

**Website features, lifestyle compatibility,  
online shopping attitudes and purchase  
intentions amongst South African  
consumers**

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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 Management in Strategic Marketing (MMSM)

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## **ABSTRACT**

The rapid growth and adoption of the internet over the last two decades has led to the boom in online businesses, as well as to the internet being used as a way of communication and connectivity. The convenience and relative affordability of accessing the internet has created unprecedented opportunities for organisations to expand their offerings to a wider, global audience. The introduction of e-commerce has provided opportunity for many individuals and organisations to operate solely online. Online stores enjoy a lot of exposure amongst those people with access to the internet, while concurrently being exposed to many competitors too.

Websites have evolved from complex coded networks that took weeks to create, to simplistic programs and templates that any individual can create in a matter of minutes. The relationship between websites, website design and online shopping, was examined in this research. The study looked at what were classified for the purposes of this study as systematic and behavioural factors associated with online shopping. The systematic factors are website system qualities and playfulness of the website, and behavioural factors are attitudes towards online shopping, lifestyle compatibility, order fulfilment and perceived usefulness of an e-commerce website. The study draws from the consumer behaviour framework, and focuses specifically on the influencing factors of website design on purchase intentions. It uses previous studies across developed and developing countries, which examined website features, customer satisfaction, and what motivates and influences consumers to purchase online.

The methodology of the study employed a cross-sectional survey design, by means of a self-administered questionnaire, distributed online. The questionnaire was adapted from previous studies, which dealt with online platforms. The results of the study prove that consumers in South Africa found the system quality of a website to be important, as well as playfulness, attitude towards shopping online, lifestyle compatibility, perceived usefulness and order fulfilment, all to be contributing factors affecting their online purchase intentions. However, playfulness in relation to perceived usefulness was not supported in the study, as well as lifestyle compatibility as a direct influencer of purchase intention.

The study provides useful insights into the booming online shopping environments in South Africa specifically, regarding how the design and use of a website does in fact affect a consumers desire to purchase. It shows exactly which systematic and behavioural factors are

important to consumers, and provides theoretical as well as practical recommendations to marketers and business owners on how to better prioritise their investment into websites, and how to improve their user journeys to encourage purchases.

**Key words:** online shopping, e-commerce, website features, purchase intention, system quality, playfulness, lifestyle compatibility, attitudes, order fulfilment, perceived usefulness

# **DECLARATION**

I, Erica Cuna, 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 Management in Strategic Marketing at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Erica Vanessa Cuna

Signed at Johannesburg, South Africa

On the 18<sup>th</sup> day of March 2020

# **DEDICATION**

This Master's degree is dedicated to my parents. For the desire to work hard and persistence which they instilled in me, as well as for their constant and unwavering support. Thank you.

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I would like to acknowledge:

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# CHAPTER 1. INTRODUCTION

## 1.1 Purpose of the study

The purpose of this study is to determine which website design features have an influence on the purchase intentions of consumers in South Africa, and the influence that lifestyle compatibility and online shopping attitudes has. Website research has become a global phenomenon (Lim et al., 2016). Over the last decade, online shopping has been a growing trend in South Africa, which more organisations are buying in to. This has created a lot of competition in the e-commerce space, and therefore it becomes important to determine which aspects of a website affect a consumer's desire to purchase and repurchase from them (Kim, 2011).

Research shows that consumers put a greater reliance on digital content than they did in the beginning of the millennium, for information seeking, socialising and entertainment (O'Brien, 2017). The emergence of the internet and its associated digital platforms has resulted in 4.2 billion people being active internet users globally, as reported by Statista (2018b). The internet has brought along with it convenience, for those able to have regular access. In South Africa, out of the 31.2 million internet users (Statista, 2018a), 18.43 million of them are users of e-commerce (eshopworld, 2018). Traditional retailers have adopted an online presence, alongside their brick and mortar stores. Additionally, there are thousands of online retailers that exist solely online. With so many competitors globally all available to a single consumer during a single browsing session, it is has become critical for online retailers to attract customers, satisfy their needs and encourage repeat purchases from these customers (Perea y Monsuwé, Dellaert, & De Ruyter, 2004; Reibstein, 2002).

Consumers shop online through websites. The website acts as the window to the company's online offerings, and a badly designed website can result in monetary losses to the organisation, and in some cases even brand and/or reputational damage. Since it is such a pivotal point of the consumer or user's experience, it is crucial for marketers to understand which features of

the website are valued the most by users, and which influence their decision to purchase, and to return to the website (Reibstein, 2002).

Features which are crucial to website design are not considered as much lately when websites are being built, as new website design tools such as Wix (Wix, 2006) and Weebly (Square, 2019), make it easy for anyone who wishes to create a website to conveniently place content and information into an existing template. This leads to a disregard for how the website features affect consumers, and how the website is perceived by and affects the user's journey (Kim, 2011).

Studies have identified some of the most significant website features as being information quality, system design and quality, service quality and enjoyment (Bai, Law, & Wen, 2008; Liu & Arnett, 2000). Previous studies have looked at these features and their relationship to a consumer's purchase intent in an Asian or European setting, but never in a South African context. South African retailers are joining ecommerce platforms, however only few are doing arguably better than their direct competitors are. They may find that they have the correct advertising in place to drive consumers to the website, but once there, consumers drop off, and do not purchase anything, and it is crucial for the success of an organisation to find out why (Perea y Monsuwé et al., 2004).

Therefore, the purpose of the study is to determine which of the website design features have an influence on the intention to purchase of the website visitor. Along with these, I will look at additional factors, which are the perceived usefulness of shopping websites, and attitudes towards online shopping that influence purchase intention. I will further explore these and see whether these too are aligned with the website offerings in a South African context. This study will benefit the online shopping industry stakeholders as it aims to determine what they should emphasise and improve within their websites to sell products and retain consumers. It will also assist in identifying specific consumer demographics that are related to online shopping.

## **1.2 Context of the study**

Online retail stores have gained popularity globally over the last 5 years, with 1.92 billion people having made online purchases in 2019 alone (Statista, 2020). The trend indicates that online sales will show a steady growth of US\$4.8 trillion by the year 2021 (Statista, 2019a).

South Africa represents a lower representation of this overall total, with online sales only amounting to about 1% of the total retail sales, however a growth of 3% is expected over the next 3 years (Hoogduijn, 2018). As consumers in South Africa become more digitally confident and open to sharing details such as credit card information, personal details and physical addresses for shipping purposes, we see online shopping gaining popularity amongst the middle and upper class (Mpinganjira, 2017).

The growth in internet penetration does not show any trend of slowing down either, specifically in South Africa, and Africa at large. Due to this, businesses on the continent and in the country alike are doing more to ensure that they have an online presence, with many making the shift to e-commerce as well (KPMG, 2017; Mpinganjira, 2017).

Digital marketing and a significant online presence for a business go hand in hand. In South Africa, smartphones and mobile phones are the most used mediums through which consumers are exposed to digital media, with approximately 22 million people owning and using mobile phones (Statista, 2019b; Kreutzer, 2007). Mobile phones and other smart devices such as tablets therefore provide marketers with the opportunity to target consumers at any time of the day or night with marketing and advertising content. According to Optinmonster (2020), 49% of online purchases took place over mobile phones in 2019.

Research shows that consumers put a greater reliance on digital content than they did in the beginning of the millennium, for information seeking, socialising and entertainment. This indicates that the digital marketing space is an important one for an organisation to penetrate to make sure that they are present when their consumers are looking for any relevant information, or even just casually browsing (O'Brien, 2017). The website is the main platform that enables this access to information online. Digital marketing efforts such as search engine optimisation (SEO), and display advertising, are useful in driving consumers to the website. It then becomes the marketing organisation's responsibility to ensure that the website is set up in such a way that consumers are able to easily browse, find what they are looking for, and ultimately fulfil the intended call to action (Yoo & Donthu, 2001). A study by Yoo and Donthu (2001) has sited website quality as being an important feature when to attract and keep consumers on a website, much in the same way that the perceived quality of a physical retail store would also affect the time a consumer spends in a store, and whether any purchases are made. Yoo and Donthu (2001) go on to mention that a well-designed website provides additional benefits to the organisation, such as trust building, provides relevant information to

the consumers, enhances the perception of competence, usefulness and, positively influence the functionality of the site, and ultimately provides a reason to consumers to visit the website again.

Apart from website quality, various studies have looked at different website features and other factors which influence a website visitor's experience on a website, and whether they will revisit a website or not (Hausman & Siekpe, 2009). Studies by Hausman & Siekpe (2009); Perea y Monsuwé et al. (2004) focuses on website features deriving from consumers' perceptions and attitudes towards the functional elements, the perceived usefulness of a website and the enjoyment or playfulness. Order fulfilment, which is also an influencing factor to perceived usefulness, has been found to have an impact on purchase intention. Order fulfilment has to do with the full delivery and completion of an order placed when shopping online (Pham & Ahammad, 2017).

Attitudes towards website usage and online shopping are also important mediating factors in determining a consumers' intention to make a purchase. Attitude is determined by antecedents which are classified into two concepts, namely hedonic attributes, which are related to experience-related and subjective attributes of website usage, and utilitarian attributes, which are related to functional attributes of website usage, (Chang, Chih, Liou, & Yang, 2016; Sarkar, 2011).

Studies have also looked at and found a correlation between a consumer's lifestyle and their tendency towards shopping online (Boateng, Adam, Okoe, & Anning-Dorson, 2016; Selvakumar & Raghavan, 2017). According to (Selvakumar & Raghavan, 2017), a consumer's lifestyle, being the way that they live daily and how they live socially will determine whether they are inclined to shop online, and whether there are perceived benefits to shopping online. The more a consumer feels that shopping online is compatible with and benefits their lifestyle, the more likely they are to have a positive attitude towards it (Selvakumar & Raghavan, 2017). Lifestyle has also been found to have an influence on a buyer's purchase intention because if a buyer already intended on using the internet, feels comfortable using it and feels that it suits their lifestyle, then they will perceive it to be compatible with their lifestyle and the way in which they intend to make purchases (Boateng et al., 2016).

Consumer intentions when visiting a website were also studied in terms of a user's perception of website features ( Perea y Monsuwé et al., 2004). The findings in these studies were that the

common features of enjoyment, perceived usefulness of the website, visual appeal and good content, positively affect consumer's buying experience and purchasing behaviour (Hausman & Siekpe, 2009; Perea y Monsuwé et al., 2004).

Consumer buying behaviour is a largely psychological process, however when looked at from a marketing context, research has shown that it is possible to influence consumer behaviour (Kotler & Keller, 2012; Hawkins & Mothersbaugh, 2016; Peter & Olson, 1996).

Several studies have been conducted in the retail industry in Europe, United States of America and Asia to determine which website features result in positive and negative user experience, consumer buying decisions and return visits and purchases from the websites. (Bai, Law, & Wen, 2008; Ganguly, Dash, Cyr, & Head, 2010; Koufaris, Kambil, & LaBarbera, 2001; Liu, & Arnett, K. P., 2000)

Other studies have looked at user journeys of online shopping (Hall, Towers, & Shaw, 2017), user perceptions of online shopping websites (Cai & Jun, 2003), and a large part focused on website quality as a main influencer of a user's decision to purchase or return to a website (Bai et al., 2008). Several studies have also looked at the influence of consumers' attitudes towards purchase intention, however many have focused on utilitarian attributes as being the biggest determinant, as opposed to hedonic factors (Moon et al., 2017). They have also looked at cognitive and affective attitude, which have to do with thought process and emotional response towards an object, respectively (Chang et al., 2016). Perceived usefulness and ease of use are two antecedents to customer satisfaction and purchase intention, as identified by several studies that have shown to be important factors to consider (Bilgihan, Kandampully, & Zhang, 2016; Gunawan, Ali, & Nugroho, 2019; Lim, Osman, Salahuddin, Romle, & Abdullah, 2016). Both perceived usefulness and ease of use affect a user's attitude towards using the internet and other technologies (Gunawan et al., 2019). Further research focused on demographic aspects such as a user's gender, age and income status (Hall et al., 2017).

Order fulfilment, which has to do with the process during online shopping, from placing an order for a product to the delivery of the product and the accompanying auxiliary services, has also been looked at in the context of online shopping, consumer satisfaction and purchase intention, but not in a South African context. There have also been few studies around order fulfilment in an online shopping context. Order fulfilment has been shown to have a positive effect on purchase intention in previous studies (Nguyen, de Leeuw, & Dullaert, 2018; Pham



& Ahammad, 2017). The compatibility with one's lifestyle has not been examined as much either, specifically in a South African context, but has often proved to be an important factor in determining a consumer's attitude towards shopping online (Boateng et al., 2016).

Despite this research, very few have any focus on South Africa. To date there has not been a study that has looked at the impact that website features, namely system design, quality and enjoyment, have on the consumer buying decision process in South Africa. This study will also look at which behavioural factors such as attitude towards online shopping, lifestyle compatibility and perceived usefulness in conjunction with the previously mentioned website features result in purchase intentions and intentions to return to a website.

### **1.3 Problem statement**

#### **1.3.1 *Main problem***

Existing studies have focused firstly, largely on developed countries, as well as primarily on how website design quality affects consumer purchasing intentions, and how to improve websites design by adding and removing features (Koufaris et al., 2001; Limayem, Khalifa, & Frini, 2000). None looked at the impact that the specifically identified website features of system design and quality and enjoyment have on the consumer buying decision process.

Therefore, the main problem to be addressed is which features of retail website have an impact on a consumer's purchase intention, as well as which mediating behavioural factors affect purchase intention, specifically in a South African context.

#### **1.3.2 *Sub-problems***

The first sub-problem is whether digital marketing channels influence the stages of the consumer buying decision process (problem recognition, information search, evaluation of alternatives, purchase decision and post purchase decision).

The second sub-problem is whether consumers are more influenced by a specific digital marketing channel (search engine, mobile, email and social media) over another when making an online buying decision.

## **1.4 Significance of the study**

The boom and continuous growth of consumers' preference for shopping online globally has created a need for organisations to invest more resources into finding out how to attract consumers to their e-commerce websites, to make purchases and to return to the websites (Perea y Monsuwé et al., 2004). A website is the main portal through which consumers are able to access the company's information, products and offerings, as well as to make purchases. It is also a way for organisations to connect with their consumers and to provide them with information.

Over the last two decades, studies have focused on what attracts consumers to online shopping websites, their user experience on the website, as well as the website design features that influence consumers' attitudes and their desire to return to websites and to make return purchases. Online sales in the United States accounted to \$137.7 billion in the first quarter of 2019 (Commerce, 2019), which indicates that e-commerce and online shopping are huge revenue generating sources for the organisation.

Globally, the United States, Europe and Asia are ahead in terms of the number and frequency of online sales by consumers (Commerce, 2019). Developing countries such as South Africa have also seen a significant increase in online sales of products such as appliances, electronics, clothing, and travel and airline related offers (eshopworld, 2018). Very few studies have placed any focus on the influences of websites layout and design, the information provided, and how they influence consumers' desire to visit the website, make purchases and then return to the website to make repeat purchases.

South Africa has a few major players in the online retail space, and the trend is towards existing traditional retailers selling their products online, mainly to provide convenience and options to consumers (Forsythe, Liu, Shannon, & Gardner, 2006). Surveys are used to determine a users' shopping experience on the website, looking at elements such as the options available in terms of variety, sizing, and their checkout experience (Forsythe et al., 2006). Unfortunately, not much focus is put into the design features of these websites, specifically not based on the consumers' experiences with the different design features provided to them on the websites. This can be easily improved if more insights are obtained from the users concerning what keeps them visiting the websites, making purchases and whether they enjoy using the websites, or find the experience to be frustrating.

The online shopping environment relies a lot on consumer reviews and repeat purchases to determine whether they are satisfying their customers (Amblee & Bui, 2011). As competition increases, businesses will be able to better target their consumers and focus on the identified system related, and behavioural related features to increase visits and online purchases on their websites. This study will benefit the online shopping industry stakeholders as it aims to determine the impact, if any, that website design features (system design and quality, and enjoyment) have on consumers' buying decision process when using South African online retail websites.

### **1.5 Delimitations of the study**

- The focus of the study is website design features and online shopping, and not on traditional above the line marketing and advertising.
- Due to the focus being website design features and online channels, the focus will be on digital marketers or those with experience and knowledge of the online retail environment.

### **1.6 Definition of terms**

A *website* is a series of pages and links which are available on the internet and are published, run and updated by an individual, a collective or an organisation (CambridgeDictionary, 2018).

*E-Commerce*, or electronic commerce is the buying and selling of goods online. The transaction is initiated online, and the final goods or services are delivered to the customer whether electronically or physically via courier service (Dinodia, 2008 p.1). It is further defined by the World Trade Organisation as "the production, distribution, marketing, sales or delivery of goods and services by electronic means" (Dinodia, 2008 p.1).

*Attitude*, defined as "...an enduring organization of motivational, emotional, perceptual, and cognitive process with respect to some aspect of our environment." (Selvakumar & Raghavan, 2017 p.26). Consumer attitude towards online shopping will influence their willingness to shop online.

*Lifestyle compatibility* in an online shopping context refers to the beliefs and values that one holds with regards to shopping online, and how well the activity of shopping online fits in to a specific consumer's lifestyle (Atchariyachanvanich & Okada, 2007).

*Purchase Intention* is the reason and conditioning, physical and cognitive, which affect a buyer's decision to make a purchase at a certain moment. Purchase intention is largely affected by a buyer's attitudes, behaviours and perceptions (Mirabi, 2015).

## **1.7 Assumptions**

- Respondents will have made at least one purchase from an online retail store within the last year.
- Respondents will have to spend at least 20 to 30 minutes a day online (browsing websites, on social networking sites, visiting online retailers).
- Respondents will reside in South Africa on a full time basis.

## **CHAPTER 2. LITERATURE REVIEW**

### **2.1 Introduction**

The literature used to validate and support this research proposal have their basis in various industries and markets, namely developed and emerging markets, financial and consumer goods industries, and range from the years 2001 to 2017. The noticeable trend over these decades has been the growth in the popularity of the internet or web 2.0 globally over the last two decades. Consumers have become more digitally savvy and are placing increasing value on the freedom and convenience that comes with being online (Mahajan & Wind, 2002).

### **2.2 Theoretical grounding, definition of topic and background discussion**

#### ***2.2.1 Consumer behaviour and purchase intent***

According to Kotler and Keller (2012, p. 151), “Consumer behaviour is the study of how individuals, groups, and organisations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants”. The study of consumer behaviour is multi-dimensional as it pertains to individuals and groups often with dynamic needs, wants and preferences, which will affect how marketers advertise and communicate to consumers (Hawkins & Mothersbaugh, 2016).

Consumer behaviour is centred on human psychological factors and consumer characteristics, which combine to lead to consumer decision process and finally to a purchase decision (Kotler & Keller, 2012). Kotler and Keller (2012) provide a model for consumer behaviour, which will form the basis of further explanation of consumer buying behaviour for the purposes of this study. Marketers will be most interested in the processes that affect how consumers interpret and process stimuli, and subsequently how this influences buying decisions.

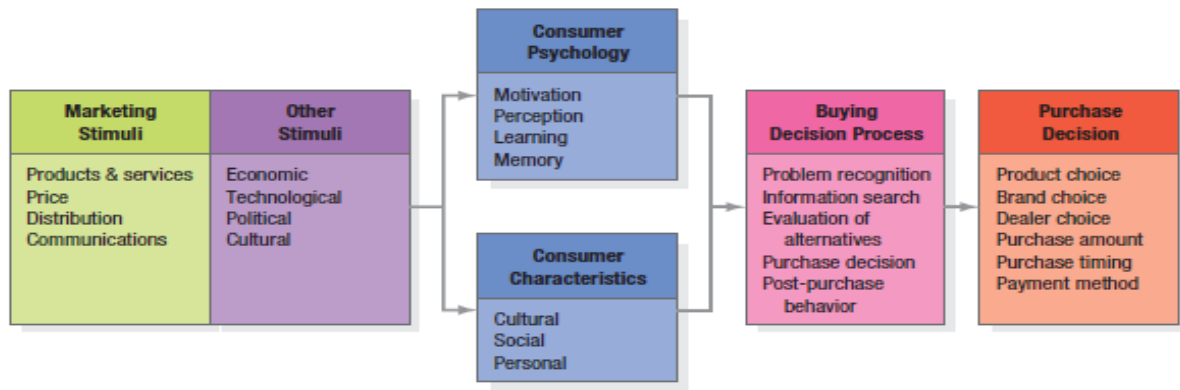


Figure 1: Consumer Behaviour Model (Kotler & Keller, 2012)

a. *Buying decision process*

The factors in the diagram cover the elements that influence consumer behaviour leading to when a consumer makes a purchase decision, but does not include the process a consumer goes through when eventually making the decision to purchase (Kotler & Keller, 2012). The consumer buying decision model below illustrates the steps that consumers go through when making a purchase decision. According to Bruner and Pomazal (1988), the model was introduced by John Dewey in 1910. Consumers may not go through every step in the process, depending on the product that they are looking for and the level of importance thereof, and the process may also not always lead to a purchase (Rani, 2014).

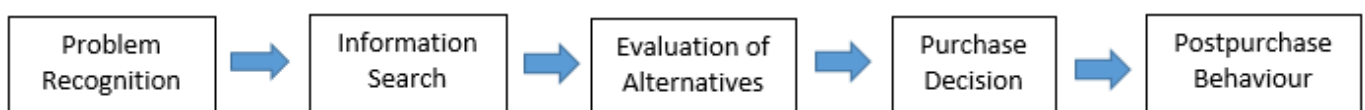


Figure 2: Consumer Buying Process (Kotler & Keller, 2012)

b. *Information search*

Information search is the process of gathering information about the product or service for which there is a need (Noel, 2009). The search will either be moderate (one or two comparisons) called heightened attention, or more in-depth, referred to as active information search (Kotler & Keller, 2012).

c. *Evaluation of alternatives*

Evaluation of alternatives involves developing criteria against which the attributes of a product or service will be compared (Rani, 2014). Kotler and Keller (2012) suggest the basic criteria to assist with understanding a consumer's evaluation process, namely a need exists, benefits are sought and attributes which the product has. Searching for these alternatives online provides benefits such as reduced cost and time, and provides the convenience of having all alternatives in one place (Teo & Yeong, 2003). It is therefore crucial that the design of the website, features and product offerings be appealing to the perceived benefits of the consumer (Teo & Yeong, 2003).

d. *Purchase decision*

Purchase decision is when the consumer makes the decision to make the purchase after evaluating all alternatives and weighing out the risks involved (Kotler & Keller, 2012). Perceived risk can be the difference between a successful or lost transaction, so it is crucial for the online retailer website to provide as much information as possible about the product to ensure that a consumer feels comfortable and is therefore inclined to make a purchase.

However in the same instance, perceived risk could be heightened due to too many choices being available and either too much information provided by online retailers, or not enough information. Consumers may then feel frustrated and/or anxious, and reject the purchase option all together.

## **2.3 Online purchase intention and online shopping**

The consumer buying behaviour process is made up of many constructs at each step, as consumer behaviour is a complex science. Consumers have different spheres of influence, motivations, needs and wants (Kotler, 2012; Rani, 2014; Solomon, Russell-Bennett, & Previte, 2012). According to Hawkins (2016), intention is the preceding factor that stimulate and drive a consumers' purchases. Purchase intentions are as important in an offline retail environment as they are in the online retail context. In order for a company to successfully sell their products and services online, they must have an understanding of consumer buying behaviour, and more specifically the motivations behind why consumers choose to shop online, and the factors that drive their purchase intent (Van der Heijden, Verhagen, & Creemers, 2003). The factors that

influence a consumer's intent will differ from buyer to buyer; however, previous studies have assisted us in identifying overarching themes. Hausman and Siekpe (2009) and Van der Heijden et al. (2003) put forward two main antecedents, as studied by Davis (1989), namely perceived usefulness, and perceived ease of use. Perceived ease of use is the users perception that a system is easy to use, while purchasing use is the mediating behavioural factor to the former (Davis, 1989).

The web design features mentioned previously can either influence the consumers purchase intention, or have no affect at all if they are not aligned (Van der Heijden et al., 2003). The importance of knowing whether this influence exists and the relationship between them has been established is crucial.

### ***2.3.1 Barriers and motives for shopping online***

Several studies have been conducted as researchers look to find out what drives consumers to visit online retail websites and partake in the online shopping experience. Several motives have been identified, depending on the setting of the study, as well as the category of online shop, and the audience being surveyed. A potential barrier to online shopping is perceived risk, which is associated with the risk of sharing personal information such as credit card details, which many consumers are not willing to do (Limayem et al., 2000).

Several studies have been conducted, and subsequently, models developed to determine what the motivations for consumers shopping online are. Arguably the most commonly used model to determine how a consumer perceives a specific medium through which technology is accessed, is the Technology Acceptance Model (TAM) (Hausman & Siekpe, 2009). The TAM model looks at Perceived Ease of Use (PEOU) and the Perceived Usefulness (PU), which are related to consumers intentions and beliefs related to their behaviour in an online setting (Kaplan, Schoder, & Haenlein, 2007; Perea y Monsuwé et al., 2004). According to Hausman & Siekpe (2009); Van der Heijden; Verhagen & Creemers (2003), PU has more of an impact on consumer's intention than PEOU does. PU relates to how the information system operates, as well as features which are navigable and with which users will interact, such as the website menu, links, and visually and sensory appealing factor; i.e. colours, graphics and any sounds (Hausman & Siekpe, 2009).



The two most common behavioural intentions, which are related to online shopping, are the intentions of consumers to make a purchase, as well as their intention to revisit the website in future (Hausman & Siekpe, 2009). Apart from the previously mentioned motives, Limayem et al. (2000) looked at factors surrounding customisation of the website content, as well as personalisation of the site to the consumers online behaviour and preferences as motivating factors to online shopping. The more a user is familiar with the website and its navigation, the less time they are likely to spend on the website. It therefore becomes necessary for website designers and marketers to employ innovative tactics to further engage these avid website users and to enhance their enjoyment of the site and of their online shopping experience (Hausman & Siekpe, 2009; Limayem et al., 2000).

A study by Childers, Carr, Peck, and Carson (2001) examined two main categorised motives; being entertainment versus functional benefits of online shopping. Entertainment motives include aspects such as the enjoyment which the user derives from their online shopping experience (Childers et al., 2001). Whereas functional motives consist of information seeking, comparing prices and other product features, and finally making the online purchase (Childers et al., 2001). The study was not conclusive in determining whether one element is more of a motivating factor than the other is, and is suggested to be further explored, as both factors appeared to be equally necessary amongst the specific group of respondents. This study will look at these motivating factors in relation to specific systematic and behavioural website design features.

## **2.4 Website design**

According to Collinsdictionary (2018), “a website is a set of data and information about a particular subject which is available on the internet.” A company will firstly opt to have a website depending on their goals, and secondly, the way in which the website is built and designed will be based on the objectives which the organisation aims to achieve (Schaupp, Fan, & Belanger, 2006). If a company has a website, it is crucial for them to regularly update it so that it remains relevant, appealing, and appears on the first page of any search engine results page when consumers search for it (Kingsnorth, 2016). The quality of a website, as well as the content available on the website; i.e. the effectiveness of the website as an information system, are two common factors amongst websites which serve different purposes (Schaupp et al., 2006). If a retail company has a well-designed website, this could positively affect the

customer's attitude towards their offering, improve brand and product recall, and even lead to repeat purchases (Bai et al., 2008).

There are many things that an organisation can do to ensure that a website remains relevant, such as apply search engine optimisation (SEO), which is "a range of practices whose end-purpose is to increase organic search traffic referrals to websites." (Dick, 2011). When setting up a website, specialists also have to consider the user experience (UX), which is how easy and pleasing it is for a user to navigate the website and its features (Kingsnorth, 2016).

There are different motivations as to why consumers visit websites, and websites serve different functions, depending on whether they are e-commerce sites, or just sites where a visitor can find more information about the organisation and their product offering (Huizingh & Hoekstra, 2003). Another motivation is whether they feel that shopping online is compatible with their lifestyle, and therefore if the website itself is conducive to making the process of shopping online seamless and efficient (Selvakumar & Raghavan, 2017). The perceived usefulness of the website will also be a motivation to visit a particular website. The way in which these websites are designed will have an effect on the experience, which a consumer or visitor will have on the site. Often times it is the website design, and more specifically the website quality which will affect aspects such as a user's satisfaction and enjoyment, and subsequently the perception of the company which the website represents (Bai et al., 2008). According to (Bai et al., 2008), their study concluded that website design quality positively impacts customer satisfaction, and subsequently influences a customer's purchase intention. The study focused specifically on travel websites and examined how the purchase intentions of consumer's in China is influence by website quality, and how their purchase intention is also impacted (Bai et al., 2008).

A previous study by Perdue (2001) into hotel and resort websites resulted in a model which established that the perception of a successful website is influenced by features such as the navigation of the website, how visually attractive the website is, and the quality and type of website content. As much as the ease of navigation, the website content, and the service quality derived from a website is important, research by Hausman and Siekpe (2009) showed that almost 50% of research subjects found more satisfaction and were more inclined to engage with the website and make purchases based on the media and its related sensory stimulating features.

### **2.4.1 *E-commerce websites and online shopping***

E-commerce has seen a boom in the last ten years as commercial retail stores, and business-to-business organisations add e-retailing websites to their brick and mortar shops (Grandon & Pearson, 2004). According to Grandon & Pearson (2004), e-commerce is defined as “the process of buying and selling products or services using electronic data transmission via the Internet and the www”. Online sales globally constituted approximately 11% of all retail sales by April 2018, and South Africa’s online retail sales statistics closely match the global sales (Fin24, 2018).

The establishment of an online store, whether by an existing retailer, or by a solely online retailer requires the organisation or owner to have insight into the market’s needs and research into whether an online store is firstly needed, and secondly whether there is an appropriate target market for it (Harn, Khatibi, & Ismail, 2006). Despite certain assumptions, the running of an e-commerce store requires a significant investment, particularly in terms of maintaining the store, and therefore the overall goal other than making sales, will often be to gain a positive return on investment (Harn et al., 2006).

In terms of competition, the online retail space is more competitive than traditional retailers, as consumers have access to online stores from across the globe on one platform at any given time (Srinivasan, Anderson & Ponnayolu, 2002). E-commerce channels provide many benefits to both the consumer and retailer involved, with the main benefits being that retailers can access niche target markets which are dispersed all over the world. Consumers can access a wide variety of global and local suppliers, often at lower costs than those involved with going to a physical retail store (Grandon, 2004).

A study by Dinner, Van Heerde, and Neslin (2013) examined how the addition of online stores to traditional physical stores has led to an increase in overall sales for organisations. Along with this is the investment in both offline and online advertising which has also grown since the introduction of online stores (Dinner et al., 2013). Although online stores are a positive addition to stores and has led to the creation of the ecommerce industry, it has also led to an increase in competition between retailers (Dinner et al., 2013).

Since the boom of the World Wide Web, and the introduction of e-commerce, various studies have been conducted around the reasons as to why consumers shop online, as well as what prompts them to return to the websites.

### **2.4.2 *Web design features and website quality***

Organisations invest large amounts of money to build and maintain websites, with South African firms spending an average of between R500-R50 000 on website design alone (Webpartner, 2018). Despite this expenditure, some companies still do not achieve their web or digital goals, and often cannot pinpoint why or what the reason is. It often has to do with the website design, and features that are not appealing to customers, and companies often lack the knowledge of how to fix these issues (Hausman & Siekpe, 2009). The website design features can be compared to what is referred to as atmospherics in tradition brick and mortar retail stores (Hausman & Siekpe, 2009).

Several studies, such as by Gillenson and Sherrell (2002), set out the requirements of what an online retail website should have to be effective. Namely; the ability to ease consumers' discomfort, it should be enjoyable, create a space in which consumers want to spend time and visit often, and lastly it must drive consumers to purchase and to return to the websites for repeat purchases (Gillenson and Sherrell (2002). Little detail, however, is given around whether all or some, and if some, then which website design elements and features will be best suited to achieving these outcomes (Hausman & Siekpe, 2009). These features of website design, along with the concepts of system quality and the actual online retail environment can be summarised as the quality of a website (Bai et al., 2008).

Through studies conducted around which design features are important to consumers, it is necessary to know whether one or more of these features rank higher in importance than others, as well as the impact they have on a consumer's purchase intent and motivations to shop online.

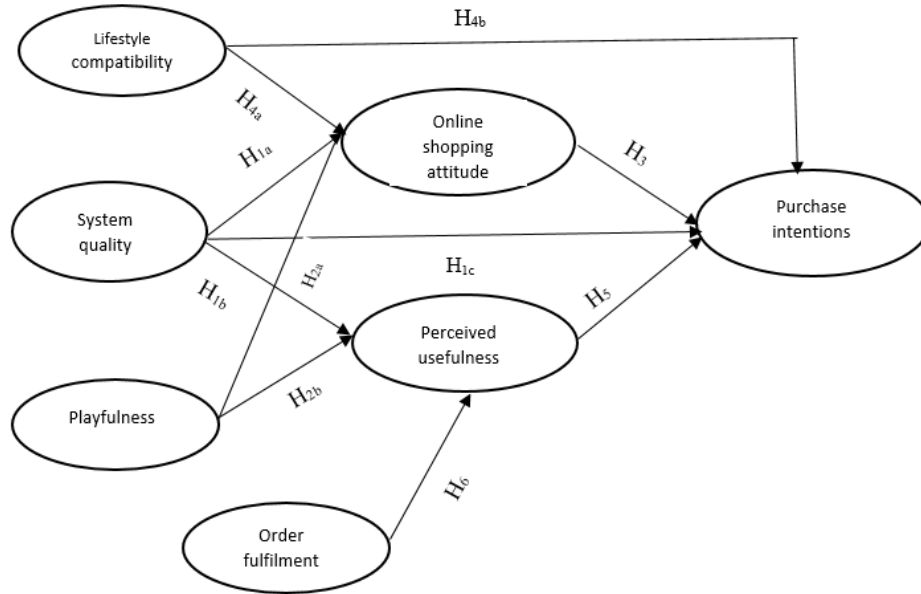


Figure 3: Conceptual framework for this study

Related to the above-mentioned website features are various other qualities, which also have an influence on consumers' purchase intention, these factors can be categorised into systematic and behavioural factories for the purposes of this study. Systematic features include a website's system quality, and the order fulfilment through an online website. Behavioural qualities include attitudes towards online shopping, perceived usefulness, and lifestyle compatibility.

Systematic and behavioural features must be analysed separately and there after collectively to determine which factors have a positive effect on consumer's experience with a site, as well whether they are inclined to make purchases and repeat purchases. These factors appear across the examined literature and will be further expanded on (Bai et al., 2008; Brengman, Geuens, Weijters, Smith, & Swinyard, 2005; Liu, Ram, Lusch, R.F, & Brusco, 2010; Schaupp et al., 2006; Selvakumar & Raghavan, 2017).

### 2.4.3 Systematic factors

#### a. System quality

System quality has to do with the security, reliability, speed and flow of the website, response time and ease of navigation of the website (Bai et al., 2008; Liu, & Arnett, 2000). If a user perceives a website to have a poor system design, it can lead to frustration, and they may choose

to abandon the website altogether, the chance of that same consumer visiting that website again, and making a purchase is very slim (Bai et al., 2008).

A website must be as easy as possible to use and navigate, and not have any glitches such as long page loading times, or any broken links (Cao, Zhang, & Seydel, 2005). It is necessary for website designers to include enough tips and direction concerning navigation to ensure that the users do not feel stuck or confused at any point during their user journey (Cao et al., 2005). Another element of system quality is the graphic, images, visual and sound elements included in a website (Cao et al., 2005; Rieh, 2002). Adding multi-media elements to a website increases loading speed and may affect website performance, so it is necessary to keep these to a minimum as including too many on a website will almost certainly negatively affect a website's system quality (Cao et al., 2005).

Another factor of system quality is the security of the website; which is how safe a consumer perceives the website to be, specifically in terms of having to input personal information like credit card details and personal details when making a transaction online (Liu, & Arnett, 2000). Typically, one would expect security to be the most important determinant of system quality, however research by Liu, & Arnett (2000) found that whilst important, security was only one factor of system quality. The most important factor in this study to the user was that the system was operating efficiently, that it had a quick recovery time and that errors were quickly loaded and corrected (Liu, & Arnett, 2000). These factors are also closely related to the benefits and factors that make up perceived usefulness, as it relates to the efficiency of the medium used to perform a task, in this case shopping online, and the ease and enjoyment of the task as a result of the system being clear of any issues (Bilgihan et al., 2016).

Consumer attitudes towards shopping online are made up of utilitarian and hedonic factors (Moon et al., 2017). Hedonic factors have to do with the enjoyment and the feelings one gets from shopping online, whilst the utilitarian factors are concerned with performing and completing the task of shopping online, convenience and the need to get something done (Scarpi, 2012). A consumer's attitude towards online shopping is affected by how they perceive the ease, usefulness and functionality of a website to be (Li & Zhang, 2002). The easier and more enjoyable a user finds a website to be and easy to complete their shopping experience, the more positive their attitude towards online shopping will be (Selvakumar & Raghavan, 2017). Therefore, website system quality may affect the attitude, which a consumer holds towards online shopping.

The study will test for the relationship between system quality and its potential effect on perceived usefulness, attitude, and ultimately purchase intention. Based on the website system quality factors and their importance in determining purchase intention, the following hypotheses are proposed:

**H1a0:** System quality has no impact on attitude towards online shopping

**H1a:** System quality has a direct and positive impact on attitude towards online shopping

**H1b0:** System quality has no impact on website perceived usefulness

**H1b:** System quality has a direct and positive impact on website perceived usefulness

**H1c0:** System quality has no impact on consumer online purchase intentions

**H1c:** System quality has a direct and positive impact on consumer online purchase intentions

b. *Playfulness*

The playfulness of a website has to do with how enjoyable a consumer finds a website to be, in terms of how interactive the e-commerce site is, the features of the site, and any videos and images which make a consumer's time on the site entertaining (Hausman & Siekpe, 2009; Liu, & Arnett, 2000). Consumers shop online for both hedonistic and utilitarian reasons (Childers et al., 2001). It is argued that hedonic motives are easier to fulfil through traditional brick and mortar retail stores, however these days with advancing technology and artificial intelligence (AI), online retailers are more creative with how they are providing entertainment to their consumers (Koufaris et al., 2001).

According to Bai et al. (2008), website visitors need to be stimulated while on the site so that they may have enjoyment and also not feel the need to visit another website, and instead complete their purchase on the website. It is also said that playfulness is one of the main drivers for consumers returning to a website as repeat visitors and buyers (Bai et al., 2008). Elements such as audio and visual features, and interactive sessions keep the user interested and intrigued (Ahn, Ryu, & Han, 2007; Bai et al., 2008).

A study by Moon and Kim (2001) identified three main aspects of playfulness in an online context; namely curiosity, concentration and enjoyment. Curiosity refers to the extent to which

a user is intrigued by the website; concentration is the level of mental involvement and attention that the user had during their interaction; and enjoyment is the level of stimulation and fun the user had (Ahn et al., 2007). The hedonic factors that affect the playfulness perceived by consumers, are an antecedent to attitudes as well (Moon et al., 2017). Therefore, playfulness and attitudes, sharing common attributes may have an effect on each other.

The utilitarian factors, which have an effect on playfulness, are also the factors that affect the perceived usefulness of a website. As much as playfulness of a website has been studied with the focus on the enjoyment and entertainment experienced by a user, the utilitarian factors are not always mentioned or considered. This study will look at the relationship between playfulness and the perceived usefulness, based on the assumption that playfulness is affected by the efficiency and usefulness of a website.

Often times, playfulness is overlooked in websites and consumers are not afforded the opportunity to enjoy their online shopping experience. An investment into adding dimensions of playfulness to websites must be made in order to achieve website success and motivate consumers to return to the site.

The following hypotheses are proposed:

**H2a<sub>0</sub>:** Playfulness has no impact on attitude towards online shopping

**H2a:** Playfulness has a direct and positive impact on attitude towards online shopping

**H2b<sub>0</sub>:** Playfulness has no impact on perceived usefulness

**H2b:** Playfulness has a direct and positive impact on perceived usefulness

#### **2.4.4 Behaviour related factors**

##### a. *Attitudes towards online shopping*

A consumer's overall attitude towards online shopping is largely psychological and will often determine whether they find their online shopping to be beneficial and even enjoyable (Akbar & James, 2014). According to Chang et al. (2016), attitude is directly associated with perceived risk and cognitive trust of shopping associated with shopping online. Akbar and James (2014) speak of perceived benefits, in the place of cognitive trust.



As mentioned previously, attitudes are made up of intrinsic and extrinsic factors, namely hedonic and utilitarian (Akbar & James, 2014; Chang et al., 2016). Hedonic factors have to do experience derived from, and the fulfilment of fun and enjoyment (Akbar & James, 2014; Chang et al., 2016; Childers et al., 2001). According to Akbar and James (2014), level of involvement in a purchase directly affects the role that hedonism plays. More so, when purchasing a product online, one is unable to touch, smell or taste it and the only analysis of the product can be made through a picture of a product and the description given. It cannot be physically experienced until it has been delivered and is used. Some consumers value this as a part of their hedonic experience. Therefore if a consumer holds a high hedonistic value, then they may perceive the benefits derived from shopping online negatively (Akbar & James, 2014).

Utilitarian factors in online shopping has to do with the convenience and task-related aspects of shopping online (Scarpi, 2012). Therefore utilitarianism has more to do with necessity and completing a task, rather than for enjoyment or escapism (Scarpi, 2012). Perceived risks largely influence utilitarianism, in that if consumers perceive high financial, convenience and product risks during online shopping, then their utilitarianism will generally be lower, and would negatively affect their attitude towards shopping (Akbar & James, 2014).

Attitudes are a mediating factor to purchase intention in online shopping, and hedonism and utilitarian qualities are considered to be motivating factors, which in turn are antecedents to attitudes. Attitudes towards shopping with affect the experience that consumers have when purchasing items online, and therefore become an important factor to study. Therefore, the following hypothesis is proposed:

**H3<sub>0</sub>:** Attitudes have no impact on consumer online purchase intentions

**H3:** Attitudes have a direct and positive impact on consumer online purchase intentions

b. *Lifestyle Compatibility*

Online shopping can be said to be compatible with a consumer's lifestyle if the user perceives the type of technology they use to fit in with the way in which they live and conduct socially (Henry Boateng et al., 2016). Lifestyle is the way in which one lives, and can be shaped and/or influenced by their social surroundings (Boateng et al., 2016).

Boateng et al. (2016) studied the adoption of internet banking through the Social Cognitive Theory (SCT), which is primarily attributed to a person's intention being driven by environmental and personal factors. The environmental factors are also referred to as external or extrinsic factors, while personal factors are cognitive or intrinsic (Henry Boateng et al., 2016). Behaviour is also an important factor of SCT, in that it comprises of how people respond to specific situations, or towards certain physical things, as well as to the technology that they are exposed to. In essence, if someone is not comfortable with using a computer, mobile phone or other medium, which allows them to access the internet, they will not perceive it as being compatible with their lifestyle. In the same sense, if the website which they visit is not user friendly, isn't trendy or up to date, or does not offer a decent experience, they are inclined to respond negatively to it (Boateng et al., 2016).

Lifestyle compatibility also has an influence on a user's attitude towards both the medium or website, and the activity of shopping online (Selvakumar & Raghavan, 2017). If a user prefers to shop at traditional retail stores, instead of online or have not been inclined to shop online, it is likely that they will have a more negative attitude towards online shopping (Selvakumar & Raghavan, 2017). Similarly, if the website is not user friendly, not appealing or makes for a complicated shopping experience, there will also be a negative attitude towards shopping online, as well as a negative effect on intention to make a purchase.

Inversely, the more that a consumer feels that shopping online suits their lifestyle, the more positive their attitude will be towards it, and the more intent they will be on making a purchase.

Therefore, the following hypotheses are proposed:

**H4a0:** Lifestyle compatibility has no impact on attitude towards online shopping

**H4a:** Lifestyle compatibility has a direct and positive impact on attitude towards online shopping

**H4b0:** Lifestyle compatibility has no impact on consumer online purchase intentions

**H4b:** Lifestyle compatibility has a direct and positive impact on consumer online purchase intentions

c. *Perceived Usefulness*

Internet usage has seen rapid growth over the last two decades, and with that are the ways that one can access and use the internet (O'Brien, 2017). As much as online shopping has grown in popularity, it is important that a user becomes accustomed to using the internet and the different mediums through which it can be accessed as their acceptance of this will affect their attitude towards internet usage and ultimately shopping online (Kaplan et al., 2007).

The Technology Acceptance Model (TAM), as developed by (Davis, 1989) was developed with the primary purpose of determining an internet user's attitude towards the internet or technology, based on perceived usefulness and perceived ease of use. TAM measures the usage of the internet as well by each user (Davis, 1989).

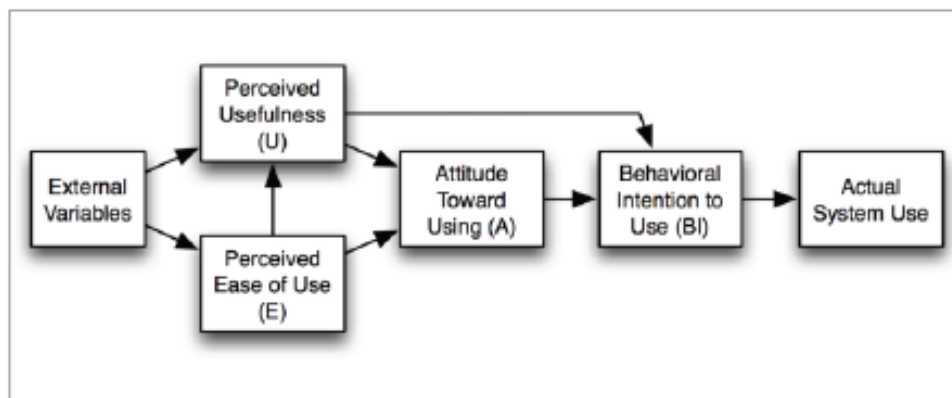


Figure 4: Technology Acceptance Model (Gunawan, Ali, & Nugroho, 2019)

Perceived usefulness (PU) and perceived ease of use (PEOU) are examined together in studies as they both have to do with how easy a website is to use, and companies should give relevant attention to this as it shows that they took the user's journey on the website into consideration (Bilgihan et al., 2016). PU refers to how a consumer feels that the website they are using facilitates their tasks, whilst PEOU refers to how easy the website is to use and navigate without

any effort (Gunawan et al., 2019; Perea y Monsuwé et al., 2004). These factors are related to utilitarian factors which were mentioned previously, and are especially important to those consumers with a high utilitarian value, especially when shopping online (Bilgihan et al., 2016). According to Lim et al. (2016), previous studies have shown a difference between consumers in developed and developing countries with regards to the influence of perceived usefulness on their purchase intention.

Perceived usefulness can be measured by the following features: “improved job performance, increased productivity, effectiveness, being useful and makes the job easier” (Gunawan et al., 2019, p.3). A consumer’s purchase decision has been shown to be affected by a consumer’s attitude towards a website, and both PU and PEOU both affect attitude. Therefore they are said to affect purchase intention directly, and indirectly through consumer attitudes, as proven by Gunawan et al. (2019). As much as PEOU is referred to in conjunction to PU in studies, PU has been found to have a greater effect on purchase intention, more so than PEOU, which indicates that users require websites to be easy to use and more convenient and efficient than traditional shopping methods. Since a consumer’s attitude towards online shopping is a relevant factor in determining purchase intention and repurchase intention, and PU is an antecedent thereof; which has been proven to have influence. This will be a factor looked at in this study.

Given the above, the following hypotheses are proposed:

**H5<sub>0</sub>:** Perceived usefulness has no impact on consumer online purchase intentions

**H5:** Perceived usefulness has a direct and positive impact on consumer online purchase intentions

d. *Order fulfilment*

Order fulfilment in a retail context is crucial, in that if an online retailer is unable to fulfil an order placed by the buyer through to its delivery, then the online store will be perceived by the buyer as being unreliable. The user will very likely not return to the website to make any purchases (Nguyen et al., 2018; Pham & Ahammad, 2017). Problems with order fulfilment can lead to a loss of trust in the retailer by the consumer, as well as a loss in revenue and possibly even affect the retailer’s reputation (Nguyen et al., 2018). When a consumer visits an online retailer website, they do so with the expectation of certain requirements being met. According

to Nguyen et al. (2018), order fulfilment comprises of three factors: inventory management, last mile delivery and returns management.

Inventory management is concerned with all aspects of the product, such as the product options available, whether they are all in stock, the quality and accuracy of the products compared to how they are described online, and the number of substitute products available to the buyer (Nguyen et al., 2018). With regards to consumer buying behaviour, inventory management is related directly to the purchase phase (Nguyen et al., 2018).

Last mile delivery has to do with the final delivery of the product to the buyer, as well as services such as up-to-date information about the product delivery, and the ability of the consumer to track the order, referred to as order tracking (Nguyen et al., 2018). Consumers need full disclosure on when their purchases will reach them, as well as on how and to where they will be delivered. It not only affects whether they will make a return purchase, but also on deciding whether to go through with an initial purchase or not, as this relates directly to the perceived risk, which was discussed earlier, that is often associated with online shopping. (Nguyen et al., 2018).

The last factor as defined by Nguyen et al. (2018) is returns management, which refers to the process involving the return of a product because it is damaged, faulty or does not meet expectations. In the same way in which a buyer can access a traditional brick and mortar retailer's return policy upon or before making a purchase in store, they must be able to easily access and view an online store's returns policy before even completing a purchase (Nguyen et al., 2018). The purpose of this will be to reduce any apprehension and for the retailer to be perceived as flexible and reliable (Nguyen et al., 2018).

Order fulfilment requires the website be easy to use and navigate, and for the process of making the purchase as seamless as placing the order and having the order delivered (Nguyen et al., 2018). Perceived usefulness of the website will therefore have an effect on the order fulfilment as it will affect how quickly and efficiently the online shopping process is completed, without any hindrances.

Different types of product categories will require different order fulfilment methods and strategies, but what remains is that order fulfilment is a crucial aspect of customer satisfaction in online shopping, and it directly affect purchase and repurchase intention (Pham & Ahammad, 2017). Based on this, the below hypothesis is proposed:

**H6o:** Order fulfilment has no impact on perceived usefulness

**H6:** Order fulfilment has a direct and positive impact on perceived usefulness

#### **2.4.5 Demographics**

Gender, education and income were also considered in this study as demographic variables. However, they were not the primary variables to be measured, therefore they will not be hypothesised on. Various studies, such as by Kuruvilla, Joshi, and Shah (2009) have shown a difference in shopping intentions and styles by men and women, based on factors such as the time spent shopping, product preferences and loyalty towards stores and websites. Level of education is considered in this study as a demographic factor for this study. According to He, Lu, and Zhou (2008) and Lee, Cheng, and Shih (2017), education did not have much impact on consumer purchase intention, specifically in more developed countries. Price of a product will generally influence the purchase decisions that consumer's make, however research by Hernández, Jiménez, and Martín (2011) found that there is no correlation between a consumer's income level, and their online purchase intentions. Their study by Hernández et al. (2011) also proved that gender and education are not factors that significantly impact online purchase intention.

## **CHAPTER 3. RESEARCH METHODOLOGY**

### **3.1 Research paradigm**

The research paradigm has to do with the underlying assumptions and beliefs about a population or the world, which then shapes the strategy for conducting the research and collecting data (Wahyuni, 2012). Based on the research paradigm, the research methods used must be the most appropriate to answer the research question (Williams, 2007). There are three main methods used in data collection, namely quantitative research, qualitative research and mixed methods (Williams, 2007). Quantitative research is based on the analysis of data using numerical data, and qualitative research is the analysis using text or non-numerical data (Williams, 2007). Mixed methods research refers to a combination of both qualitative and quantitative research (Williams, 2007).

For the purposes of this study, a quantitative approach was used, and according to Williams (2007, p.66), “Quantitative research begins with a problem statement and involves the formation of a hypothesis, a literature review, and a quantitative data analysis.” The study was based on similar quantitative methods which were undertaken by Bai et al. (2008), by Bernardo, Marimon, and del Mar Alonso-Almeida (2012) Liu & Arnett (2000), Sarkar (2011) and Schaupp et al, (2006). These studies all looked at website design features, attitudes and their impact on website success and on consumer purchase intentions in Asian and North American contexts, but their measures and data collection methods all share similarities, and were used and adapted as required for this study.

### **3.2 Research Design**

The main purpose of research design, is the way and structure in which the research will be conducted, and data will be collected in the most effective way possible, so that it explicitly answers the proposed research questions (Labaree, 2009). Research design takes into account the research paradigm and methodologies into a specific research method to achieve the aim of the study (Wahyuni, 2012).

The type of design that was used in this study was a cross-sectional survey design, which is a survey conducted to make inference about a population sample at a specific point in time (J.

Hall & Lavrakas, 2008). Cross-sectional survey design can be used to determine whether a cause-effect relationship exists between two variables (Ebrahim & Sullivan, 1995). This survey design showed whether there was a cause-effect relationship exists between website design and purchase intention, as well as the magnitude of the effect of each feature or variable on the other (Ebrahim & Sullivan, 1995).

### **3.3 Population and sample**

#### **3.3.1 Population**

In order to conduct this quantitative study, the target population from who data was collected was identified. The population is the larger collective group which I wanted to deduce a conclusion about, and therefore a sample frame was extracted from this population for the study (Bryman, 2012; Walliman, 2017). A population does not necessarily only refer to a group of people. Depending on the type and aim of the study, the population can refer to a group of objects, buildings, organisations, or any other collective groupings that are examined (Walliman, 2017).

The target population for this study, was males and females in Gauteng, South Africa, between 18 years and older, who were employed either full-time or part-time and were of any race, who had shopped for and purchased an item online within the last 12 months. According to a research study conducted by Prinsloo (2016), the profile of an online shopper from different countries are very similar in terms of demographics and socio-economic status, although this result was found from a sample survey and may not be entirely reflective of the wider population.

The target population for study is summarised below:

- **Age:** 18 years and older
- **Gender:** Males and females
- **Employment status:** Respondents were students or employed permanently or on a part-time basis at the time of the study
- **Geographic:** Respondents were living and working in South Africa



### **3.3.2 *Sample and sampling method***

According to (Ebrahim & Sullivan, 1995), the sample was drawn from the target population, and the study was conducted on them. In order to determine the sample, a sampling method was utilised. Sampling methods which exist include probability sampling, which is that each subject in the target population has a known chance of being selected for the study; and non-probability sampling where all of the subjects of the population do not have an equal and fair chance of being selected (Kumar, 2011). The sampling method used to conduct this study was non-probability sampling, and specifically quota sampling. Probability sampling would have been too expensive and time consuming for the purposes of the study. The sample consisted of 280 respondents, 208 whose responses were eligible to use, who were all above the age of 18, resided in South Africa, and were studying part or full time, or employed either part time or full time. They had to have purchased an item through online shopping within the last 12 months.

### **3.3.3 *The research instrument***

The research instrument refers to the tool that was used to collect data when the survey was being conducted (Kumar, 2011). A research tool can either be developed by the researcher from scratch, or an existing research instrument from previous research studies may be utilised (Kumar, 2011).

The research instrument was a structured questionnaire, and was in the form of a self-administered survey. The questionnaire is available under Appendix B. The benefits of administering a questionnaire to collect data are that they can be set up easily, are inexpensive to produce and distribute, and the data collected can be easily interpreted (Wilkson & Birmingham, 2003). The most important outcome of a survey must be that the data must be accurate and useful for the process of data analysis and for conclusions to be made from it (Wilkson & Birmingham, 2003).

## Top Categories Purchased Online

(% of global online consumers having purchased, 2018)

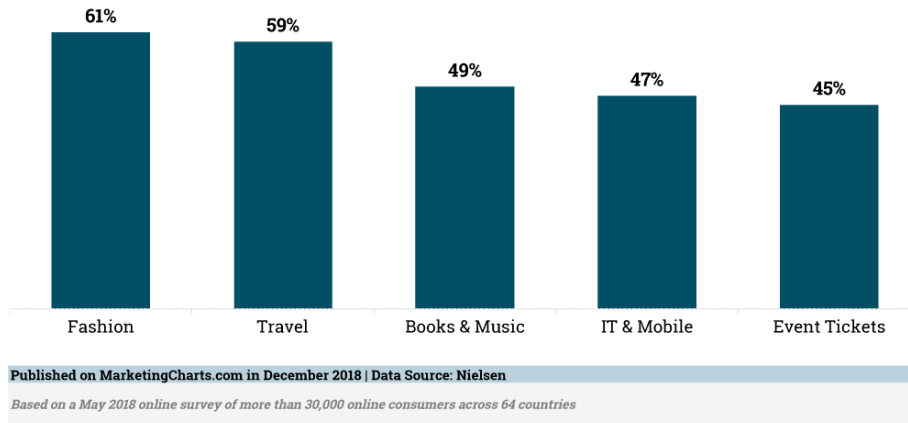


Figure 5: Graph illustrating top 5 global online shopping categories (MarketingCharts, 2018)

The survey was distributed to respondents online through a link that was emailed and made available through social media networks to representatives of the sample to open and complete. The survey began with an instruction in English around the objective of the study as well as included a formal ask of the respondents to participate.

The first section (section A) included qualifying questions such as whether the respondent was a student, employed on a part-time, full-time or contractual basis, whether they were 18 years old or older, and whether they had purchased anything online within the last 12 months. If the responses to any of these questions was no or was left unanswered, they were requested to not continue any further with the study. It also included a question in which the respondent had to choose from 5 product categories as identified by Nielsen (2018), and a question about what kind of items or services they had purchased was included to further qualify that they did in fact purchase a product online.

The next section (section B) measured the variable of interest: Website design features, systematic and behavioural attributes, consumer's perceptions of them, and their purchase intentions.

Section C consisted of remaining demographic information, such as questions around income, age, gender, ethnicity, and education to gather more information around the respondent's background.

The success of a website, is determined by the features of the website design, namely system quality, order fulfilment, perceived usefulness, playfulness, lifestyle compatibility and purchase intention. The study draws on previous research to derive items to measure the key constructs; items were adapted from previous by slightly modifying some of the words and sentences to enhance the understanding of respondents in South African context (Boso, Story, & Cadogan, 2013). Table 2 highlights the specific items used to measure constructs with their accompanying standardised factor loadings, t-values and composite reliability scores.

a. *System Quality*

System quality has to do with the overall performance of the information system; in this case, the website (Gorla, Somers, & Wong, 2010). The system quality of a website is determined by its ease of use, quality of the operating system, whether the website has any errors or bugs, security of the website, the load time, whether errors are quickly corrected, reliability of the data on the website and the flexibility of the website (Bai et al., 2008; Gorla et al., 2010). System quality is an important attribute in determining the quality of website design because if a website does not function properly, users will not be able or willing to use it and therefore no purchases will be made (Liu, & Arnett, 2000). Liu, & Arnett (2000) focused on six main variables of which the average determines the overall score for system quality. These variables, which were measured by a 5-point Likert scale, are security, processing speed, error recovery time, easy to use quality of operation and the perceived ease of use of the website.

b. *Playfulness*

Playfulness is a feature of website design that is perceived and ultimately determined by the website user, and not by the retail organisation (Hsu, Chang, & Chen, 2012). The qualities of playfulness are associated with the feelings of satisfaction and enjoyment (Hsu et al., 2012). According to Liu and Arnett (2000) and Hsu et al. (2012), the variables used to measure website playfulness are excitement, enjoyment, escapism, concentration, feeling of participation and the charm that a website possesses. These factors will be used in this study to determine the importance of playfulness in determining a consumer's purchase intention.

c. *Attitudes towards online shopping*

Attitudes has to do with the way that a consumer feels towards a certain thing and can be influenced by internal and external variables, and hedonistic and utilitarian variables (Li &

Zhang, 2002). The measures for attitudes used in this study were derived from a study by (Olney, Holbrook, & Batra, 1991) titled *Consumer Responses to Advertising: The Effects of Ad Content, Emotions, and Attitude toward the Ad on Viewing Time*. The study focused on viewing of adverts specifically, and used measures to determine the emotions which they evoked from the study sample (Olney et al., 1991). The scale used in the study measured advert content, attitudinal components and the emotional reaction towards an advert (Olney et al., 1991). The emotional and attitudinal components were adapted for this study, the online shopping context, and the scale used was a six-item rating scale consisting of a question: “*My attitude towards online shopping is...*” followed by item choices negative/positive, very bad/very good and unfavourable/favourable.

d. *Lifestyle Compatibility*

Lifestyle compatibility was measured using a three-item, 5-point Likert scale, adapting items from an article by Boateng et al. (2016), titled *Assessing the determinants of internet banking adaptation intentions: A social cognitive theory perspective*. The study was based on internet banking; however, the attributes measured apply to e-commerce sites as well. Lifestyle compatibility measured if online shopping fits in with a consumer’s lifestyle, whether it is compatible with how they like to shop, and if the activities related to online shopping are suitable to them.

e. *Perceived Usefulness*

Perceived usefulness of a website entails that the website and online shopping experience must be one that makes the task easier and more efficient than any other traditional or alternative mode of shopping (Gunawan et al., 2019). The measures for this study were extracted from an article by Sarkar (2011), titled *Impact of utilitarian and hedonic shopping values on individual’s perceived benefits and risks in online shopping*. The three items used to measure this construct in a 5-point Likert scale are related to whether the shopping experience was effortless, and whether the items purchased were found. The items were: whether the consumer accomplished what they intended to on the website, whether they found the exact item they were in search of, and if they were purchased (Sarkar, 2011). The results thereof will determine the impact on purchase intention.

f. *Order Fulfilment*

Order fulfilment has to do with the entire process from ordering a product to the delivery thereof and the post-purchase procedures such as returns policies (Nguyen et al., 2018). Order fulfilment was identified as an important variable to measure for this study because it has not been looked at in a South African context of online shopping, and previous studies has shown a difference amongst consumers in developed and developing countries (Rajan, Swaminathan, & Pavithra, 2017). The items used to measure this variable were taken from an article by Bernardo et al. (2012), titled *Functional quality and hedonic quality: A study of the dimensions of e-service quality in online travel agencies*. The four-items used to measure this variable were extracted from the afore mentioned article, and they measured aspects relates to delivery of the products, timeliness of the deliveries, whether the products on the website were accurately described and whether the items were actually in stock (Bernardo et al., 2012).

g. *Purchase intention*

The variable purchase intentions and intentions to revisit the site in the future were measured by a four-item, and a two-item 5-point Likert scale which was borrowed from the study conducted by Hausman and Siekpe (2009) titled *The effect of web interface features on consumer online purchase intentions*. The scales were originally created by Yoo and Donthu (2001) in their study: *Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL)*.

Pretesting was done to test against discrepancies in the study, as well as to test the reliability and validity of the survey.

The validity and reliability of the study were tested through a series of analyses, which are further discussed in section 3.7.

### **3.4 Procedure for data collection**

The data for this research was collected through a survey making use of quantitative methods. The survey was distributed and administered to the sample of respondents through online surveys. The online surveys were distributed via a link that was shared with respondents via email and other social networks.

### **3.5 Data analysis and interpretation**

This study evaluates the relationship between website design features, attitudes and lifestyle compatibility, and the influence that they have on consumer buying behaviour when shopping online. The specific aspect of consumer behaviour that is looked at is purchase intention.

The validity of the constructs was tested by conducted an exploratory factor analysis, whilst the reliability of the constructs was tested by conducting Cronbach's alpha (Hausman & Siekpe, 2009).

After data was gathered, in order to further test the hypotheses and the correlation between the questions, a regression analysis was conducted (Rawlings, Pantula, & Dickey, 2001). The constructs were mapped as dependant and independent variables, and then the correlation between the two determined. A significance value above 0.06 proves that the variables have a strong significance value (Rawlings et al., 2001).

In order to conduct all statistical analyses on the data, during the pre-testing and final results analysis, SPSS statistical software was used. Apart from the above mentioned analyses, another analysis which was conducted was a confirmatory factor analysis to test the quality of the questionnaire and the questions included (Bai et al., 2008).

### **3.6 Limitations of the study**

Every study that involves collecting data from a population will include some limitations, and often times a degree of error (Ebrahim & Sullivan, 1995). This is due to the fact that the entire population cannot be surveyed, and only a sample will be used, therefore some of the conclusions will be drawn based on assumptions of the entire population (Walliman, 2017).

Limitations of the study include:

- The study is only focused on the middle and higher income groups.
- The study does not take into account specific online retail stores, but rather looks at online shopping in South Africa in general.
- The study focuses on business to consumer (B2C) online retail, and does not take into account business to business (B2B), therefore negating any unique factors that may exist there.

### **3.7 Validity and reliability**

The validity of a research instrument is “the extent to which research findings correctly reflect and explain reality” Ebrahim and Sullivan (1995, p.13). The validity should determine whether the findings of the study correctly answer the research question (Ebrahim & Sullivan, 1995; Golafshani, 2003). The research instrument should be accurate (Golafshani, 2003). Confirmatory factor analysis was used to test the validity of the constructs to ensure that all questions asked and constructs being measured were correct (Bai et al., 2008; Hausman & Siekpe, 2009).

Reliability refers to the consistency of the measurement instrument and whether the same methods can be used again in future studies (Golafshani, 2003). The reliability of the study was measured using Cronbach’s Alpha as per the study by Hausman and Siekpe (2009).

#### **3.7.1 External validity**

External validity is related to the population and sample involved in the study, and affects the extent to which the results of the study can be applied to the larger population (Ebrahim & Sullivan, 1995). If the results cannot be applied to the larger population, then it will be rendered invalid (Ebrahim & Sullivan, 1995)

#### **3.7.2 Internal validity**

Internal validity looks to test for any bias or confounding in the study, by ensuring that what is being measured is in fact being measured (Ebrahim & Sullivan, 1995). Any internal factors that affect the validity of the research instruments may negatively affect the relationship between the relevant variables (Ebrahim & Sullivan, 1995).

#### **3.7.3 Reliability**

The reliability of the study will determine how accurate the results are when the study is replicated over time to the same sample and population (Golafshani, 2003). The consistency of this research instrument when replicated is referred to as stability (Golafshani, 2003; Kimberlin & Winterstein, 2008).

## CHAPTER 4. PRESENTATION OF RESULTS

### 4.1 Introduction

This chapter provides the results from the study as collected through the self-administered online survey. The first section consists of the descriptive statistics about the demographic factors measured in the study, followed by the section, which looks at an analysis of the hypotheses, and states whether the hypotheses were supported, or not. The survey was created and hosted on Qualtrics, and distributed online via email and social media platforms. Details specified that respondents should be South African.

### 4.2 Descriptive Statistics

The study responses resulted in 280 responses, with 208 usable responses. The respondents consisted of 148 female and 60 male respondents. The graph below show as the breakdown of the gender of respondents by percentage.

#### 4.2.1 Gender of respondents

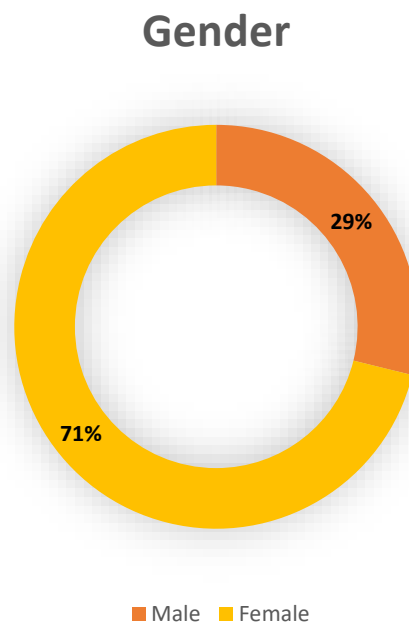


Figure 6: Gender of Respondents



As can be seen above, the majority of respondents (71%) were female, whilst males only made up 29% of the respondents. This breakdown is also reflected in the population of South Africa, to a lesser degree, as out of the overall South African population of 58.78 million people, approximately 30 million (51.2%) are women, and 48.8% are males (D. S. S. Africa, 2019).

#### 4.2.2 Ethnicity of respondents

The breakdown of the ethnicity of the respondents resulted in the majority of the respondents (104) being African and 63 being white, followed by the other identified ethnicities being the minority when referring specifically to respondents of this study. The results are reflected visually in the chart below.

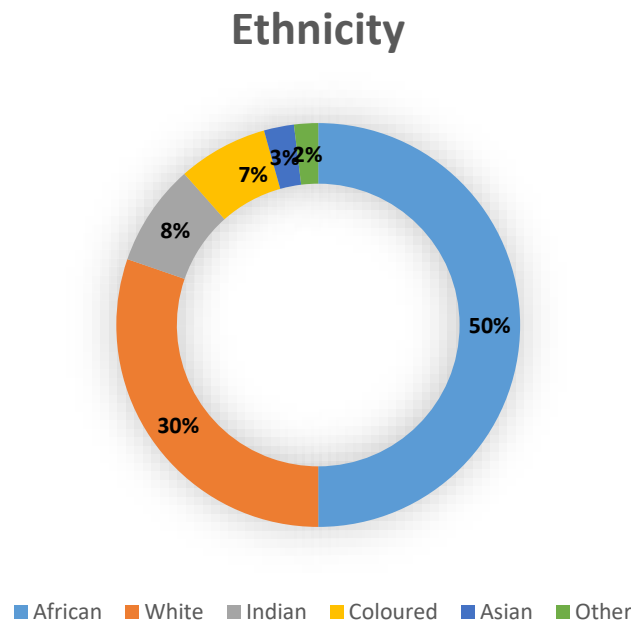


Figure 7: Ethnicity of Respondents

As seen above, the African ethnicity made up the majority of the population at 50%, followed by the White ethnicity at 30%, Indian at 8%, Coloured at 7%, Asian at 3% and other at 2%. This again is fairly represented as the South African Department of Statistics reported on the South African population as consisting of 80.7% black people; however, white people are the demographic minority as compared to the other measured ethnicities in South Africa.

### 4.2.3 Income of respondents

The respondents were asked to indicate their level of income that they earn on a monthly basis, and the results are shown below. The range of income as given in the questionnaire were:



Figure 8: Monthly income of respondents

The results showed that 17% of respondents earn below R10 000, 24% earn between R10 000 and R20 000, 20% earn between R20 001 and R30 000, 22% between R30 001 and R40 000, 8% earn between R40 001 and R50 000 and 9% between R40 001 and R50 000. The highest monthly income earned by respondents was in the range of R10 000 and R20 000, followed by 22% in the R30 001 and R40 000 range.

### 4.2.4 Level of education

The respondents' level of education was also looked at, to determine if there is any relation between their education and income, which could describe a trend in their inclination to shop online. The results showed that an equal number of respondents (37%) have either a professional qualification/diploma, or a bachelor's degree. This makes up the majority of respondents, at 156 respondents specifically. Ten percent have only some primary school experience, 14.3% have a high school diploma and 0.5% hold a higher postgraduate qualification. The graph below shows the results.

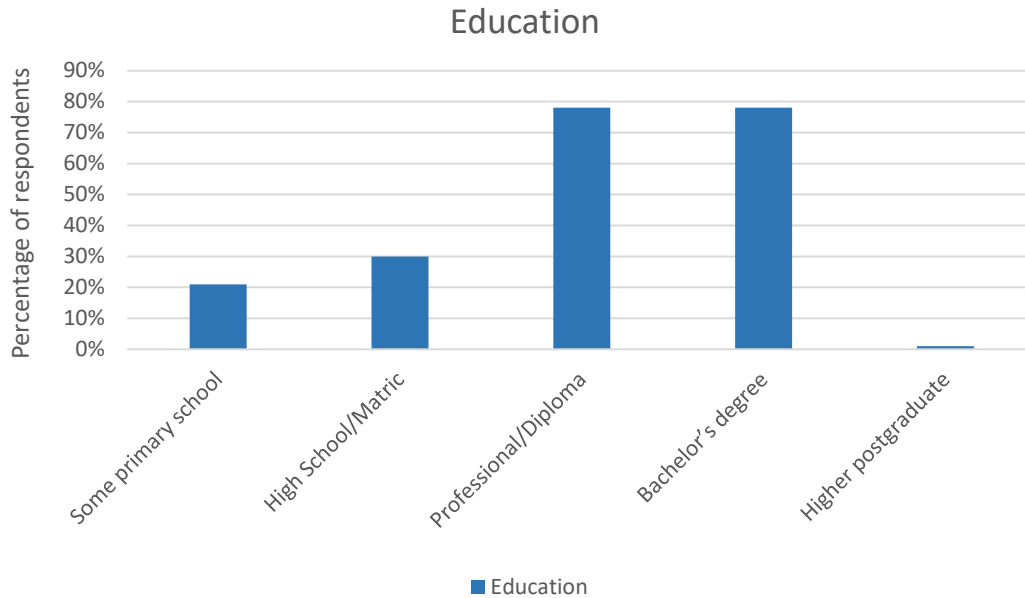


Figure 9: Level of Education

#### 4.2.5 Online shopping categories

As identified by Nielsen, 2018, the most popular online shopping categories of 2018 in South Africa were fashion, travel, books & music, IT & mobile, event tickets and groceries. The researcher also added the category 'other' to ensure that all categories were covered. The question was used as a screening question in the questionnaire and as a form of recall, so that respondents may be able to relate their experience to a recent purchase, and website used. Below is a summary of the responses.

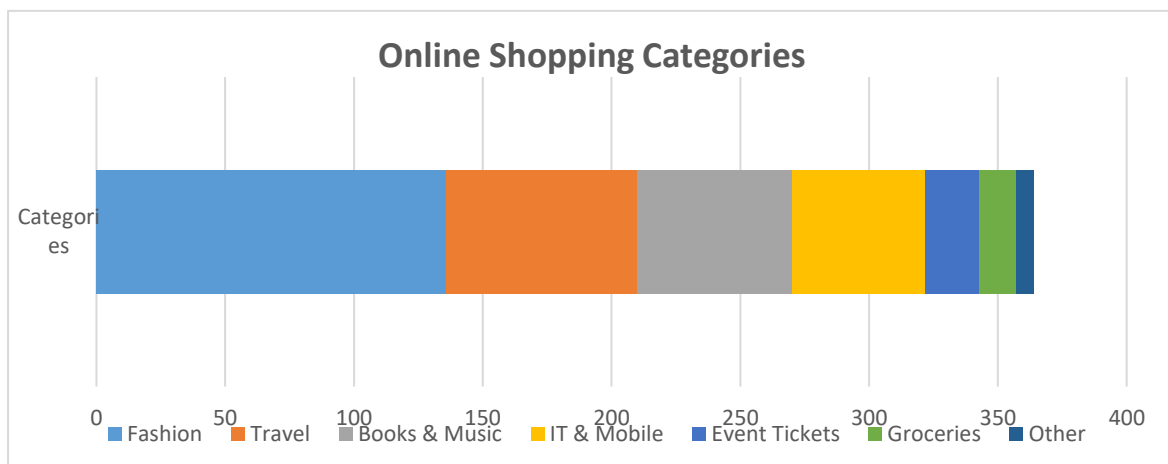


Figure 10: Online shopping categories

As per the above results, 136 respondents selected fashion as their most frequently purchased shopping category, followed by 74 that selected travel, 60 selected books and music, 52 bought IT and mobile products, 21 purchased event tickets, 14 purchased groceries, and 6 selected other. The respondents were able to select more than one category and up to all seven, so majority of the respondents made more than one selection.

**Table 1 summarises the demographic characteristics of respondents**

**Characteristics**

<b>Demographic variable</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Female	148	71%
Male	60	29%
<b>Ethnicity</b>		
African	104	50%
White	63	30%
Indian	17	8%
Colored	15	7%
Asian	5	2%
Other	4	2%
<b>Income</b>		
Below R10,000	36	17%
R10,001 – R20,000	50	24%
R20,001 – R30,000	41	20%
R30,001 – R40,000	46	22%
R40,001 – R50,000	17	8%
R50,001 and over	18	9%
<b>Education</b>		
Some primary school	21	10%
High School/Matric	30	14%
Professional/Diploma	78	37%
Bachelor's degree	78	37%
Higher postgraduate	1	0.5%

*Table 1: Summary of demographics*

### 4.3 Reliability and Validity of the Measurement Scales

#### 4.3.1 Confirmatory Factor Analysis

To assess the reliability and validity of the measures, the study employed Mplus 8.30 to perform SEM analysis with full information maximum likelihood, with robust estimation to assess all of the scales in Confirmatory Factor Analysis (CFA) (Muthén & Muthén, 1998–2017). The CFAs assist in determining any problematic items in the measures. The measurement model was validated following recommendations by Anderson and Gerbing (1988) where the CFA is used to validate construct measures, before structural equation modelling is performed. CFA highlights the psychometric properties of all the measures employed in the study. To achieve an acceptable model fit, different error covariances with respect to inter-item construct measures were used to correlate following a series of modification indices. Several items were removed from the model to ensure that the best items with acceptable factor loadings were maintained. Table 3 depicts the results of the confirmatory factor analysis.

Following Bagozzi and Yi (2012), a series of approximate fit heuristics were examined to guide the acceptable model fit information. Model fitness was examined using the chi-square ( $X^2$ ) test. Table 3 provides information on the fit indices and results of the full measurement model in which all items were entered concurrently in a CFA model, where a predicted measurement model is executed (Boso et al., 2013). All factor loadings were positive and significant.

Overall, the model fit of the measurement model shows a satisfactory fit to the data based on model fit thresholds: [Root Mean Square Error of Approximation (RMSEA) = 0.055; Comparative Fit Index (CFI) = 0.942; Turker Lewis Index (TLI) = 0.931; Standardized Root Mean Square Residual (SRMR) = 0.058;  $X^2 = 377.257$  (230);  $X^2/d.f. = 1.64$ ].

**Table 2 shows the results of confirmatory factor analysis**

---

Items	Estimates	t-	CR
		value	

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*System quality (Bai et al., 2008; K.-C. Chang, Kuo, Hsu, & Cheng, 2014; C. Liu & Arnett, 2000)  $\alpha = 0.74$*

I felt that my information was safe when completing a purchase on this online store	0.51	Fixed	0.72
I did not experience any system errors in completing my purchase on this online store	0.51	6.41	
The design of this online store made it easy to use.	0.75	15.67	
It was easy to find information about the product or service which I purchased on this online store.	0.70	12.90	
The products offered on this online store are of high quality.	0.62	7.77	0.82

***Order Fulfilment (Bernardo et al., 2012)  $\alpha = 0.82$***

This online store makes items available for delivery within a suitable time frame.	0.55	Fixed	
My items ordered were delivered on time.	0.64	10.79	
The items shown on this online store were actually in stock.	0.77	15.11	
This online store was truthful about its offerings.	0.86	20.45	

***Playfulness (Hsu et al., 2012; C. Liu, & Arnett, K. P., 2000)  $\alpha = 0.76$***

I enjoy my experience when I am shopping online.	0.88	Fixed	0.78
I find shopping online to be a thrilling experience.	0.71	11.63	

***Perceived usefulness (Sarkar, 2011)  $\alpha = 0.83$***

I accomplished what I wanted to while shopping online.	0.74	Fixed	0.84
While shopping, I bought what I really wanted.	0.87	22.25	
While shopping I found the exact items I was looking for.	0.79	17.59	

***Lifestyle compatibility (Henry Boateng, Diyawu Rahman Adam, Abednego Feehi Okoe, & Thomas Anning-Dorson, 2016)  $\alpha = 0.87$***

Shopping online fits my lifestyle.	0.78	Fixed	0.87
Shopping online fits well with how I like to do my shopping.	0.88	29.10	
Shopping online is compatible with most aspects of my shopping activities.	0.82	22.02	

***Attitude toward online shopping (Olney et al., 1991)  $\alpha = 0.95$***

Negative/Positive	0.92	Fixed	0.95
Very bad/very good	0.95	56.24	
Unfavourable/favourable	0.93	37.92	

***Purchase intentions (Hausman & Siekpe, 2009)  $\alpha = 0.76$***

I will definitely buy products from this online store in the near future.	0.89	Fixed	0.94
I intend to purchase through the same website in the near future.	0.92	37.24	
I am likely to revisit this online store in the near future.	0.94	51.95	
I am encouraged to revisit this online store in the near future.	0.79	12.61	

---

SEM Fit Indices

$X^2 = 377.257$  (230);  $X^2/d.f. = 1.64$ ; RMSEA = .055; CFI = 0.942; TLI = 0.931; SRMR= 0.058

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Table 2: Confirmatory Factor Analysis

The CFI and TLI values greater than 0.95 are regarded as an excellent model, however, values greater than 0.90 as demonstrated in this study are an acceptable model fit (Hooper, Coughlan, & Mullen, 2008; Hu & Bentler, 1999). RMSEA value of < 0.06 and SRMR value of < 0.08 also confirm acceptable model fit. Thus, all the fit indices provide evidence in support of well-fitting construct models. An assessment of the modification indices shows no evidence of correlated errors, suggesting that the model does not depart from unidimensionality (Boso et al., 2013).

#### 4.3.2 Reliability and Validity

In terms of reliability and validity of measures, all standardised factor loadings of the constructs exceed the recommended threshold of 0.5 (Anderson & Gerbing, 1988), with nearly all average variance extracted (AVE), values higher than 0.5, demonstrating acceptable convergent validity of the measures (Bagozzi & Yi, 1988). Composite reliabilities and Cronbach's alpha scores above 0.7 show that all the items reliably measure the underlying constructs.

**Table 3 depicts the descriptive statistics of the measured constructs**

Correlation matrix and descriptive statistics

#	Constructs	Mean	SD	1	2	3	4	5	6	7
1	System quality	4.00	0.16	<b>0.62</b>						
2	Order fulfilment	4.00	0.20	0.22	<b>0.70</b>					
3	Playfulness	3.69	0.49	0.33	0.46	<b>0.80</b>				
4	Perceived usefulness	4.05	0.33	0.64	0.31	0.50	<b>0.80</b>			
5	Lifestyle compatibility	3.63	0.58	0.68	0.11	0.30	0.61	<b>0.83</b>		
6	Attitude toward online shopping	5.88	1.89	0.73	0.17	0.40	0.66	0.70	<b>0.93</b>	
7	Purchase intentions	4.05	0.59	0.40	0.50	0.46	0.41	0.39	0.34	<b>0.88</b>



N=210; bold scores on the diagonal represent square roots of Average Variance Extracted (AVE) values; off the diagonal are inter-construct correlations.

Table 3: Correlation matrix and descriptive statistics

Following the study by Fornell and Larcker (1981), discriminant validity was confirmed for all but one construct by demonstrating that the square root of the average variance extracted for every construct is higher than the inter-construct correlations as depicted in Table 4. The table also highlights the descriptive statistics with the mean and standard deviation for each latent construct. Also, discriminant validity was confirmed by demonstrating that the variables did not have 1.0 as an inter-item correlation for the phi correlations (e.g., Anderson & Gerbing, 1988).

## 4.4 Path Modelling and Hypothesis Testing

### 4.4.1 Path modelling

All of the hypotheses in this study were examined through path modelling or structural equation analysis (SEM), where structural paths are added to the measurement model. Table 5 depicts the standardised parameter estimates and levels of significance for all the predicted paths as shown in Figure 11. The results show satisfactory estimates for the overall model fitness as they are within acceptable cut-off ranges [RMSEA = 0.51; CFI = 0.938; TLI = 0.928; SRMR = 0.063;  $X^2 = 471.696$  (304);  $X^2/d.f. = 1.56$ ].

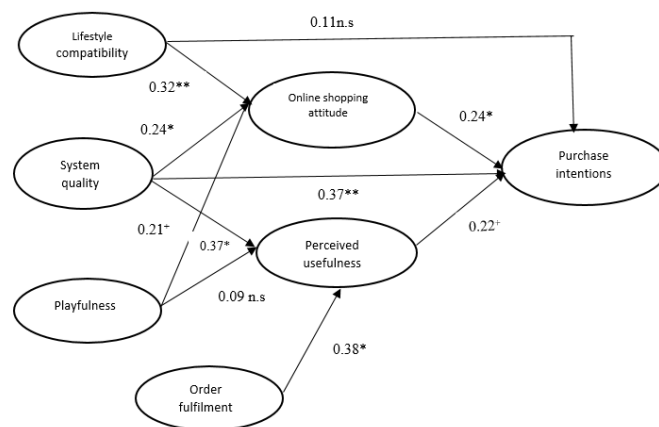


Figure 11: Results of Path Analysis

#### 4.4.2 Hypothesis results

a. *Relationship between system quality and attitude*

It was hypothesised in H1a that system quality would be positively related to online shopping attitude. The hypothesis was confirmed to be positive and statistically significant: system quality – online shopping attitude link ( $\beta = 0.24$ ;  $t = 2.28$ ;  $p < 0.05$ ).

b. *Relationship between system quality and perceived usefulness*

Hypothesis H1b stated that that system quality would be positively related to perceived usefulness of e-commerce websites. They hypothesis was confirmed to be positive and statistically significant: system quality – perceived usefulness link ( $\beta = 0.37$ ;  $t = 2.16$ ;  $p < 0.05$ ).

c. *Relationship between system quality and purchase intention*

H1c hypothesised that system quality will be positively related to purchase likelihood among online consumers. The hypothesis was confirmed to be positive and statistically significant: system quality – purchase likelihood link ( $\beta = 0.40$ ;  $t = 3.00$ ;  $p < 0.01$ ).

Figure 12 below shows the number of respondents that responded to each questionnaire item. The items were coded as SQ1, SQ2, SQ3, SQ4 and SQ5, with SQ being the abbreviation for system quality, and the number being the item in the scale.

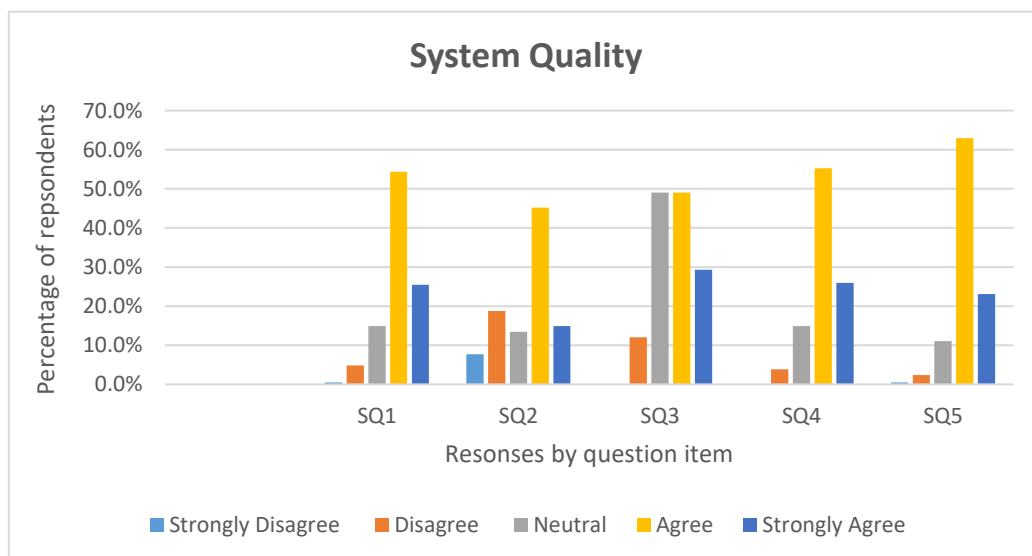


Figure 12: System quality responses

d. *Relationship between playfulness and attitude*

It was further predicted that playfulness of an e-commerce website would positively influence consumer's attitude towards online shopping. The results reveal that playfulness does influence online shopping attitude ( $\beta = 0.21$ ;  $t = 1.71$ ;  $p > 0.10$ ); this effect, H<sub>2a</sub>, is weakly supported at 0.10 level of significance. This suggests that entertaining content is important for improving attitudes toward online shopping behaviour.

e. *Relationship between playfulness and perceived usefulness*

H<sub>2b</sub> predicted that playfulness of an e-commerce website would also positively influence the consumer's perceived usefulness of the respective e-commerce platform. Additionally, the association between playfulness of a website and its perceived usefulness was not supported ( $\beta = 0.09$ ;  $t = 0.92$ ;  $p > 0.05$ ); thus, H<sub>2b</sub> is not supported as shown in table 4. This suggests that the current study shows that playfulness is not at all important when consumers are evaluating the perceived usefulness of a website in achieving their shopping goals.

Figure 13 below shows the number of respondents that responded to each questionnaire item. The items were coded as P1, P2, P3, P4 and P5, with P being the abbreviation for playfulness, and the number being the item in the scale.

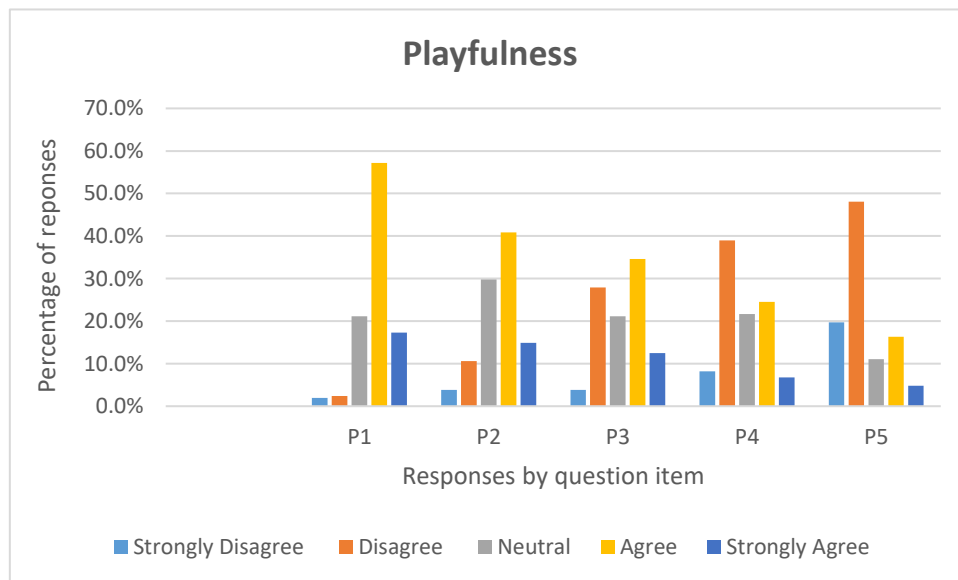


Figure 13: Playfulness responses

f. *Relationship between attitudes towards online shopping and purchase intention*

In H3, the study predicted that consumers with favourable online shopping attitude are more likely to purchase online. The study finds a positive and significant relationship between online shopping attitude and purchase likelihood from online stores ( $\beta = 0.24$ ;  $t = 2.37$ ;  $p < 0.05$ ). The present study corroborates prior studies that argue that when customers' attitude towards online shopping is positive, they have a higher tendency to buy from online stores.

Figure 14, 15 and 16 below show the number of respondents that responded to each questionnaire item. The items were coded as A1, A2 and A3, with A being the abbreviation for attitudes towards online shopping, and the number being the item in the scale.

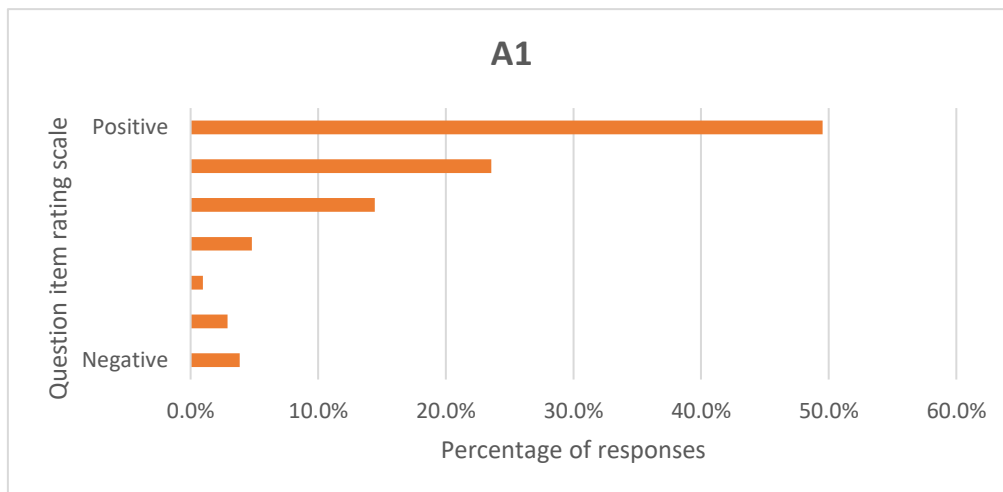


Figure 14: Attitude 1 responses

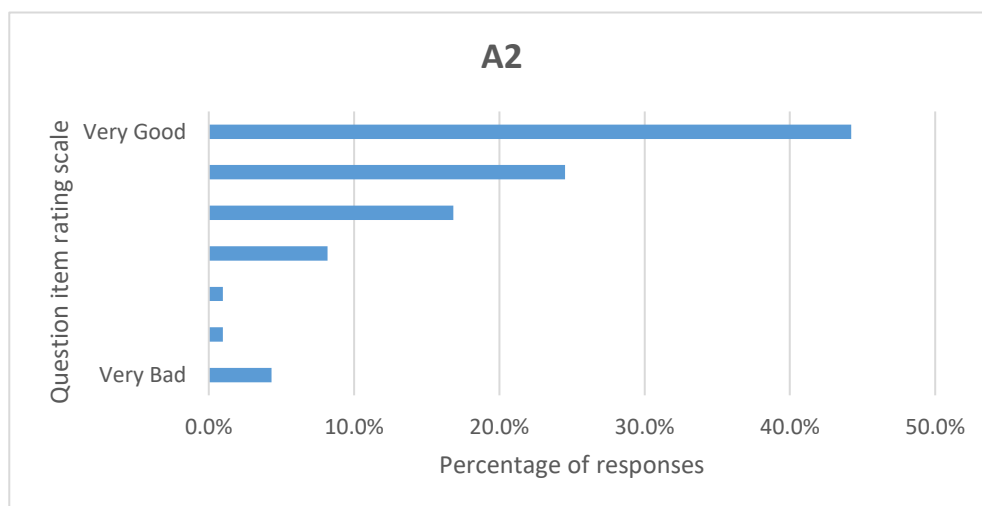


Figure 15: Attitude 2 responses

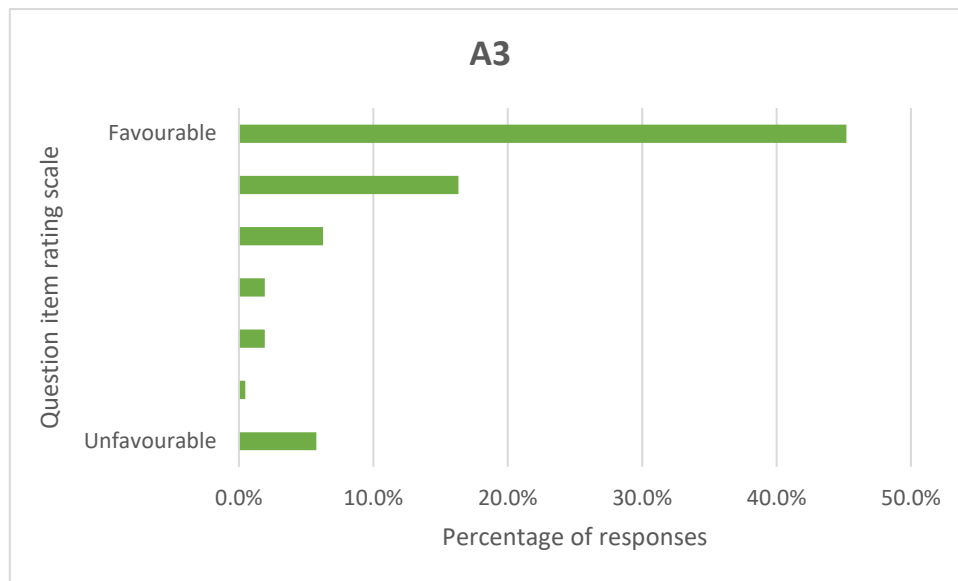


Figure 16: Attitude 3 responses

g. *Relationship between lifestyle compatibility and attitudes*

Online shopping lifestyle compatibility was hypothesised to be positively related to online shopping attitudes (H4a). The hypothesis that lifestyle compatibility will predict favourable online shopping attitudes was found to be positive and significant ( $\beta = 0.32$ ;  $t = 3.77$ ;  $p < 0.01$ ), thus confirming hypothesis H4a.

h. *Relationship between lifestyle compatibility and purchase intention*

Similarly, online shopping lifestyle compatibility was hypothesised to be positively related to purchase likelihood. However, the hypothesised link between lifestyle compatibility and purchase likelihood was not significant ( $\beta = 0.11$ ;  $t = 1.46$ ;  $p > 0.05$ ), and therefore not supported. This confirms a full mediation effect where the direct causal link from lifestyle compatibility to purchase intentions is not significant, but the significant influence is observed through the mediational role of online shopping attitudes (Baron & Kenny, 1986).

Figure 17 below shows the number of respondents that responded to each questionnaire item. The items were coded as C1, C2 and C3, with C being the abbreviation for lifestyle compatibility, and the number being the item in the scale.

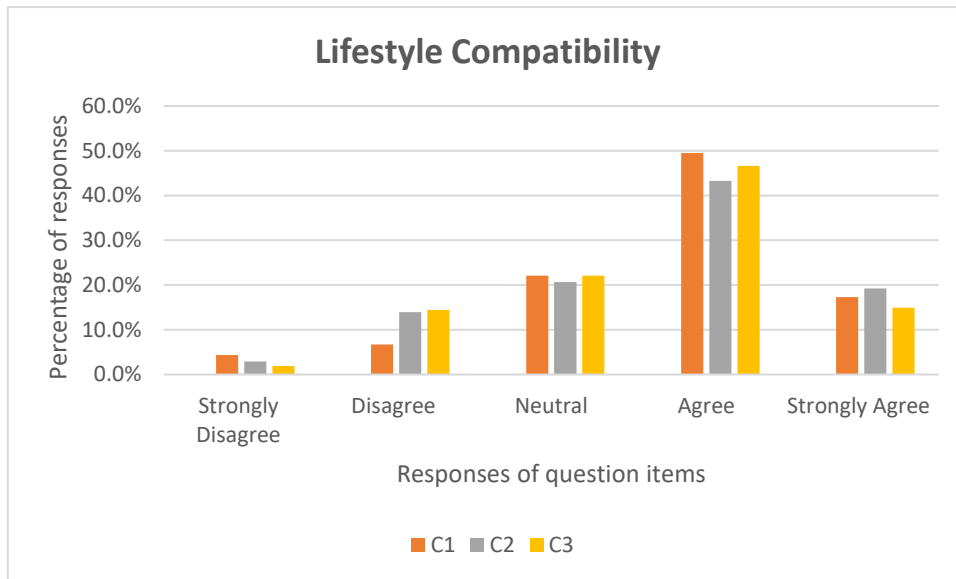


Figure 17: Responses to questionnaire items for lifestyle compatibility

i. *Relationship between perceived usefulness and purchase intentions*

Furthermore, the study predicted that the perceived usefulness of online stores is positively related to purchase intentions from online stores. H5 is confirmed, since we find a positive and significant influence of perceived usefulness on purchase intentions ( $\beta = 0.22$ ;  $t = 1.82$ ;  $p < 0.10$ ), although this effect is weak. This finding further corroborates prior findings suggesting that when customers perceive online stores to be useful in their regular shopping regime, they are more likely to buy from online stores.

Figure 18 below shows the number of respondents that responded to each questionnaire item. The items were coded as U1, U2, U3 and U4 with U being the abbreviation for perceived usefulness, and the number being the item in the scale.

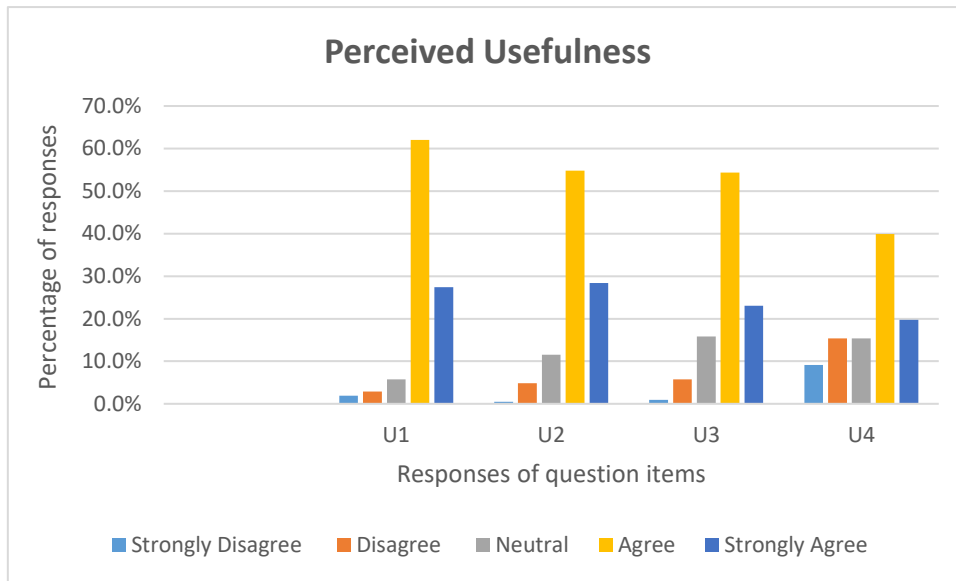


Figure 18: Responses to questionnaire items for perceived usefulness

j. *Relationship between order fulfilment and purchase intentions*

Lastly, the study argues that effective and prompt order fulfilment of customer requests in the online shopping space will influence the extent to which consumers perceive the e-commerce medium to be useful. Hypothesis H6 is supported, since order fulfilment is positive and significantly related to perceived usefulness of shopping websites ( $\beta = 0.38$ ;  $t = 2.25$ ;  $p < 0.05$ ). Thus, support is found for the notion that the ability of online stores to effectively and successfully fulfil customers' orders has a strong influence on how readily a customer will consider these shopping mediums as useful for their shopping activities.

Figure 19 below shows the number of respondents that responded to each questionnaire item. The items were coded as F1, F2, F3, F4 and F5, with F being the abbreviation for order fulfilment, and the number being the item in the scale.

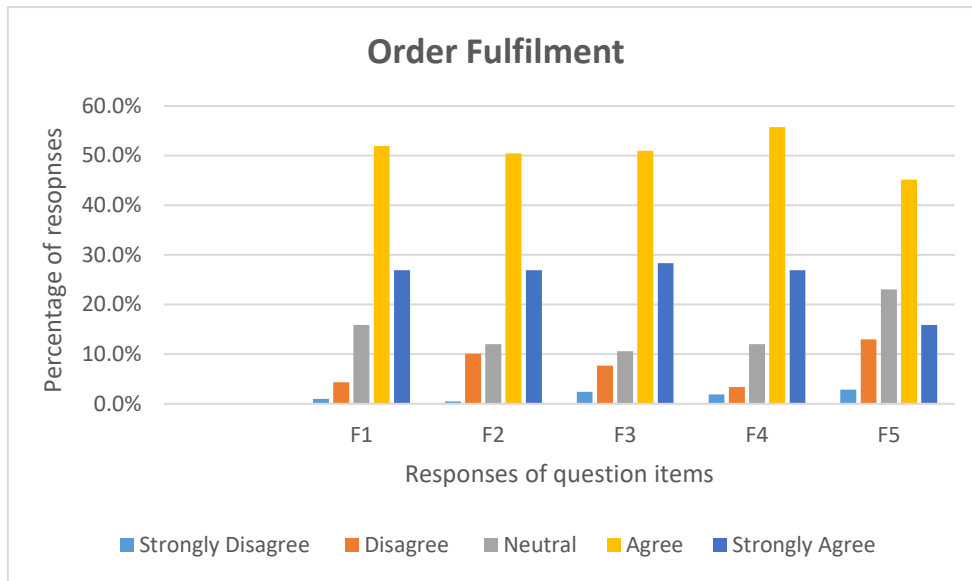


Figure 19: Order fulfilment responses

**Table 4 shows the path analysis**

Path Analysis for the structural model

Hypothesis	Paths	Estimates	t-values	Hypothesis supported
H1a	System quality → online shopping attitude	0.24	2.28*	Yes
H1b	System quality → Perceived usefulness	0.37	2.16*	Yes
H1c	System quality → purchase intentions	0.40	3.00**	Yes
H2a	Playfulness → online shopping attitude	0.21	1.71 <sup>†</sup>	Yes
H2b	Playfulness → perceived usefulness	0.09	0.92	No
H3	Attitudes towards online shopping → purchase intention	0.24	2.37*	Yes



H4a	Lifestyle compatibility → online shopping attitude	0.32	3.76**	Yes
H4b	Lifestyle compatibility → purchase intentions	0.11	1.46	No
H5	Perceived usefulness → purchase intentions	0.22	1.82 <sup>†</sup>	Yes
H6	Order fulfilment → perceived usefulness	0.38	2.25*	Yes
<b>Control variables</b>				
	Gender → purchase intentions	0.03	0.54	No
	Education → purchase intentions	0.14	2.71**	Yes
	Income → purchase intentions	-0.15	-3.25**	Yes

---

SEM Fit Indices

$X^2 = 471.696$  (304);  $X^2/d.f. = 1.56$ ; RMSEA = .051; CFI = 0.938; TLI = 0.928; SRMR = 0.063

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<sup>†</sup> $P < 0.10$ ; \* $P < 0.05$ ; \*\* $P < 0.001$

Table 4: Path Analysis for the structural model

In line with the literature, the study also included three key sociodemographic variables: gender, education and income as control variables. The results show that gender is not related to purchase intentions ( $\beta = 0.03$ ;  $t = 0.54$ ;  $p > 0.05$ ). However, education was significant and positively related to purchase intentions ( $\beta = 0.14$ ;  $t = 2.71$ ;  $p < 0.01$ ), while income was significant and negatively related to purchase intentions ( $\beta = -0.15$ ;  $t = -3.25$ ;  $p < 0.01$ ). This finding shows that consumers that are more educated have more interest and likelihood to use online stores for purchases than less educated consumers do. Yet consumers with less income are more likely than consumers with more income to show strong purchase likelihood in an online store environment.

## 4.5 Summary of the hypotheses results

The section showed the results of the descriptive statistics relating to the demographic and qualifying questions in the questionnaire, as well as the measurement of scales, pre-testing of the items, reliability and validity of the questionnaire, and finally the hypothesis results.

In summary, the analysis of the questionnaire hypotheses revealed the following: hypotheses **H1a - H1c** were all proved positive and are supported, which means that: system quality has a direct and positive impact on attitude towards online shopping; system quality has a direct and positive impact on website perceived usefulness. It also means that system quality has a direct and positive impact on consumer online purchase intentions.

With regards to playfulness as a factor effecting online shopping, results showed that playfulness does influence online shopping attitude, but not perceived usefulness. Therefore, **H2a** is supported, but **H2b** is not, and is therefore invalid.

**H3** is concerned with the consumer's attitude towards online shopping and purchase intentions, and the analysis thereof supports the hypothesis as being positive.

Lifestyle compatibility was analysed in relation to attitude towards online shopping, and online purchase intentions, and the results proved that **H4a**, which is the relationship between lifestyle compatibility and attitude is supported, however **H4b** - lifestyle compatibility and purchase intentions is not supported.

**H5**, which states that perceived usefulness has a direct and positive impact on consumer online purchase intentions was found to be positive for this study.

Lastly, order fulfilment was hypothesised to have a direct and positive impact on perceived usefulness, and analysis found **H6** to be supported as well.

## CHAPTER 5. DISCUSSION OF RESULTS

### 5.1 Introduction

This chapter will expand on the findings made in chapter 4, and explain the relationship between the variables.

### 5.2 Demographics

The gender of respondents that participated in the study was 71% female and 29% male respondents. Previous studies, such as by Herter, dos Santos, and Pinto (2014), and Kuruvilla et al. (2009), have shown that women generally shop more than men, and perceive more enjoyment from shopping, as well as exhibit more loyalty than men. However, when looking at the results from the study, gender is not found to have any impact or relation to purchase intentions, as the results show a significance of less than 0.9 ( $t=0.54$ ). So unlike other studies have shown, in the context of this study was conducted in South Africa, gender is not an important factor.

The ethnic profile of the respondents was looked at as well. The results were that 50% of respondents were African, which represent the majority of respondents, and 30% were white. 8% were Indian, 7% coloured and 4% made up Asian and other demographics. The results from the study can be a reflection of the population represented on the platforms through which the survey was distributed as the link shared on social media channels (Facebook, LinkedIn and WhatsApp), and on the Survey Circle website.

**Table 5 shows the ethnic statistics of the South African population**

Population group	Male		Female		Total	
	Number	% distribution of males	Number	% distribution of females	Number	% distribution of total
Black African	23 124 782	80,7	24 318 477	80,8	47 443 259	80,7
Coloured	2 513 221	8,8	2 663 530	8,8	5 176 750	8,8
Indian/Asian	768 594	2,7	734 413	2,4	1 503 007	2,6
White	2 266 151	7,9	2 385 855	7,9	4 652 006	7,9
<b>Total</b>	<b>28 672 747</b>	<b>100,0</b>	<b>30 102 275</b>	<b>100,0</b>	<b>58 775 022</b>	<b>100,0</b>

Table 5: Mid-year population estimates of South Africa by population group and sex, 2019 (D. S. S. Africa, 2019)

The monthly income of respondents was also considered in this study. The results showed that the majority of the respondents was between the less than R10 000 and R30 000 brackets (17% - >R10 000, 24% - Between R10 001 and R20 000 and 22% - Between R20 001 and R30 000). In relation to purchase intentions, income had a significant relation to purchase intentions, however the relationship was negative ( $t=-3.25$ ), which may show that respondents with a lower income may be more inclined to shop online due to the convenience and potential hype or popularity which online shopping has. There could also be the perception that there are better deals and discounts offered from shopping online that these consumers want to experience.

According to D. o. S. o. S. Africa (2019), the average South African's monthly income in 2019 for employees in the formal non-agriculture sector was between R20 859 and R21 432. The correlation between the average monthly income and that of the respondent from the study is visible as 59% of respondents earned between >R10 000 and R30 000.

The level of education of respondents was the last demographic factor considered. Results showed that the majority of respondents have a professional qualification/diploma or a bachelor's degree (37% for both), and the least (0.5%) have a higher postgraduate degree. The remainder made up the percentage that had only a primary or high school certificate (10% and 14% respectively). In relation to purchase intention, there was a significant and positive relation between them. This could show that the more educated a consumer, the more inclined they are to shop online, as it is more likely that they are exposed to and inclined to try new technologies, and find shopping online to be efficient.

## **5.3 Discussion of Hypotheses**

### **5.3.1 *Relationship between system quality and attitude***

System quality was measured using a six-item in a 5-point Likert scale, of which only five items were deemed usable after analysis of the scale. The items were extracted from the article by Bai et al. (2008); Chang, Kuo, Hsu, & Cheng (2014) and Liu & Arnett (2000). As seen in chapter 4, the hypotheses relating to system quality were all found to be positive and significant.

System quality is linked to the utilitarian antecedent of attitudes, as discussed in chapter 2 (Scarpi, 2012). The utilitarian factors are concerned with the convenience of performing tasks and necessity (Akbar & James, 2014). Therefore when all aspects included in measuring system quality, given above are met, the consumers have a more positive and favourable attitude towards online shopping and the website through which they are shopping.

### ***5.3.2 Relationship between system quality perceived usefulness***

System quality was also linked to PU. PU entails that respondent's perceive the website through which they are making their purchases to be conducive to facilitating their tasks (Bilgihan et al., 2016). A well working website, being one without system errors, easy to use and that supply all product or service information will influence a user's PU of a website. In this case, the factors were rated highly as seen in the table above and explain why hypothesis H1b is supported.

### ***5.3.3 Relationship between system quality and purchase intention***

Ultimately, the study sets out to prove the impact that website systematic and behavioural features have on a consumer's online purchase intention, and system quality was proved to have a positive impact on purchase intent. As stated by Van der Heijden et al. (2003), website design features such as system quality can positively influence a consumer's intention to purchase, or have no effect what so ever. For a successful website design and for the success of the online store, it is important for a potential relationship to be determined. In this case, it is clear to see from the study that system quality does play an important role in influencing purchase intention, amongst the study sample.

### ***5.3.4 Relationship between playfulness and attitude***

Playfulness of an e-commerce website was measured using five-items in a 5-point Likert scale, of which only two items were usable and contributed to the results after the analysis of the scale was done. The items were extracted from the studies by Hsu et al. (2012) and Liu, & Arnett (2000). Playfulness as related to online shopping has to do with the enjoyment, excitement and escapism that the buyer experiences when performing the task of shopping online. Some users enjoy the process more than others, and organisations can make sure to

have certain website features in place to enhance the playfulness of a website (Moon & Kim, 2001). Utilitarian and hedonic factors are antecedents to attitude. In this case, playfulness is related to the hedonic factors of attitudes, as this also has to do with feelings of enjoyment and fun from performing a task i.e. shopping online (Akbar & James, 2014). With these two being so closely related, it is possible to see why the study resulted in hypothesis H2a being supported.

### **5.3.5 *Relationship between playfulness and perceived usefulness***

H2b was not supported, and was about the relationship of playfulness and perceived usefulness. PU of a website is largely associated with utilitarianism, while playfulness, as stated above is associated with hedonism. Generally, when a consumer holds playfulness; enjoyment and fun highly, they will not be as interested in the system or functions of the website, as long as there are enough features and aspects on said website to enhance the enjoyment factor. Therefore, the two are inconclusive, and H2b is not supported.

### **5.3.6 *Relationship between attitudes towards online shopping and purchase intention***

Attitudes towards online shopping was measured using three-items in a 7-point rating scale, with three dimensions of attitudes being measures, as can be seen below. The scale was adapted from a study by (Olney et al., 1991).

A consumer needs to find a website and the task of shopping online both enjoyable and useful in order for them to begin to have a positive attitude towards it (Akbar & James, 2014). Purchase intention is affected by various factors such as the perceived risk which a consumer holds with regards to making a purchase decision, as well as several other motivations which were mentioned in chapter 2 (Kotler, 2012). Perceived risk and perceived trust are also factors that make up a consumer's attitude towards online shopping (Selvakumar & Raghavan, 2017). If the user perceives the risk to be low, and trusts that the online shopping website will more easily enable them to make their purchase, then they will be more likely to purchase a product, which can be seen as a result of this study. The more favourably, positively and the more enjoyable a consumer finds a website to be, the more positive their attitude will be.

### **5.3.7 *Relationship between lifestyle compatibility and attitudes***

A three-item 5-point Likert scale measured lifestyle compatibility. The items were taken and adapted from the study by Boateng et al. (2016). Lifestyle compatibility in an online shopping context has to do with how well a online shopping fits into the everyday life of a consumer (Boateng et al., 2016). The more suitable a consumer finds it to be to them, based on internal and external factors discussed in chapter 2, the more likely and willing a consumer will be to partake in it. With lifestyle compatibility, one considers the convenience offered by online shopping as compared to other methods of doing so, as well as any time and or cost savings provided (Boateng et al., 2016). These are linked to utilitarian antecedents of attitude towards online shopping, and therefore lifestyle compatibility has an influence on attitudes towards online shopping, proving H4a.

### **5.3.8 *Relationship between lifestyle compatibility and purchase intentions***

Lifestyle compatibility and purchase intention were found to not have a significant direct relationship in this study, which could indicate that the study sample did not put as much weight on lifestyle compatibility when deciding to make a purchase online or not. Despite this, lifestyle compatibility does have an indirect influence on purchase intention through the mediation of attitudes toward online shopping.

### **5.3.9 *Relationship between perceived usefulness and purchase intentions***

Perceived usefulness was measured by a four-item 5-point Likert scale, of which only three items were usable and contributed to the results, after the analysis of the scale was done. The items were taken and adapted from the study by Sarkar (2011). Hypothesis H5 was found to be positive.

Perceived usefulness relates to the usability of the website, as well as the information provided on the website (Davis, 1989). As much accurate information as possible needs to be provided in order for a consumer to be able to make a confident purchase decision. The website must also make the shopping process as convenient and efficient as possible, and be as user friendly as possible for a user to perceive its usefulness highly. In this study, the perceived usefulness was rated high, as seen in the above table, however the actual impact that it has on purchase

intention is weak. This result proves that if a consumer perceived the website to be useful to them within their normal shopping routine, then they are more likely to make a purchase.

#### **5.3.10 *Relationship between order fulfilment and perceived usefulness***

Order fulfilment was measured in the study by use of a usefulness was measured by a five-item 5-point Likert scale, of which only four items were usable and contributed to the results, after the analysis of the scale was done. The items were taken and adapted from the study by (Bernardo et al., 2012). Hypothesis H6 was proven to be significant in this study.

Order fulfilment is concerned with the entire online shopping process from order placement, to the delivery of the product and all subsequent services and procedures (Nguyen et al., 2018). Apart from speaking to the product delivery of a product, order fulfilment also relates to the information about the product given on the website, and the accuracy of this information relating to things such as amount of items in stock and description of the product (Nguyen et al., 2018). If a consumer feels that they know exactly what they are buying, when, where and how it will arrive, whether they are able to track and order and whether there is a reliable refund policy in place, they will be more likely to trust it enough to make a purchase (Bernardo et al., 2012). Therefore, the more successfully and effectively an online store is able to fulfil a consumer's order, the higher the consumer is likely to perceive the website as being useful to them and their shopping routine.

## **5.4 Conclusion**

Chapter 5 provided a discussion of the descriptive statistics undertaken for gender, ethnicity, education and income, as well as for the hypotheses tested in the study. The hypotheses results provided some useful insights into how website features are perceived by a sample of South African respondents, and how they affect one another, ultimately with their resulting effect on purchase intentions. Overall, in support of other researchers' findings, we see that system quality does affect purchase intention directly, and through the mediators' attitudes and PU. We also see how lifestyle compatibility influences purchase intent through attitude as a mediator. Playfulness also affects purchase intentions through attitude, and PU impacts purchase intention directly. Lastly, order fulfilment affects attitudes though being mediated by perceived usefulness.



The next chapter will provide the conclusion to the report, as well as recommendation of future research.

## **CHAPTER 6. CONCLUSION AND RECOMMENDATIONS**

### **6.1 Introduction**

This final chapter will conclude the study and give an overview of all chapters. It will also give recommendations to marketers, web designers and organisations that are involved in e-commerce sales to consumers. It will also make suggestion towards future research.

As initially stated, the main research problem was to analyse the effect of website features, lifestyle compatibility and online shopping attitudes on purchase intentions amongst South African consumers.

### **6.2 Conclusion of the study**

The hypotheses in this study were determined through an in-depth study of the literature, and pre-testing of the measurement scale amongst a proportion of the study sample. The results of the study proved the majority of the hypotheses to be supported, while two were not supported. The hypotheses (H1a, H1b, H1c, H2a, H3, H4a, H5 and H6) were all in support of observations from previous studies. In addition, those that were not supported; namely H2b and H4b, still provided some useful insight into the sample of the South African population.

The findings indicate that e-commerce users value the system quality features of a website more highly over the other website features which were measured through the questionnaire. They value the usefulness, effectiveness, convenience and the efficiency of performing their tasks and of the fulfilment of their orders through online shopping websites. These factors in turn affect their attitudes towards online shopping websites, and ultimately have a positive impact on the consumer's purchase intentions. As studies also show, the same factors also affect the likelihood of returning to the website to make subsequent purchases (Fang et al., 2014).

The findings also showed that whilst the level of a consumer's education also affects how they use the websites, their gender and ethnicity do not. An interesting finding too was the lower and mid-income earning consumers were the most inclined to shop online, despite having less disposable income than their higher earning counterparts have.

### **6.3 Recommendations**

E-commerce is a growing method of shopping as more people are becoming aware of the convenience and variety available through accessing the internet at their own time, even after working hours. With this growth comes an increase in competitors too, often competing for the same audience. Some online shopping websites are more successful than others are, and there are various reasons for this, some of which were examined in this study. The following points suggest recommendations that organisations can apply to their e-commerce strategies, as well as to create better experiences for their consumers, and ultimately increase purchases.

- **Rethink the website design**

As previously mentioned, website creation tools and templates such as Wix and Mailchimp have provided an easy way for business, especially small business, or those without much experience or budget to build a professional coded website to create usable company websites. E-commerce websites will ace features that differ compared to a regular company website that just offers information. It is important for the flow of a website to be appealing and provide a straight forward and effective user journey for suppliers, therefore marketers should employ the process of design thinking. This involves thinking iteratively from a consumer's perspective on what a potential problem may be, a potential solution, applying the solution, then reworking it if it is not suitable (Zahedi & Sharlin, 2013). In this case, an organisation should consider each stage of the website's purchase process, and reevaluate each design element of a website, to make sure that from a consumer's view, it functions as it should, and makes the user journey as seamless as possible. The website should also be tested regularly by the organisation to ensure that systematically it is working and no errors are experienced.

- **Personalisation of the website**

The growth in the competition of websites means that there are various websites in similar industries with similar product offerings targeting the same audiences. In order to set themselves apart against other competitors, and to modernise their offerings and features, managers should personalise their content to users, especially if they are regular visitors of the site. E-commerce companies have a lot of information about their website visitors and customers, and it would make sense for them to use it more strategically to improve website performance and increase a consumer's willingness to make a purchase (Sheridan, 2017).

Artificial Intelligence (AI) and data are employed by banking and technology companies often to tailor products and experiences to their consumers. Therefore, B2C e-commerce sites should use the same. Personalisation, such as small discounts for items that users usually purchase, can help consumers become more loyal and frequent users of a site. Another option is to personalise a section of product categories based on what the consumer has previously searched for or purchased, etc., which can make an impact on consumer's purchase and repurchase intentions (Jackson, 2007).

- **Delivery of orders**

Order fulfilment was examined in this study as a factor that is important in determining consumer's intention to purchase. One of the factors of order fulfilment has to do with the delivery of the items purchased by consumers (Nguyen et al., 2018). Certain factors, sometimes outside of the control of the organisations, for example the current load shedding issues in South Africa, affect the way in which websites run, and lead to extension in the usual delivery times. It is important for the management of e-commerce organisations to provide various alternative delivery and collection options for buyers, so that there is more flexibility in the process, and less disappointment on the side of the consumers. Few e-commerce organisations in South Africa are currently employing this option, i.e. Takealot, and often times it comes down to cost and security concerns. However, larger organisations which do function countrywide should consider these alternative options so that consumers are not deterred from continuing shopping online, and seeking more traditional methods or substitute websites instead.

- **Promote two-way communication**

Another element that most popular e-commerce websites lack, as seen through the most popular websites identified through the questionnaire (question 5) are that the users do not have a direct way of getting in touch with the organisation regarding questions, queries, or any issues they encounter on the website. It is important that marketers and organisational web designers should adopt an onsite live chat feature (a chat bot) or a quick form that users can fill in without having to stray from the website to send an email from elsewhere, or having to make a phone call to the company (Okoe, 2016). Consumers find frustration in having to leave the website to conclude any matters pertaining to aspects of the website and the shopping process (Okoe, 2016). If the shopping process is taking place on the company's platform online, then all

interactions should occur on that same platform for the user's convenience, and not take them between platforms to have queries answered or problems resolved. Therefore, management should put a small team or a few individuals in place to monitor the chat bot and respond to consumer online queried in 24 hours or less. This will contribute to the positive perception consumers have concerning their attitudes towards the shopping process, towards order fulfilment and the system quality and PU of the website.

- **Omni-Channel user experience**

Shopping websites should allow consumers to continue with and complete their shopping process on different platforms through which they access the website. This is referred to as an omni-channel user experience (Flaherty, 2017). For example, a consumer can log onto an online store on their phone, tablet, laptop or desktop and begin a transaction, however when logging on to the same website on a different device, the transaction often has to be started from scratch. Netflix has mastered the seamless transition across devices, and it will be worthwhile for South African retailers to apply the same (Duczeminski, 2019). Often, this lack of seamless transition causes frustration and affect the user's attitude towards the website, amongst users and causes them to abandon the transaction, and not complete a purchase (Flaherty, 2017; Maškarić, 2020).

## **6.4 Future studies**

Previous studies have focused on website design features and their influence on purchase intentions, as well as which features are more important to consumers than others. Whilst others have looked at the risks and trust associated to users shopping online. Many studies have focused on various elements related to online stores, purchases, consumers and website design, but very few so far have been in South Africa.

Studies should also look at the use of AI and big data as a means of driving purchases through online stores, and the different ways in which AI can be employed in a website. Website building platforms such as Wix and WordPress have simplified website building, to the point where people with very little coding or design knowledge are able to build their own websites. Future studies should focus on the difference in user journeys and effectiveness of the feature on consumer purchase intentions between coded websites, and those built through web design platform with no coding necessary. It could reveal which of the two are more effective.

As e-commerce expands to other platforms such as social media e.g. Facebook marketplace, it may be interesting to see whether these social media platforms will soon compete with other e-commerce websites and whether especially the younger consumers will purchase more from there than from other websites.

## **6.5 Conclusion**

The purpose of this chapter was confirm the studied hypotheses in this study to be significant as well as supported. It also referred to the main research problem, which is the effect on systematic and behavioural factors on the purchase intention of consumers in an online shopping context.

The rest of the chapter provided recommendations to these problems and for the improvement of e-commerce websites, as well as suggestion for future studies, which can shine more light on the growth of e-commerce as competition amongst them increases.

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# **APPENDIX A**

## **QUESTIONNAIRE**

### **Consent Letter**

Dear Respondent

Thank you for taking the time to complete this academic questionnaire. I am a post-graduate student at the University of the Witwatersrand – Graduate School of Business Administration, undertaking a Master of Management degree in the field of Strategic Marketing.

I am currently conducting research for my dissertation entitled: Website design and online shopping in South Africa. The aim is to determine the effect of website design features on consumers' purchase intent.

I kindly request you to complete the attached survey, which should take no longer than 10 minutes. Your response will be greatly appreciated and of great value to my research.

Your participation is voluntary and you will not be asked to provide any identification information; your identity and responses will remain anonymous. This research is for academic purposes only and the information obtained will be kept strictly confidential.

Your views are very important to me.

Sincerely,

Erica Cuna

Email: [ericacuna92@gmail.com](mailto:ericacuna92@gmail.com)

Please tick the appropriate response

**Q1. Have you purchased anything online within the last 12 months? Please note: If no is selected, please do not continue with the rest of the questionnaire.**

Yes	<sup>1</sup>	No	<sup>2</sup>
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**Q2. In the last 12 months, how many times have you purchased online?**

None	<sup>1</sup>	1-3 times	<sup>2</sup>	4-6 times	<sup>3</sup>	7-10 times	<sup>4</sup>	More than 10 times	<sup>5</sup>
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**Q3. What is your employment status?**

Student	<sup>1</sup>	Part-time	<sup>2</sup>	Contractual	<sup>3</sup>	Permanent	<sup>4</sup>	Retired	<sup>5</sup>
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**Q4. Which product category/categories have you purchased online in the last twelve (12) months? (Nielsen, 2018)**

Fashion	(CAT1)	Travel	(CAT2)	Books & Music	(CAT3)	IT & Mobile	(CAT4)	Event Tickets	(CAT5)
Groceries	(CAT6)	Other (please specify)	(CAT7)						

**Q5. Please name the online store(s), which you most frequently purchase from when shopping on the internet.**

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The following questions contain a list of statements that are to determine the importance of certain website design feature attributes. Please consider the most recent online store you have purchased a product or service from when completing this section.

**Q6. For each statement below, please indicate to what extent you agree or disagree.**

	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Somewhat Disagree (3)</b>	<b>Neutral (4)</b>	<b>Somewhat Agree (5)</b>	<b>Agree (6)</b>	<b>Strongly Agree (7)</b>
The information provided on this online store was reliable (IS1)							
The information provided on this online store was accurate (IS2)							
The information provided on this online store met my needs (IS3)							
Information about the product or service on this online store was complete (IS4)							
The information provided on this online store was up-to-date (IS5)							

**Q7. For each statement below, please indicate to what extent you agree or disagree.**

	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Somewhat Disagree (3)</b>	<b>Neutral (4)</b>	<b>Somewhat Agree (5)</b>	<b>Agree (6)</b>	<b>Strongly Agree (7)</b>
I felt that my information was safe when completing a purchase on this online store (SQ1)							

The quality of this online store decreased the time that I spent making my purchase (SQ2)							
I did not experience any system errors when completing my purchase on this online store (SQ3)							
The design of this online store made it easy to use (SQ4)							
It was easy to find information about the product or service which I purchased on this online store (SQ5)							
The products offered on this online store are of high quality (SQ6).							

**Q8. For each statement below, please indicate to what extent you agree or disagree.**

	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Somewhat Disagree (3)</b>	<b>Neutral (4)</b>	<b>Somewhat Agree (5)</b>	<b>Agree (6)</b>	<b>Strongly Agree (7)</b>
This online store made it easy for me to find what I needed (EF1)							
I found it easy to navigate on this online store (EF2)							
This online store allowed me to complete my purchase transaction quickly (EF3)							

The information on this online store was well presented (EF4)							
The pages on this online store loaded quickly (EF5)							
	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
This online store makes items available for delivery within a suitable time frame (F1)							
My items ordered were delivered on time (F2)							
The items shown on this online store were actually in stock (F3)							
This online store was truthful about its offerings (F4)							
This online store allowed for adjustments to a placed order (F5)							
	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I feel safe in my transactions with this online store (PR1)							
The process of shopping on this online store does not negatively affect my privacy (PR2)							

This online store protects information about my online shopping behaviour (PR3)							
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**Q9. For each statement below, please indicate to what extent you agree or disagree.**

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I accomplished what I wanted to while shopping online (U1)							
While shopping, I bought what I really wanted (U2)							
While shopping I found the exact items I was looking for (U3)							
I feel disappointed if I don't find everything I need on one online store (U4)							

**Q10. For each statement below, please indicate to what extent you agree or disagree.**

**H4:** Playfulness has a direct and positive impact on consumer online purchase intentions

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I enjoy my experience when I am shopping online (P1)							



I find shopping online to be a thrilling experience (P2)							
When browsing an online shopping website, I am not aware of the time as it elapses (P3)							
When browsing an online shopping website, I am not aware of distracting noise (P4)							
When shopping online, I often forget other commitments (P5)							

**Q11. For each statement below, please indicate to what extent you agree or disagree.**

	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Somewhat Disagree (3)</b>	<b>Neutral (4)</b>	<b>Somewhat Agree (5)</b>	<b>Agree (6)</b>	<b>Strongly Agree (7)</b>
Shopping online fits my lifestyle (C1)							
Shopping online fit well with how I like to do my shopping (C2)							
Shopping online is compatible with most aspects of my shopping activities (C3)							

**Q12. What is your overall attitude towards online shopping?**

My attitude towards online shopping is...

Negative	1	2	3	4	5	6	7	Positive
Very bad	1	2	3	4	5	6	7	Very good
Unfavourable	1	2	3	4	5	6	7	Favourable

The following questions contains a list of statements that are to determine the most important attributes of purchase intention and intentions to revisit this online store. Please consider the most recent website you have purchased a product or service from when completing this section.

**Q13. For each statement below, please indicate to what extent you agree or disagree.**

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I will definitely buy products from this online store in the near future (PI1)							
I intend to purchase through the same website in the near future (PI2)							
I expect to make a purchase through this online store in the near future (PI3)							
I am likely to revisit this online store in the near future (RI1)							
I am encouraged to revisit this online store in the near future (RI2)							

Please tick the appropriate response

**Q14. What is your gender?**

Female	1	Male	2
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**Q15. What is your ethnicity?**

African	1	White	2	Indian	3	Coloured	4	Asian	5
Other	6								

**Q16. What is the highest level of education that you completed?**

Some primary school	1	High School/ Matric	2	Professional Diploma	3	Bachelor's Degree	4	Higher Postgraduate Degree	5
Other	6								

**Q17. What is your average monthly income?**

R0 – R10 000	1	R10 001 – R20 000	2	R20 001 – R30 000	3	R30 001 – R40 000	4	R40 001 – R50 000	5
R50 001 and over	6								

**End of the survey. Thank you!**

## APPENDIX B

### SUMMARY OF QUESTIONNAIRE ITEMS

**Table 6 showing respondent ratings for system quality scale item**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I felt that my information was safe when completing a purchase on this online store	1	10	31	113	53
The quality of this online store decreased the time that I spent making my purchase	16	39	28	94	31
I did not experience any system errors when completing my purchase on this online store	0	25	20	102	61
The design of this online store made it easy to use	0	8	31	115	54
It was easy to find information about the product or service which I purchased on this online store	1	5	23	131	48

**Table 7 showing respondent ratings for playfulness scale item**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I enjoy my experience when I am shopping online	4	5	44	119	36
I find shopping online to be a thrilling experience	8	22	62	85	31
When browsing an online shopping website, I am not aware of the time as it elapses	8	58	44	72	26
When browsing an online shopping website, I am not aware of distracting noise	17	81	45	51	14
When shopping online, I often forget other commitments	41	100	23	34	10

**Table 8 showing the question responses to attitudes towards online shopping item**

Items	Negative						Positive
A1	8	6	2	10	30	49	103
	<b>Very Bad</b>						<b>Very Good</b>
A2	9	2	2	17	35	51	92
	<b>Unfavourable</b>						<b>Favourable</b>
A3	12	1	4	13	34	50	94

**Table 9 showing the item responses for lifestyle compatibility**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Shopping online fits my lifestyle	9	14	46	103	36
Shopping online fit well with how I like to do my shopping	6	29	43	90	40
Shopping online is compatible with most aspects of my shopping activities	4	30	46	97	31

**Table 10 showing the item responses for perceived usefulness**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I accomplished what I wanted to while shopping online	4	6	12	129	57
While shopping, I bought what I really wanted	1	10	24	114	59
While shopping I found the exact items I was looking for	2	12	33	113	48
I feel disappointed if I don't find everything I need on one online store	19	32	32	83	41

**Table 11 showing responses for order fulfilment**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This online store makes items available for delivery within a suitable time frame	2	9	33	108	56
My items ordered were delivered on time	1	21	25	105	56
The items shown on this online store were actually in stock	5	16	22	106	59
This online store was truthful about its offerings	4	7	25	116	56
This online store allowed for adjustments to a placed order	6	27	48	94	33

**Table 12 showing the response numbers for purchase intentions**

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I will definitely buy products from this online store in the near future	8	4	9	126	61
I intend to purchase through the same website in the near future	9	3	15	121	60
I expect to make a purchase through this	9	7	14	123	55

<b>online store in the near future</b>					
<b>I am likely to revisit this online store in the near future</b>	9	4	11	118	66
<b>I am encouraged to revisit this online store in the near future</b>	8	6	20	122	52