppers and can be explored as potential arbiters of online experiences for future research.

Future researchers may further adopt and replicate the study in a different geographical location. For instance, a developed country which may display different online factors and yield different results due to the diverse respondents as they could behave in a different manner compared with this sample. Therefore, this will help future researchers to understand other factors that may influence e-commerce customer experience.

Future research should also explore if, and how the impact of smartphones, tablets and other electronic devices which are used to access online

platforms influence online customer experience. This will aid online retailers to formulate an attractive and user-friendly website as it is also a vital criterion to an effective online business. Thus, the online site must be kept renewed and updated often.

Lastly, this study should be of interest to all high-level managerial e-commerce decision makers across large private and public organizations. It should also be of interest to scholars of marketing research, digital analysis research and retail and distribution research.

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APPENDICES

Appendix 1.1: Data collection instrument(s)



SURVEY QUESTIONNAIRE

Date: 20 February 2020

Please be assured that all responses will be treated with the out most confidentiality and anonymity.

DEAR PARTICIPANT

My name is Palesa Mahange and I am studying towards a Master of Business Administration at the Wits Business School. I am inviting you to participate in a study regarding the factors that influence e-commerce customer experience in South Africa. The study will highlight the role of e-commerce platforms and customer experience in the lives of South African consumers. E-commerce is a platform for buying of services and products online that offers social benefits for consumers and promotes competition between online vendors.

There are three sections in the survey that need to be completed. This questionnaire should take you approximately 8 minutes to complete. There is no correct and incorrect answer to the questionnaire. The data is expected to be destroyed within a 5-year period.

Participating in this study is voluntary and you are under no obligation to consent to participation. It is highly likely that you have family members or friends who can add value to the research and as such please feel free to share the survey details with them.

The link to the survey is below:

https://wits.eu.qualtrics.com/jfe/form/SV_79endaBfDLxs8G9

Should you have questions or queries, feel free to contact me.

Yours sincerely

Palesa Mahange

T: 072 381 0104

E: 471852@students.wits.ac.za

Study Supervisor

Garth Balabanoff

E: garthbal@LIVE.CO.ZA

Thank you for taking time to read this information sheet and for participating in this study.

SURVEY QUESTIONNAIRE

Section A: General biographical questions- please select the appropriate option

1 Please indicate your age

a) 18-24 years
b) 25-34 years
c) 35-44 years
d) 45-54 years
e) 55-64 years

2 Please indicate your gender

a) Male
b) Female

3 What is your employment status?

a) Employed Private sector
b) Employed Public sector
c) Business Owner/ Entrepreneur
d) Student
e) Unemployed

4 Do you own a Smart phone?

a) Yes
b) No

5 Do you own a Computer?

a) Yes
b) No

6 Do own a Tablet?

a) Yes
b) No

7 How would you rate your computer literacy?

a) Expert
b) Moderate
c) Slight knowledge
d) Extreme beginner

8 Have you heard about e-commerce? (E.g. Online shopping)

a) Yes
b) No

9 Have you used e-commerce platforms in the past 12 months? (E.g. Takealot; Uber Eats; Zando)

a) Yes
b) No

10 If you answered YES to question 9, which is your preferred e-commerce platform?

a) Clothing & apparel
b) Groceries
c) Gadgets
d) Professional services (E.g. Education; Cleaning services; Municipal account payments)
e) Entertainment

11 How frequently do you use e-commerce platforms?

a) Daily
b) Weekly
c) Monthly
d) Semi-annually
e) Annually

12 On average what is your typical basket size (E.g. Spend)?

a) R0-R100
b) R100-R500
c) R500-R1000
d) R1000-1500
e) < R1500

13 Are you likely to purchase from an e-commerce platform that gives you an absolute free delivery regardless of the terms and conditions?

a) Yes
b) No

14 Would you prefer to pay a delivery flat fee (E.g. R50) or not pay for delivery if you have spent over a certain amount (E.g. R1500)?

a) Delivery Flat Fee
b) Not pay for delivery when purchase is over a certain amount

15 What amount would you be willing to pay for delivery, if you had to pay a flat fee?

R

16 Do you belong to a loyalty programme? (E.g. PnP Smart Shopper; Clicks Clubcard; FNB EBucks)

a) Yes
b) No

17 If you answered YES to question 16, what loyalty programme incentive do you prefer?

a) Cash-back
b) Discounts
c) Points
d) All of the above

18 How quickly would you expect to earn a reward?

a) Monthly
b) Quarterly
c) Semi-annually
d) Annually

Section B: Please select one option per question.
Your answer should be between 1 (Strongly Disagree) and 5 (Strongly Agree)

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1.	I would be satisfied if the products or services shown were personalized based on my viewing and shopping history					
2.	I would prefer an online vendor that has a free shipping banner on their home page					
3.	I would prefer an online platform that has category pages (E.g. shoes, accessories etc) to help me browse for products easily					
4.	I am likely to shop from an online platform that allows me to filter my products by price, size, colour, brand, and even shipping options					
5.	I am likely to provide feedback on my order that I bought online					
6.	I am likely to refer an online vendor to a friend post my online purchase					
7.	I am likely to shop online again when the vendor has met my online shopping expectations					
8.	I am likely to use an online platform that has an easy process for returning of goods					
9.	I am likely to use an online platform that offers me free returns					
10.	I would be satisfied if information about my purchased product or service is communicated to me via email or SMS					

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
11.	I would be satisfied with an online platform that has a FAQ and the contact us options					
12.	I would prefer an online vendor that ensures clear and effective online communication					
13.	I would be satisfied with an online vendor that provides continuous communication from point of purchase to point of delivery					
14.	I am likely to shop online where there are reviews on products or services purchased					
15.	I would be satisfied with an online platform where I can easily find information					
16.	I believe the vendors website should lead me in my decision-making process					
17.	I am likely to use an online platform that is user friendly and easy to navigate					
18.	I enjoy reviewing information about products and services that have good imagery and videos					
19.	I would be satisfied with an online vendor that communicates with me directly to resolve my inquiries					
20.	I would be satisfied with an online platform that allows me to leave feedback on the products or services they offer					

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
21.	I would prefer an online vendor that offers ongoing channels of communication (E.g. customer service line; email) and are also responsive					
22.	I would prefer an online platform that creates a positive user experience					
23.	The type of incentive (E.g. cash-back; discounts; points) has an impact on which online platform I use					
24.	Having membership to a loyalty programme makes me want to shop online more frequently					
25.	I am likely to use an online platform that allows me to choose my own reward incentive					
26.	I would be more satisfied to receive surprise offers for simply being a loyal customer					

Appendix 2.1: One-page bio of the researcher including declaration of interest in the research and funders, if any

Palesa Mahange

Roles and Responsibilities

Palesa Mahange is a Senior Strategy & Management consultant for the Strategy & Consulting division at Accenture. Palesa's role encompasses of identifying gaps in the business and developing a business case using financial data and understanding the business structure and value chain. To develop strategies for reducing & saving costs and increasing revenue. Lastly, to continuously assist clients to making key decisions by defining markets from identify trends, providing insights within a specific market and organizing client workshops to present findings back to client.

Background

Palesa started her career in the Automotive industry when she joined the Toyota graduate programme in 2014, her career quickly progressed, as she was appointed as a Pricing analyst after completing the graduate programme. Palesa then went on to move into the Pharmaceutical industry for two years as a Trade marketing manager conducting data analytics and insights for the sales and marketing divisions before moving onto join Accenture as a Senior business strategy consultant.

Education

B.Com. Management at the University of Johannesburg

B.Com. Honours at the University of Johannesburg

PDM with Wits Business School

Certificate in Economics at the Thabo Mbeki African Leadership Institute (UNISA)

MBA candidate at the Wits Business School

Interest in this topic

I have always been interested in the operation of online platforms and understanding the user experience of customers behind the concept of "online shopping". Immediately I thought this was a great topic and if done correctly, this study could provide insightful data and findings that can be translated into actionable successful go-to-market strategies especially for South African online businesses across all industries and those also looking at operating online.

Appendix 2.2: Ethic documentation

Appendix 3.1: Dully filled in data collection instrument(s)

SURVEY QUESTIONNAIRE

Section A: General biographical questions- please select the appropriate option

1 Please indicate your age

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c) 35-44 years
d) 45-54 years
e) 55-64 years

2 Please indicate your gender

a) Male
b) Female

3 What is your employment status?

a) Employed Private sector
b) Employed Public sector
c) Business Owner/ Entrepreneur
d) Student
e) Unemployed

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a) Yes
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a) Yes
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a) Yes
b) No

10 If you answered YES to question 9, which is your preferred e-commerce platform?

a) Clothing & apparel
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c) Gadgets
d) Professional services (E.g. Education; Cleaning services; Municipal account payments)

e) Entertainment

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b) Weekly
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e) Annually

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d) R1000-1500
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a) Yes
b) No

14 Would you prefer to pay a delivery flat fee (E.g. R50) or not pay for delivery if you have spent over a certain amount (E.g. R1500)?

a) Delivery Flat Fee
b) Not pay for delivery when purchase is over a certain amount

15 What amount would you be willing to pay for delivery, if you had to pay a flat fee?

R50

16 Do you belong to a loyalty programme? (E.g. PnP Smart Shopper; Clicks Clubcard; FNB EBucks)

a) Yes
b) No

17 If you answered YES to question 16, what loyalty programme incentive do you prefer?

a) Cash-back
b) Discounts
c) Points
d) All of the above

18 How quickly would you expect to earn a reward?

a) Monthly
b) Quarterly
c) Semi-annually
d) Annually

Section B: Please select one option per question.
Your answer should be between 1 (Strongly Disagree) and 5 (Strongly Agree)

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
1.	I would be satisfied if the products or services shown were personalized based on my viewing and shopping history				**X**	
2.	I would prefer an online vendor that has a free shipping banner on their home page					**X**
3.	I would prefer an online platform that has category pages (E.g. shoes, accessories etc) to help me browse for products easily					**X**
4.	I am likely to shop from an online platform that allows me to filter my products by price, size, colour, brand, and even shipping options					**X**
5.	I am likely to provide feedback on my order that I bought online	**X**				
6.	I am likely to refer an online vendor to a friend post my online purchase		**X**			
7.	I am likely to shop online again when the vendor has met my online shopping expectations				**X**	
8.	I am likely to use an online platform that has an easy process for returning of goods					**X**
9.	I am likely to use an online platform that offers me free returns				**X**	
10.	I would be satisfied if information about my purchased product or service is communicated to me via email or SMS					**X**

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
11.	I would be satisfied with an online platform that has a FAQ and the contact us options					**X**
12.	I would prefer an online vendor that ensures clear and effective online communication					**X**
13.	I would be satisfied with an online vendor that provides continuous communication from point of purchase to point of delivery				**X**	
14.	I am likely to shop online where there are reviews on products or services purchased				**X**	
15.	I would be satisfied with an online platform where I can easily find information				**X**	
16.	I believe the vendors website should lead me in my decision-making process					**X**
17.	I am likely to use an online platform that is user friendly and easy to navigate					**X**
18.	I enjoy reviewing information about products and services that have good imagery and videos					**X**
19.	I would be satisfied with an online vendor that communicates with me directly to resolve my inquiries				**X**	
20.	I would be satisfied with an online platform that allows me to leave feedback on the products or services they offer					**X**

Question no.	Question	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
		1	2	3	4	5
21.	I would prefer an online vendor that offers ongoing channels of communication (E.g. customer service line; email) and are also responsive		**X**			
22.	I would prefer an online platform that creates a positive user experience				**X**	
23.	The type of incentive (E.g. cash-back; discounts; points) has an impact on which online platform I use					**X**
24.	Having membership to a loyalty programme makes me want to shop online more frequently			**X**		
25.	I am likely to use an online platform that allows me to choose my own reward incentive					**X**
26.	I would be more satisfied to receive surprise offers for simply being a loyal customer					**X**