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The role of online shopping for consumers in South Africa

Pereira Soares Moreno, Arif

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The role of online shopping for consumers in South Africa

Arif Pereira Soares Moreno

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

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ABSTRACT

The South African retail landscape is changing and the role of online shopping has impacted the manner in which traditional brick and mortar retailers conduct business. The purpose of this research was to evaluate the factors contributing to the use of online shopping for consumers in South Africa.

This paper investigated the perceptions of a sample, using a quantitative approach, of both genders and a diverse age range. A sample of 204 respondents was sent a link to a web-based survey questionnaire which asked a series of questions relating to the ability to shop online. The data was analysed using the statistical software package SPSS. A factor analysis was used to determine the factors which contributed towards online shopping where a correlation matrix was used that identified the relationship between these factors.

The overall conclusion was that two research questions were put forward by the researcher, namely; the factors which contribute the most to online shopping, and, the factors which contribute the least to online shopping. Given that the role of the traditional in-store retail business model is being disrupted by the advent of the internet and technological advancements, retailers need to think differently on how they will get consumers to purchase their products. The shift of consumer needs, behaviours and purchasing habits further reveal the complex environment in which retailers operate.

This research provides guidance to retailers in understanding the factors that contribute to the use of online shopping for consumers. These findings assist retailers in understanding the elements that enhance an online experience for consumers, and understand the extent to which online is impacting traditional shopping.

DECLARATION

I, Arif Pereira Soares Moreno, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Arif Pereira Soares Moreno

Signed at Randburg, Johannesburg

On the 7th day of March 2017

DEDICATION

To my parents, Suraya and Vitor

Your endless love, support and years of sacrifice have given me the opportunity to become the man I am today, for that, I am forever thankful.

To my sister, Nadia

You have witnessed the commitment and dedication that has gone into all three of my qualifications first hand, this demonstrates to you that with hard work, you can achieve anything you set your heart and mind on. You are, and will forever be, closest to my heart.

To my grandparents, Halima and Ebrahim

Thank you for always being there for my family when we needed you the most.

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To my beautiful fiancé, Maria

Your love, kindness and patience that you have shown me throughout this MBA journey has validated the lady that you are. Thank you for being the shining beacon of light in my life. I love you.

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CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this study is to evaluate the factors contributing to the use of online shopping for consumers in South Africa.

1.2 Context of the study

According to Salahuddin (2016), the Internet was introduced to South Africa in the late 1980s, and its consolidation and maturity saw the emergence of large Internet Service Providers (ISPs) and Web Hosting companies in the late 1990s (Salahuddin & Gow, 2016). Since then, the Internet has been a fast changing environment and has in turn, affected the behaviour and attitudes of consumers at large. In addition to this, the South African economy has grown and transformed the manner in which business is conducted. An increase in exposure to global markets has led to a change and the pace in lifestyles of the population at large (Fletcher, 2016). This significant market change and evolution has resulted in the creation of an online shopping market or community.

The South African online retail market is currently in transition, from infancy to a growth phase, where research has demonstrated a rapid increase in the presence of local and international online retailing companies (Barnard, 2016). An increase in online transactions is proving that South African consumers are becoming more comfortable translating their previously traditional purchasing habits to the interactive and fast-paced nature of online shopping (Fletcher, 2016). Thus, retailers are being confronted with a digital divide phenomenon, which presents consumers with distinctive multichannel strategies, which offer unique shopping experiences (Brynjolfsson & Smith, 2000).

With varied consumer expectations, the utilisation of a single retailing strategy will no longer be adequate to maintain market dominance. A new generation consumer market segment will be more inclined towards online shopping activities compared

to the rest of the consumer groups (Scarpi, Pizzi, & Visentin, 2014). A continuous rise in broadband penetration levels, improving internet connectivity infrastructure, rising living standards and accessible smart phones and mobile devices, will enable the heightened usage and awareness of relevant online shopping platforms and channels (Rodríguez-Torrico, Cabezudo, & San-Martín, 2017).

The rapid growth rate of the middle class consumers, mobile penetration levels and Internet connectivity access through multiple touch points such as; Internet TV, smart phones, tablets and web-based applications, has accelerated the market acceptance of online retailing (Kracher & Corritore, 2004; Rodney & Wakeham, 2016). Judging by current market trends, traditional retailers are under considerable pressure to re-engineer their business models and operational processes, to successfully implement and benefit from multi-channel retailing strategies that offer consumers a convenient and memorable shopping experience (Trevinal & Stenger, 2014).

The central aim of this research report is to investigate the manner in which online shopping has disrupted the in-store experience, and how this entices consumers to shop online, through these contributing factors.

1.3 Problem statement

1.3.1 *Main problem*

The problem that is addressed by doing this research is to evaluate the factors contributing to the use of online shopping for consumers in South Africa.

1.3.2 *Sub-problem 1*

The first sub-problem is to identify and evaluate the factors which contribute the most to online shopping.

1.3.3 *Sub-problem 2*

The second sub-problem is to identify and evaluate the factors which contribute the least to online shopping.

Keywords: online shopping, online consumer

1.4 Significance of the study

This study provides guidance to retailers in understanding the factors that contribute to the use of online shopping for consumers. The findings may provide new insight in understanding the factors which contribute to the online experience and the extent to which online is disrupting traditional in-store shopping, thus allowing retailers the opportunity to create a unique shopping experience for consumers.

The South African retail landscape is changing, which has been propelled by an emerging number of younger technology-driven consumers, who place greater importance and prominence on reliable and trusted mobility (Ashraf, Thongpapanl, & Razzaque, 2015). As a result of fast-changing consumer expectations, needs, wants, resources, tastes and preferences, a considerable shift in consumer behaviour and purchasing decision-making has been observed. Retailers have had to quickly adapt to these changes to ensure they are better positioned to capture share of wallet in this fast-growing market segment.

With online sales continuously gaining traction, the growth surge in online shopping has created additional consumer awareness about the embedded value of integrated real time transactional platforms (Karimi, Papamichail, & Holland, 2015; Schoenbachler & Gordon, 2002). There is a greater probability for retailers who are able to offer an holistic value proposition, targeted at meeting these unique consumer needs, will be geared to deliver unprecedented long term customer value (Bilgihan, Kandampully, & Zhang, 2016).

To achieve this objective, retailers would need to optimise their value chain to stand a better chance of offering a unique, customer-centric and holistic digital platform,

that effectively responds to a differentiated value proposition in the market place (Haucap & Heimeshoff, 2014).

1.5 Delimitations of the study

- This research and its findings is specific to consumers who have experienced the traditional in-store shopping environment.

- This research consists of online purchases which require physical delivery of the product to the consumer (i.e. no purchases of services).

- This research is targeted to the purchasing of products that require a payment method/process.

- This research is limited to consumers in South Africa.

- This research is limited to a target market age range of 18 to +65 years old.

- This research did not take into account race or economic background, therefore it did not look at the differences between, for example, high and low income earners.

1.6 Definition of terms

a) Internet

The ‘Internet’ can be defined as a collection of local, regional and national computer networks that are inter-linked to exchange data (Bollou, 2006; Dutton & Blank, 2015).

b) E-Commerce

Electronic commerce (e-commerce) is a term used for any transaction (business or commercial) that utilises the internet as a medium for the transfer of information (Andam, 2014).

c) Online Shopping

Online shopping refers to any form of shopping that occurs via the Internet as a medium used to make purchases at virtual stores.

d) Brick-and-Mortar

Brick-and-mortar refers to the traditional physical shopping store and outlet (can also be referred to as ‘in-store’).

1.7 Assumptions

- This research selected a sample that had experienced traditional in-store shopping.
- This research assumed that online shopping would have an impact on traditional in-store shopping.
- This research assumed that the data construct will be evaluated in a critical and unbiased manner through the observation process.
- This research assumed that the sample was computer literate.

- This research assumed that participants responded truthfully. Anonymity and confidentiality is preserved.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

A literature review forms part of the fundamental basis of research which aids in providing an understanding of, and insight into, existing research studies that have been conducted (Jiang, Yang, & Jun, 2013).

This literature review explores the body of knowledge pertaining to the key themes of research. The review proceeds as follows: The first section delves into the background of online shopping and constructs the definition for online shopping. The second section explores the background of disruption and builds the definition in the context of the retail industry. This section is followed by an analysis of the South African online shopping industry. Thereafter, this section is followed by an analysis of the consumer shopping experience in the online environment.

The chapter concludes by determining the factors which contribute to the use of online shopping and the manner in which it is disrupting traditional in-store shopping.

2.2 Definition and Background to Online Shopping

2.2.1 *Online Shopping*

The traditional means of shopping has transformed and become somewhat insufficient to consumers. This change is being driven by the introduction of innovative technologies that are disrupting the current shopping landscape. Consumers' shopping preferences have shifted in South Africa as customers prefer easier and simpler ways to reach brands and stores (Steyn & Mawela, 2016)

Kotler and Armstrong (2013) encapsulates the core essence of this transformation through the advent of the Internet. This medium had fundamentally changed consumer's notions of the following; convenience, speed, price, product information

and service (Kotler & Armstrong, 2013). As a result, the internet has given retailers a new way to create value for customers, as well as foster relationships with their end user.

Therefore, online shopping can be defined as any form of shopping that occurs via the Internet as a medium used to make purchases at virtual stores (Jiang et al., 2013). Due to the increased volume of transactions being conducted online, a number of companies are expanding and upgrading this segment of their business.

2.3 Disruption

Digital disruption, change that results from the influence of digital technology, is causing massive upheaval within industries, shaking business models, value chains, ecosystems, processes, innovation and organisational structures (Gans, 2016).

The two distinct features of disruptive technologies, as highlighted by Joshua Gans, are that they initially appeal to a niche market segment, and they target the lower end consumer (i.e. low price positioning) (Gans, 2016). Online shopping, through electronic, mobile and digital (smart) television channels, is aligned with the concept of being a disruptive technology that is transforming the traditional offline arena.

This concept ties in very closely to disruptive innovation as the online shopping technology can be seen as being a disruptive innovator. Clayton Christensen spoke of disruptive innovation as a phenomenon that creates a new market and value network thus disrupting an existing market, displacing established market leaders (Christensen, Raynor, Dyer, & Gregersen, 2013).

2.3.1 *Disruption of Key Industries*

The Internet's greatest impact in South Africa, and in Africa as a whole, is likely to be concentrated in six sectors, namely; financial services, education, health, retail, agriculture, and government. Technology-related productivity gains in these sectors

could reach between US$148-billion to US$318-billion, in Africa, by 2025, where the population at large stand to benefit as a result (Sonobe & Otsuka, 2016):

a) Financial services

With the advent of the Internet and digital technology, the proximity of financial services will be brought closer to the customer eradicating distance from branches or ATMs as a potential hindering factor. It is projected that, on average, 63% of South Africans could be in a position to gain access to financial services by 2025, with more than 76% utilising mobile wallets for day-to-day transactions (Brown & Molla, 2015; Sonobe & Otsuka, 2016)

b) Education

Smart devices, such as tablets and iPads, are an enabling platform in aiding students and teachers in acquiring premium educational content for training and development means. Technology will contribute productivity gains enabling governments to; achieve their educational budgets, and providing a stable foundation and sustainable future for students and educators (Pimmer et al., 2014).

c) Health

With the current shortage of healthcare professionals in South Africa, and in Africa, and the ever-growing disease burden on the country, healthcare treatment is emerging as important. Through the Internet and technology advancements, remote diagnosis and treatment is becoming readily available to all (Kirigia, Sambo, & Lambo, 2015)

d) Retail

The Internet and the evolution in digital technology offers consumers a new shopping experience through online product purchases. Approximately 10% of retail sales could account for online shopping by 2025 in South Africa (Aye, Balcilar, Gupta, & Majumdar, 2015).

e) Agriculture

The connectivity of the Internet offers farmers access to information on critical decision elements, such as; weather, crop selection, pest control, management and finance (Juma, 2015).

f) E-Government

The use of the Internet has improved activities, such as; service delivery and revenue collection of public sector institutions. The predicted forecast for productivity gains in Africa is estimated to be between US$10-billion to US$25-billion (Sonobe & Otsuka, 2016).

The Internet in South Africa, and in Africa as a whole, will provide the foundation for organisations to produce innovative applications and dynamic business models. Currently, South Africa's digital development is at its infancy phase, but will gain traction as the Internet becomes readily available throughout the country. Organisations have the opportunity to capture Internet-driven benefits, through online solutions, making them more competitive in this emerging market (Andam, 2014)

2.3.2 *Disruptive Innovation in Retail*

Digital technology is transforming the retail industry at an unprecedented pace. As online shopping is still at its infancy stage in South Africa, and the significant amount of traction already witnessed in this arena, the online retail story is still unfolding. Online retail has resulted in a data influx from in-store transactions and online sales, which allow retailers to analyse this data to better understand and address specific retail challenges (Gandomi & Haider, 2015).

With the advent of the Internet, the retail industry has undergone a significant transformation with the introduction of multiple retail channels. Prior to the emergence of the Internet, retails had to manage two major distinct channels, namely; brick-and-mortar retail and catalogues. However, online retail created a disruptive innovation that changed the shopping experience for consumers and the way in which retailers conduct business (Hristov & Reynolds, 2015).

The boundaries between the physical or offline retailers, and the digital environment is blurring. Offline retailers are shifting towards the online landscape, and pure-play digital retailers are diversifying in having a physical presence in the market (Gandomi & Haider, 2015). For example, Woolworths Food sold their products exclusively in-store in South Africa. However, in 2012, Woolworths Food introduced their online store as an additional channel via which consumers could purchase fresh produce. Previously, brick-and-mortar retailers first sold merchandise in-store thereafter sold via catalogues, which later evolved to selling products online.

2.3.3 *Waves of Disruption*

There are four waves of disruption that have significantly transformed the traditional retail landscape, and these are (McQuivey, 2013):

a) **The changing role of the store:** The physical store remains the retail touch point with the highest frequency, however the role will evolve to become more customised to enhance the in-store shopping experience.
b) **Social networking:** Social media is an emerging medium that is having a bottom-line effect on the retailing experience.
c) **Mobile technology:** Mobile commerce, purchasing products through a mobile phone, is rapidly becoming a crucial shopping agent as consumers' demands evolve.
d) **Demographic shift:** Digital natives have a different shopping behaviour when compared to traditionalists. Additionally, the cause of disruption is attributed by the global aging patterns and disposable income.

2.4 The South African Online Retail Industry

2.4.1 *Current Overview*

The use of online shopping as a retail medium has grown significantly in South Africa, however, the majority of consumers, irrespective of age, have a preference of purchasing products in-store. Digital innovation is undoubtedly reshaping

consumers' shopping experience and purchasing behaviour. However, research has demonstrated that consumers are using the Internet as a browsing tool and not a purchasing one (Aye et al., 2015).

Aye (2015) highlighted that consumers are becoming more specific and aware in their choice of shopping medium and destination (Aye et al., 2015). A notion that has emerged in consumer behaviour theory stated by Trevinal (2014) that shopping is not entirely about what the customer desires, however more about the overall experience offered by the retail destination (Trevinal & Stenger, 2014). Thus, the value proposition of a shopping mall has shifted in recent times from not only being a destination that has a collection of stores, but also a social gathering location for consumers.

There has been an accelerated increase in the number of internet users in South Africa from 2008. According to Parvinen (2015) there is an estimated five year timeframe before new internet users gain the confidence and experience in the medium to become active participants in the Internet economy, known as the digital participation curve (Parvinen, Oinas-Kukkonen, & Kaptein, 2015). The growth in the number of internet users has resulted in the online retail market to be worth R4.4-billion. This market is forecast have a steady growth rate of 5% in 2016 (Aye et al., 2015).

2.4.2 *Regulation, Market Drivers and Trends*

The major changes and market trends that have since occurred, have caused a great need for, reliance on, and enjoyment of Internet usage. Shopping patterns have evolved and consumers are offered more options vis-à-vis finding goods and services, comparing the prices of such and obtaining any chosen products and services. The increase in options may be summarised as follows (Da Costa, 2016):

i. Multi-channel retailing – shopping across a number of different channels e.g. brick-and-mortar and online digital channels,
ii. Click and collect services,

iii. Online shopping is a growing phenomenon, and between the years of 1999 – 2001, the majority of online shoppers were male. However, the gap between men and women usage soon narrowed in this period. The most active age groups were between the ages of 25 – 34 years,

iv. Increase in access and affordability to the Internet and computers, laptops, tablets and smart phones sees positive increases in mobile connections and data usage,

v. Mobile penetration has increased rapidly in the last 12 years in South Africa, from just 1% in 2000 to 54% in 2012, representing a compound annual growth rate of over 36% (Rodney & Wakeham, 2016),

vi. Southern Africa has the highest mobile penetration at 119%,

vii. The introduction and development of internet banking has positively influenced and increased trust and use of the Internet. In this regard, legislation such as Protection of Personal Information Act (POPI) has added to increased trust levels between consumers and the businesses to which they provide their personal information (Brown & Molla, 2015),

viii. Other legislation and policies such as the Electronic Communications and Transactions Act, which regulates this industry, adds to its regulation, thus affording consumers some comfort in communicating and transacting online,

ix. Most products and services purchased from the Internet are fast developing in variety, ranging from books, music compact discs, videos, airline tickets and accommodation (Moloney, 2015),

x. In addition, reliance on Internet usage and e-commerce activity has in itself bred a need for diversification of the online market arena (Barnard, 2016)

2.4.3 *Gradual Growth and Traditional Retail Shift*

The online retail landscape in South Africa has observed numerous new entrants into the market over the past few years. An online fashion retailer, Style36, has made a significant online presence since its inception in January 2014. According to the Zeitgeist list, a chart developed by Google which ranks the most searched websites globally, Style36 was placed in fifth position, behind local giants such as OLX, Spree, Zando and Computicket (Moloney, 2015).

Yuppiechef, an online kitchen and homeware retailer founded in 2006, has experienced a growth rate of 300% and achieved a year-on-year growth rate of 100% between 2007 and 2011 (Agnelli, 2015). Yuppiechef managed to increase their customer base from inception by continually re-inventing and expanding their product offering.

Another example is Waltons, an office supplies company, which launched its online retail service in 2000. Waltons has further strengthened its online capability by partnering with Bidvest in 2015 to further extend its digital footprint by adopting Bidvest Direct's procurement system. This enabled Waltons to integrate key system functions, such as; purchase orders, authorisation and invoicing. Waltons' online shopping segment of the business has grown with the sector making up to 14% of its overall annual turnover (Agnelli, 2015).

The introduction of Woolworths to the online arena, in 2013, offering consumers the optionality to purchase groceries online, made fellow competitors, such as Pick 'n Pay, take notice. Woolworths' online traffic originated from consumers predominately using smartphones and tablets to purchase products, 38% and 8% respectively. Even though a small percentage of Woolworths' online sales contribute to the group's overall revenue, online and mobile shopping is steadily becoming a growing method of shopping as Internet connectivity becomes faster and cheaper (Moloney, 2015).

The above mentioned examples demonstrate that online shopping has impacted the business and operating models of retailers. Businesses that have expanded their value proposition to include an online portfolio are enhancing their capability and service offering to their customers which has a positive effect to their bottom-line. There are five predominant areas where online shopping has impacted traditional retailers, these are:

i. **Profit:** Online retailers have the ability to reduce product prices thus creating a price war with in-store products. This forces retailers to compete on price thus diminishing their in-store profit margin (Agarwal & Durga, 2016).

ii. **Discounts:** Online retailers have the ability to offer its customers product discounts which further reduce the overall price point for a basket of goods which physical stores need to be aware of.
iii. **Variety:** Online retailers have the ability to maintain a wide variety of products where brick and mortar stores are not able to maintain large amounts stock as this can have a negative impact of unsold products resulting in revenue losses (Tontini, 2016).
iv. **Customer service:** An online store offers consumers a seamless experience on a platform. Brick and mortar retailers are transforming their service and delivery model to be engaging and interactive in order to compete with online stores (Trevinal & Stenger, 2014).
v. **Marketing:** The internet enables online marketing to reach a wider audience not limited by geographical boundaries, where physical retailers are bound by the location they operate in.

Retailers will need to re-define the manner in which business is done in an industry that is being disrupted by technology, and identify which areas in their value chain is most at risk by the impact of online shopping.

2.5 Contributing Factors to Online Shopping

An online shopping experience can be articulated as the journey a consumer will engage within a virtual setting with the aim of purchasing a product or acquiring a service. To understand this concept, Schmitt (2013) describes consumer experience as the result of an interaction between the organisation and a customer over the duration of their relationship (Schmitt & Zarantonello, 2013).

This interaction includes a consumer's attraction, awareness, discovery, cultivation, advocacy and use of the organisation's products or services. This interaction has an influence on consumer behaviour which drives customer loyalty. Trevinal and Stenger (2014) developed a conceptual framework of the online shopping experience (Table 1) which highlights the dimensions, components and

characteristics of a consumer's experience in an online environment (Trevinal & Stenger, 2014).

Table 1: Conceptual Framework – Online Shopping Experience (Trevinal & Stenger, 2014)

Dimension	Components	Characteristics
Physical	Place and senses	Atmospherics (environment variables)
		Loss of self-consciousness
	Time	Time distortion
		Time pressure/duration of experience
Ideological	Shopping values	Hedonic (sensation of pleasure and gratification)
		Utilitarian
	Symbolism	Symbols in consumption
		Symbols in shopping
	Rituals	Rituals in consumption
		Rituals in shopping
Pragmatic	Acts and gestures	Shopping practices
		Routines
	Appropriate of the environment	Freedom
		Control
		Coproduction
Social	Socialisation	Companions: friends, peers, family
		Vendors

Chaparro-Peláez (2016) developed a framework, seen in Table 2, which identified the components and characteristics that drive consumers to shop online. The study identified individual benefits that consumers may obtain from using an online medium to purchase products.

Table 2: Online Shopping Motives Framework (Chaparro-Peláez, Agudo-Peregrina, & Pascual-Miguel, 2016)

Components	Characteristics
Convenience	General convenience
	Time saving
	Effort saving
	Flexibility
	Payment methods
Economic	Low prices
	Comparison shopping
Information seeking	Information seeking
Variety	Variety
Social	Social
	Antisocial
Customisation	Customisation
Impulsiveness	Impulsiveness
Fidelity	Fidelity
Exclusivity	Online exclusive
Hedonic	Enjoyment
	Adventure
	Mood

The research from both Trevinal (2014) and Chaparro-Peláez (2016) highlighted critical findings which enabled the researcher to expand the body of knowledge on consumer behaviour in an online environment. Therefore, the researcher developed a framework, seen in Table 3, which leverages the ideology of the journey a consumer experiences while shopping online, and the contributing motives which entice a consumer to shop online.

Table 3: Online Shopping Contributing Factors Framework

Contributing Factor	Element
Convenience	Flexible shopping times
	Delivery destination
	Multi-tasking
Price and payment	Product price
	Promotions
	Multiple payment methods
Variety	Range of products
	Product feature comparison
	Website navigation
Privacy and security	Discreet purchases
	Personal details
Social engagement	Engagement with brands and products
	Engagement with retailers
	Engagement with shoppers
Category	Groceries
	Books
	Electronic goods
	Fast foods
Device	Mobile (feature 'non-smart' phone)
	Smartphone
	PC/Laptop
	Tablet/iPad

The researcher identified seven predominate factors which contribute and enable consumers to shop online. These factors and their elements are described below.

2.5.1 *Convenience*

The convenience factor entails three elements, namely; flexible shopping times, delivery destination, and the ability to multi-task. Lian (2014) highlighted that most people want their shopping needs met that maximises efficiency and convenience (Lian & Yen, 2014). Online shopping has the ability to offer consumers shopping flexibility as an online store is not restricted by traditional operating times. The benefit offered by e-commerce is the ability for products to be delivered to

consumers' preferred destination, as well as offer the ability to multi-task while shopping (Moloney, 2015).

2.5.2 *Price and Payment*

The price and payment factor entails three elements, namely; product price, promotions, and the ability to have multiple payment methods. Carlson (2015) identified that affordability is a major driver for online shopping behaviour (Kukar-Kinney & Carlson, 2015). Online shopping offers consumers the ability to view product prices, deals on offer, and payment optionality. E-commerce has the ability to offer consumers insight to prices and product promotions enabling consumers with information to make a purchasing decision. Online retailers have the ability to offer consumers a seamless transaction gateway with multiple payment options (Karimi et al., 2015).

2.5.3 *Variety*

The variety factor entails three elements, namely; range of products, product feature comparison, and the ability to navigate through a website. Online retailers possess the ability to offer consumers a diverse product offering which enablers shoppers with information to compare product features (Tontini, 2016). The visual aspects of a commercial website have a significant role in generating trust and the perception of the quality guarantee that retailers give to consumers (Trevinal & Stenger, 2014). Navigation and the online shopping experience are collective, the interaction frame is widened from the consumer, computer, family or friends paradigm (Borges, Babin, & Spielmann, 2013)

2.5.4 *Privacy and Security*

The privacy and security factor entails two elements, namely; discreet purchases, and the security of inserting personal details on an online platform. Online shopping has the ability to offer consumers the ability to purchase products in a discreet and private manner. However, Steyn (2016) identified that consumers are concerned

about internet security and that there is a perceived risk associated with sharing confidential personal information, such as credit card details and a home address (Steyn & Mawela, 2016).

2.5.5 *Social Engagement*

The social engagement factor entails three elements, namely; the ability to engage with brands and products, retailers, and shoppers. While consumers shop online, they interact through social media with other consumers to comment and compare the products that they are considering purchasing. At times, online consumers are influenced by their interactions with other online shoppers in the decision-making process on whether to purchase a product or not (Trevinal & Stenger, 2014)

2.5.6 *Category*

The category factor focused on four product types, namely; groceries, books, electronic goods, and fast foods. Ashraf (2015) highlighted that the demand for online products constantly change over time due to the competitive nature of the retail industry (Ashraf et al., 2015). A study undertaken by Moloney (2015) identified that electronic goods and books are the most purchased product categories. Online stores possess the advantage of offering consumers a diverse product range, where a brick and mortar store is constrained by physical limitations.

2.5.7 *Device*

The device factor entails four elements, namely; the ability to shop online using a mobile (non-smart) phone, smartphone, personal computer/laptop, and a tablet/iPad. Bilgihan (2016) highlighted that devices are a crucial shopping agent that enables consumers to participate in the overall purchasing journey (Bilgihan et al., 2016). Smart devices have empowered consumers to view and acquire products by removing geographic and purchasing constraints.

2.6 Interactivity

Parvinen (2015) highlighted interactivity to be a multidimensional construct entailing the exchange of information, availability of information on demand, response contingency, customisation of content and real-time feedback (Parvinen et al., 2015). There is a difference between the online and in-store shopping experiences based not only on the content of information that is provided, but also on the degree of interactivity. The level of interaction with information has an influencing factor on whether the consumer perceives that more information is online, as opposed to offline, or vice versa.

Both the online and offline shopping experiences entail their own challenges, for instance, traditional retailers are limited to physical floor space in which to display their products, whereas on online retailer allows for an unlimited number of products to be demonstrated at any given time. In an online setting, there is no sales person to aid the customer with more information, clarity or simplification on the decision-making process for the customer, whereas, the in-store experience allows for a greater level of interaction and engagement with the retailer's staff on product enquiries.

The continual interaction between the in-store and online shopping experience will bridge the 'quality of information' divide which is highly dependent on the degree of interactivity of each format (Parvinen et al., 2015).

2.7 Conclusion of Literature Review

The literature review reveals that although online shopping at present represents a relatively small portion of retail sales, it is however expected to increase in the future. This increase will become more apparent as broadband infrastructure and internet connectivity becomes readily available throughout the country. The increase in education levels and exposure to information technology will aid the role of online shopping becoming a disruptor to the traditional in-store shopping model.

The physical and digital realm is merging as these boundaries become blurred. Physical retail stores are shifting towards the online landscape, and pure-play digital retailers are diversifying in having a physical presence in the market. The fundamental underlying driver for the change is demographic shift and consumer demand. The online consumer has a different set of purchasing behaviour as compared to a traditional shopper. Additionally, the cause of disruption is attributed by the global aging patterns and disposable income.

The literature review reveals the factors contributing to the use of online shopping for consumers. The dimensions of the online shopping experience, as well as the researcher's framework highlights factors, such as, convenience, price, variety, device, category, privacy, security, payment and social engagement as prominent contributing factors of a consumer's journey to use online as a shopping platform.

The following research questions have been formulated following the literature review.

2.7.1 *Research Question 1*

The first research question is to identify and evaluate the factors which contribute the most to online shopping.

2.7.2 *Research Question 2*

The second research question is to identify and evaluate the factors which contribute the least to online shopping.

CHAPTER 3. RESEARCH METHODOLOGY

This research is based on evaluating the factors contributing to the use of online shopping for consumers. The research methodology chosen for this study is quantitative in nature as this study is aimed at assessing the extent to which the online experience has disrupted the traditional in-store experience.

The first section of this chapter articulates the methodology and design used in conducting this study. The second section describes the population, sample, sampling methodology and procedure that was used. The third section delves into providing details of the measuring and data collection instrument utilised in the gathering of the data, inclusive of analysis and interpretation of this data. Thereafter, this section is concluded through a discussion of the limitations, reliability and validity of the research instruments.

3.1 Research Methodology

Broadly, research methodologies can be positioned into three categories, namely; qualitative, quantitative and a mixed method approach which combines both the qualitative and quantitative methodologies (Creswell, 2013). Quantitative research addresses research objectives through empirical assessments that involve numerical measurements and analysis approaches that apply some form of statistical analysis (Creswell, 2013).

In organisational research, two broad paradigms exist, namely; positivist and interpretivist. The positivist paradigm attempts to uncover cause and effect, it claims to develop knowledge, or to test theories and propositions, through descriptive quantitative studies, such as surveys, data collection yielding statistical data, etc. (Simonson, Carmon, Dhar, Drolet, & Nowlis, 2001). Descriptive studies attempt to sample randomly from a population and provide statistics describing the distribution of responses, such as central tendency of individual variables or correlation between variables or multivariate relations among a set of variables (Johnson, Moe, Fader, Bellman, & Lohse, 2004).

The researcher has chosen the quantitative methodology and positivist paradigm as the research methodology approach which is driven by the research question to evaluate the factors contributing to the use of online shopping for consumers.

An online self-assessed survey was adopted as the quantitative tool to address the research question at hand. This technique allows a general observation to be stated from a sample to a population so that inferences made in the study can be observed as the general notion and behaviour of the entire population (Creswell, 2013). This research was conducted as a once-off, cross sectional, study and was not conducted over a period of time.

3.2 Research Design

A research design is a framework used when conducting the study as it constitutes decisions that build the holistic design strategy by discussing the procedure for collecting and analysing the required information.

An online-based self-administered survey was used as the tool for data collection which adhered to the following advantages (Denscombe, 2014):

- Allows data to be collected from a larger and broader sample size as compared to the interview technique,
- The chosen sample has access to computers and the internet which is used on a daily basis,
- Increased convenience for respondents as the survey is relatively quick to complete and the researcher does not have to be present, thus allowing the respondents to complete the survey in their own time,
- The researcher is able to ensure that every respondent receives the same set of questions,
- Decreased turnaround time for results to be generated,
- Distribution of the survey is relatively quick and easy, via email, as the respondents are technology savvy and receive information, such as surveys, through this method as the majority of organisations practice a paperless working environment

The disadvantages of using an online-based survey for data collection are as follows (Denscombe, 2014):

- The researcher will not be able to track the respondents who have and have not completed the survey,
- The researcher will not be able to follow-up with non-respondents to increase the response rate,
- As the chosen sample of respondents might be overloaded with information by email on a regular basis, the email containing the link to the survey could be seen as not a priority to be completed

The questionnaire design is discussed in detail in section 3.4.

3.3 Population and Sample

This section discusses the population that was used to participate in the survey, and defined the sample of participants qualified to take part in the survey.

3.3.1 *Population*

A population is the entire set of entities of which one would like to form a generalised notion, as it aggregates all the elements that share some common set of characteristics that involve the universe for the purposes of the research problem (Malhotra & Birks, 2007). The population for this research was defined to include males and females that have experienced the online shopping environment within South Africa.

There was no limitations made on; race, work experience, educational level or cultural background. It was necessary for the participant to have experienced shopping in an online environment in order to be included in the study. This is to ensure that there is a higher probability of the participants being exposed to the

type of situation articulated in the survey questionnaire, thus responding from a position of personal understanding.

3.3.2 *Sample and Sampling Method*

A sample is a subset of the population that suitably represents that entire group (Malhotra & Birks, 2007). The desired sample size is a minimum of 150 respondents entailing males and females in South Africa. As the methodology is quantitative in nature, it is vital to ensure that at least 150 responses are received to ensure reliability and validity of the study. In order to aid that the number of targeted responses were achieved, a snowball sampling technique was used.

Riff (2014) highlighted that snowball sampling is used often by researchers who are interested in an interconnected network of people, through a direct or indirect linkage (Riff, Lacy, & Fico, 2014). This technique was adequate for selecting cases for the research study as a sample of consumers introduced the researcher to other consumers, enabling the research sample to grow.

A probability sampling method was utilised as the sample was randomly selected and it can be assumed that a representative sample most likely reflected the general population (Malhotra & Birks, 2007). The benefit of this method ensured that the sampling error was kept to a minimum.

3.4 The Research Instrument

An online-based self-administered survey questionnaire was used to conduct the research of this study. This instrument was chosen based on the advantages illustrated in section 3.2. The most prominent advantage of this instrument was to provide the respondent with flexibility and convenience (Creswell, 2013). The questionnaire that was used in this study is included in Appendix A.

The survey questionnaire that was used for this study was not based on, nor amended from, any previous research. Therefore, no permission was required for the use of questions. The questions were designed using information gathered in

the literature review and consolidated into seven key constructs for the study. The seven constructs were split into 22 questions according to the literature on which they were based, as shown in section 4.2. Since the survey questionnaire was fundamentally constructed, it had not been previously tested, thus was not proven in terms of validity and reliability. Therefore, the researcher conducted a pilot study prior to the inception phase of the research.

3.5 Procedure for Data Collection

The researcher engaged with potential respondents through e-mail. The e-mail explained the research topic, the purpose and objective of the survey, and a web link directed respondents to the online questionnaire.

The respondents were given a deadline of two weeks within which to respond. A follow-up notification e-mail was sent as a reminder after a week has elapsed. Thereafter, a final reminder e-mail was communicated two days before the deadline.

3.6 Data Analysis and Interpretation

The SPSS statistical software tool was used to analyse and interpret data received from the survey questionnaire. The initial test on the data involved the following:

- Conducting a basic descriptive statistic to analyse the means of the questions,
- Rank these means from highest to lowest to evaluate which questions were prominent for the use of online shopping,
- Analysis of the means of the factors to highlight perceptions and trends for these factors.

The descriptive statistics was used for the following:

- Assess the reliability of each question by analysing the Cronbach alpha,
- Analysis whether all questions in each factor measured that particular factor,

- Evaluate the grouping of questions to analyse each factor.

The researcher used a factor analysis on the data to evaluate the relationship between the use of online shopping (independent variable) and the contributing factors to the use of online shopping (dependent variables) (Montgomery, Peck, & Vining, 2015). The use of this statistical technique demonstrated interrelationships of variables to analyse patterns between and structures among the variables (Montgomery et al., 2015). The analysis assisted the researcher in understanding the correlation of each factor.

3.7 Limitations of the Study

The following limitations were identified for this research study:

- The research methodology is limited by, and to, the researcher's abilities, integrity and sensitivity. An element of risk exists of results being misinterpreted, whether intended or unintended (Creswell, 2013). The researcher minimised the risk of misinterpretation by incorporating a rigorous procedure and standard protocol.
- The research was exploratory in nature as the survey that was constructed had not been utilised in a previous study.
- The research relied on participants' honesty and integrity.
- The researcher was not able to track participants' completeness or incompleteness of the survey, thus making it impossible to follow-up on non-respondents.

3.8 Reliability and Validity

The reliability and validity of any research study is important to address whether the outcome of study (i.e. results) are credible and based on grounded theories and concepts.

The reliability concept refers to the extent to which a measurement procedure is evaluating what is intended to be measured, and ensures that the quality of the measurement is consistent (Riege, 2003).

The validity concept refers to the ability of the measurement instrument, that the study is utilising the correct measurements and that there is accuracy in the results. This study uses a structured questionnaire to measure what it is intended to in order for the researcher to know if the results are 'true' (Barratt, Ferris, & Lenton, 2015).

3.8.1 *External Validity*

External validity is defined as the degree to which results of a specific study can be generalised beyond the immediate form of inquiry (i.e. other people, places, times, treatments or settings) (Barratt et al., 2015).

In the context of this study, two questions had to be answered in order for the statistical conclusion to have had validity. The first question was whether the results gained from this research could be generalised to the entire population. The second was whether the results could be generalised to other industries which have had the presence of online technologies impacting their business and operating models, such as online banking.

In response to the first question, the researcher required a minimum of 150 responses to ensure the reliability and validity of the study. However, through the snowballing sampling technique, the researcher received 204 responses which the researcher believes is sufficiently strong to be able to generalise across the population.

In response to the second question, similar research has been undertaken in other industries, such as the financial sector, where similar results to this study were achieved. The researcher believes that the results achieved in this research is a fair generalisation to other industries.

An external validity threat was that there was no discernible difference made between race or age group, therefore, the outcome of this study assumed that all

respondents would, in actual fact, have had similar responses regardless of race or age demographic.

3.8.2 *Internal Validity*

Internal validity addresses whether or not the observed effects between an independent and dependent variable is a causal relationship (Shadish, Cook, & Campbell, 2002). This study evaluated the relationship between the use of online shopping (independent variable) and the contributing factors to the use of online shopping (dependent variables). The researcher made the assumption that online shopping was disrupting the traditional in-store retail business. The researcher has decreased any possible negative effect on internal validity through literature review of previous research identifying disruptive trends and waves to traditional retail business models.

Since the survey questionnaire was fundamentally constructed, and evaluated various factors, the relationship between factors was piloted. The pilot study assisted in increasing the internal validity of the study and an opportunity was given to amend/modify the questionnaire before it was distributed (Riege, 2003).

3.8.3 *Reliability*

The reliability concept is dependent on the extent of findings being replicated while holding other aspects constant. The respondents' input is dependent on a diverse range of factors, which include; mood, time of day, recent events, etc. There is always a possibility where, even if each step is precisely replicated, results might differ (Riege, 2003).

The researcher provides a compelling demonstration that each construct being measured in the questionnaire entails a minimum of 150 responses to ensure an acceptable reliability score for the study. If a particular factor receives less than the minimum respondent requirement, then those questions/factors were omitted from the study. This mitigating action for this risk is that each question needed to be

answered by the respondents before they were allowed to proceed to the next question.

The questionnaire only consisted of 22 questions in order to mitigate against respondent fatigue which would have a negative impact on this study's reliability.

CHAPTER 4. PRESENTATION OF RESULTS

This chapter presents the results of the research. No effort is made to interpret the results at this stage. The interpretation of the results is covered in Chapter 5.

4.1 Introduction

The research results have been presented in two sections. The first section investigates the demographics of the sample under review. The demographic questions only delved into gender and age. These results have been graphically represented for ease of review and analysis.

Section two consists of the results of the survey questionnaire which have been summarised and presented. The set of results reflects the responses captured by the sample and analysed as a group using descriptive statistics. This is followed by the analysis of the means of the responses pertaining to the research question stipulated. The researcher ran a factor analysis where the inter-item collation is represented in Chapter 5.

4.2 Demographic Profile of Respondents

In order to gain insight into the demographics of each respondent, two questions were asked at the beginning of the survey. These included the respondents' gender and age. It was deemed by the researcher, and based on prior research in this field, that these demographics would be the only ones necessary for this research and therefore additional irrelevant questions such as race, number of years' experience with online platforms, etc. were deleted after the pilot study as these would not add any value to the analysis or research.

Results from the demographic questionnaire are presented in Table 1.

Table 4: Demographic Profile of Respondents

Category	Response Options	Frequency
Gender	Male	84
	Female	120
Age	< 18	0
	18 – 29	93
	30 – 39	79
	40 – 49	15
	50 - 59	13
	60 +	4

In Table 4 above, it can be seen that the majority of the respondents are female (58.82%). The researcher believes that the male-to-female split is representative of the shopping population and was satisfied with the respondents' diversity.

The majority of respondents are below 40 years of age, with 45.59% between the age of 18 and 29, while 38.73% are between 30 and 39. There were no respondents below the age of 18. The researcher believes that the age split is representative of the population under this study.

4.3 Questionnaire Results

The sample was sent a 22 question, online survey (Appendix A) which was evaluated using a 5-point Likert scale. The respondents were asked to rank their responses from 'highly unlikely' (1) to 'highly likely' (5).

4.3.1 *Frequency*

Frequency is the number of occurrences of data values that fall within a certain group or response category (Grant, Ries, & Thompson, 2016). The response frequency table is represented as Table 5. The table is a summary of each question showing what percentage of people responded to each of the ratings.

Table 5: Full Frequency Table

Factor Question	Rating 1: Highly Unlikely	Rating 2: Unlikely	Rating 3: Neutral	Rating 4: Likely	Rating 5: Highly Likely
Convenience					
1	5.3%	6.4%	16.6%	34.2%	37.4%
2	2.1%	3.7%	12.2%	25.4%	56.6%
3	5.0%	7.2%	20.6%	30.6%	36.7%
Price and Payment					
4	3.3%	2.7%	16.3%	34.2%	43.5%
5	2.1%	4.1%	14.9%	27.8%	51.0%
6	3.8%	3.3%	12.6%	29.0%	51.4%
Variety					
7	2.8%	6.1%	16.8%	35.8%	38.5%
8	1.6%	4.9%	13.2%	33.0%	47.3%
9	3.3%	3.3%	12.8%	31.7%	48.9%
Privacy and Security					
10	8.0%	8.5%	30.1%	26.7%	26.7%
11	8.9%	13.0%	35.5%	30.2%	12.4%
Social Engagement					
12	7.7%	11.3%	32.1%	31.0%	17.9%
13	6.9%	9.2%	26.6%	34.7%	22.5%
14	21.9%	23.9%	26.5%	16.8%	11.0%
Category					
15	25.5%	29.2%	18.2%	18.2%	8.8%
16	5.9%	5.4%	11.4%	29.7%	47.6%
17	4.5%	7.3%	16.3%	35.4%	36.5%
18	13.8%	13.2%	19.1%	27.6%	26.3%
Device					
19	8.9%	13.1%	35.7%	30.4%	11.9%
20	8.8%	6.6%	10.5%	30.4%	43.6%
21	4.2%	3.1%	7.9%	23.6%	61.3%
22	9.0%	7.2%	14.4%	26.9%	42.5%

In the full frequency table above (Table 5), the researcher has shaded the modal category responses. Where there are two response categories which have the same percentage (or 1% difference), both were highlighted.

There were only five responses where most of the respondents said that they were neutral to the questions related to the contributing factors of shopping online. There were the following:

- **Privacy and security:** The discreetness of the products purchased *(Question 10)*; the safety of inserting personal details (personal credentials, home address, contact details, credit card details, etc.) *(Question 11)*
- **Social engagement:** The ability to provide comments/feedback about the experience with the brand or product *(Question 12)*; the ability to engage with other shoppers *(Question 14)*
- **Device:** Mobile / Feature 'non-smart' phone *(Question 19)*

For ease of analysis, a summarised version of this modal response table, where the five items of the Likert-scale have been consolidated in three categories: 'unlikely', 'neutral' and 'likely', is represented in Table 6. The responses for 'highly unlikely' and 'unlikely' were added to give a total percentage for 'unlikely'. Similarly, the responses for 'likely' and 'highly likely' were added to give a total percentage for 'likely'.

Table 6: Summarised Frequency Table

Factor Question	Unlikely	Neutral	Likely
Convenience:			
1. The availability to shop 24 hours-a-day, 7 days-a-week	11.8%	16.6%	71.7%
2. The ability of products to be delivered to my preferred destination	5.8%	12.2%	82.0%
3. The ability to multi-task (i.e. purchase products online while simultaneously making dinner at home)	12.2%	20.6%	67.2%
Price and Payment:			
4. The price of products on offer	6.0%	16.3%	77.7%
5. The promotions and deals on offer	6.2%	14.9%	78.9%
6. The ability to pay using multiple payment options (credit card, EFT, PayPal, etc.)	7.3%	12.8%	79.9%
Variety:			
7. The range of products on offer	8.9%	16.8%	74.3%
8. The ability to compare product features and prices	6.6%	13.2%	80.2%
9. The ability to navigate through a website	6.7%	12.8%	80.6%
Privacy and Security:			
10. The discreetness of the products purchased	16.5%	30.1%	53.4%
11. The safety of inserting personal details (personal credentials, home address, contact details, credit card details, etc.)	21.9%	35.5%	42.6%
Social Engagement:			
12. The ability to provide comments/feedback about the experience with the brand or product	19.0%	32.1%	48.8%
13. The ability to follow your favourite brand or retailer	16.2%	26.6%	57.2%
14. The ability to engage with other shoppers	45.8%	26.5%	27.7%
Category:			
15. Groceries	54.7%	18.2%	27.0%
16. Books	11.4%	11.4%	77.3%
17. Electronic goods	11.8%	16.3%	71.9%
18. Fast foods	27.0%	19.1%	53.9%
Device:			
19. Mobile / Feature ‘non-smart’ phone	20.6%	36.4%	43.0%
20. Smartphone	15.5%	10.5%	74.0%
21. PC / Laptop	7.3%	7.9%	84.8%
22. Tablet / iPad	16.2%	14.4%	69.5%

In Table 6, containing the modal frequency responses, the researcher has shaded the modal category responses. It can be seen that 20 out of the 22 responses lie within the ‘likely’ category.

The majority of respondents replied ‘likely’ to the questions related to the contributing factors of shopping online, namely, the following:

- Convenience (all questions had the highest frequency in the likely column)
- Price and payment (all questions had the highest frequency in the likely column)
- Variety (all questions had the highest frequency in the likely column)
- Privacy and security (all questions had the highest frequency in the likely column)
- Social engagement (2 out of 3 questions had the highest frequency in the likely column)
- Category (3 out of 4 questions had the highest frequency in the likely column)
- Device (all questions had the highest frequency in the likely column)

The majority of respondents replied ‘unlikely’ to the questions related to the contributing factors of shopping online are the following:

- Social engagement (1 out of 3 questions had the highest frequency in the unlikely column)
- Category (1 out of 4 questions had the highest frequency in the unlikely column)

4.3.2 *Mean and Standard Deviation*

The responses have been analysed using the statistical programme SPSS and the results from the analysis of mean and standard deviation are summarised in Table 7 below.

Table 7: Questionnaire Results – Question Mean and Standard Deviation

Factor	Question	Mean	Standard Deviation
Convenience	1	3.91	1.147
	2	4.31	.968
	3	3.86	1.157
Price and Payment	4	4.11	1.015
	5	4.20	.989
	6	4.20	1.057
Variety	7	4.01	1.047
	8	4.19	.979
	9	4.19	1.029
Privacy and Security	10	3.56	1.199
	11	3.23	1.120
Social Engagement	12	3.39	1.153
	13	3.57	1.142
	14	2.70	1.295
Category	15	2.55	1.300
	16	4.05	1.193
	17	3.92	1.124
	18	3.39	1.381
Device	19	2.19	1.457
	20	3.93	1.283
	21	4.34	1.058
	22	3.86	1.303

As can be seen in Table 7 above, there are nine questions which have a mean (average) of above 4.0 indicating that the respondents chose ‘likely’ to ‘highly likely’ as their responses to the questions. These were:

- **Convenience:** The ability of products to be delivered to my preferred destination *(Question 2)*
- **Price and payment:** The price of products on offer *(Question 4)*; the promotions and deals on offer *(Question 5)*; the ability to pay using multiple payment options (credit card, EFT, PayPal, etc.) *(Question 6)*
- **Variety:** The range of products on offer *(Question 7)*; the ability to compare product features and prices *(Question 8)*; the ability to navigate through a website *(Question 9)*
- **Category:** Books *(Question 16)*
- **Device:** PC/Laptop *(Question 21)*

There were only three responses with the lowest means where all have a mean below 2.9, indicating that the respondents chose 'unlikely' to 'highly unlikely' as their responses to the questions. These were:

- **Social Engagement:** The ability to engage with other shoppers *(Question 14)*
- **Category:** Groceries *(Question 15)*
- **Device:** Mobile / Feature 'non-smart' phone *(Question 19)*

Table 7 also reflects the questions in their cluster groupings with the mean of each question and the standard deviation. It can be seen in the responses that there is no one factor which has consistently high (above 4.2) or low (below 3.2) means. The standard deviation indicates variance in responses around the mean (Grant et al., 2016). A high standard deviation has been interpreted by the researcher as being any value above 1.3, where anything below that is considered acceptable.

The interval within 1.3 standard deviations around the mean includes approximately 80% of all observations (Grant et al., 2016). There are four questions which have a standard deviation above 1.3, indicating that these lie outside the 80%. This could mean either that the question was confusing or that there are significant differences in responses. The questions with a high standard deviation are represented in Table 8.

Table 8: Questions with high Standard Deviation

Factor	Question	Mean	Standard Deviation
Category	15	2.55	1.300
	18	3.39	1.381
Device	19	2.19	1.457
	22	3.86	1.303

It is of interest that the four questions with a high standard deviation reside in two factors, ‘category’ and ‘device’, indicating great variation in opinions and on these questions. The analysis and further reasons for this is discussed in Chapter 5.

Table 9: Overall – Mean

Factor	Mean
Convenience	4.03
Price and Payment	4.17
Variety	4.13
Privacy and Security	3.40
Social Engagement	3.22
Category	3.48
Device	3.58

Table 9 above illustrates the overall mean and standard deviation of the factors. As can be seen in Table 9, there are three factors which have a mean of above 4.0 indicating that the respondents chose ‘likely’ to ‘highly likely’ as their responses to the questions. These were:

- Convenience,
- Price and payment, and
- Variety

It is of interest to note that the remaining factors under this study have a mean of above 3.0 and below 3.6. This indicates that the respondents chose ‘neutral’ as their responses to the questions. These were:

- Privacy and security,
- Social engagement,
- Category, and
- Device

As Table 7 alluded, it is demonstrated in Table 9 that no one factor has a mean greater than 4.2 and less than 3.2. The analysis and further reasons for this are discussed in Chapter 5.

4.3.3 *Factor Analysis*

A factor analysis is a commonly used data and variable reduction technique which will aid the researcher to describe a collection of observed variables (Grant et al., 2016). These factors are constructed to explain variation that is common to the observed variables. Therefore, the primary goal of this factor analysis is to achieve a meaningful interpretation of the observed variables through these factors, as well as to reduce the number of factors, a process which is known as data reduction (Grant et al., 2016).

Before a factor analysis can be undertaken, two prominent tests are required to be carried out on the data, namely; Cronbach’s Alpha, and the Kaiser Meyer Olkin (KMO) and Bartlett’s Test. The Cronbach’s Alpha is used to measure the reliability and internal consistency of the data. A KMO test is conducted to measure the sampling adequacy in order to perform a meaningful factor analysis. Thereafter, a Bartlett’s Test of Sphericity is undertaken which relates to the significance of the study and thereby shows the validity and suitability of the responses collected to the problem being addressed through the study (Kruschke & Liddell, 2016).

The results of these tests can be found in Appendix B and C, which reflects that the data is classified under the ‘good’ category thus deeming it reliable to use, and

recommending that a factor analysis is suitable to perform (KMO is greater than a value of 0.6, and the Bartlett's test of Sphericity is less than a value of 0.05) (see Appendix C).

Table 10 is a correlation matrix which is used to investigate the degree of relationship between two factors (Grant et al., 2016). The correlation coefficient is a measure of the strength and direction of the linear relationship between factors. The results from the questionnaire indicate that a positive relationship exists between all the factors, but varied in strength.

Table 10: Correlation Matrix

	Convenience	Price and Payment	Variety	Privacy and Security	Social Engagement	Category	Device
Convenience	1.00	.602	.471	.462	.205	.382	.282
Price and Payment	.602	1.00	.543	.417	.329	.334	.334
Variety	.471	.543	1.00	.443	.280	.186	.209
Privacy and Security	.462	.417	.443	1.00	.374	.234	.249
Social Engagement	.205	.329	.280	.374	1.00	.108	.197
Category	.382	.334	.186	.234	.108	1.00	.422
Device	.282	.334	.209	.249	.197	.422	1.00

According to Pearson's Correlation table, a value of 0.433 (or greater) indicates, with a 97.5% confidence level, that there is a correlation between two factors for this study (de Winter, Gosling, & Potter, 2016). The researcher has shaded the correlation coefficients that exceed the 0.433 value threshold. A value below the identified threshold indicates that there is a low confidence level between two

factors being correlated, thus allowing the researcher to place focus on the correlation of four factors. These were:

- Convenience,
- Price and payment,
- Variety, and
- Privacy and security

A correlation coefficient value of greater than 0.6 indicates that a strong relationship exists between two factors. A value between 0.4 and 0.6 indicates a moderate relationship, where a value of less than 0.4 indicates a weak relationship (Kristoufek, 2014). The following factors and their relationship strength were:

- **Convenience** with; price and payment (strong), variety (moderate), and privacy and security (moderate)
- **Price and payment** with, convenience (strong), and variety (moderate)
- **Variety** with; convenience (moderate), price and payment (moderate), and privacy and security (moderate)
- **Privacy and security** with; convenience (moderate), and variety (moderate)

The inter-item correlation matrix for each factor representing this can be viewed in Appendix E.

Table 11: Principal Factor Analysis

Factor		Initial Eigenvalues		
		Total	% of Variance	Cumulative
1	Convenience	3.021	43.159	43.159
2	Price and Payment	1.139	16.272	59.432
3	Variety	1.012	14.458	73.890
4	Privacy and Security	.556	7.954	81.844
5	Social Engagement	.524	7.496	89.341
6	Category	.436	6.239	95.580
7	Device	.309	4.420	100.000

Table 11 demonstrates the extracted eigenvalues which reflects the factors considered for this study. A total of seven principal factors were identified for the purpose of this study. The Kaiser scale suggests that components which have an eigenvalue of 1, or greater, should be extracted as the principal factors which significantly contribute to the problem under review (Lo, Molenaar, & Rovine, 2016).

A total of seven factors were identified where only three have an eigenvalue greater than one. These factors account for a total of 73.89% variation, where the convenience factor accounts for 43.16% of the total variation.

The principal factor analysis provided the researcher with three factors which significantly contribute the most to online shopping, these are:

- Convenience,
- Price and payment, and
- Variety

The principal factor analysis provided the researcher with five factors which contribute the least to online shopping, these are:

- Privacy and security,
- Social engagement,
- Category, and
- Device

The full principal factor analysis table can be viewed in Appendix D. The analysis of the extracted factors is discussed in detail in Chapter 5

4.4 Summary of Results

The researcher has, in this chapter, presented the results from the research. This has been done in two categories. The first deals with the demographics of the sample, and the second is the presentation of the questionnaire results. The demographic results have been presented in Table 4.

The questionnaire results were analysed using the statistical programme SPSS. A frequency table, and a summarised version of the table, are presented in Table 5 and 6, which assess the modal categories of responses. These showed that most respondents have responded in the ‘likely’ category.

The researcher then ran the means and standard deviations of the entire group of respondents, and these are presented in Table 7. There are nine questions which have a mean above 4.0, and three reflecting a mean lower than 2.9. This table also reflects four questions with a high standard deviation (above 1.3). These are discussed further in Chapter 5.

Finally, the researcher ran a factor analysis which highlighted the relationship of factors to each other. Table 10 identified that ‘convenience’ and ‘price and payment’ had a strong correlation (above 0.6). The full results of the inter-item correlation can be found in Appendix E. There were three factors identified in Table 11 which contribute to the most to the use of online shopping, where four factors contribute least to online use, based on their eigenvalue. The potential reasons for convenience, price and payment, and variety as the most contributing factors for online shopping are discussed further in Chapter 5.

CHAPTER 5. DISCUSSION OF RESULTS

This chapter discusses the interpretation of the results presented in Chapter 4. The analysis follows the progression outlined in the methodology section of this research.

5.1 Introduction

Results have been analysed and presented in two sections. The first section analyses the demographics of the sample and the second analyses the results from the questionnaire.

The second section of results from the research, primarily deals with general statistical findings from the whole group with regard to frequency and mean analysis. General comments are also made on the items with a high standard deviation. A detailed analysis was then done on the research questions using a mean distribution analysis and a factor analysis. The factor analysis consists of a detailed evaluation of the extracted principal factors, with the addition of the inter-factor correlation, where the inter-item correlation results are represented in Appendix E.

5.2 Demographic Profile of Respondents

The chosen sample is tabulated in Table 12 and entails the responses from all 204 respondents split between both men and women.

Table 12: Demographic Profile of Respondents

Category	Response Options	Frequency
Gender	Male	84
	Female	120
Age	< 18	0
	18 – 29	93
	30 – 39	79
	40 – 49	15
	50 – 59	13
	60 +	4

In Table 12, it can be seen that the majority of the respondents are female (58.82%). The researcher believes that the male-to-female split is representative of the shopping population and was satisfied with the respondents' diversity.

The majority of respondents are below 40 years of age, with 45.59% between the age of 18 and 29, while 38.73% are between 30 and 39. There were no respondents below the age of 18. The researcher believes that the age split is representative of the population under this study.

5.3 Results of Research Questionnaire

The data from the 204 survey responses received have been collated, sorted and analysed using the statistical programme SPSS. The researcher compiled an online survey entailing 22 questions where respondents were asked to rank their responses using a 5-point Likert scale ranging from 'highly unlikely' (1) to 'highly likely' (5).

5.3.1 *Frequency*

Table 5 and 6 represent the frequency tables developed in Chapter 4, where it is evident that the majority of the responses lie in the 'likely' category in both tables.

In Table 6, the summarised modal frequency responses reflect that two out of 22 responses lie within the 'unlikely' category. The majority of respondents replied

‘likely’ to the questions related to the contributing factors of shopping online are the following:

- Convenience (all questions had the highest frequency in the likely column)
- Price and payment (all questions had the highest frequency in the likely column)
- Variety (all questions had the highest frequency in the likely column)
- Privacy and security (all questions had the highest frequency in the likely column)
- Social engagement (2 out of 3 questions had the highest frequency in the likely column)
- Category (3 out of 4 questions had the highest frequency in the likely column)
- Device (all questions had the highest frequency in the likely column)

This reflects that in these seven factors, respondents were answering more frequently to likely shop online based on statements presented. This could reflect that there is a general agreement that all of the presented factors foster the use of online shopping. The question with the highest modal response of 82% was question 2: “The ability of products to be delivered to my preferred destination”, reflecting the samples belief about convenience related to online shopping.

It should be noted however, that this does not mean that the sample believes that this is negative or positive, just that there is a discrepancy in the weighting of convenience. It is, therefore, necessary to evaluate these areas in further detail through the statistical analysis that follows below.

The majority of respondents that replied ‘unlikely’ to the questions related to the contributing factors of shopping online are the following:

- Social engagement (1 out of 3 questions had the highest frequency in the unlikely column)
- Category (1 out of 4 questions had the highest frequency in the unlikely column)

This could imply that, in general, the surveyed sample believes elements in the 'social engagement' and 'category' construct do not contribute to the use of online shopping. This is discussed in more detail later on.

5.3.2 *Mean and Standard Deviation*

The mean responses of all respondents were analysed, and are reflected in Table 7 in Chapter 4. There are three factors that have a mean of above 4.0, indicating that on average, the respondents chose 'likely' to 'highly likely' as their responses to the questions residing in these factors. These factors are summarised in Table 13.

Table 13: Summary - Highest Factor Means

Factor	Mean
Convenience	4.03
Price and Payment	4.17
Variety	4.13

In Table 14, the researcher shaded in the factors that did not possess an overall mean value of above 4.0, but do entail a question in the construct where respondents chose 'likely' to 'highly likely' as their responses to the question.

Table 14: Summary - Highest Question Means

Factor	Question	Mean
Convenience	2. The ability of products to be delivered to my preferred destination	4.31
Price and Payment	4. The price of products on offer	4.11
	5. The promotions and deals on offer	4.20
	6. The ability to pay using multiple payment options (credit card, EFT, PayPal, etc.)	4.20
Variety	7. The range of products on offer	4.01
	8. The ability to compare product features and prices	4.19
	9. The ability to navigate through a website	4.19
Category	16. Books	4.05
Device	21. PC/Laptop	4.34

The convenience factor reflected one question, which reads: “the ability of products to be delivered to my preferred destination”, demonstrated the mean of this question to be 4.31, illustrating that the average response resides in the ‘likely’ category. This supports statements discussed in the literature review which means that most people want their shopping needs met that maximises efficiency and convenience (Lian & Yen, 2014). Furthermore, alluding to literature, convenience in the online retail industry from an international perspective which has a significant bearing on South Africa. This statement proves that consumers are likely to shop online based on the element of flexibility and efficiency.

The price and payment factor reflected three questions, which reads: “the price of products on offer”, “the promotions and deals on offer”, and “the ability to pay using multiple payment options (credit card, EFT, PayPal, etc.)”. These questions demonstrated that the average responses reside in the ‘likely’ category. This supports statements discussed in the literature review which means that for most people, affordability is a major driver for online shopping behaviour (Kukar-Kinney & Carlson, 2015).

The ability for consumers to research and compare prices, promotions and various deals across different retailers is a value addition, where multiple payment methods provide optionality for consumers to execute a transaction. These statements prove that consumers likely to shop online based on the elements price and payment optionality.

The variety factor reflected three questions, which reads: “the range of products on offer”, “the ability to compare product features and prices”, and “the ability to navigate through a website”. These questions demonstrated that the average responses reside in the ‘likely’ category. This supports statements discussed in the literature review which means that most people prefer to acquire a range of brands and products from different retailers at a single place (Tontini, 2016). The ability for consumers to navigate seamlessly through an online store, thus increasing the online shopping experience, increases the likelihood of a consumer purchasing a product through online means (Mosteller, Donthu, & Eroglu, 2014). These

statements prove that consumers are likely to shop online based on the elements of product variety and platform navigation.

The category factor reflected one question, which reads: “books”, demonstrated the mean of this question to be 4.05, illustrating that the average response resides in the ‘likely’ category. This somewhat does not support statements discussed in the literature review. The online retail industry, both internationally and locally, indicate that consumers purchase electronic goods more frequently compared to books (Hsu, Yu, & Chang, 2017). However, books are a popular product in online purchases. This statement reflects that there could be a potential shift of likely products purchased by consumers in South Africa from electronic goods to books.

The device factor reflected one question, which reads: “PC/Laptop”, demonstrated the mean of this question to be 4.34, illustrating that the average response resides in the ‘likely’ category. This supports the statement discussed in the literature review which means that consumers insist on a seamless, integrated omni-channel experience that enables them to shop from anywhere (Rodríguez-Torrico et al., 2017). This statement reflects that consumers are likely to shop online using a PC or laptop as their preferred device.

The three responses with the lowest means all have a mean below 2.9, indicating that the respondents chose ‘unlikely’ to ‘highly unlikely’ as their responses to the questions. These questions are summarised in Table 15.

Table 15: Summary - Lowest Question Means

Factor	Question	Mean
Social Engagement	14. The ability to engage with other shoppers	2.70
Category	15. Groceries	2.55
Device	19. Mobile / Feature ‘non-smart’ phone	2.19

As can be seen in Table 15, the overall mean of the three identified factors do not possess a value below 2.9, but do entail a question in the construct where respondents chose ‘unlikely’ to ‘highly unlikely’ as their responses to the question.

The social engagement factor reflected one question, which reads: “the ability to engage with other shoppers”, demonstrated the mean of this question to be 2.70, illustrating that the average response resides in the ‘unlikely’ category. This somewhat does not support the statement discussed in the literature review. The rise of consumer communities and the influence of social media bridges the engagement divide between consumer-to-consumer and consumer-to-retailer interaction (Bilgihan et al., 2016). This statement reflects that there could be a potential social shift emerging within South Africa where consumers are unlikely to shop online based on their ability to engage with other shoppers.

The category factor reflected one question, which reads: “groceries”, demonstrated the mean of this question to be 2.55, illustrating that the average response resides in the ‘unlikely’ category. This question possesses a high standard deviation, seen in Table 8 in Chapter 4, indicating great variation in opinion. This supports the statement discussed in the literature review that reflects that consumers are unlikely to purchase groceries online. The international and local online retail landscape indicate that groceries are the least bought online category where shoppers prefer to make grocery purchases in store (Hsu et al., 2017). However, with a large variance in responses, there is potential that South African consumers could purchase groceries online. This statement reflects that consumers are unlikely to purchase groceries online.

The device factor reflected one question, which reads: “mobile / feature ‘non-smart’ phone”, demonstrated the mean of this question to be 2.19, illustrating that the average response resides in the ‘unlikely’ category. This question possesses a high standard deviation, seen in Table 8 in Chapter 4, indicating great variation in opinion. This supports the statement discussed in the literature review which means that consumers are unlikely to shop online using a ‘non-smart’ mobile device. The capability of the device plays a role in the online shopping experience. This

influences the seamless interaction that consumers will experience when on an online platform (Rodríguez-Torrico et al., 2017).

5.3.3 *Factor Analysis*

In the results presented above, the researcher believed that additional analysis would aid in refining a conclusion regarding the questions of the research. The researcher, therefore, ran a factor analysis which extracted and highlighted the principal factors which contribute the most to online shopping through their respective eigenvalues. A correlation matrix was developed to identify the degree of relationship between factors, which aids the researcher in evaluating which contributing principal factors are related to the other identified factors. An inter-item correlation matrix is represented in Appendix E.

5.4 Discussion pertaining to research questions

The factors which contribute towards the use of online shopping for consumers are the fundamental principal upon which this study is based. The internet has transformed the consumer's notion of convenience, speed, price, payment, product information and service (Kotler & Armstrong, 2013). As a result, it has given retailers a whole new way to create value for consumers and build relationships with them.

The survey reflects the measurement of the contributing factors which were identified in the literature review. By using the factor analysis methodology, the researcher was able to discover the most prominent factors which will contribute towards the use of online shopping, as well as the least contributing factors. In addition, the researcher was able to discover the relationship between the most contributing factors and the remaining set of factors. The results of this are reflected in Table 16.

Table 16: Summary - Principal Factor Analysis

Factor		Initial Eigenvalues
		Total
1	Convenience	3.021
2	Price and Payment	1.139
3	Variety	1.012
4	Privacy and Security	.556
5	Social Engagement	.524
6	Category	.436
7	Device	.309

Table 16 demonstrates the extracted eigenvalues which reflects the factors considered for this study. The Kaiser scale suggests that components which have an eigenvalue of 1, or greater (shaded in Table 16), should be extracted as the principal factors which significantly contribute to the problem under review (Lo et al., 2016).

These results have been analysed and presented in two sections. The first section analyses the factors which contribute the most to online shopping, and the second analyses the least contributing factors.

5.5 Results pertaining to research questions

The purpose of this research was to evaluate the factors contributing to the use of online shopping for consumers in South Africa. This study identified the most and least significant factors which would contribute towards the use of shopping online.

5.5.1 *Results pertaining to Research Question 1: The factors which contribute the most towards online shopping*

5.5.1.1 Convenience

According to Moloney (2015), convenience is the benefit associated with online shopping as geographical limitations are overcome as the world becomes accessible (Moloney, 2015). The research study listed the convenience of online shopping as one of the biggest advantages in a South African context.

As highlighted in the literature review, the convenience factor offers consumers the ability to save time which motivates individuals to take up online shopping (Lian & Yen, 2014). The results from this research suggest that consumers are likely to shop online based on;

- The ability to have flexible purchasing times, and
- The ability of purchases to be delivered to their preferred destination

The convenience of being able to acquire products at any time, the flexibility that a physical store cannot offer, is an important driver for consumers. The results from this research indicated that 72% of respondents would shop online based on the flexible purchasing hours offered by a virtual store.

Online purchases can be undertaken by consumers without leaving the comfort of their homes as e-commerce eliminates travel and associated costs. This element of convenience is further supported by the results of this research as 82% of respondents indicated that they would shop online based on purchases to be delivered to their preferred destination.

The data analysis conducted on this research highlighted that convenience is the most important factor that will drive consumers to shop online. This agrees closely with the literature that the ability to save time is an underlying motivator. It must be noted that price is strongly correlated to convenience which highlights that the element of price plays an important role on whether a consumer would purchase a product online. A consumer might engage with the medium of online shopping

based on convenience, however, if the consumer's expected price threshold exceeds their affordability level, the likelihood will be reduced. This is further elaborated in section 5.5.1.2.

Drawing from the literature and data analysis, it is evident that today's consumers want their shopping needs to be met in a manner that minimises uncertainty and inflexibility, and maximises efficiency, convenience and pleasure.

5.5.1.2 Price and Payment

According to Kukar-Kinney and Carlson (2015), even though consumers are after value, price is still a fundamental motive in a purchasing decision (Kukar-Kinney & Carlson, 2015). Years of slow economic growth have resulted in a value dynamic, and affordability is important in every income band across different age groups. Affordability is a major driver for shopping behaviour in South Africa, and is a part of the online value proposition. The actual price of a product is as important as the perceived value of a purchase (Moloney, 2015).

As highlighted in the literature review, lower prices and the possibility of making price comparisons are key motivators for online shopping (Kukar-Kinney & Carlson, 2015). The results from this research suggest that consumers are likely to shop online based on;

- The ability to view prices of products on offer,
- The ability to view product promotions and deals on offer, and
- The ability to pay for products using multiple payment options

A study undertaken by Karimi (2015) examined the online buying behaviour among a group of Internet users, specifically exploring information seeking patterns as well as the participants' motivations for online shopping (Karimi et al., 2015). Based from the results of this study, South African consumers can be deemed as comparison shoppers that compare product features, prices, and that actively seek for promotional offers, prior to making a purchasing decision.

The notion that South African consumers are comparison shoppers is supported by the results of this research which indicate that approximately 78% of respondents are likely to shop online based on the ability to view product prices, promotions and deals on offer.

Due to the widely spreading rate of information across the Internet, retailers can compress the value chain through electronic transfer of information and transactions (Kukar-Kinney & Carlson, 2015). Retailers are more flexible in reacting to customers' requirements by reducing transaction processing time. With an integrated transactional platform, customers can track the products in transit, payment and fulfilment. Based from the results of this study, South African consumers are likely to shop online due to the ability to transact utilising multiple payment options. This stems from the notion that this provides optionality for consumers to execute a transaction.

Drawing from the literature and data analysis, it is evident that consumers shop online based on both the convenience and price benefit that online shopping can unlock. These benefits have a negative impact on South African brick and mortar retailers as they are experiencing an increase in prices contributed by store rentals (Moloney, 2015). The stress on their cost structure is compounded further by online pressures to reduce prices.

5.5.1.3 Variety

According to Tontini (2016), as online retailers increase their product variety, this enables the opportunity for an increase in convenience with the ability to decrease product prices for customers (Tontini, 2016). The Internet not only offers a wide variety of information, it offers the capability to deliver specific information tailored to the needs of the consumer. This enables online shoppers to evaluate product features and prices from multiple sources in order to make an informed purchasing decision (Chang, 2015).

As highlighted in the literature review, a consumer is more motivated by a variety across retail alternatives, product types and brands. The ability for a consumer to access an online store from a variety of destinations is essential with the rapid development of social media (Jiang et al., 2013). The results from this research suggest that consumers are likely to shop online based on;

- The range of products on offer,
- The ability to compare product features and prices, and
- The ability to navigate through a website

The range of products that are readily available at an online store is a key motivator for shopping online for participants involved in this study as 74% of respondents indicated that they are likely to shop online based on product variety. There is a strong correlation between product range and the ability to compare product features and prices. This correlation is further substantiated by Tontini (2016) which highlighted that online retailers have the ability to offer consumers a diverse product offering which enablers shoppers with information to compare product features and prices (Tontini, 2016). This has the potential of increasing the likelihood of a consumer to shop online. Product features and prices are available from various retailers and can be compared in real time on numerous online websites. The data analysis conducted on this research highlighted that convenience is the most important factor that will drive consumers to shop online.

A study undertaken by Karimi (2015), reflected that participants' motivation for online shopping is the ability to search for information. Based from the results of this study, South African consumers can be deemed as 'information surfers' as they have good navigation skills and a fair amount of online shopping experience (Karimi et al., 2015). The notion that South African consumers are information surfers is supported by the results of this research which indicate that approximately 81% of respondents are likely to shop online based on the ability to navigate through a website and shop around, prior to conducting a purchase. This allows consumers to navigate seamlessly through an online store, increasing their online experience, and ensures that shoppers receive value for their money.

Drawing from the literature and data analysis, it is evident that consumers shop online based on the diversity and optionality the online medium offers. The ability to acquire a range of brands and products from multiple retailers at a single point is indicated (Tontini, 2016).

5.5.2 *Results pertaining to Research Question 2: The factors which contribute the least towards online shopping*

5.5.2.1 Privacy and Security

According to Steyn (2016), South African consumers are for the most part concerned about internet security and reliability with regard to online shopping (Steyn & Mawela, 2016). There is a lack of confidence in online security and perceived risk associated with online shopping.

As highlighted in the literature review, it was identified that online privacy and security concerns discouraged South African consumers from purchase products online. The results from this research indicated that 22% of respondents are unlikely to shop online based on the safety of inserting personal details on an online platform. It is of interest to note that 36% of respondents were neutral and that security had no influence on whether they would shop online or not.

With the escalation of online retailers and the need for further improving current security standards, shopping online will become a more logical and safer alternative to current purchasing habits (Karson, 2015).

Drawing from the literature and data analysis, it is evident that South Africans are concerned about privacy and security issues such as fraud and identity theft. Prior to purchasing online, South African shoppers evaluate the implications of providing credit card details and security, in terms of internet payment methods. This notion indicates that it is beneficial for online retailers to reduce consumers' concerns about privacy and security by providing a safe and secure website for transactions.

5.5.2.2 Social Engagement

According to Trevinal (2014), the premise is that consumers use their senses which have a powerful effect on the social element of decision making. The impact of social media on consumers has an influence on their purchasing decision. Consumers place emphasis on social media, in addition to friends and family's opinions, advertisements and media coverage, to make product decisions and gauge brand authenticity (Trevinal & Stenger, 2014).

As highlighted in the literature review, the consumer-to-consumer and consumer-to-retailer interaction is a motivating factor to shop online, however, the results from this research suggest that, either the social networking wave has not yet emerged within the South African shopping community, or a potential social shift has developed where the ability to engage with shoppers has no impact on purchasing products online (Bilgihan et al., 2016).

The results from this research suggest that consumers are unlikely to shop online based on the ability to engage with others shoppers. However, this research suggests that the ability for a consumer to engage with a retailer, brand or product has no influence whether or not a consumer would shop online.

Drawing from the literature and data analysis, it is evident that social engagement as a phenomenon through social media is at its infancy in South Africa, and its bottom-line effect on retailers will begin to emerge as consumers interaction strengthens.

5.5.2.3 Category

The best products to sell online constantly change over time due to the competitive nature of the retail industry. Online retailers are continually monitoring and evaluating the market in order to capitalise on the next niche product that is in high demand and low supply (Ashraf et al., 2015).

As highlighted in the literature review, consumers influence the demand of products which provide retailers with insight on the type of products consumers find valuable

to purchase online (Hsu et al., 2017). In the South African context, electronic goods and books are currently the most popular online purchased products, which is aligned with the global context (Moloney, 2015).

The results from this research suggested that participants are likely to purchase books and electronic goods online. However, 55% of participants mentioned that they are unlikely to purchase grocery products online. Drawing from the literature and data analysis, it is evident that consumers would prefer to purchase durable products online as opposed to fresh produce.

This stems strongly from the notion that consumers rely on their senses to make a purchasing decision (Moloney, 2015). Shoppers would like to touch, smell and feel fresh produce prior to purchase, where product specification on durable products is sufficient information required by a consumer to make a purchasing decision.

5.5.2.4 Device

According to Bilgihan (2016), smart devices such as; smart phones, laptops and tablets, is a factor in facilitating an online purchase which is rapidly becoming a crucial shopping agent as shoppers demand more online personalisation (Bilgihan et al., 2016). Smart devices have redefined retail by removing friction from transactions and empowering consumers. An online shopper has the ability to view and acquire products that stem beyond geographical boundaries through a smart device (Rodríguez-Torrico et al., 2017).

As highlighted in the literature review, mobile commerce is becoming the online shopping tool of choice where mobile devices are an essential part of the overall purchasing journey (Bilgihan et al., 2016). The results from this research suggested that participants are likely to use a smartphone, laptop or tablet to undertake online shopping, where 85% of participant would prefer using a laptop.

Drawing from the literature and data analysis, it appears that a feature (non-smart) mobile device has a role to play in the online shopping arena with 30% of participants indicating that they are likely to use this device to shop online. A study conducted by Rodney (2016) indicated that 65% of South Africans use a feature

phone due to the affordability of the device compared to a smartphone (Rodney & Wakeham, 2016). A feature phone possesses internet capability which can facilitate online shopping. This allows consumers, across different income brackets, to experience online shopping irrespective of location.

CHAPTER 6. CONCLUSION AND RECOMMENDATIONS

This chapter discusses the final conclusion and recommendations from the research conducted. Recommendations are given for retailers in this study. The research has also indicated options for further research.

6.1 Introduction

The research set out to evaluate the factors contributing to the use of online shopping for consumers in South Africa. This chapter will be presented in three sections. The first section highlights the conclusions of the study by encapsulating the results in this research study concur with or contradicts previous research studies. The second section places forth implications and recommendations to retailers. This is followed by the researcher's suggestions for further research and overall conclusion.

6.2 Conclusions of the study

With the changing role of in-store shopping as discussed in the literature review, it is evident that the internet and technological advancements has disrupted the traditional retail business model. It would, therefore, be a likely assumption that retailers need to think differently about how they get their products to consumers.

From the evidence presented in the statistical analysis and discussion, as well as literature on previous studies, it was demonstrated by the researcher that there is evidence to support both research questions. These findings are summarised below.

6.2.1 *Research Question 1: The factors which contribute the most towards online shopping*

This research question aimed to identify those factors which would motivate consumers the most to shop online. The analysis identified three factors, namely; convenience, price and payment, and variety. The participants demonstrated a higher likelihood to shop online based on these factors.

This supports the research of Lian (2014) and Moloney (2015) that the notion of the ability for consumers to save time and money, due to the ease of acquiring products at affordable prices, are major drivers for online shopping for South African consumers. It also supports research undertaken by Tontini (2016) that product variety enables online retailers to offer consumers a diverse range of products, which increases convenience and affordability for consumers, thus contributing as a significant motivator for South African consumers.

The researcher found that there is evidence in support of this research question when comparing the results of the factor analysis which indicated the most contributing factors to online shopping for South African consumers.

6.2.2 *Research Question 2: The factors which contribute the least towards online shopping*

This research question aimed to identify those factors which would motivate consumers the least to shop online. The analysis identified four factors, namely; privacy and security, social engagement, category, and device. The participants demonstrated a lower likelihood to shop online based on these factors.

This supports the research of Steyn (2016) which highlights that South African consumers are concerned about internet security and privacy risk of online shopping. This notion aligns with participants' responses as a discouraging factors to shop online. Research conducted by Trevinal (2014) discussed that social interaction, whether it be with fellow consumers or retailers, is a factor that lends itself to online shopping. However, the analysis lends itself to the notion that the

ability to socially engage has no impact on their likelihood of shopping online, where participants' responses deemed this so.

This research question supports the research of Moloney (2015) and Bilgihan (2016) where category and device contribute the least towards online shopping. Consumers rely on their senses to make a purchasing decision which lends itself to certain product categories to be more attractive in an online setting than others. The optionality to utilise a number of devices to shop online allows consumers the ability to shop anywhere through a number of platforms. The researcher found that there is evidence in support of this research question when comparing the results of the factor analysis which analysed the least contributing factors to online shopping for South African consumers.

6.3 Recommendations

Research has demonstrated that there are two insights that catalyse and define the opportunity ahead of retail businesses. Transactions in the short-to-medium term will remain and happen in a physical location. However, during the same timeframe, more than 90% of consumers will research for a product online before conducting a physical transaction (Aye et al., 2015). When the physical and digital realm combine, this will in essence create the omni-channel experience that retailers of the future will have to embrace and know how to win in.

Shopping has been, and will be, a social experience. Customers like to interact with people, and like to touch and feel products, in essence to know that it exists. The question fundamentally is, where do retailers find themselves today in an ever changing world? Firstly, there are retailers in categories that have been highly penetrated online, these retailers find themselves in survival mode. Secondly, there are retailers that are in categories that are less penetrated by online. This is an opportunity for these retailers to learn from those who have already had the impact of digital disrupt their business model.

Considering the results of this research, the researcher will make recommendations to retailers. These recommendations follow below.

6.3.1 *Recommendations to retailers*

These recommendations are made based on the research, responses and analysis from individuals surveyed and, therefore, should be taken into account by retailers.

- Retailers should be prudent on the manner in which they spend on technology, and invest in technology that will materially impact the customer experience.
- Retailers should increase their learning potential around consumer behaviour trends, through pilot initiatives, to understand the underpinning drivers behind consumer needs and how it effects their business model.
- Retailers should construct capabilities that create frictionless, intuitive, convenient and easy shopping pathways that enable consumers to purchase on demand.
- Retailers should sense, share, shape and amplify engagement strategies, interactions, tactics and experiences with all ecosystem constituents, such as; consumers, employees and trading partners. This will allow retailers to gain insight at various interaction points and engage these avenues in a well-orchestrated manner.
- Retails should embed self-learning autonomic decision processes into retail forecasting, planning and execution processes. This will allow retailers the opportunity to enable individualised experiences through personalised and contextualised data.
- Retailers should focus on increasing the privacy and security levels of their online platform to offer consumers a safe shopping journey thus creating trust between the retailer and consumer.

6.4 Suggestions for further research

There are a number of areas which have been uncovered during the course of this paper which require further research.

The following topics are suggested for further research:

- There is a need for further research conducted on the subject matter from a qualitative vantage point. Having a qualitative approach would have allowed the researcher to be free of assumptions and uncover findings around the reasons behind the options selected by the participants.
- An analysis of trends over time through cross-sectional research (either qualitative or quantitative) would allow the researcher to identify whether actions taken by retailers would cause a shift in consumer behaviour towards online shopping.
- An investigation into the disposable income of consumers who shop online and identify the drivers that will allow lower income consumers to undertake in online shopping.
- A study on the influence of whether computer literacy of South Africans at a young age would lead to additional internet usage thus increasing online purchases.
- Additional research on human motives having an impact on online shopping as the roles of emotions and interpersonal relationships that may affect the online shopping activity.
- Further research on a broader, diversified sample base representative of the South African population where emerging groups of internet users should be included in future research studies.

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APPENDIX A

Online Survey Questionnaire

Please answer the questions below as honestly as possible. The first section consists of a demographic questionnaire which is used for reporting purposes only, and will not allow the researcher to identify any individual respondents. Please note that ALL responses are confidential.

Please answer the following questions as possible, your first reaction is usually the most accurate response.

Section 1: Demographic Profile

Please click on the appropriate option from the list provided.

Gender

Male	Female

Age (Years)

< 18	18 - 29	30 - 39	40 - 49	50 - 59	60 +

Please rate each statement below as you feel the responses are appropriate to you using the scale provided (highly unlikely – highly likely)

These questions will assess your perception of the use of online shopping based.

Section 2: Research Questions

Highly Unlikely (1)	Unlikely (2)	Neutral (3)	Likely (4)	Highly Likely (5)

1. Convenience

How likely am I to shop online am based on:

a. The availability to shop 24 hours-a-day, 7 days-a-week
b. The ability of products to be delivered to my preferred destination
c. The ability to multi-task (i.e. purchase products online while simultaneously making dinner at home)

2. Price and Payment

How likely am I to shop online based on:

a. The price of products on offer
b. The promotions and deals on offer
c. The ability to pay using multiple payment options (credit card, EFT, paypal, etc.)

3. Variety

How likely am I to shop online based on:

a. The range of products on offer
b. The ability to compare product features and prices
c. The ability to navigate through a website

4. Privacy and Security

How likely am I to shop online based on:

a. The discreetness of the products purchased
b. The safety of inserting personal details (personal credentials, home address, contact details, credit card details, etc.)

5. Social Engagement

How likely am I to shop online based on:

a. The ability to provide comments/feedback about the experience with the brand or product
b. The ability to follow your favourite brand or retailer
c. The ability to engage with other shoppers

6. Category

How likely am I to purchase the following products online?

a. Groceries
b. Books
c. Electronic Goods
d. Fast Foods

7. Device

How likely am I to use the following devices when purchasing products online?

a. Mobile (feature ‘non-smart’ phone)
b. Smartphone
c. PC/Laptop
d. Tablet/iPad

Closing Remarks:

Thank the respondent for taking time to complete the survey questionnaire. Each respondent that would like to be placed in a luck draw to stand a chance to win a gift voucher will be asked to e-mail the researcher.

APPENDIX B

Reliability Test Result

Cronbach Alpha's values related to internal consistency

Cronbach's Alpha	α ≥ 0.9	0.9 > α ≥ 0.8	0.8 > α ≥ 0.7	0.7 > α ≥ 0.6	0.6 > α ≥ 0.5	0.5 < α
Internal consistency	Excellent	Good	Acceptable	Questionable	Poor	Unacceptable

Reliability Statistics – Survey Questionnaire Result

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	Number of Factors
.773	.764	7

APPENDIX C

Kaiser Meyer Olkin (KMO) and Bartlett's Test Results

KMO values for Sampling Adequacy

KMO Value	0.00 – 0.49	0.50 – 0.59	0.60 – 0.69	0.70 – 0.79	0.80 – 0.89	0.90 – 1.00
Sampling Adequacy	Unacceptable	Miserable	Mediocre	Middling	Meritorious	Marvelous

KMO and Bartlett's Test – Survey Questionnaire Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	343.043
	df	21
	Sig	.000

APPENDIX D

Extraction Method

Communalities

	Factor	Initial	Extraction
1	Convenience	1.000	.596
2	Price and Payment	1.000	.649
3	Variety	1.000	.600
4	Privacy and Security	1.000	.566
5	Social Engagement	1.000	.418
6	Category	1.000	.727
7	Device	1.000	.604

Total Variance

Factor		Initial Eigenvalues			Extraction Sums of Squared Loadings		
		Total	% of Variance	Cumulative	Total	% of Variance	Cumulative
1	Convenience	3.021	43.159	43.159	3.021	43.159	43.159
2	Price and Payment	1.139	16.272	59.432	1.139	16.272	59.432
3	Variety	1.012	14.458	73.890	1.012	14.458	73.890
4	Privacy and Security	.556	7.954	81.844			
5	Social Engagement	.524	7.496	89.341			
6	Category	.436	6.239	95.580			
7	Device	.309	4.420	100.000			

APPENDIX E

Factor Analysis Results

Inter-Item Correlation Matrix

Factor 1: Convenience

	Convenience 1	Convenience 2	Convenience 3
Convenience 1	1.00	.627	.494
Convenience 2	.627	1.00	.503
Convenience 3	.494	.503	1.00

Factor 2: Price and Payment

	Price and Payment 1	Price and Payment 2	Price and Payment 3
Price and Payment 1	1.00	.774	.565
Price and Payment 2	.774	1.00	.558
Price and Payment 3	.565	.558	1.00

Factor 3: Variety

	Variety 1	Variety 2	Variety 3
Variety 1	1.00	.734	.608
Variety 2	.734	1.00	.588
Variety 3	.608	.588	1.00

Factor 4: Privacy and Security

	Privacy and Security 1	Privacy and Security 2
Privacy and Security 1	1.00	.423
Privacy and Security 2	.423	1.00

Factor 5: Social Engagement

	Social Engagement 1	Social Engagement 2	Social Engagement 3
Social Engagement 1	1.00	.552	.544
Social Engagement 2	.552	1.00	.498
Social Engagement 3	.544	.498	1.00

Factor 6: Category

	Category 1	Category 2	Category 3	Category 4
Category 1	1.00	.245	.029	.069
Category 2	.245	1.00	.364	.460
Category 3	.029	.364	1.00	.518
Category 4	.069	.460	.460	1.00

Factor 7: Device

	Device 1	Device 2	Device 3	Device 4
Device 1	1.00	.270	.347	.124
Device 2	.270	1.00	.312	.345
Device 3	.347	.312	1.00	.094
Device 4	.124	.345	.094	1.00