

Examining Consumers' Continued Use of Retailers' Branded Mobile Applications

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Doctor of Philosophy

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Parts of the generated knowledge from this thesis have been presented and published in various academic events during the development of the research (2012-2018).

McLean, G., Al-Nabhani, K. & Wilson, A. 2018. Developing a Mobile Applications Customer Experience Model (MACE) - Implications for Retailers. *Journal of Business Research*, 85, 325-336.

McLean, G., Osei-Frimpong, K., Al-Nabhani, K. Examining customer attitudes towards M-commerce applications... What does it mean for retailers?. *2018 AMS Annual (46th) Conference*, New Orleans, Louisiana, USA.

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Dedication

This thesis is dedicated to my family and all the people who supported me.

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Abstract

The aim of this research is to expand our understanding of consumers' continuous usage of traditional retail smartphone branded mobile applications (apps). Previous research in technology acceptance and continuous usage of technological innovations mainly focuses on functional and hedonic variables specifically related to the technology under research. Also, past research typically focuses on the continuous use of e-services reflecting the loyalty of consumers toward a specific e-service (e.g. loyalty toward a website or m-commerce). While this research examines utilitarian and hedonic variables that influence consumers to be satisfied and motivate them to continue to use smartphone branded apps, it finds that variables related to the brand motivate consumers to continue to use traditional retail smartphone branded apps. Therefore, this research shows that while utilitarian and hedonic variables that are related to the technical characteristics of the technology in use are essential to motivate consumers to continue to use a technological innovation, brand-related variables related to the traditional retailer (e.g. long-term brand reputation and loyalty) are important in motivating consumers to continue to use branded mobile apps.

Considering the limited knowledge available on what motivates consumers to continue using traditional retail smartphone branded mobile apps in a multi-channel retail environment, this research adopted a mixed methods approach. The research utilised an exploratory qualitative method in the form of 21 semi-structured individual in-depth interviews conducted in the UK to explore the drivers that motivate consumers to continue to use traditional retail smartphone branded apps and to refine the theoretical model that is tested in the quantitative phase of this research. The quantitative phase utilised an online questionnaire with 1009 consumers who retain and have continued to use traditional retail branded smartphone apps for a period of more than six months from John Lewis, M&S, Next and H&M.

This research highlights several findings on what motivates consumers' satisfaction with the smartphone branded app user experience and the continuous intention to use the app. The findings highlight that the utilitarian variables (perceived ease of use, usefulness, and personalisation), and the hedonic variable (enjoyment) increases consumers' satisfaction with the branded app user experience leading to an increase in consumers' continuous intention to use traditional retail smartphone branded apps. Furthermore, this research finds that utilitarian variables of perceived usefulness, compatibility and the hedonic variable of enjoyment, are capable of influencing consumers to continue using traditional retail smartphone branded apps

even when they are not satisfied with the app user experience. Furthermore, this research finds that satisfaction with the app user experience mediates escapism negatively, while escapism also has a significant negative relationship with the continuous intention to use the smartphone branded app. Also, the escapism finding in this study contradicts the previous literature on the usual role of escapism in e-services generally. Furthermore, the subjective norm (e.g. social influence) does not influence the continuous intention to use the smartphone branded app directly or indirectly through satisfaction with the app user experience. Also, this research highlights that consumers' satisfaction with app user experience significantly increases consumers' continuous intention to use the smartphone branded app.

The findings of this research also highlight that the retailer's long-term brand reputation and loyalty intention toward the traditional retailer's brand, which are variables that are not related to the technical characteristics of smartphone branded apps, play an important role in influencing consumers' intention to continue using traditional retail smartphone branded apps. Furthermore, this research finds that loyalty intention toward the traditional retailer mediates the relationship of satisfaction with the branded app user experience to consumers' continuous intention to use traditional retail smartphone branded apps. Also, loyalty intention toward the traditional retailer influences the consumers' continuous intention to use the branded app directly. Interestingly, consumers' perceptions of long-term reputation of the traditional retail brand do not influence the continuous intention directly as hypothesised. However, long-term brand reputation influences consumers' continuous intention to use the branded app through the mediated relationship of loyalty intention toward the traditional retailer brand.

This research contributes by enhancing our understanding of the variables that influence consumers' intentions to continue to use traditional retail smartphone branded applications. Furthermore, this research presents a theoretical model that provides theoretical implications and offers managerial implications for understanding the continuous usage of smartphone branded apps in a multi-channel retail context.

Chapter 1

Introduction to the Research

1.0 Introduction

The mobile phone has advanced technologically from a device that enables people to perform basic communication to a smart mobile device that enhances how people communicate with each other and how people communicate with brands (Chou et al., 2013; Fogg, 2007; Shankar et al., 2016). Previously mobile devices were considered a channel for creating brand awareness mainly through push-based communications; however, the technological advancement of smartphones and the innovative ideas implemented in branded mobile applications (apps) changed how consumers interact and communicate with brands (Ajax and Irfan, 2012; Bellman et al., 2011; Chiem et al., 2010; Shankar et al., 2016).

A report by Ericsson (2015) asserts that by 2020, 70% of the world's population is predicted to own a smartphone, reflecting people's ongoing adoption of smartphones at higher rates that exceed expectations. Also, it is suggested that mobile applications contribute to accelerating the adoption rates of smartphones (Garg and Telang, 2013). Furthermore, Criteo (2014) explains several interesting findings on smartphones, mobile applications, and m-commerce. First, the number of transactions generated through smartphones are higher than the number of transactions that are generated from other mobile devices such as tablets. Second, the m-commerce value is comparable to the value of desktop computers, reflecting the fact that consumers' ability to conduct m-commerce transactions ubiquitously is reaching similar levels to transactions that are conducted from stationed desktop computers. Finally, Criteo (2014) also concluded that consumers' utilisation and usage of m-commerce is beyond previous predictions and expectations. Also, recently it was reported that consumers are becoming more confident and comfortable about making purchases via smartphones (WARC, 2017). In addition, the mobile application market profit levels are predicted to reach \$270 billion, which is a significant increase from the \$70 billion estimated profit value in 2015 (App Annie, 2016).

Consumers are able to shop from any location at any time through the utilisation of the implemented services and features that brands provide in their branded apps, to enable consumers to interact with services offered by the brand and/or make purchases (Kim et al., 2013; Shankar et al., 2016). For example, branded mobile apps enable consumers to conduct

various tasks such as shopping, make a payment for services and products, find the nearest store around their current location, explore available products or services provided by the retailer, and read customer reviews from other customers who have already purchased and used the product or the service (Kim et al., 2013).

1.1 Research Problem

As mentioned earlier, consumers are becoming more confident about using smartphone branded apps (WARC, 2017), and smartphone branded apps are witnessing rapid growth and initiating high transactions that have exceeded the industry's expectations (Criteo, 2014). However, research and reports from the industry suggest that consumers do not continue to use or retain mobile branded apps. For example, Perro (2016) reports that on average, 80% of consumers do not retain a branded app for more than 90 days. It is worth noting that Perro's (2016) report stated that the study involved collecting data from multiple industries, and the collected data showed that the media and the entertainment industry holds the highest retention rates of 24% after 90 days. Similarly, it was previously reported that in the UK, after minimal use, 84% of consumers do not retain smartphone branded apps, while 47% of consumers do not retain branded apps after one-time use (Feeley, 2015).

The literature also highlights the issue relating to the fact that consumers adopt branded mobile apps; however, after a period of time, they do not retain the branded app resulting in its discontinued use. For example, Bhandari et al. (2015, p.162) state that "Another issue in case of mobile apps is that initial adoption is high however retention rate is extremely low. It has also been reported that 26% of people who download apps only use them once." Furthermore, Nysveen et al. (2015, p.v) assert that it is important to research consumers' retention and continuous usage of mobile services, while highlighting three main gaps within the mobile services research domain. First, they highlight that little is known about "app-based mobile services". Second, they highlight that in comparison to the large amount of mobile adoption research available, the knowledge available in relation to the effects of "using mobile services" is limited. Third, it is important to conduct research on "mobile services that are developed for specific contexts."

Furthermore, while there is a need to understand what leads consumers to retain and continue to use branded mobile apps, some authors expressed that mobile research is in need of more research to help understand the development in consumer behaviour and smart mobile devices use. For example, Ajax and Irfan (2012) explained that much of the available research available

could be considered outdated, because of the technological transition that replaced classic mobile phones with smartphones which exceed the technological capabilities of classic mobile phones. Furthermore, it is argued that an alteration in consumer behaviour has occurred, as a result of the rapid technological development of mobile phone technology (Wang et al., 2015; Roach, 2009). In addition, understanding consumers' retention and continuous usage of technologies that aim to deliver services to consumers is highly important to retailers who operate in a multi-channel environment, especially in online competitive market environments, and can significantly contribute to increasing the firm's profits (Reichheld and Schefter, 2000). For example, an organisation may face undesired costs when consumers discontinue use of the organisation's technological innovation which aims to deliver services to consumers (Hong et al., 2006). Retaining customers is extremely beneficial to organisations in maintaining a long-term sustainable market environment, which also help organisations to survive and overcome difficult market situations (Reichheld and Schefter, 2000; Bhattacharjee, 2001b).

Therefore, the aim of this research is to examine the variables that play a role in influencing consumers' satisfaction with the smartphone branded app user experience and their continuous intention to use smartphone branded apps which are provided by traditional retailers who operate in a multi-channel retail environment. Furthermore, it is argued that it is essential to understand loyalty in a multi-channel context, as most of the available research mainly concentrates on examining loyalty in a specific online context (e.g. e-loyalty: loyalty toward the website or a mobile app) (Klaus and Nguyen, 2013). Thus, this research takes further steps to examine the effect of satisfaction with the smartphone branded app user experience on a retailer's long-term reputation, and the impact of loyalty toward the traditional retailer and the consumers' intention to continue using the branded app. Furthermore, the objectives of this research are:

- To establish the utilitarian and hedonic variables that influence the consumers' continuous intention to use traditional retail smartphone branded apps, and to examine the role of consumers' satisfaction with the branded app user experience in mediating the utilitarian and hedonic variables toward consumers' continuous intention to use these branded apps.
- To investigate the role of social influence in influencing consumers' continuous intention to use traditional retail branded apps.

- To investigate the role of variables that are related to the traditional retail brand in influencing consumers' continuous intention to use the retailer's smartphone branded app.
- To examine the interrelation of consumers' satisfaction with the branded app user experience, variables that are related to the traditional retail brand, and consumers' continuous intention to use traditional retail smartphone branded apps.

1.2 Methodology

Consumers' continuous usage of traditional smartphone branded apps in this research is examined through the utilisation of a mixed methods approach, through taking a pragmatic philosophical stance. The selection of the pragmatic philosophical stance and the mixed methods approach in this research is due to the limited knowledge relating to consumers' continuous usage of smartphone branded apps that are offered by traditional retailers who utilise multiple channels (e.g. physical store, website, and branded mobile apps) to provide services and products to consumers. The application of the mixed-method approach in this research involved applying an exploratory qualitative method in the first phase, and a main quantitative method in the second phase of the research. The exploratory qualitative method is applied through semi-structured individual in-depth interviews, and the main quantitative phase is applied through an online questionnaire.

In the qualitative exploratory phase of this research, 21 semi-structured individual in-depth interviews were conducted with consumers who retain and continue to use branded apps from the traditional retail industry. Furthermore, the individual in-depth interviews utilised a quota sampling technique that applied requirements to how participants are recruited to obtain a sample that reflects the general population. For example, participants had to be residents of the UK, had to have retained branded apps from traditional retailers for several months, and the age and gender was to be equally distributed as far as possible. The individual in-depth interviews provided useful insights related to consumers' beliefs and attitudes regarding the continuous usage of traditional retail smartphone branded apps. Furthermore, the individual in-depth interviews also helped to refine the theoretical framework of this research by highlighting the most relevant variables that play a role in influencing consumers to continue to use traditional retail smartphone branded apps. Moreover, the refined theoretical framework based

on the individual in-depth interviews was tested in the quantitative phase of this research to confirm the hypothesised relationships.

The quantitative phase utilised a cross-sectional online questionnaire designed to test the hypothesised relationships in the theoretical framework of this research. Since the research is cross-sectional in design, additional measures were applied to establish a well-designed cross-sectional online questionnaire, as “in some cases a well-designed cross-sectional survey may serve as an adequate substitute for longitudinal data collection” (Rindfleisch et al., 2008, p.264). Thus, a quota sampling technique helped in obtaining the selected sample for this research to represent the general population of consumers who use smartphone branded apps from traditional retailers that are selected for this study. For example, participants in the survey must have retained and continued to use traditional branded smartphone apps from John Lewis, M&S, Next and H&M, for a period of more than six months, to be in a suitable position to rate their responses. Also, the online data collection process aimed for participants to be equally distributed across selected traditional retailers for this study, in addition to the age and gender being equally distributed as far as possible.

To reach the targeted sample for this research, a market research agency was employed to facilitate the distribution of the online questionnaire to targeted consumers. After the completion of the data collection, 1,447 responses were received. After the completion of a data screening procedure, 1,009 valid responses were obtained, and the data were analysed and the theoretical framework to examine consumers’ continuous usage of traditional smartphone branded apps was tested through Structural Equation Modeling (SEM).

1.3 Structure of the Thesis

The following provides information on the structure of this thesis.

Chapter 1 provides an introduction to the research, the nature of the research problem, context of the study, the methodology and research methods utilised for this study.

Chapter 2 aims to build a theoretical understanding of the drivers that influence people to continue using technological innovations. Thus, the chapter reviews the literature associated with behaviour prediction, technology acceptance and continuous usage.

Chapter 3 builds an understanding of the concept of brand image, brand reputation, and brand loyalty which are known to influence consumers’ decision making, and are capable of

increasing organisations' profits, and helping organisations to survive difficult market situations.

Chapter 4 begins by discussing Information Communication Technologies (ICTs), in addition to discussing m-commerce and branded mobile applications (apps).

Chapter 5 presents the initial conceptual development. This chapter provides an overview of the theoretical notions that are gathered from the literature that led to the development of the initial conceptual model for this research.

Chapter 6 presents the methodology. This chapter presents a discussion on the research methodology (research strategy) developed for this research. In addition, the chapter discusses philosophical positions (paradigms), and provides a justifying discussion on the philosophical approach selected to answer the study's research questions. Furthermore, this chapter discusses the methodological approach for this study, research design, the research methods chosen for collecting the data, and the methodological techniques used in this study.

Chapter 7 includes the exploratory findings. This chapter presents and discusses the qualitative analysis of the exploratory individual in-depth interviews, which is the first data collection method applied in this study. In this regard, this chapter discusses the analysis and findings of the exploratory individual in-depth interviews, which helped the researcher distinguish relevant and irrelevant constructs that influence consumers' continuous use of smartphone branded mobile apps offered by high-street retailers to improve the theoretical framework of this study.

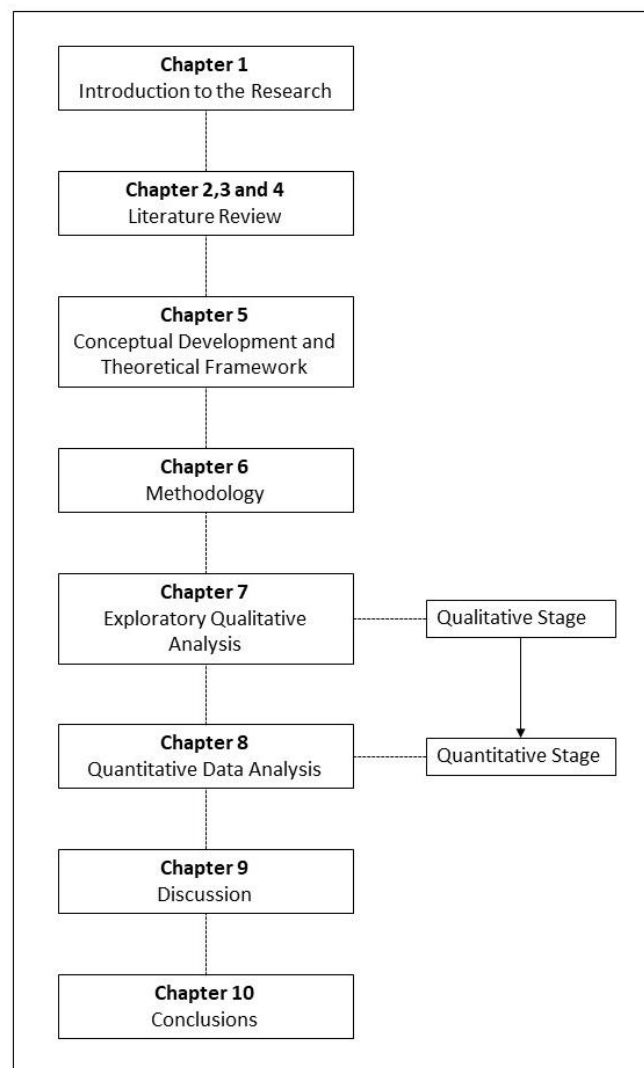
Chapter 8 presents the quantitative analysis. This chapter presents the procedures followed in the quantitative analysis and findings. The chapter discusses the preliminary analysis and the SEM statistical analysis used in this study. The preliminary analysis discusses the data screening, sample demographics, distribution of normality, multicollinearity, reliability and validity of all measures, using IBM SPSS 25. After discussing the preliminary analysis, the chapter discusses the utilisation of the Structural Equation Modelling (SEM) via AMOS 25. Furthermore, the chapter discusses the findings and results of testing the hypothesis within the structural model.

Chapter 9 provides a discussion of the findings derived from the qualitative and quantitative analysis in relation to consumers' continuous usage of traditional branded smartphone apps. The chapter also discusses the results and findings relative to the previous literature.

Chapter 10 discusses the research conclusions and managerial implications. The chapter also outlines the theoretical contributions, future research and research limitations.

A graphical representation of the thesis structure is provided in Figure 1.1:

Figure 1. 1 Thesis structure



Chapter 2

Theories of Technology Acceptance and Continuous Usage

2.0 Introduction

New innovative technologies transform how organisations and consumers interact with each other (Jayawardhena and Foley, 2000; Parasuraman, 2000; Parasuraman and Zinkhan, 2002; Meuter et al., 2005; Cao and Mokhtarian, 2005; Ajax and Irfan 2012; Roach, 2009; Wang et al., 2015), due to the persuasive impact information and communication technologies have on our daily lives (Parasuraman and Zinkhan, 2002).

Understanding the consumer's acceptance of new technological innovations is essential in organisations to develop innovative products and services that consumers accept and use (Bitner et al., 2000). However, the implementation of new technological innovations that aim to serve consumers better may lead to adverse outcomes for organisations, when technological innovations are not adopted and accepted by consumers (Meuter et al., 2005). Furthermore, a research area of interest is to understand what persuades consumers to retain and continue to use smartphone branded mobile apps (Bhandari et al., 2015; Nysveen et al., 2015), which will further enhance the organisations' delivery of services through the mobile channel. In addition, understanding what leads consumers to continue to use the organisation's services will contribute to the organisation's success and survivability in the marketplace (Battacherjee, 2001b).

This chapter aims to build a theoretical understanding of consumers' acceptance, and continuous use of technological innovations from the Information Systems (IS) research area. Thus, this chapter discusses established theories that are developed to predict people's behaviour to accept and use technological innovations. Also, the chapter discusses Battacherjee's (2001b) Expectation Confirmation Model of Information Technology (ECM-IT), which is designed to understand the drivers that motivate consumers' continuous intention to use technological innovations.

It is worth noting that the theories and models discussed in this chapter may share similar theoretical traits and approaches in predicting technology use. Additionally, it can be noted,

that most of the theories discussed in this chapter went through further developments over the years and have been replicated or extended by researchers.

Although this chapter's aim is directed toward understanding theories that predict people's technology acceptance, and continuous use, the chapter begins by discussing two theories from the discipline of psychology which are designed to predict people's behaviour. The two theories are the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980), which went through further development leading to the introduction of the Theory of Planned Behavior (TPB) (Ajzen, 1991). The main reason for discussing the TRA and the TPB in this chapter is that the two theories played a role in the development of theories within the IS research area, such as the Technology Acceptance Model (TAM) (Davis, 1986), the Decomposed Theory of Planned Behaviour (DTPB) (Taylor and Todd, 1995a, Taylor and Todd, 1995b) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003a). Furthermore, the chapter will also discuss the Unified Theory of Acceptance and Use of Technology Two (UTAUT2) (Venkatesh et al., 2012), Diffusion of Innovations Theory (DIT) (Rogers, 1995), and the Expectation Confirmation Model for Information Technologies (ECM-IT) (Battacherjee, 2001b).

2.1 Theory of Reasoned Action (TRA)

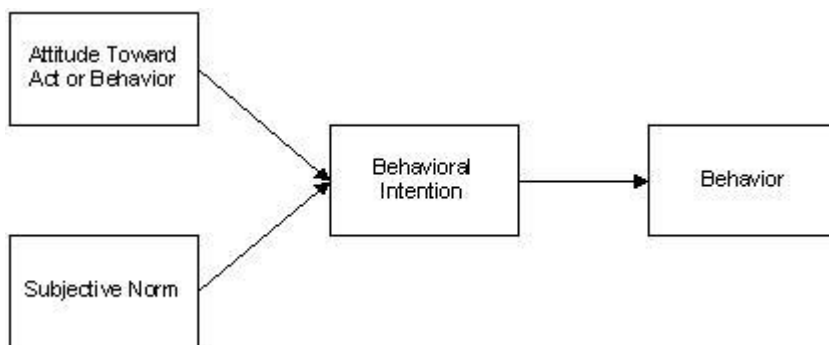
The Theory of Reasoned Action (TRA) was developed by Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980); it aims to predict people's behaviour through their behavioural intentions. Ajzen (1988) argues that behavioural intentions are important in determining people's willingness to perform a particular behaviour, and the individual's own beliefs shape the behavioural intentions. It is worth noting that behavioural intention is referred to by Fishbein and Ajzen (1975, p.288) as the "person's subjective probability that he will perform some behavior."

Ajzen and Fishbein (1980) named it the Theory of Reasoned Action because they believe that people will act rationally toward performing a behaviour. In Ajzen and Fishbein's (1980, p.5) own words they explain that "...the theory is based on the assumption that human beings are usually quite rational and make systematic use of the information available to them." Therefore, the TRA assumes that people are "rational actors" (Montaño and Kasprzyk, 2008). Moreover, the TRA is concerned with understanding and predicting behaviours that involve an individual

evaluating the positive and negative outcomes before deciding to engage or not to engage in a particular behaviour.

For this purpose, the TRA is not concerned with social behaviours that may happen automatically such as social behaviours that are controlled by unconscious motives (Ajzen and Fishbein, 1980). Thus, in Greene’s (2009, p. 826) own words, “It specifically excludes behaviors that are impulsive, habitual, or scripted. TRA would not be used, for example, to explain a frequent traveller’s getting through airport security. Instead, the theory has been effectively applied to behaviors such as smoking and blood donations, over which the person has some choice.” Furthermore, Bentler and Speckart (1979) and Langer (1989) explain that the TRA excludes behaviours which are impulsive and habitual and behaviours that may happen naturally without conscious thought, as cited in Hale et al. (2002). Excluding such behaviours, classifies the TRA as a theory that is concerned with behaviours that are taken through voluntary and conscious decisions, and for this reason, behaviours which are impulsive or habitual had to be excluded from the theory (Hale et al., 2002). It is also worth mentioning that Hale et al. (2002), prefer to use the term “volitional behaviours” when referring to behaviours that involve voluntary and conscious decisions. Moreover, the TRA is not restricted to a specific type of behaviour, as Ajzen and Fishbein (1980) believe that their theory can be applied to predict and understand any behaviour that does not happen “automatically”. A representation of the TRA model is presented in Figure 2.1.

Figure 2. 1 Theory of Reasoned Action (TRA)



Source: Ajzen (1988)

According to Eagly and Chaiken (1993), the TRA can be also expressed mathematically by the following formula:

$$\mathbf{B} = \mathbf{BI} + w_1\mathbf{A}_b + w_2\mathbf{SN}$$

Furthermore, Eagly and Chaiken (1993) explain, that **B** is the behaviour, **BI** is the behavioural intention, **A_b** is the attitude toward the behaviour and **SN** is the subjective norm. It is also important to note that the empirical weights in the formula are represented by **w₁** for “attitude toward the behaviour” and by **w₂** for “subjective norms”. In other words, some behaviours could be influenced by the attitude toward the behaviour more than the subjective norm and vice versa.

2.1.1 The TRA Components

As mentioned earlier, the TRA understands and predicts people’s behaviour through behavioural intentions. Furthermore, Ajzen and Fishbein (1980) theorised that people’s behavioural intention is formed by two variables that are considered to be the beliefs of an individual, which are “attitude toward the behaviour” and “subjective norm”. The TRA suggests that the two mentioned variables shape an individual’s behavioural intention, which aims to capture the degree of the individual’s motivation and willingness to perform the behaviour (Ajzen, 1991). The TRA is believed to be able to predict and understand various volitional behaviours through its components (Fishbein and Ajzen, 1975; Hale et al., 2002).

2.1.1.1 Attitude

The attitude construct is referred to as “a person’s general feeling of favorableness or unfavorableness toward some stimulus object” (Fishbein and Ajzen, 1975, p.216). The attitude variable in the TRA is formed by two antecedents, which are “behavioural beliefs” and the “outcome evaluation” of the behaviour in question. The TRA suggests that people will have a set of behavioural beliefs that could be positive or negative toward a particular behaviour. Also, people will evaluate and personally judge the advantages and disadvantages of the behaviour outcomes, which will favourably or unfavourably influence their attitude about the behaviour, before deciding to take action toward the behaviour in question (Ajzen and Fishbein, 1980). Therefore, if an individual has a positive attitude toward a particular behaviour, the individual will hold positive behavioural intention toward the behaviour, where the individual is more likely to take action to perform the behaviour and vice versa. Therefore, the TRA suggests that people’s attitude toward a behaviour is a process of thinking regarding evaluating the

behavioural beliefs and what consequences the behaviour may lead to if performed (Eagly and Chaiken, 1993).

Referring to the TRA model in Figure 2.1, it can be noted that Fishbein and Ajzen (1975) referred to the attitude construct as “attitude toward the action or behaviour” and not just “attitude”. The reason for this is that the TRA is concerned with people’s attitude toward performing a behaviour, and not people’s attitude toward an object (Montaño and Kasprzyk, 2008). For example, an individual’s attitude toward continuing to use branded mobile applications could be that mobile applications will enhance their lifestyle, increase productivity and allow them to perform a variety of tasks through the use of mobile applications anytime anywhere. Therefore, the TRA suggests that people’s attitudes include a bundle of behavioural beliefs, in addition to evaluating the consequences of performing the behaviour. It is worth noting that people may have a different set of behavioural beliefs and may evaluate the consequences of performing a behaviour differently (Eagly and Chaiken, 1993).

Attitude and Past Experiences

As mentioned earlier, the creation of the TRA is centred on predicting volitional behaviours that people perform in a conscious state of mind. However, Fishbein and Ajzen (1975) acknowledge that persuasive communications play a significant role in shaping people’s beliefs toward a behaviour and can modify and change people’s beliefs. Thus, an individual’s attitude is viewed as something that is learned, which means attitudes can evolve and get modified based on the individual’s past experiences (Fishbein and Ajzen, 1975). The view of attitude which describes it as something that is learned is in line with Byrne (1971). For example, Byrne (1971, p. 205) explains that “Our supposition is that the response to attitudes is based on common learning experiences which stress the desirability of being logical and correct in perceiving the world as others do.”

Therefore, it is likely that an individual’s attitude toward a behaviour will be changed or modified, based on the individual’s previous experiences toward a particular behaviour. In a marketing context, this view corresponds with Meuter et al. (2005), who found that consumers are more likely to adopt self-service technologies, based on past experiences of using self-service technologies. Similarly, Rogers (2003) suggests that a potential adaptor of an innovation views the innovation as an extension of previously adopted ideas. Therefore, there

are similar and consistent views that people's attitude toward a behaviour is affected by previously encountered behavioural past experiences.

2.1.1.2 Subjective Norm

The subjective norm variable is referred to as “the person's perception that most people who are important to him think he should or should not perform the behavior in question” (Fishbein and Ajzen, 1975, p.302). The subjective norm variable aims to capture two dimensions. The first dimension is the “normative beliefs” of an individual, regarding engaging or not engaging to perform a particular behaviour, based on the perception of other people that are important to the individual regarding the behaviour (Ajzen and Fishbein, 1980). The second dimension captures the degree of the motivation that an individual has, to comply with the approval or disapproval of referents regarding a particular behaviour (Ajzen, 1988). In other words, Hale et al. (2002) explain that the motivation to comply dimension represents the “... real or imagined pressure one feels for his or her behavior to match the perceived expectation of others.” Therefore subjective norms could be described as the social pressure that an individual would personally feel from others, regarding a particular behaviour.

It is worth noting that in the TRA, people's norms are described as subjective and that is how the term “subjective norm” originated (Simons-Morton et al., 2011). Moreover, Simons-Morton et al. (2011) explain that the TRA classifies norms as subjective, because they are something that is not “actual”, and in the TRA, norms are the perceptions of an individual, regarding what other important referents to the individual think about a particular behaviour.

2.1.2 Attitude, Subjective Norm and the Context of the Behaviour

The attitude and subjective norm variable may vary in their weights across different types of behaviours. For example, if an individual did not care what others think about a particular behaviour, the subjective norm construct could carry less weight toward behavioural intentions for that behaviour (Miller, 2005). Furthermore, Ajzen and Fishbein (1980) suggest that in some behaviours, the attitude construct could be a stronger determinant than the subjective norm construct and vice versa. As an example, the attitude construct could be found to be a more important determinant than subjective norms in consumers' continuous usage of mobile shopping applications, and subjective norms can be a more important determinant in consumers' continuous usage of mobile banking applications.

Also, external variables such as demographics will also play a role in influencing the weights of the attitude and the subjective norm construct (Ajzen and Fishbein, 1980). For example, the attitude and subjective norm construct may behave differently when external variables such as gender, age or cultures are applied. Therefore, the TRA acknowledges that the context of the behaviour will cause the weights of attitude and subjective norms to vary in their relationship toward behavioural intentions (Ajzen, 1988).

2.1.3 TRA's Limitations

Sheppard et al. (1988) argue that the TRA appears to be a robust theory only when the principles that the theory was created for are present. Therefore, Sheppard et al. (1988) presented three main limitations of the TRA. These limitations are presented as follow:

- The TRA does not distinguish between goal intention and behavioural intention. In other words, an individual may have strong intentions to perform a particular behaviour, but factors such as skill, resources or specific conditions are not available to enable the individual to perform the intended behaviour. Similarly, Eagly and Chaiken (1993) also questioned the TRA's ability to distinguish scenarios where people form intentions to perform a particular behaviour, but they do not have the resources or skills to perform the behaviour in question.
- The TRA's ability to predict behaviours that involve a choice among alternatives could be considered questionable. For example, an individual may form behavioural intentions to buy a particular product from a specific brand, but the presence of choice and alternatives may direct the individual to buy a similar product from a different brand than the one originally intended. Therefore, although the individual may have a positive attitude and subjective norm toward a product, the individual may consider a different product if the alternatives were to be present.
- The TRA in some research situations may fail to distinguish between people's intentions toward performing a behaviour and their subjective estimates regarding the behaviour. Therefore, Sheppard et al. (1988) argue that there are situations where the

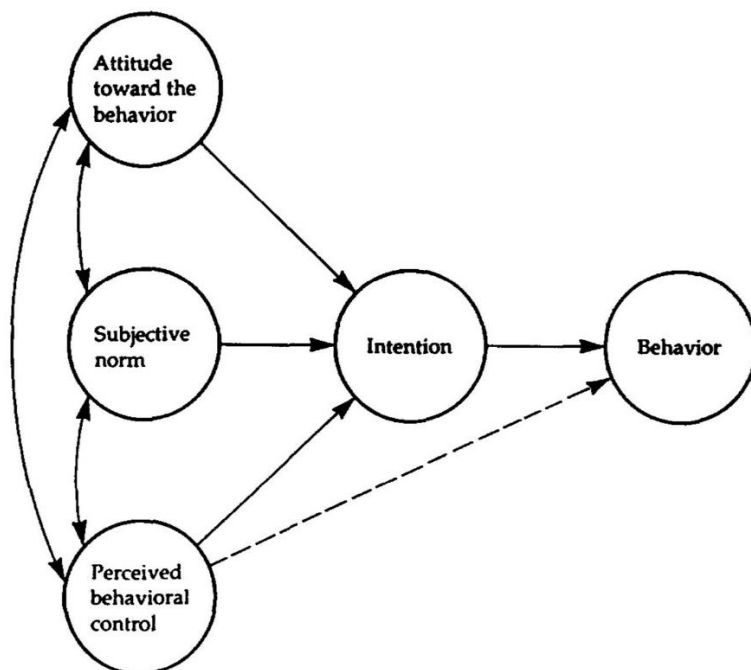
TRA may not be able to distinguish between people’s intention to do something, and their expectations that they can perform the behaviour as intended.

To limit some of the criticisms of TRA, Ajzen (1991) extended the TRA by introducing “Perceived Behavioral Control” as an additional variable (Eagly and Chaiken, 1993; Greene, 2009). The extended theory from the TRA is named the Theory of Planned Behavior (Ajzen, 1991), which is discussed in the next section.

2.2 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) was developed by Ajzen (1991), to address some of the criticisms of TRA (Eagly and Chaiken, 1993; Greene, 2009). Ajzen (1991, p.181) states that “the theory of planned behavior is an extension of the theory of reasoned action (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) made necessary by the original model’s limitations in dealing with behaviors over which people have incomplete volitional control.” A representation of the TPB, which is an extension of the TRA, is presented in Figure 2.2.

Figure 2. 2 Theory of Planned Behaviour (TPB)



Source: Ajzen (1991, p.182)

2.2.1 Perceived Behavioural Control

Along with the Attitude toward the behaviour and the Subjective Norms variables from the TRA, the TPB extends the TRA by the addition of the Perceived Behavioral Control variable (Ajzen, 1991). The Perceived Behavioral Control variable is referred to by Ajzen (1991, p.183) as the “people’s perception of the ease or difficulty of performing the behavior of interest.” Therefore, Perceived Behavioral Control addresses behavioural situations regarding people having the behavioural intentions to perform a behaviour but lacking the skills or resources to perform the behaviour in question. Therefore, although an individual may have a positive attitude and subjective norm toward the behaviour, he or she may not have the ability to perform a behaviour, because the resources or skills that are required to motivate the individual to perform the behaviour may not be available (Ajzen, 1991).

According to Eagly and Chaiken (1993), the “Perceived Behavioral Control” variable originated from the concept of “self-efficacy” that was introduced by Bandura (1977), which is defined as “the conviction that one can successfully execute (a given behavior)” (Bandura, 1977, p.193). Therefore, the self-efficacy concept seems to have played a role in the development of the Perceived Behavior Control variable, because Ajzen (1991) explained that self-efficacy and the Perceived Behavioural Control variable share similarities.

2.2.1.1 Perceived Behavioral Control’s Relation with Intention and Behaviour

Referring to the model in Figure 2.2, the Perceived Behavioral Control variable is the only variable in the model that has a relationship toward the behavioural intention, and a “possible” direct relation toward the “Behavior”. Regarding perceived behavioural control’s relation with behavioural intentions, Eagly and Chaiken (1993) explain that this relationship reflects people’s perception of control over the behaviour, regarding how much control people think they have to be able to perform the behaviour successfully. Furthermore, Ajzen (1991) explains that past experiences may play a role in how people perceive their control over the behaviour, and these perceptions may change or be modified.

With regard to the possibility of perceived behavioural control impacting behaviour directly, this relation aims to represent the actual control that people have for the behaviour to take place (Ajzen, 1991). Therefore, the direct relationship of perceived behaviour control affecting the behaviour represents the actual ability, opportunities, skills or resources that are required for

the behaviour to be performed (Ajzen, 1991; Eagly and Chaiken, 1993). It is worth noting that the possible direct relationship of perceived behaviour control toward the behaviour represents “actual control”, and not people’s perceptions and beliefs of control (Eagly and Chaiken, 1993). Thus, Eagly and Chaiken (1993, p.188) explain that “Ajzen used perceived behavior control as a proxy for actual control and argued that ordinarily people’s beliefs about their degree of control are at least moderately accurate.” In conclusion, the perceived behavioural control in the TPB accounts for people’s perception of control over a behaviour, and the actual control elements that could be possibly underestimated by people that may hold intentions toward a behaviour.

The next section discusses the Technology Acceptance Model (TAM). It is worth noting that the TAM borrowed from the TRA’s theoretical foundation which was discussed earlier, and the TAM is specifically tailored to predict technology acceptance and use.

2.3 Technology Acceptance Model (TAM)

Understanding how new technology is adopted became a topic of attention during the 1970s, due to the rising implementation of technologies in organisations that resulted in system failures when not adopted by users, and therefore, the topic of new technology adoption started gaining popularity among researchers during that time (Chuttur, 2009).

The Technology Adoption Model (TAM) which utilised the Theory of Reasoned Action’s (TRA) theoretical foundation continues to remain an influential theoretical framework in the IS literature that contributed to guiding the technological investments of organisations’ implementation of technologies (Davis and Venkatesh, 1996; Kapoor et al., 2013). Exploring the TAM’s theoretical perspective, positive aspects and limitations is essential for anyone involved with researching the area of technology adoption and acceptance (Chuttur, 2009; Venkatesh and Davis, 1996). The TAM proved to be a robust solution in predicting user acceptance and usage behaviour, and the TAM is a popular model that received much attention and gained popularity among the Information Systems (IS) literature (Davis and Venkatesh, 1996; Venkatesh and Davis, 1996).

The TAM aims to understand the adoption of new technologies within the workplace, to guide organisations to implement technologies more successfully and minimise the chances for the

technology to be rejected by the end user (Davis et al., 1989). The TAM is an attitude-intention based model that theorises that perceived usefulness and perceived ease of use are the cognitive dimensions that influence the attitude (a favourable or non-favourable feeling) toward using a system, which in turn influences the intention to use a technology potentially leading to the technology's actual usage (Davis et al., 1989). The TAM was created by Davis (1986), and it is specifically tailored to answer questions regarding computer usage and acceptance in an organisational setting (Davis et al., 1989). It is worth noting that Davis (1986) based the TAM theoretical foundations on the Theory of Reasoned Action (TRA).

2.3.1 TAM's Existence

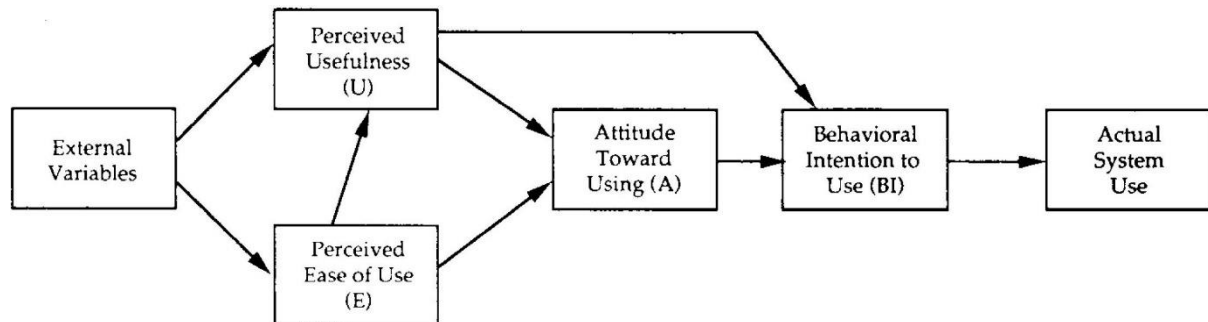
In the 1980s the TAM was then developed by Davis (1986) during the rising era of personal computer-based applications over a contract with IBM Canada Ltd (Davis and Venkatesh, 1996). Moreover, the TAM's aim was to address issues concerning the adoption and acceptance of technologies involving multi-media, image processing, and pen-based computing, with the goal to develop a reliable model to guide the technological investments of organisations (Davis and Venkatesh, 1996). Thus, the TAM was created to understand technology acceptance in an organisational setting. Also, the TAM aimed to aid organisations to establish an advanced communication structure to improve productivity and the decision-making process, by understanding the adoption of new technologies in the workplace, to reduce risky implementations of new technologies in organisations, that may end up facing rejection by the end user (employees) (Davis et al., 1989).

2.3.2 The TAM Variables

Similar to the TRA, the TAM theorises that an individual's attitude toward using a system determines the individual's behaviour intention to use the system, which, in turn, will influence the individual to accept or reject using the system (Davis et al., 1989). In the TAM, the overall attitude is formulated by two variables, which are perceived usefulness and perceived ease of use (Davis et al., 1989). However, it is worth noting, that the TAM takes a different approach from the TRA when it comes to describing the antecedents that shape people's attitudes toward the behaviour. For example, in the TRA, the antecedents of attitude toward the behaviour are behavioural beliefs and evaluation of outcomes. On the other hand, the TAM suggests that perceived usefulness and perceived ease of use are the cognitive dimensions that formulate the attitude toward using technology. Therefore, the TAM categorises the mentioned variables to

be the primary predictors of understanding and accepting technologies (Davis et al., 1989). The TAM variables function to determine the actual use of the system. The TAM by Davis et al. (1989) is presented in Figure 2.3.

Figure 2. 3 The Technology Acceptance Model (TAM)



Source: Davis et al. (1989, p.985)

As mentioned earlier, there are two main predictors in the TAM, which determine the attitude towards using a technology. These attributes are defined as follows:

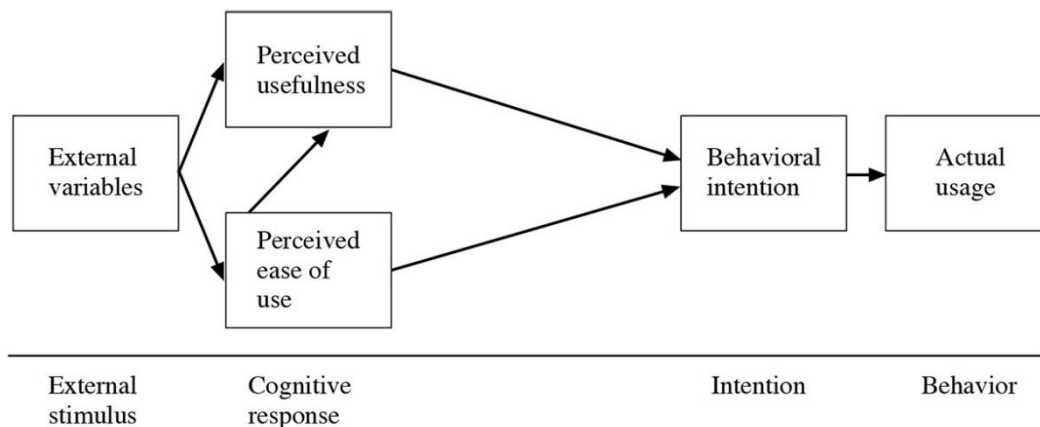
- Perceived Usefulness is defined by Davis (1989, p.320) as “the degree to which a person believes that using a particular system would enhance his or her job performance.” This definition suggests that individuals are more likely to adopt and accept technologies based on its benefits and usefulness.
- Perceived Ease of Use is defined by Davis (1989, p.320) as “the degree to which a person believes that using a particular system would be free of effort.” This definition suggests that an individual is more likely to adopt and accept a technology, depending on the individual’s perception of ease of use. Furthermore, perceived ease of use has a direct relationship with perceived usefulness. This relationship suggests that if a technology is easy to use, it will be useful.

There are two other variables in the TAM that have a mediated relationship with perceived usefulness and perceived ease of use, which are the attitude toward using, and behavioural intentions to use. In addition, the attitude toward using a system directly predicts behavioural intention, which then will lead to actual system use (Davis et al., 1989). The attitude towards using and behavioural intentions’ attributes are defined as follows:

- Attitude is referred to by Fishbein and Ajzen (1975, p.216) as the representation of “a person’s general feeling of favorableness or unfavorableness toward some stimulus object.” It is suggested that an individual’s attitude toward an object, is determined by the individual's evaluation of beliefs toward that particular object, which then formulates the attitude (Fishbein and Ajzen, 1975). As mentioned earlier, in the case of the TAM, perceived usefulness and perceived ease of use are the attributes that formulate the individual's attitude toward using a system (Davis, 1986).
- Behavioural intentions are referred to by Fishbein and Ajzen (1975, p.288) as the “person’s subjective probability that he will perform some behavior.” As mentioned earlier, the attitude toward using a system directly predicts behavioural intention.

It is worth noting, Davis and Venkatesh (1996) refined the TAM further by eliminating the attitude construct from the model as shown in Figure 2.4.

Figure 2. 4 Technology Acceptance Model without attitude toward the behaviour



Source: Davis and Venkatesh (1996, p.20)

The reason for refining the model is, as Davis and Venkatesh (1996) explain, that Davis et al. (1989) found that attitude toward using did not represent a fully mediated relationship with perceived usefulness towards intention to use, where the variable of attitude toward using was only partially mediating perceived usefulness towards behavioral intention to use, based on empirical evidence. Therefore, the attitude variable was excluded from the updated version of the TAM.

It is worth noting that Davis and Venkatesh (1996) also justified the reason for previously including the attitude construct in the TAM which is presented in Figure 2.3 earlier. They explained that the attitude construct was included in the model, because Davis et al. (1989) considered that the attitude construct was essential in the model since the research at that time was conducted in an organisational setting, and employees would be required to use the system, even though some of them might not have positive attitudes toward using a technology. Furthermore, Davis (1989) also indicated that the theoretical notions surrounding the attitude variable are debatable, and so theoretical approaches and studies find mixed findings regarding the relationship of attitude and behavioural intention. For example, Davis (1989, p.335) Stated that “Currently, the role of affective attitudes is also an open issue. While some theorists argue that beliefs influence behavior only via their indirect influence on attitudes (e.g., Fishbein and Ajzen, 1975), others view beliefs and attitudes as codeterminants of behavioral intentions (e.g., Triandis, 1977), and still others view attitudes as antecedents of beliefs (e.g., Weiner, 1986). Counter to Fishbein and Ajzen's (1975) position, both Davis (1986) and Davis et al. (1989) found that attitudes do not fully mediate the effect of perceived usefulness and perceived ease of use on behavior.”

Furthermore, Taylor and Todd's (1995b) study findings offered further justification regarding why Davis et al. (1989) did omit attitude from the TAM. In Taylor and Todd's (1995b, p.166) study they explained that “This is likely due to the significant effect of usefulness on intention and subsequent behaviour. This would appear to support the contention of Davis et al. (1989) that attitude may not be an important determinant of intention and usage in workplace settings when other factors such as usefulness are independently taken into account. The explanation for such a finding is based on the fact that in work-related settings, performance is key, and intentions will be formed based on performance considerations rather than simply on personal likes or dislikes with respect to performing a behaviour (Davis et al. 1989).” Therefore, Taylor and Todd (1995b) suggest that when investigating employees' technology acceptance and use at the workplace or students' technology acceptance in a university, perceived usefulness and ease of use may become key predictors of technology acceptance and use regardless of their likes or dislikes. In other words, Taylor and Todd's (1995b) contention that user's attitude toward using a technology system can play an important role in contexts that are not mandatory for the user (e.g. consumer) to use the technology.

2.3.3 The Exclusion of the Subjective Norm from the TAM

Although, the TAM originated from Fishbein and Ajzen's (1975) TRA. The subjective norm construct was not included in the TAM (Davis et al., 1989). According to Davis et al. (1989, p.986) this is "because of its uncertain theoretical and psychometric status". Furthermore, Schepers and Wetzels (2007) explain that there is still uncertainty surrounding the subjective norm variable because some studies found that the subjective norm generates significant results, and some studies did not. Therefore, Schepers and Wetzels (2007) argue that the subjective norm attribute can have a significant effect on the intention to use depending on the nature of the research and the sample being studied (e.g. students or non-students). It is worth noting that Schepers and Wetzels' (2007) notion is in line with the TRA's theoretical foundation by Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980). For example, Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) explain that in the TRA the intention to perform a behaviour can be influenced by either attitude toward the behaviour or subjective norm, or both. In other words, the effects of the subjective norm can be more or less than the attitude toward the behaviour in influencing intention, or either attitude toward the behaviour or subjective norm may not affect the intention to perform a behaviour. Therefore, in the TRA both the attitude toward the behaviour or subjective norm do not strictly have to be significant.

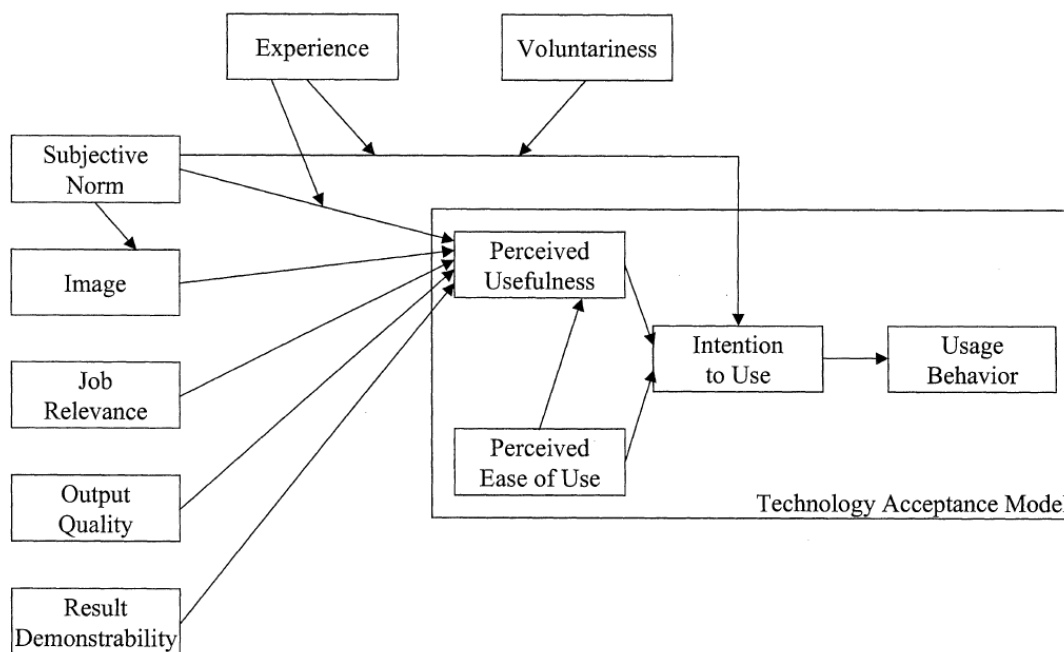
Interestingly, Schepers and Wetzels (2007) also argue that from a realistic standpoint, the subjective norm construct is vital in B2C research, because it represents word-of-mouth. This insight makes sense when taking into account the integration of social media across multiple technological platforms, where communications that are generated socially by consumers can influence people to perform an action or negatively impact the organisation's reputation (Deighton and Kornfeld, 2009). Thus, the subjective norm is believed to be an essential variable, when researching the adoption of technology on consumers (Schepers and Wetzels, 2007).

Furthermore, the subjective norm construct became part of later technology acceptance models such as the TAM2 and TAM3. Venkatesh and Davis (2000) proposed an extension to the original TAM model, which included subjective norm as a factor that plays a role in influencing the acceptance of technologies. The TAM2 is discussed in the next section.

2.3.4 TAM2

The TAM2 is a proposed extended version that utilises the theoretical foundation of the TAM and introduces subjective norm, voluntariness, and image reflecting the social process, and job relevance, output quality and result demonstrability reflecting the cognitive process (Venkatesh and Davis, 2000). The TAM2 was validated through four longitudinal field studies, where the factors introduced were found to significantly influence the user's acceptance of technology at the workplace (Venkatesh and Davis, 2000). The TAM2 proposed by Venkatesh and Davis (2000) is presented in Figure 2.5.

Figure 2. 5 Technology Acceptance Model 2 (TAM2)



Source: Venkatesh and Davis (2000)

As mentioned earlier, the TAM2 utilised the theoretical foundation of the TAM updated version which eliminated attitude from the model. In this regard, the TAM2 expands the TAM by including additional variables which are defined in Venkatesh and Davis' (2000) research as the following:

- Subjective Norm: “the person’s perception that most people who are important to him think he should or should not perform the behavior in question” (Fishbein and Ajzen, 1975, p.302).

- Output Quality: “over and above considerations of what tasks a system is capable of performing and the degree to which those tasks match their job goals (job relevance), people will take into consideration how well the system performs those tasks, which we refer to as perceptions of *output quality*” (Venkatesh and Davis, 2000, p. 191).
- Job Relevance: “individual’s perception regarding the degree to which the target system is applicable to his or her job. In other words, job relevance is a function of the importance within one’s job of the set of tasks the system is capable of supporting” (Venkatesh and Davis, 2000, p. 191).
- Result demonstrability: “the tangibility of the results of using the innovation, including their Observability and Communicability” (Moore and Benbasat, 1991, p.203).
- The image variable: “the degree to which use of an innovation is perceived to enhance one’s image or status in one’s social system” (Moore and Benbasat, 1991, p.195).
- Voluntariness: “the degree to which use of innovation is perceived as being voluntary, or of free will” (Moore and Benbasat, 1991, p.195).
- Experience: reflecting the user’s degree of experience of using a technology (Venkatesh and Davis, 2000).

In the original TAM, perceived usefulness and ease of use are the two predictors that influence the intention to use directly. However, in the TAM2, the subjective norm also has a direct effect on the intention to use along with perceived usefulness and ease of use, while also influencing perceived usefulness, and influencing image to perceived usefulness (Venkatesh and Davis, 2000). Thus, the direct relation of subjective norm toward behavioural intention is in line with the TRA (see: Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980)). Moreover, image, job relevance, output quality and result demonstrability are mediated by perceived usefulness toward the intention to use. It is worth noting that Venkatesh and Davis (2000) found that output quality influences perceived usefulness through an interactive influence with job relevance.

Furthermore, voluntariness and experience in the model are used as moderators (Venkatesh and Davis, 2000). Experience moderates the relationship of subjective norm, perceived usefulness and intention to use, while experience moderates the relationship of subjective norm to intention to use only (Venkatesh and Davis, 2000). Moreover, Venkatesh and Davis (2000) found an interesting finding regarding experience moderating the relationship between subjective norm and perceived usefulness, and subjective norm and intention to use. In this

regard, as the level of user's experience increases, the relationship of the subjective norm to perceived usefulness and intention to use will decrease over time. Thus, the TAM2 shows that the influence of some variables on some relationships may decrease as consumers become more experienced with using the system. This notion is in line with Davis et al.'s (1989) study that compared the behaviour predictability in technology acceptance, by comparing the TAM to the TRA, where it is explained that the effect of ease of use on intention will decrease over time. It is worth noting that Venkatesh and Davis (2000) validated the TAM2 in an organisational setting in the workplace.

2.3.5 TAM Findings

The TAM was replicated (Adams et al., 1992; Burton-Jones and Hubona, 2006), validated (Davis et al., 1989; Schepers and Wetzels, 2007) and expanded (Porter and Donthu, 2006). It is worth noting that researchers also expanded TAM by integrating Parasuraman (2000) technology readiness theory with the TAM, which seems to be an approach attempting to merge two paradigms of technology adoption and acceptance theories together (Lin and Chang, 2011).

With regard to the TAM validation, Schepers and Wetzels (2007) conducted a meta-analysis to investigate empirical studies on the TAM. They were able to confirm that perceived ease of use and perceived usefulness, are variables that influence people's attitude and behavioural intentions toward adopting new technologies. This fact is also present in other studies (Cheong and Park, 2005).

In similarity, Davis (1989), conducted two studies to validate the measurement scales for perceived usefulness and ease of use, which have robust psychometric properties. One study was conducted through a field study with 112 users, and the other study was conducted in the lab with 40 users. Moreover, Davis (1989) found both variables of perceived ease of use and perceived usefulness to be significant in both studies. However, the study revealed that perceived usefulness showed a stronger linkage to system usage than perceived ease of use. Therefore, Davis (1989) explained that, although a system that is complex to use may discourage its adoption and acceptance, the results show that people will still be willing to adopt technologies that are extremely useful to them and survive the complexity associated with them. Therefore, the study by Davis et al. (1989) generated three main insights, which are as follow:

- Behavioural intention is a strong predictor of people's computer use.
- Perceived usefulness is a critical factor that decisively predicts people's intentions to use computers.
- Perceived ease of use is a secondary factor that predicts people's intentions to use computers.

Furthermore, although Davis et al. (1989) show that perceived usefulness is stronger than perceived ease of use in predicting behavioural intention, other studies have found that in some contexts, the perceived ease of use can be stronger than perceived usefulness. For example, according to Schepers and Wetzels' (2007) meta-analysis on the TAM, ease of use was found to be more significant than perceived usefulness in non-Western cultures, and perceived usefulness was found to be more significant in Western cultures. Therefore, they concluded that when expanding on the TAM, there are external variables that can cause ease of use to be more effective than perceived usefulness.

Other studies that expanded on the TAM also found other predictors to be more significant than the TAM's main predictors (ease of use and perceived usefulness). For example, a study by Wu and Wang (2005) in the area of mobile commerce revealed that perceived usefulness, perceived risk, cost and compatibility (e.g. compatible with people's needs) directly impact on the behavioural intention to use mobile commerce, except for perceived ease of use. Furthermore, their study found that compatibility was more significant than perceived usefulness in predicting the adoption of mobile commerce. This finding suggests that when the TAM is applied in different fields of research, other variables from other technology adoption theories can be more significant than the original primary predictors in the TAM. However, it is worth noting that the study was conducted in Taiwan and therefore, there can be cultural differences involved (Schepers and Wetzels, 2007).

Furthermore, surprisingly Wu and Wang (2005) found that perceived risk had a positive relationship in predicting the adoption of mobile commerce. It is worth noting that they seemed not to offer a solid justifiable explanation regarding this particular finding, but they concluded that many of the respondents in the study were mobile commerce users and they might be aware of the risks involved when using mobile commerce. Another interesting finding in their study

was that cost is a significant predictor of the adoption of mobile commerce and has a significant negative impact on its adoption.

With regard to expanding on the TAM, Porter and Donthu (2006) were among the first to extend the TAM in terms of integrating demographic variables into the model, to offer explanations on how attitudes determine internet usage based on demographic variables (age, education, income and race). Also, Porter and Donthu (2006) included access barrier (e.g. financial costs) as a third main predictor into the TAM along with its original predictors (perceived ease of use and perceived usefulness). With regard to demographic variables, they found that they vary in their relationships with perceived usefulness, perceived usefulness and the access barrier variable. Therefore, Porter and Donthu (2006) concluded that beliefs about the adoption of the technology vary across population segments.

The TAM was also applied to investigate the adoption of online communities. Chung et al. (2010) conducted a study which aimed to investigate the perception of individuals who did not yet participate in online communities. Interestingly, they did not find that the relationship of perceived ease of use influencing perceived usefulness is significant in their study. Furthermore, they explained that individuals who do not participate in online communities are familiar with Internet usage already, and these individuals use the Internet to perform many other activities. Therefore, the effect of ease of use on perceived usefulness was not found to be significant. Also, they mentioned that it may be possible that in previous studies, the TAM was tested on individuals who were not entirely familiar with the usage of that particular technology, and therefore perceived ease of use was found to have a significant relationship with perceived usefulness.

The notions of perceived ease of use not affecting perceived usefulness when individuals are familiar with the usage of a particular technology, seems to influence researchers to exclude the ease of use attribute in technology adoption models. For example, Chou et al. (2013) proposed a model that is going to be applied to continuous usage of the smartphone and mobile applications. It is worth noting they were not using the TAM, but they only borrowed the perceived usefulness variable from the TAM. In this regard, Chou et al. (2013) argue that since they are researching continuous usage of the smartphone and mobile applications, the ease of use attribute from the TAM becomes unnecessary at this point. However, this view may generate some concerns when mobile service delivery is involved. For example, organisations

may update, enhance and add new services to the mobile application or completely alter the user experience at any point to enhance delivering services via a mobile device (Shankar et al., 2016).

Interestingly, other studies exclude the perceived usefulness variable. For example, Dabholkar and Bagozzi (2002) used the perceived ease of use attribute and decided to exclude the perceived usefulness variable in the area of Self-Service Technology (SST) adoption. In this regard, Dabholkar and Bagozzi (2002) argue that people can own products such as computer software, but do not own the usage of a self-service technology. However, this view can be debatable, because researchers who did not use the TAM, found that people adopt SSTs because they are useful (Meuter et al., 2000). Similarly, in another study, the TAM was used to investigate the adoption of SSTs, where the perceived usefulness variable was found to be significant in predicting the adoption of SSTs (Meuter et al., 2005).

Yang et al. (2015) also proposed a revised model based on the original TAM which included the attitude toward the behaviour construct, while aiming to understand m-commerce adoption of consumers in Singapore. It is worth noting that, in their research, they modified the TAM by excluding behavioural intention and actual behaviour (Yang et al., 2015). Furthermore, Yang et al. (2015) found that perceived ease of use and perceived usefulness were significant in predicting the attitude toward using m-commerce.

Although many researchers have used the TAM by extending or replicating it, it has been argued that some features of the TAM raise some concerns (Schepers and Wetzels, 2007). Therefore, the next section will explore criticisms of the TAM.

2.3.6 Criticism of the TAM

Like many other dominant and successful models, the TAM was vulnerable to criticism. According to Bagozzi (2007), despite the fact that Davis et al.'s (1989) publication has received a substantial number of citations, which is considered to be a respectably high number for a publication in an applied field, there are still some concerns surrounding the model. Similarly, Benbasat and Barki (2007) stated the TAM is a respected model that offers information system research a vast contribution; however, it is about time to move on and develop new theories beyond the TAM. In addition, Benbasat and Barki (2007), argue that researchers who modify,

extend, and expand on the TAM are not contributing enough fruitful knowledge to information system research, as the TAM seems to have diverted researchers from solving more serious problems with the rapid evolution of technologies. Furthermore, Benbasat and Barki (2007) did not end their criticism of the TAM there and exposed four dysfunctional outcomes for information system research, which are:

- The TAM diverts researchers' attention from important problems that are linked with adoption and acceptance of new technologies. Furthermore, the TAM has offered limited exploration of the consequences that are linked with the adoption of new technologies and acceptance.
- Research findings when utilising the TAM could lead to results that are based on illusions, and therefore, it will potentially impact research negatively with regard to knowledge contribution.
- The TAM causes confusion and chaos in the information system research arena, because it has not been based on accepted foundations.
- The systematic nature of the TAM provides a model to be adapted and expanded on with limitations.

In the case of replicating the TAM to discover if the model is truly robust, Burton-Jones and Hubona (2006) questioned the model's claim that perceived ease of use and perceived usefulness fully mediate external variables such as age, system experience and level of education. The study was conducted by surveying 125 US government employees and investigated the adoption of word processing and email applications while taking into account their beliefs and usage behaviour. Their study found that perceived ease of use and perceived usefulness do not fully mediate external variables. Therefore, Burton-Jones and Hubona (2006) concluded that full mediation between perceived ease of use and perceived usefulness will not always necessarily occur, and if it occurs, there is a high probability that it is subject to chance. In addition, Burton-Jones and Hubona (2006) stated that if full mediation occurs between perceived ease of use and external variables, it is due to the nature of the technology that is being researched. It is worth noting that they also pointed out that when using sophisticated measures with the TAM, there is a high possibility that it will generate unreliable results.

Another criticism came from Bagozzi (2007), who was one of the authors in Davis et al.'s (1989) publication which compared the TAM and TRA, and it was proven that the TAM was a better model to apply in the context of technology adoption based on its higher significant

results. It is worth noting that Bagozzi (2007) acknowledges the vast amount of knowledge that the TAM has contributed to information system research. However, Bagozzi (2007) demonstrated that researchers aiming to study technology adoption and acceptance research must be concerned with the limitations of the TAM, as giving heavy attention to the model turned the research of technology adoption into a field with a great deal of fragmented knowledge, and modest empirical findings. Furthermore, Bagozzi (2007) purposed that the research of technology adoption needs to first develop a unified theory by integrating the modest findings in the technology adoption field. It is worth noting that Bagozzi (2007) also stated that technology adoption research does not give a substantial amount of consideration to group, cultural and social aspects of technology adoption. It is worth noting that Benbasat and Barki (2007) advise researchers to “revisit” the Theory of Planned Behavior, and to examine additional variables that could play a role in building models to understand technology adoption in a specific context. In other words, depending on the nature of the technology, other variables could also play a significant role in understanding how people adopt a certain technology.

As mentioned earlier, the TAM is respected in the field of information technology research, even among researchers who offer some criticism of it. However, this criticism is making researchers aware of the TAM’s weaknesses. Therefore, criticisms of the TAM will aid researchers to still build better theories around the TAM model, if they keep the model’s limitations in mind. Furthermore, there is an indication in the criticism that the TAM produces mixed findings. This can be related to the nature of the technology (Burton-Jones and Hubona, 2006).

The next section discusses Venkatesh et al.’s (2003a) introduction of the Theory of Acceptance and Use of Technology (UTAUT). The UTAUT combines theoretical knowledge from multiple theories such as the TRA, TPB and the TAM to design a unified theory to predict technology acceptance and use (Venkatesh et al., 2003a).

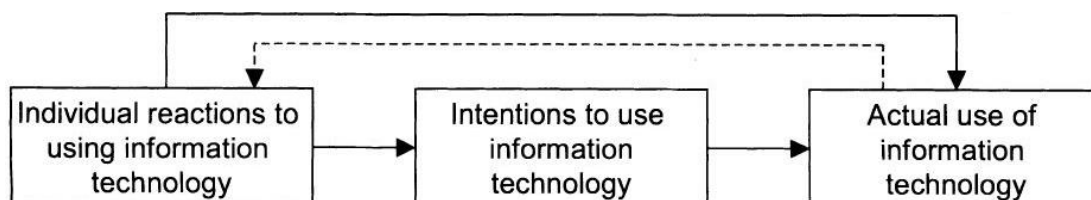
2.4 Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. (2003a) introduced the Unified Theory of Acceptance and Use of Technology (UTAUT) with the aim of offering technology adoption and acceptance research a unified theory that incorporates ideas from the various theories that are also used to understand technology adoption and acceptance. Venkatesh et al. (2003a) developed and established the UTAUT while reviewing eight competing models:

- Theory of Reasoned Action (TRA)
- Theory of Planned Behavior (TPB)
- The Technology Acceptance Model (TAM)
- Diffusion of Innovation Theory (DIT)
- The Motivational Model (MM)
- A model that combined the TAM and the TPB (C-TAM-TPB)
- Model of PC Utilization (MPCU)
- Social Cognitive Theory (SCT)

Furthermore, Venkatesh et al. (2003a) explain that the mentioned theories in their research share similar theoretical ideas and constructs that capture the same concept but are referred to differently across these theories. It is essential to understand the underlying theoretical framework that guided the development of the UTAUT. A representation of the basic theoretical framework by Venkatesh et al. (2003a) while establishing the UTAUT is represented in Figure 2.6.

Figure 2. 6 Basic concept underlying user acceptance models used in the UTAUT

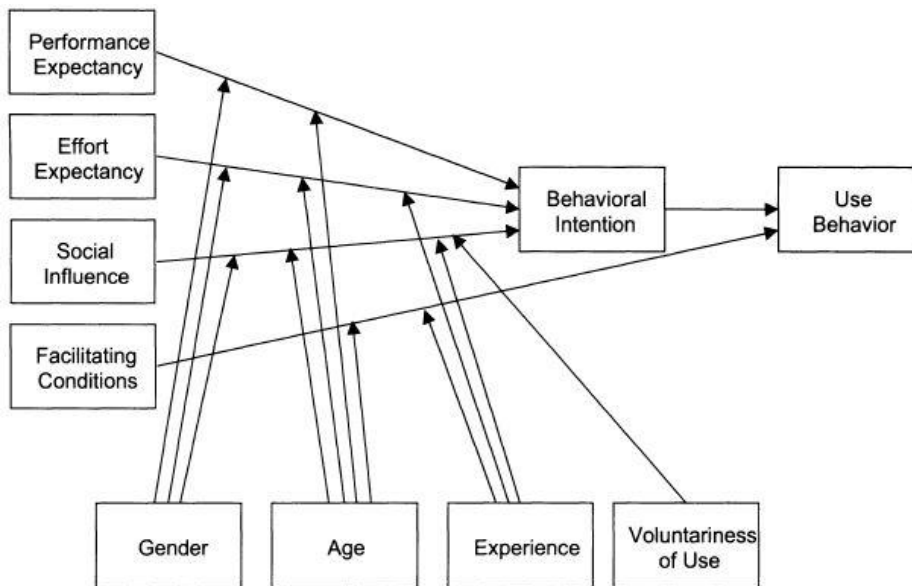


Source: Venkatesh et al. (2003a)

The fundamental theoretical notions in Figure 2.6 illustrate that an individual's reactions to and perceptions of using information technology influence the intentions to use which in turn can influence the individual's actual use of information technology. Also, Figure 2.6 illustrates that the reactions and perceptions can have a direct influence on the actual use of information technology. It is worth noting that the basic theoretical framework of the UTAUT shares some similarities with the TAM (with and without attitude), TAM2 and TAM3. For example, the basic theoretical framework of the UTAUT does not account for attitude to mediate individual beliefs of using an information technology which was part of the original TAM. It can also be noted that this approach departs from the theoretical structure of the TRA, TPB and the DTPB where the individual beliefs such as perceived usefulness and perceived ease of use influence the attitude toward the behaviour to determine the intention to perform the behaviour. However, it is worth noting that Venkatesh et al. (2003a) mention that the effect of attitude is already captured by the individual beliefs related to performance expectancy and effort expectancy, which reflect perceived usefulness and perceived ease of use in the UTAUT model.

The UTAUT had better predictive power than previous theoretical establishments (e.g. TAM, TRA and DTPB) as it was able to explain 70% of the variance in behavioural intention and 48% in technology use based on cross-validated data, where the eight models mentioned earlier, explained between 17% to 53% of the variance in user behavioural intentions to use technology systems (Venkatesh et al., 2003a). It is worth noting that the UTAUT was applied in an organisational setting to help managers in understanding the factors that motivate users to adopt and accept newly introduced technologies (Venkatesh et al., 2003a). The UTAUT developed by Venkatesh et al. (2003a) is as represented in Figure 2.7.

Figure 2. 7 Unified Theory of Acceptance and Use of Technology (UTAUT)



Source: Venkatesh et al. (2003a)

As can be noted in Figure 2.7, Venkatesh et al. (2003a) developed UTAUT resulting in the identification of three main beliefs that predict behavioural intention, which are performance expectancy, effort expectancy, social influence, while both facilitating conditions and behavioural intention predict technology use. Furthermore, the mentioned beliefs are moderated by gender, age, experience and voluntariness. The beliefs in the UTAUT are defined by Venkatesh et al. (2003a) as follow:

Performance expectancy is defined as “the degree to which an individual believes that using the system will help him or her to attain gains in job performance” (Venkatesh et al., 2003a, p.447). It is worth noting that, according to Venkatesh et al. (2003a), the performance expectancy in the UTAUT is similar to the perceived usefulness in the TAM and TAM2, and relative advantage in the Diffusion of Innovation Theory (DIT).

Effort expectancy is defined as “the degree of ease associated with the use of the system” (Venkatesh et al., 2003a, p.450). Furthermore, according to Venkatesh et al. (2003a), effort expectancy is similar to perceived ease of use in the TAM and TAM2. In addition, Venkatesh et al. (2003a) explain that effort expectancy is similar to the complexity construct in the DIT, which captures the complexity of using the system.

Social influence is defined as “the degree to which an individual perceives that important others believe it is important that he or she should use the new system” (Venkatesh et al., 2003a, p.451). Furthermore, Venkatesh et al. (2003a), views the social influence construct as similar to subjective norm in several theories such as the TRA, TPB, TAM2, the Decomposed Theory of Planned Behaviour (DTPB), and the image construct in the DIT.

The facilitating conditions variable is defined as “the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system” (Venkatesh et al., 2003a, p.453). Venkatesh et al. (2003a) argue that the facilitating conditions share conceptual similarities with the perceived behavioural control construct in the TPB and the DTPB, the compatibility construct in the DIT and the facilitating conditions construct in the theory of Model of PC Utilization (MPCU). Furthermore, Venkatesh et al. (2003a) explain that the mentioned constructs (e.g. perceived behavioural control, compatibility, and facilitating conditions) are theoretically designed to ensure that conditions related to a user’s lifestyle environment or organisational environment are not blocking the user from accepting and using the technological system. It is worth noting that Venkatesh et al. (2003a) provided empirical evidence which supports the idea that the influential relationships of compatibility, perceived behavioural control and facilitating conditions are similar.

Nistor et al. (2010) applied the UTAUT in the field of organisational learning, where the model only explained 40% in behavioural intention and 15% in use behaviour. Thus, the variance in Nistor et al. (2010) was significantly below the variance in the original UTAUT by Venkatesh et al. (2003a). Furthermore, Nistor et al. (2010) concluded that UTAUT is developed to be generalisable, and it is possible that higher variance would be explained when it is tested through investigation of specific technologies.

In the area of mobile commerce research, Min et al. (2008) proposed a revised UTAUT to explore issues associated with m-commerce acceptance and use. Furthermore, Min et al. (2008) revised the UTAUT by including trust and privacy, convenience and cost as additional main predictors of behavioural intention. Furthermore, the proposed revised UTAUT retained the variable of effort expectancy and replaced performance expectancy with utility expectancy to also be the main predictors of behavioural intention. Min et al.’s (2008) argument of replacing performance expectancy with utility expectancy is that, in the m-commerce context, a construct that reflects the hedonic nature of m-commerce is more important than perceived usefulness.

Furthermore, Min et al. (2008) also conceptually theorised that utility expectancy and effort expectancy mediate information satisfaction and system satisfaction toward behaviour intention. With regard to the moderators, Min et al.'s (2008) revised UTAUT accounted for user demographics and the Chinese culture, since the proposed revised UTAUT might be tested in China in the future. It is worth noting that they eliminated the moderating variable of experience in the revised UTAUT, because m-commerce is new to consumers at the time of their research paper, and therefore, consumers may not be experienced in using the system. Additionally, Min et al. (2008) commented that the revised UTAUT was conceptual and was not tested in Min et al.'s (2008) research paper.

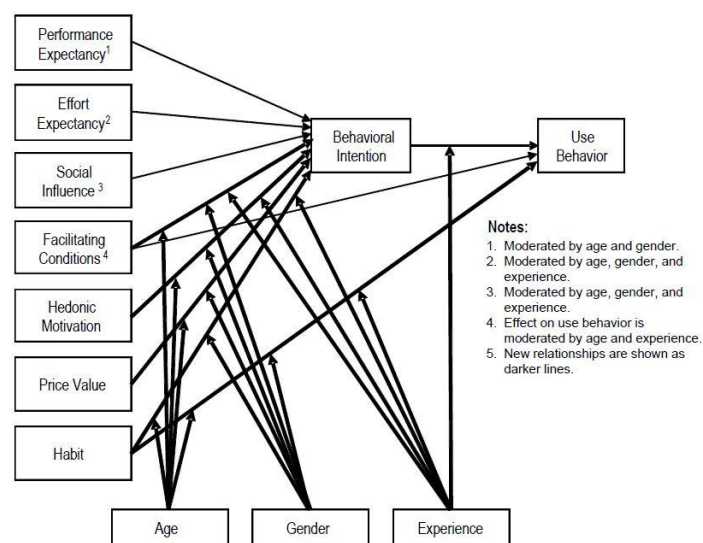
Lai and Lai (2014) conducted research to investigate consumers' m-commerce acceptance in China. Their research extended the UTAUT model by introducing the privacy concern variable. Lai and Lai (2014) found that performance expectancy, social influence, facilitating conditions and privacy concern predicted behavioural intention. Interestingly they found that effort expectancy was not significant in their research, where they concluded that maybe the m-commerce applications are well designed in China or that users do not value ease of use to predict their behavioural intention to accept m-commerce. It is worth noting that privacy concern in their research demonstrates that when consumers have concerns about their privacy using m-commerce it will negatively influence the behaviour intention to accept m-commerce. Additionally, their research explained 54% of the variance in behavioural intention. Furthermore, their study did not account for use behaviour which is part of Venkatesh et al.'s (2003a) UTAUT. It is worth noting that Venkatesh et al.'s (2003a) UTAUT includes variables that moderate the main predictors; however, Lai and Lai (2014) did not account for any moderating factor on any of the main predictors in their research. It is worth noting that Venkatesh et al. (2012) mention that, based on their review of research about those who utilise the UTAUT theoretical lens, many researchers dropped the moderators when investigating the UTAUT.

2.4.1 Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

In recent years, Venkatesh et al. (2012) have extended the original UTAUT and introduced the UTAUT2. Venkatesh et al.'s (2012) motive for introducing the UTAUT2 is to develop a model that is specifically designed to predict consumers' acceptance and use of technological innovation, as the previous UTAUT was developed to predict the acceptance of technologies

at the workplace in an organisational context. The UTAUT2 Was validated through a longitudinal study of four months (Venkatesh et al., 2012). Furthermore, The UTAUT2 borrows from the original UTAUT theoretical foundation. However, the UTAUT2 introduced three additional variables to predict behavioural intention, which are hedonic motivation (i.e. perceived enjoyment), habit and price value. It is worth noting that while habit predicts behavioural intention in the UTAUT2, habit also predicts use behaviour. Furthermore, there were also adjustments made in the UTAUT2 with regard to the facilitating condition variable (Venkatesh et al., 2012). For example, in the UTAUT, facilitating conditions only predict use behaviour directly, while in the UTAUT2, facilitating conditions predict behavioural intention and use behaviour. The UTAUT2 uses age, gender and experience as moderators. A representation of the UTAUT2 is presented in Figure 2.8.

Figure 2. 8 Unified Theory of Acceptance and Use of Technology Two (UTAUT2)



Source: Venkatesh et al. (2012)

Venkatesh et al.'s (2012) introduction of the UTAUT2 aimed to contribute to the IS literature in three ways:

- To introduce new variables that are capable of predicting consumers' technology use, utilising the UTAUT's theoretical lens
- To adapt and extend the UTAUT to enhance the generalisability of the theory, so it can be applied in different contexts.

- To help organisation design and develop technologies that are accepted and used by consumers from various demographics.

As mentioned earlier the UTAUT was designed to help organisations to implement technologies successfully to employees in the workplace. On the other hand the UTAUT2 is designed to help organisations implement technologies successfully to consumers. Therefore, the definitions of performance expectancy, effort expectancy, social influence, and facilitating conditions found in Venkatesh et al.'s (2003a) UTAUT were slightly adapted to fit the consumer context of the UTAUT2 (Venkatesh et al., 2012). In the UTAUT2, Venkatesh et al. (2012, p.159) state that performance expectancy is defined as “the degree to which using a technology will provide benefits to consumers in performing certain activities”, effort expectancy is “the degree of ease associated with consumers’ use of technology”, social influence is “the extent to which consumers perceive that important others (e.g., family and friends) believe they should use a particular technology”, facilitating conditions “refer to consumers’ perceptions of the resources and support available to perform a behavior.” Furthermore, the UTAUT2 extended the original UTAUT by introducing three additional variables that predict behavioural intention, which are hedonic motivation (e.g. perceived enjoyment), price value and habit. Venkatesh et al. (2012, p. 161) defined hedonic motivation “as the fun or pleasure derived from using a technology.” Furthermore, price value is defined as “consumers’ cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them (Dodds et al. 1991)” as cited by Venkatesh et al. (2012, p. 161). Finally, Venkatesh et al. (2012) explained that habit in the UTAUT2 reflects to what extent the consumer performs the behaviour in question naturally, repetitively and automatically. It is worth noting, according to Venkatesh, that the conceptualisation of habit is in line with Limayem et al. (2007).

Alalwan et al. (2017) extended the UTAUT2 further to investigate adoption of mobile banking by Jordanian bank customers, where their study included trust as an additional variable. Furthermore, Alalwan et al. (2017) hypothesised that while that trust directly influences behavioural intention, it also influences performance and effort expectancy indicating that trust influences consumers’ behavioural intention indirectly. Furthermore, their study only hypothesised that the facilitating conditions only influence use behaviour which is in line with the original UTAUT, and did not hypothesise that facilitating condition may influence behavioural intention as Venkatesh et al. (2012) demonstrated when establishing the UTAUT2.

Furthermore, their study found that performance expectancy, effort expectancy, hedonic motivation and the facilitating condition play a role toward the consumers' adoption of mobile banking in Jordan, except for the social influence relationship on behavioural intention which was not significant. It is worth noting that the study did not include the UTAUT2 moderating effects in the model. However, their extended UTAUT2 accounted for 65% of the variance in behavioural intention and 31% of the variance in facilitating condition.

Chopdar et al. (2018) extended the UTAUT2 by conducting a cross-cultural study comparing the model between consumers from the USA and India including privacy risk and security risk. Their findings suggested that cultural differences play a role in consumers' adoption of mobile shopping apps. Furthermore, their study found that performance expectancy is the strongest predictor of behavioural intention for the US and the Indian sample. They also found that social influence does not play a significant role in influencing consumers to adopt mobile shopping apps. Interestingly, they found that effort expectancy has a significant influence on behavioural intention for the US sample, while it was insignificant for the Indian sample. They concluded that this finding reflects the fact that American consumers are more experienced and skilful in using complex systems than Indian consumers. It is worth noting that in their study, they did not apply an age quota to the data collecting procedure to ensure that consumers were experienced to rate their beliefs on mobile shopping apps. The median age for the US sample was 30 years and the Indian sample was 22 years. In addition, they found that facilitating conditions did not have a significant direct influence on behaviour, suggesting that the younger generation is confident in using new technologies. Chopdar et al. (2018) also found that perceived value was insignificant for the US sample, but significant for the Indian sample. Finally, their study found that privacy risk and security risk negatively influenced Indian consumers' behavioural intention and use behaviour of mobile shopping apps, while privacy risk and security risk were insignificant for the US sample. It is worth noting that their study utilised age, gender and experience as path control variables rather than having age, gender and experience moderate the path relationship like the UTAUT2. Their extended UTAUT2 model explained 63.76% of the variance in behavioural intention and 61.80% in use behaviour for the Indian sample, while the variance explained for the American sample was approximately 69.70% in behavioural intention and 58.54% in usage behaviour.

Tak and Panwar (2017) conducted a study in India to examine the variables that influence consumers' behavioural intention and usage behaviour of mobile shopping apps. Tak and

Panwar (2017) extended the UTAUT2 through the inclusion of deal proneness which is defined by Webster (1965) as “a function of both the consumer’s buying behavior and the frequency with which a given brand is sold on a deal basis” as cited in Tak and Panwar (2017, p. 251). Their study showed that the direct path relationships of performance expectancy, effort expectancy, hedonic motivation, price value, habit, social influence and facilitating conditions influence behavioural intention. It is worth mentioning that in their study, hedonic motivation and habit were the strongest predictors of behavioural intention. In addition, facilitating conditions, habit and deal proneness were significant predictors of use behaviour.

2.4.2 Limitations of the UTAUT

Bagozzi (2007) mentions that the technology acceptance research area has reached a state of chaos. Bagozzi (2007, p. 245) explains that the UTAUT theoretical development is intuitive and well-presented; however, the UTAUT has left the technology acceptance research area “with a model with 41 independent variables for predicting intentions and at least eight independent variables for predicting behavior.” Explaining Bagozzi’s (2007) criticism of the UTAUT is important. First, the UTAUT presented in Figure 2.7 earlier shows that four beliefs influence behavioural intention in addition to four moderators. Testing the UTAUT model results in the creation of 41 independent variables to predict behavioural intention, and eight independent variables to predict behaviour. Second, Bagozzi (2007) also mentions that there are important direct effects that were not tested by Venkatesh et al. (2003), and there are important predictors that were not included in the UTAUT. In relation to this criticism of the UTAUT, Bagozzi (2007, p.245) stated that “The study of technology adoption/acceptance/rejection is reaching a stage of chaos, and knowledge is becoming increasingly fragmented with little coherent integration”. In addition, Bagozzi’s (2007) argument about the UTAUT also applies to the UTAUT2. For example, the UTAUT2 introduced the additional variables of hedonic motivation, price value and habit in addition to the included moderators, significantly increasing the 41 independent variables that are needed to test the model in the original UTAUT to a much higher number. Therefore, the application of the UTAUT2 could be considered a complex theoretical framework to apply based on Bagozzi’s (2007) criticism.

Van Raaij and Schepers (2008) argue that merging constructs from various theories could be a concern. Furthermore, Van Raaij and Schepers (2008, p.840) avoided using the UTAUT

theoretical approach in their research, as they argue that, “These constructs explain up to 70% of the variance in usage intention. In our study however, we do not take UTAUT as the basis for our model. First of all, UTAUT’s high R^2 is only achieved when moderating the key relationships with up to four variables (gender, age, experience and voluntariness) in order to yield more significant coefficients.” Therefore, it is argued that the UTAUT’s theoretical approach only achieves high levels of the variance explained in behavioural intention and technology use, because the impact of its moderators increase the explained variance. For example, in Venkatesh et al.’s (2012) study, the behavioural beliefs in the UTAUT without the involvement of the moderating effect explained 35% of the variance in behavioural intention and 26% of the variance in technology use, while the moderated UTAUT model explained 56% in behavioural intention, and 40% in technology use. Furthermore, the UTAUT2 with direct effects explained 44% of the variance in behavioural intention, and 35% in technology use, while the moderated UTAUT2 model explained a 74% in behavioural intention and 52% in technology use (Venkatesh et al.’s., 2012).

It is worth noting, that Tamilmani et al.’s (2017) recent literature review on the UTAUT2 revealed that researchers mostly cite the UTAUT2 to prove a point in their studies. This may also indicate that testing the UTAUT is complex as mentioned earlier by Bagozzi (2007).

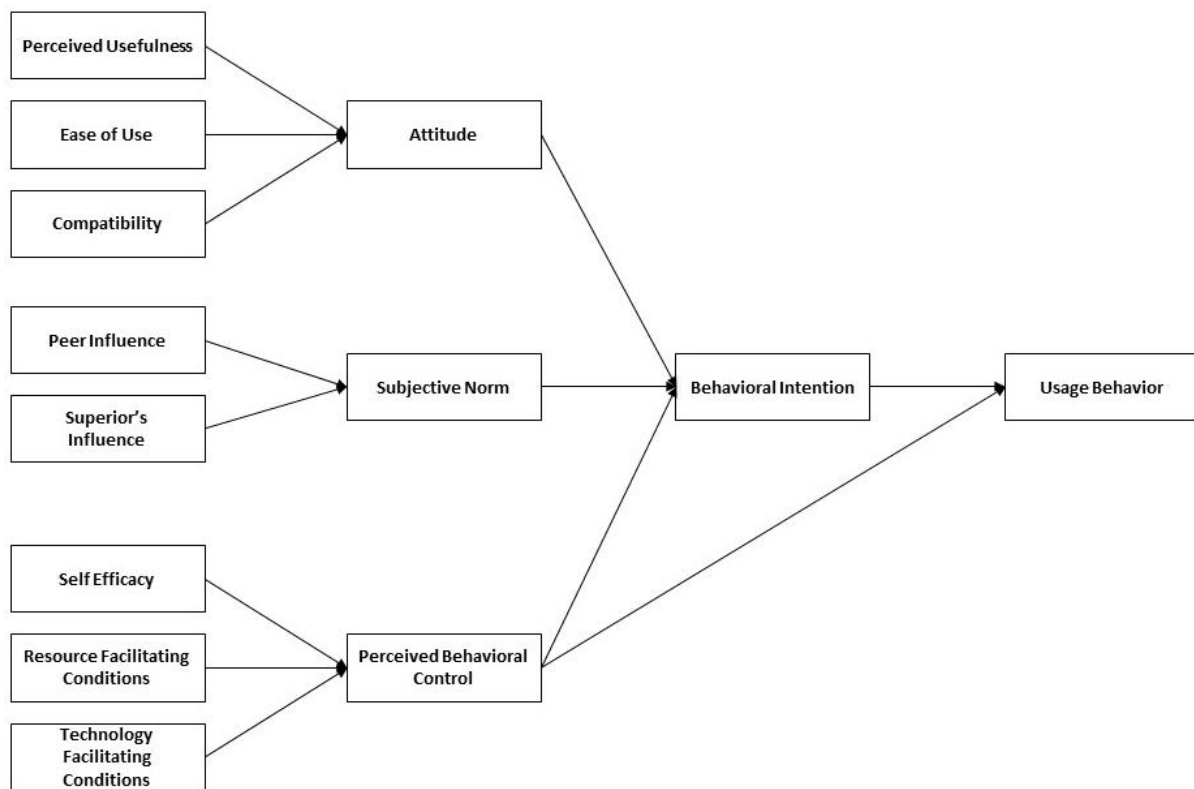
The next section discusses the Decomposed Theory of Planned Behaviour (DTPB). The DTPB could be thought of as an extension of the TPB which was discussed earlier in the chapter, and the DTPB is specifically designed to understand and predict technology acceptance and use.

2.5 Decomposed Theory of Planned Behavior

The Decomposed Theory of Planned Behavior (DTPB) was theoretically developed by Taylor and Todd (1995a) and Taylor and Todd (1995b). It is worth noting that Taylor and Todd (1995a) and Taylor and Todd (1995b) also compared the DTPB to other theoretical models such as the TPB and TAM, to examine the power and predictability of the DTPB toward understanding technology acceptance. Taylor and Todd (1995b) explain that usually research within the Information Technology (IT) discipline, aims to understand technology usage, while providing managerial implications, to help organisations implement, manage and enhance their IT resources. The DTPB takes a different theoretical approach to the Theory of Planned

Behaviour (TPB) to understand technology acceptance and usage. The, salient beliefs in the TPB which influence the attitude toward the behaviour are unidimensional. On the other hand, the DTPB's aim is to explore the behavioural beliefs that influence attitude, subjective norm and perceived behavioural control in a decomposed multidimensional fashion (Taylor and Todd, 1995b). Furthermore, Taylor and Todd (1995b , p.151), in their own words argue that, "For the TRA and TPB models, the identification of a stable set of relevant belief dimensions for attitudinal beliefs has traditionally been problematic (Berger 1993). Indeed, the difficulties associated with establishing a set of beliefs may be one reason why Davis et al. (1989) and Mathison (1991) found the TRA and TPB did not explain usage intentions as well as TAM". The Decomposed Theory of Planned Behavior (DTPB) is presented in Figure 2.9.

Figure 2. 9 Decomposed Theory of Planned Behavior (DTPB)



Source: Taylor and Todd (1995b)

As can be noticed in Figure 2.9, Taylor and Todd (1995b) decomposed the beliefs for attitude, subjective norm and perceived behavioural control. In the DTPB, perceived usefulness, ease of use and compatibility are multi-dimensional antecedents of attitude toward behavioural intention. Furthermore, it is worth noting that Taylor and Todd (1995b, p.152) explain that

“According to the innovations literature, there are five perceived characteristics of an innovation that influence adoption (Rogers 1983), three of which – relative advantage, complexity, and compatibility – have been found to be consistently related to adoption decisions in general (Tornatzky and Klein 1982) and to IT usage specifically (Moore and Benbasat 1993).” Taylor and Todd (1995b, p. 152) view relative advantage to be similar to perceived usefulness and it is defined as “the degree to which an innovation provides benefits which supersede those of its precursor and may incorporate factors such as economic, image enhancement, convenience and satisfaction (Rogers 1983).” Complexity is measured negatively but it reflects ease of use (Taylor and Todd, 1995b) which Taylor and Todd (1995b, p.152) define as “the degree to which an innovation is perceived to be difficult to understand, learn or operate (Rogers 1983).” Furthermore, Taylor and Todd (1995b, p.152) referred to compatibility as “the degree to which the innovation fits with the potential adopter’s existing values, previous experiences and current needs (Rogers 1983).”

Subjective norm is predicted by peers’ and superiors’ influence, and it is worth noting that in Taylor and Todd (1995b) the peers’ influence represents subjective social influence from other students, and the superiors’ influence is the subjective social influence coming from professors. Perceived behavioural control is predicted by self-efficacy, resources facilitating conditions and technology facilitating conditions. self-efficacy is a concept that comes from Bandura (1977) and it reflects the individual’s ability to perform the behaviour (Taylor and Todd, 1995b). Furthermore, resource facilitating conditions represent time and money resources and technology facilitating conditions represent the technology compatibility and conditions that may constrain its usage (Taylor and Todd, 1995b).

There are several advantages of decomposing the beliefs to be multidimensional. Thus, Taylor and Todd (1995b) explain that an overall representation of the beliefs is not likely to result in consistent findings that are related to the predictors of intention, and therefore, decomposing the beliefs into multiple dimensions should offer a clearer understanding of the dimensions that are consistent in predicting technology use, and can be generalisable to other technological contexts and settings. Furthermore, Taylor and Todd (1995b) explain that decomposing the beliefs into multiple dimensions should provide practitioners and managers relevant practical implications, which can help managers refine and improve their technology implementation strategies. Similarly, in Taylor and Todd’s (1995a) study, it is found that the TRA and TPB

showed similar comparable results in explaining behavioural intention versus a model where the structural beliefs are decomposed into multiple dimensions. Furthermore, Taylor and Todd (1995a) concluded that although the TRA, TBP explained behavioural intention well, decomposing the beliefs structure resulted in better prediction and clearer understanding of the relationships. Furthermore, Taylor and Todd (1995b) assert that the DTPB shares some similarities with the original TAM in terms of perceived usefulness and perceived ease of use which predict individuals' attitude and behavioural intention toward the behaviour; however, the DTPB is more complex than the TAM which may offer a complete overview of technology adoption.

When Taylor and Todd (1995b) proposed and tested the decomposed version of the TPB while providing a comparison of the DTPB with original TPB and TAM on business school students in terms of their usage of a computing resource centre, Taylor and Todd (1995b) found that, in the TAM, perceived usefulness and perceived ease of use predicted the attitude and had a significant relationship with perceived usefulness; however, attitude was insignificant toward behavioural intention. Perceived usefulness had a direct significance on behavioural intention and behavioural intention predicted usage behaviour. With regard to the findings from the original TPB study, Taylor and Todd (1995b) found that the results related to model fit statistics and the predictive power of the original TPB is comparable to the TAM. Furthermore, they found that combining the beliefs to predict attitude did not predict the attitude better than TAM, and the inclusion of perceived behavioural control did not add to the predictive power compared to TAM to provide a better understanding of the technology usage behaviour. In their study, they found that the normative and control beliefs predict subjective norm. The results of the TPB also showed that attitude, subjective norm and perceived behavioural control all predicted behavioural intention. With regard to the DTPB, Taylor and Todd (1995b) found that only perceived usefulness predicted attitude, with perceived ease of use and compatibility being insignificant in predicting attitude. They also found that peer influence and superiors' influence were successful in predicting subjective norm, and self-efficacy, resource facilitating conditions and technology facilitating conditions in predicting perceived behavioural control. They also concluded that attitude, subjective norm and perceived behavioural control predicted behavioural intention and behavioural intention predicted usage behaviour. They also noted a slight increase in the variance explained in behavioural intention compared to the original TPB and TAM.

In another study, Taylor and Todd (1995a) referred to decomposing the beliefs structure which investigates the adoption and use of a VCR technology and they found that the measurement items of relative advantage (e.g. perceived usefulness) and compatibility loaded together during the principal component analysis, suggesting that relative advantage and compatibility are not distinct from each other in their study. Therefore, Taylor and Todd (1995a) combined relative advantage and compatibility in the study. Furthermore, they found that relative advantage and complexity (e.g. ease of use) predicted attitude, normative influences predicted subjective norm, and efficacy and facilitating conditions predicted perceived behavioural control. They also found that attitude and subjective norm predicted behavioural intention; however, perceived behavioural control did not predict behavioural intention.

Hong et al. (2008) investigated consumers' intention to continue using mobile data services in Hong Kong based on the theoretical basis of the DTPB while integrating into the theoretical framework relevant factors to the context of the study. Their study investigated four categories of mobile data service which are communication, information, entertainment and commercial transactions. It is worth noting, due to the small sample size for the commercial transactions category, Hong et al. (2008) did not focus on discussing the results of the commercial transactions category in further analysis of their study. Furthermore, the proposed antecedents of attitude in their study were represented by perceived usefulness, perceived ease of use and perceived enjoyment. Furthermore, social influence and media influence represented the normative social beliefs, and perceived mobility represented perceived behavioural control. In addition, Hong et al.'s (2008) model included perceived monetary value. It is worth mentioning that for Hong et al. (2008), the normative beliefs dimensions of social influence and media influence directly influence consumers' intention to use mobile data services. Furthermore, Hong et al. (2008) show that attitude is a consistent predictor across all service categories analysed in their study, and perceived ease of use is the strongest factor to significantly influence consumers' attitude to continue using mobile data services for the three categories of communication, information, and entertainment. Furthermore, enjoyment also influenced the three categories of communication, information, and entertainment, and it was stronger than usefulness in the entertainment service category. With regard to social influence, Hong et al. (2008) found that it predicts the communication and entertainment service category; however, it does not predict the information service category where they concluded that a consumer may use it for "individual-centric reasons". Hong et al. (2008) also concluded that since the effect of perceived ease of use was stronger than perceived usefulness which is mainly a stronger

predictor of work-setting technologies, it is important for future research to investigate the two factors because their role may vary depending on the technology under study.

Gangwal and Bansal (2016) conducted a study to investigate m-commerce adoption in India based on the DTPB. In their study, the antecedents of attitude of perceived usefulness, ease of use, and perceived enjoyment all predicted consumers' attitude toward adopting m-commerce. It is worth noting that perceived usefulness was the strongest predictor of attitude in their study, followed by trust, perceived ease of use, and perceived enjoyment. Furthermore, normative influence predicted subjective norm and self-efficacy predicted perceived behavioural control. Furthermore, consumers' attitude toward adopting m-commerce, subjective norm, and perceived behavioural control predicted consumers' intention to adopt m-commerce. In addition, Gangwal and Bansal (2016) included the factor personal innovativeness which predicted attitude and intention. Their model explained 56% of the variance in attitude, 29% in subjective norm, 52% in perceived behavioural control, and 60% in behavioural intention.

The main focus of the next section is to discuss the five characteristics of an innovation within Rogers' (2003) Diffusion of Innovations Theory (DIT) that can influence people's adoption of an innovation. According to Hsu et al. (2007), the variables that represent the characteristics of an innovation are capable of successfully predicting the adoption of information technologies. The DIT was among theories that were used by Venkatesh et al. (2003a) when establishing the UTAUT. In addition, Taylor and Todd (1995b) explain that relative advantage, complexity and compatibility are three out of five variables in the DIT that were capable of predicting people's adoption and acceptance of technologies consistently in the literature. It is worth noting that the three mentioned variables play a part in Taylor and Todd's (1995a) and Taylor and Todd's (1995b) work on the DTPB.

2.6 Diffusion of Innovations Theory

It is essential to understand the diffusion of innovations, as it will offer great insights into what causes the adoption of innovations, which contributes to determining how innovations are diffused into a social system successfully.

According to Rogers (2003, p.12), "An innovation is an idea, practice or object that is perceived as new by an individual or other unit of adoption." And diffusion is "the process in which an

innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003, p.5). This means that communication plays a major role in making people aware of an innovation’s existence.

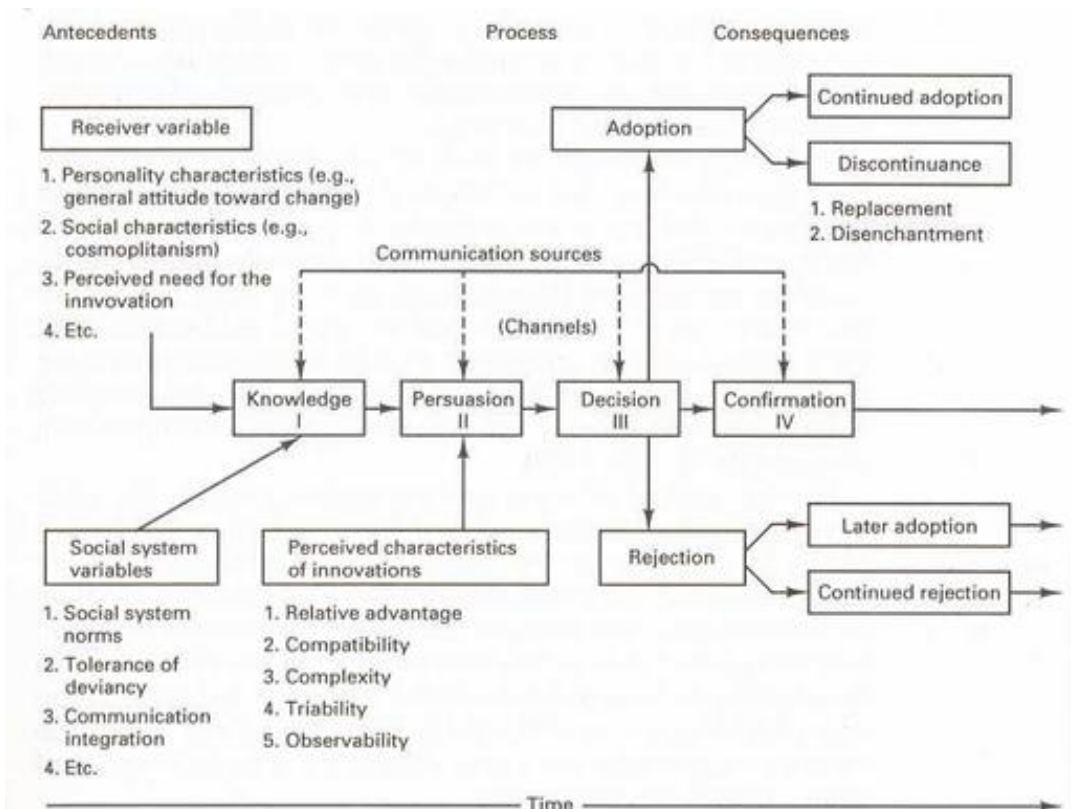
According to Hall and Khan (2003), new technological innovations often happen suddenly, where on the other hand, the diffusion of these new technologies appears to be a continuous and a slow process. Furthermore, they also stated that many new technological innovations may appear promising as contributions to economic growth; however, new technological innovations may completely fail, if they are not adopted by users.

In general, the DIT model aims to determine the adoption rate of a specific innovation among a given set of the innovation’s perspective adaptors, by utilising a simple mathematical function to illustrate the elapsed time of the adoption rate since the innovation’s introduction, to result in forming an s-shaped curve illustrating the adoption rate (Mahajan and Muller, 1979; Hall and Khan, 2003).

2.6.1 The Innovation Decision Process

Rogers (1995) presented a sequential innovation decision process model that is formed of five stages, which aims to demonstrate what stages an individual will go through to potentially decide to adopt or reject an innovation. In Rogers’ (2003, p.172) own words, “The innovation-decision process is essentially an information-seeking and information-processing activity in which an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation.” Noting that the decision process involves information seeking by an individual indicates that an individual will encounter forms of communications that will guide him to reduce the levels of uncertainty to adopt or reject an innovation. Rogers’ (2003) innovation decision process model, is also known as the DIT, which is presented in Figure 2.10.

Figure 2. 10 A model of five stages in the innovation decision process



Source: Rogers (1995)

It is important to present each stage of the model to understand the notions behind the model's existence, as the model illustrates the process of adopting an innovation. Therefore, in this section the stages of the model are explored based on Rogers' (2003) notions about the model and its process.

- The Knowledge Stage

The first stage of the model demonstrates the individual's exposure to the innovation. In this stage, the individual is aware of the innovation's existence, and processes information to gain an understanding of its existence. Rogers (2003) generalised that individuals in this stage are also known as "earlier knowers", and they are usually more educated, higher in social status, exposed to interpersonal channels, in contact with change agents, exposed to communication channels and recognised as social participants rather than "later knowers". Furthermore Rogers (2003) explained that there are three types of knowledge when seeking information about an innovation which are:

- *Awareness-knowledge*
 - This type of knowledge deals with knowing about the innovation's existence. Furthermore, this type of knowledge has the potential to trigger the act of further information seeking by an individual. However, Rogers (2003) demonstrated that an individual becoming willing to gather additional knowledge about the innovation might also happen at the third and the second stage of the innovation decision process model, where the adoption has still not occurred. These stages are persuasion (stage 2) and decision (stage 3).
- *How-to-knowledge*
 - How-to-knowledge can be recognised as the amount of information that an individual will gather on how the innovation is going to function if adopted. In terms of functionality, individuals may also question if the new innovation will be similar or differ from previously adopted innovations. In addition, with regard to the how to knowledge and the innovations complexity, Rogers (2003) suggested that innovations that are highly complex, will require an individual to obtain a higher amount of "how to knowledge" to consider the adoption of that particular innovation. In other words, if an individual fails to obtain enough how-to-knowledge about an innovation that is relatively complex, the probability of adopting that innovation will be low or unlikely to occur.
- *Principle knowledge*
 - This type of knowledge deals with information that is fundamental to the innovation in terms of the consequences or issues that may occur when adopting an innovation. Furthermore, according to Rogers (2003), individuals may adopt a new innovation without taking into account the dangers that can be associated with misusing the innovation, which can result later in discontinuing the use of the innovation when issues are known.

- Persuasion Stage

The persuasions stage deals with the innovation's influence on an individual, in terms of leading an individual to develop positive or negative attitude (beliefs) towards an innovation. It is worth noting that Rogers (2003, p.174) refers to attitude as "a relatively enduring organization of an individual's beliefs about an object that predisposes his or her actions."

- The Decision Stage

At this stage, individuals will decide whether to adopt or reject the innovation. However, Rogers (2003) suggests that individuals are most likely to engage in trying the innovation before its adoption, in order to experience its functionality based on trial, evaluate its usefulness, and reduce the level of uncertainty towards the adoption. It is worth noting that individuals may reject an innovation at this stage and decide to adopt it after they see many people using it.

- Implementation Stage

This stage involves the innovation's existence in practice. Rogers (2003) highlighted that until the innovation is put to actual use, the individual will continue evaluating his or her thoughts about the decision with regard to adopting that particular innovation. It is worth noting that in some instances, people may adopt an innovation before its initial release to the market. In this case, the individual might experience some level of uncertainty toward the adoption decision.

- The Confirmation Stage

In the confirmation stage, an individual has already adopted the innovation. However, according to Rogers (2003) the individual will continue to seek reinforcement of his or her adoption decision, and therefore, the decision of adopting an innovation can be reverted, if the individual encounters negative communications about the adoption.

The greatest contribution of Rogers' (2003) DIT is the five variables that determine the adoption of innovation. These constructs are explained in the next section.

2.6.2 The Five Perceived Variables of an Innovation

There are five important variables of DIT, which exist to determine or gauge the rate of an innovation's adoption, which are relative advantage, trialability, compatibility, complexity, observability (Rogers, 2003). It is worth noting, that these mentioned variables have been applied in various research fields of technology adoption, where some researches use all or some of these constructs. According to Hsu et al. (2007) these variables are known to successfully determine the adoption and acceptance of ITs. The mentioned attributes by Rogers (2003) are explained as follow:

- Relative Advantage

Rogers (2003, p.229) referred to relative advantage as “the degree to which an innovation is perceived as being better than the idea it supersedes.” For example, an individual switching from a classic phone to a smartphone to perform tasks on the go, browse the Internet and other productive benefits that a smartphone will enable the individual to perform. Furthermore, Rogers (2003) believes that evaluating the various dimensions of relative advantage depends on the characteristics of potential adopters of new innovations. It is worth noting that the variable of relative advantage shares similarities with the variable of perceived usefulness in the Technology Adoption Model (TAM) (Moore and Benbasat, 1991; Hernandez and Mazzon, 2007). However, Moore and Benbasat (1991) argue that the term “relative advantage” is a term that is very broad, as researchers plug into the term a variety of advantages, which make the term’s status become unclear. However, it is worth mentioning that Moore and Benbasat (1991), in their study, still used the term relative advantage, when validating a new scale measurement based on Rogers’ (2003) constructs, “only” because it is the term that appeals to other researchers.

- Trialability

Rogers (2003, p.258) referred to trialability as “the degree to which an innovation may be experimented with on a limited basis.” The trialability variable assumes that an individual may like to experience the innovation on a trial basis, to reduce the level of uncertainty and to decide whether to adopt or to reject the innovation. It is worth noting that Rogers (2003) suggests that trialability is much more important to earlier adopters than individuals who adopt the innovation at a later stage, because they have no one to follow as they are the first to experience the innovation.

- Compatibility

Rogers (2003, p.240) referred to compatibility as “the degree to which an innovation is perceived as consistent with the existing values, past experiences, and the needs of potential adopters.” According to Rogers (2003), an innovation can be adopted based on the three following dimensions of compatibility:

- Social cultural values and beliefs: a potential adopter of an innovation may view the innovation incompatible if it violates sociocultural values and beliefs.

- Previous introduced ideas: a potential adaptor of an innovation views an innovation as an extension of previously adopted ideas. Therefore, a potential adopter of an innovation will have a reduced level of uncertainty and familiarity toward new ideas, based on his or her previous experiences. It is worth noting that in the research area of self-service technology, Meuter et al. (2005) suggested that consumers are more likely to adopt services, based on past experiences of using self-service technologies.
- The innovation is compatible with people's needs.

- Complexity

Rogers (2003, p.257) defines complexity as “the degree to which an innovation is perceived as relatively difficult to understand and use.” Therefore, this definition suggests that the lesser the complexity of an innovation, the more likely it will be to result in adoption. It is worth noting that all the variables presented by Rogers (2003) have a positive relationship with the rate of adoption except for complexity, which have a negative relationship with the rate of adoption. Furthermore, it is worth mentioning that the complexity variable is similar to Davis et al.'s (1989) ease of use variable in the Technology Acceptance Model (TAM) (Moore and Benbasat, 1991; Hernandez and Mazzon, 2007).

- Observability

Rogers (2003, p.258) referred to observability as “the degree to which the results of an innovation are visible to others.” Therefore, this definition suggests that if an innovation is visible to other members of the social system, it will be likely that the innovation will be adopted.

Rogers (2003) suggests that technology appears in the form of hardware (physical object) and software (information). Therefore, he points out that not all innovations have the same visibility degree, because some innovations have a noticeable physical appearance and some may not. On the other hand, Moore and Benbasat (1991), when they developed a scale to measure the technology adoption based on the variables provided by Rogers (2003), found it best to split the observability variable into two parts, which are “result demonstrability” and “visibility”, because the term observability showed results that are sophisticated. Furthermore, they also argue that the observability definition offered by Rogers (2003) indicates that an innovation can be something that is tangible (e.g. hardware) and also something that is not tangible but can be visible (e.g. software). Therefore, Moore and Benbasat (1991, p.203) defined result

demonstrability as “the tangibility of the results of using the innovation, including their Observability and Communicability” and referred to visibility as the degree which the innovation is visible to others.

2.6.3 Additional Constructs that were Identified

Moore and Benbasat (1991) also introduced two additional variables, when they were developing a measurement scale to be used with regard to technology adoption based on the variables that were previously identified by Rogers (2003). These additional variables were found to be significant and important to determine the adoption of technology, which are “image” and “voluntariness of use” (Moore and Benbasat, 1991). The image variable is defined by Moore and Benbasat (1991, p.195) as “the degree to which use of an innovation is perceived to enhance one’s image or status in one’s social system.” This definition refers to the extent to which the innovation will enhance the image or status of an individual in the social system. Furthermore, Moore and Benbasat (1991, p.195) defined voluntariness of use as “the degree to which use of innovation is perceived as being voluntary, or of free will.” This definition highlights the individual’s freedom to adopt or reject an innovation.

As mentioned earlier, these variables are popular in determining technology adoption and acceptance of a particular technology, as researchers used all or some of the variables across various fields of research to test and validate innovation adoption models. The next section discusses research findings, where the mentioned variables were used.

2.6.4 The DIT Constructs and Research Findings

There are a substantial number of studies which have used Rogers’ (2003) constructs to determine technology adoption and the acceptance of information technology. Some of these studies involved the following research areas: mobile internet (Hsu et al., 2007) , adoption of smartphones (Park and Chen, 2007), mobile commerce (Wu and Wang, 2005), e-commerce (Eastin, 2002), customer relationship management (Wu and Wu, 2005), and adoption of smart television (Kapoor et al., 2013).

In the research area of E-Commerce, Eastin (2002) used six of the most common DIT variables while investigating the adoption of four E-Commerce practices that were available during the time of the research, which are online shopping, online banking, online investing and electronic

payment for an internet service. He found that the DIT variables play a significant role in the adoption of the mentioned innovations. The results of the study also showed that individuals who have adopted electronic services are more likely to adopt another. Furthermore, Eastin (2002) concluded that individuals adopt each of the electronic services for different reasons and purposes.

In the research area of the mobile Internet, Hsu et al. (2007) investigated the adoption of the Multimedia Message Service (MMS) across different adopter categories that Rogers (2003) identified as innovators, early adopters, early majority, late majority and laggards. The study was conducted on 207 users who were surveyed. Their study included image, result demonstrability and voluntariness as extra variables to the ones that were already offered by Rogers (2003). They found that relative advantage was significant and influenced the adoption of MMS except amongst laggards. It's worth noting that laggards are referred to by Rogers (2003, p.284) as the "last in a social system to adopt an innovation." Other findings in their study were that ease of use, trialability, result demonstrability, visibility, image, and voluntariness showed different mixed results across different adopter categories, and that compatibility is an important variable that motivates the potential and majority of adopters to use MMS.

With regard to the adoption of smartphones, Park and Chen (2007) conducted a study to investigate the adoption of smartphones among doctors and nurses. It is worth noting that in their study, they tested the TAM and the DIT. From the TAM variables, they found that perceived ease of use and perceived usefulness were strong predictors of smartphone adoption among doctors and nurses. With regard to the variables from DIT, they found that only observability and the organisational characteristics are significant predictors of the adoption of smartphones among doctors and nurses. It is worth noting that the compatibility variable was not tested in their study because it did not pass the reliability test due to missing values. Furthermore, the trialability variable was found to be insignificant in predicting smartphone adoption in the nature of their study. Other findings were that the organisational environment might influence the adoption of smartphones among employees.

The diffusion constructs indicate that they are key predictors of the motivation of an individual to adopt technology in different fields of research, keeping in mind that the DIT has two variables that share similarities with the TAM. However, it is also worth noting that the findings

can vary depending on the nature of the technology when applying DIT. Also, when applying DIT variables to different categories of the social system, each variable can be affected by each category differently (Hsu et al., 2007).

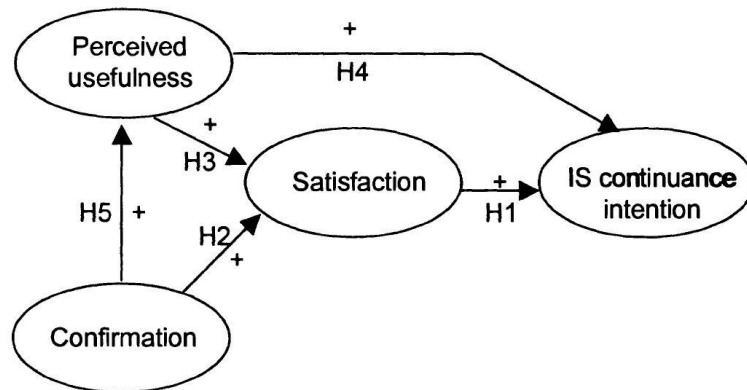
2.7 Expectation Confirmation Model of Information Technology (ECM-IT)

The Expectation Confirmation Model of Information Technology (ECM-IT) is developed by Bhattacharjee (2001b) to examine the drivers that influence consumers' behavioural intention to continue to use technological innovations (Bhattacharjee, 2001b). According to Bhattacharjee (2001b), the ECM-IT could be considered one of the first theoretical establishments in the Information Science (IS) research discipline to specifically address consumers' continuous usage of technologies. The theoretical framework of the ECM-IT involved two main research questions (Bhattacharjee, 2001b). The first is to identify the salient beliefs that influence consumers' behavioural intention to continue using technologies. The second considers how the variables reflecting consumers' beliefs and feelings influence consumers' behavioural intention to continue using technologies.

The theoretical development of ECM-IT involved combining theoretical knowledge from the consumer behaviour research discipline, with theoretical knowledge from the Information Science (IS) research discipline (Bhattacharjee, 2001b). Furthermore, the combination of theoretical knowledge from the two mentioned disciplines, involved utilising theoretical knowledge of Oliver's (1980) Expectancy Confirmation Theory (ECT) within the consumer behaviour research discipline with Davis et al.'s (1989) TAM from the IS research discipline. Bhattacharjee (2001b) argued that existing research and theories within the IS research domain are mostly focused on predicting the initial acceptance of technological innovations, but do not explain the post-acceptance process and the drivers that lead consumers to continue to use technologies. Furthermore, previously in this chapter, it was mentioned that an organisation may face increased undesired outcomes and costs resulting from consumers not accepting to use the innovation (Bitner et al., 2000; Meuter et al., 2005). On the other hand, Bhattacharjee (2001b) takes a different approach to technology use. For example, Bhattacharjee (2001b) argues that although it is important to understand consumers' acceptance of technologies, it is

highly important for organisations to understand what drives consumers' continuous behavioural intention to use the technological innovation. The ECM-IT is presented in Figure 2.11.

Figure 2. 11 The Expectation Confirmation Model of Information Technology (ECM-IT)



Source: Bhattacharjee (2001b)

Bhattacharjee (2001b) integrated into the ECM-IT theoretical framework the post-acceptance variables of confirmation and satisfaction, and a post-consumption variable of perceived usefulness. The ECM-IT by Bhattacharjee (2001b) borrows theoretical ideas from Oliver (1980), in the sense that confirmation and satisfaction play a role in influencing consumers' behavioural intention to repurchase products and services. In addition, the ECM-IT also accounts for the role consumers' salient beliefs about the technology use (e.g. perceived usefulness). Thus, the post-acceptance and post-consumption variables in the ECM-IT function to predict consumers' behavioural intention to continue using technological innovations.

2.7.1 The ECM-IT Components

The ECM-IT has three components (e.g. variables) that are involved in predicting consumers' behavioural intention to continue using technologies. The components are perceived usefulness, confirmation and satisfaction. It can be noted from Figure 2.11 that the TAM played an apparent role in the ECM-IT's theoretical structure. For example, in the original TAM that includes attitude (e.g. an affect representing favourable or unfavourable feelings.), the perceived usefulness influences behavioural intention directly and indirectly via attitude. It is worth noting that satisfaction is borrowed from Oliver's (1980) and replaces attitude from the

TAM in the ECM-IT. Confirmation is borrowed from Oliver's (1980), which functions to confirm post-acceptance (e.g. usefulness) and satisfaction in a post-consumption context.

2.7.1.1 Perceived Usefulness

Perceived usefulness is defined by Davis (1989, p.320) as "the degree to which a person believes that using a particular system would enhance his or her job performance." The ECM-IT only included the perceived usefulness from TAM as a salient belief and did not account for additional salient beliefs such as ease of use which is one of the two predictors in TAM. In the ECM-IT, perceived usefulness influences behavioural intention in two ways. For example, perceived usefulness influences behavioural intention directly and indirectly via satisfaction (Bhattacharjee, 2001b). Furthermore Bhattacharjee (2001b) theorises that a salient belief may influence behavioural intention even if consumers were not satisfied with its prior use. This notion is found in the following quote:

"in case the rational and affective components oppose each other, relative strengths of the two components determine the outcome of the continuance decision process. For instance, users may continue using an e-commerce service if they consider it useful, even if they are dissatisfied with its prior use" (Bhattacharjee, 2001a, p.203).

Furthermore, Bhattacharjee (2001a) argues that attitudinal theories would only show that an individual's salient beliefs only influence behavioural intention toward the behaviour via their favourable or non-favourable feelings toward the behaviour (e.g. attitude), while research in Information Science has empirically shown that a salient belief may influence the behaviour directly, even if the individual did not hold favourable or non-favourable feelings toward the behaviour (for example see: Davis (1989). Therefore, Bhattacharjee's (2001a) notion is similar to Davis (1989) which suggests that an individual may still accept using a technology because it is useful even if the individual did not hold favourable or non-favourable feelings toward using the technology.

2.7.1.2 Satisfaction

Overall satisfaction is defined as "an affective state that is the emotional reaction to a product or service experience" (Cadotte, Woodruff, and Jenkins; Oliver 1980, as cited in Spreng et al., 1996, p.17). Bhattacharjee (2001b, p.355) refers to satisfaction as "an affect, captured as a positive (satisfied), indifferent, or negative (dissatisfied) feeling." As Bhattacharjee (2001b)

borrowed theoretical ideas from Davis et al.'s (1989) TAM, similarities in terms of how satisfaction predicts intention can be noticed. Bhattacharjee (2001b) argued that satisfaction in the ECM-IT is an affect like attitude, and attitude that represents the role of affect was previously validated in IS literature (e.g. Davis et al. 1989; Karahanna et al. 1999; Taylor and Todd 1995a; Taylor and Todd 1995b). Thus, it is justifiable to integrate satisfaction into the ECM-IT to replace attitude and this is theoretically justifiable as previous literature provides partial theoretical support (Bhattacharjee, 2001b).

In the ECM-IT, consumers' continuous behavioural intention is determined mainly by satisfaction with using the technology, while individuals' post-expectations (e.g. perceptions or beliefs toward using a system) may also influence continuous behavioural intention, while being mediated by individuals' satisfaction with using the systems. As mentioned earlier, when establishing the ECM-IT, Bhattacharjee (2001b) only tested perceived usefulness as a post-perception in the continued usage context of technology and encouraged researchers to explore additional factors that are capable of influencing consumers to continue using technologies. Furthermore, Bhattacharjee (2001b) found that satisfaction in the ECM-IT is the strongest predictor influencing consumers' continuous intention. Furthermore, Bhattacharjee, (2001b) concluded and argued that satisfaction is a better and a more realistic predictor than attitude in predicting technology continuous usage as demonstrated by the following quote:

“Users' pre-acceptance attitude is based solely on cognitive beliefs (e.g., usefulness, ease of use) formed potentially via second-hand information from referent others, popular media, or other sources. These influence sources maybe be biased. Hence, user attitude potentially may be inaccurate, unrealistic, and uncertain. In contrast, post-acceptance satisfaction is grounded in users' first-hand experience with the IS. It is, therefore, more realistic, unbiased, and less susceptible to change (Fazio and Zanna 1982). Users' may accommodate this uncertainty in affect by underweighting more uncertain attitude in their acceptance decisions and overweighting more certain satisfaction in continuance decisions” (Bhattacharjee, 2001b, p.364).

Therefore, Bhattacharjee (2001b) argues that in the context of continuous technology use, satisfaction is a better predictor than attitude in capturing the role of affect toward technology use. Hence, in the ECM-IT, satisfaction was the strongest predictor of consumers' continuous intention to use a technology (Bhattacharjee, 2001b).

2.7.1.3 Confirmation

The confirmation variable in the ECM-IT is also known and appears as “disconfirmation or disconfirmation of expectations” in the literature (Bhattacharjee, 2001b). Confirmation is referred to in the following: “Confirmation, a cognitive belief representing the extent to consumers’ ex ante expectations of service use were met in reality, refers to this evaluation process. In other words, the affect in satisfaction is the outcome of a rational process of comparing initial expectations with actual experience or the confirmation belief” (Bhattacharjee, 2001a, p.204). Furthermore, Bhattacharjee, (2001b) explains that if a consumers’ expectation toward a technological innovation are low, while perceiving that the technology performed better than what was previously expected, the consumer is more likely to be satisfied and develop a positive intention to continue using the technology and vice versa. In the ECM-IT, confirmation is mediated by perceived usefulness and satisfaction.

Some researchers criticise the approach of confirming or disconfirming consumers’ beliefs and argue that performance dimensions alone can predict consumers’ intentions well enough, and that confirming or disconfirming consumers’ beliefs becomes unnecessary (Yüksel and Rimmington, 1998). In addition, Yüksel and Rimmington (1998, pp.61-62) explain that it is also argued that accounting for the consumers’ expectations and actual experience relationship may interrelate causing bias. It is also suggested that confirming or disconfirming consumers’ expectations becomes problematic when the research involves current experienced consumers who already continue to use the service (Halstead et al., 1994). For example, the assumption that consumers’ satisfaction of a service is determined by confirming or disconfirming consumers’ expectations is not clear and uncertain, because when consumers are familiar with using the service, their cognitive processing is less active (Halstead et al., 1994). Therefore, Halstead et al. (1994) argue that in the context of continuous usage of services, measuring how the service is performing is central to predicting consumers’ satisfaction.

Hossain and Quaddus, (2012) also questioned the role of confirming or disconfirming consumers’ expectations, as they explain that in Rogers’ (2003) DIT the confirmation role comes at the final stage in the adoption decision-making process, which occurs to confirm or to disconfirm an individual’s adoption of a technology. In other words, Rogers (2003) explain, that in the diffusion process of innovation confirmation acts as a phase to confirm a potential adopter’s decision to accept and adopt or to reject a technology.

2.7.2 The Exclusion of Ease of Use from the ECM-IT

Bhattacharjee (2001b) excluded ease of use by supporting Davis et al.'s (1989) argument that the effect of perceived ease of use diminishes as consumers become more experienced with using technology. It is also worth noting that Bhattacharjee (2001b) mentioned that the influence of perceived ease of use was informally tested in the ECM-IT, but it showed no significant relationship on satisfaction. Therefore, Bhattacharjee (2001b) suggests that when conducting research on current consumers that are experienced with using the service, perceived ease of use is likely to not play a role in continuous usage of a technological innovation. Similarly, in online shopping research, Hausman and Siekpe (2009) excluded ease of use when investigating the motivating factors that influence consumers' purchase and revisit intention, as the subjects in their study were current consumers who are experienced Internet users.

However, studies were able to provide support for the role of perceived ease of use to significantly influence consumers' continuous intention to use technological innovations (Thong et al., 2006; Hong et al., 2006). Hong et al. (2006) conducted a study on current users in the context of continuous usage of the mobile internet, where the study compared three models, ECM-IT, an Extended ECM-IT (EECM-IT) that incorporated perceived ease of use, and TAM without the mediating effect of attitude (see: Davis and Venkatesh, 1996). Interestingly Hong et al. (2006) found that perceived ease of use in their study showed a stronger influence in the TAM and the EECM-IT than perceived usefulness in a continuous usage setting. Furthermore, their study found that in the EECM-IT, perceived usefulness had a direct influence on continuous intention, and did not influence satisfaction, while perceived ease of use influenced satisfaction and directly influenced continuous usage intention. There are also other studies which support the role that perceived ease of use plays in the continuous usage of technology systems using the ECT theoretical lens (e.g. Mahmood et al., 2000).

Furthermore, Hong et al. (2008) who did not use the ECM-IT but utilised the DTPB to investigate continuous usage of mobile data services argue that the role of perceived ease of use is underrated in technology acceptance literature and in particular the TAM. Hong et al. (2008) found that perceived ease of use was the strongest predictor in motivating consumers attitude to continue using mobile data services in the communication, information, and entertainment categories in their study. Interestingly, Hong et al. (2008) explain, that in the

context of investigating consumers' continuous technology use, perceived ease of use can play a similar or more important role than perceived usefulness toward predicting consumers' continuous intention depending on the technological innovation under study. In addition, Hong et al. (2008, pp.440-441) argue that the perceived ease of use is important in the context of investigating consumers' continuous intention to use technology because, "If consumers face difficulty in using a particular mobile data service while waiting for the bus, they will simply pursue other alternatives to fill their time. Compared to information technology usage in organizations where consumers have little flexibility in choosing an alternative technology to perform their duties, consumers of mobile data services in similar circumstances do have a broad array of alternatives (e.g., read newspapers or magazines; listen to radio or walkman)". Furthermore, consumers can value ease of use because of the small screen size of mobile devices (Venkatesh et al., 2003b).

2.7.3 ECM-IT Studies

Bhattacharjee (2001b, p.365) encouraged future research to further examine variables that influence consumers to continue to use technologies. In Bhattacharjee's (2001b, p.365) own words, "Future studies that extend TAM into continuance contexts should, therefore, integrate satisfaction and its antecedents (e.g., confirmation) with existing TAM constructs to provide a better understanding of this anomaly... IS satisfaction may have additional salient predictors than those identified using the ECT lens." Moreover, Thong et al. (2006) explain that it is important to expand our understanding of consumers continued technology use by recognising additional variables that are able to predict and reflect the context of the technology under research. Subsequent studies have introduced further constructs, while utilising the ECM-IT theoretical framework. Furthermore, it is worth noting that previous research that utilised or borrowed theoretical notions from the ECM-IT introduced additional factors that can influence consumers' continuous intention to use technology directly and/or indirectly through satisfaction (Kim, 2010; Hsu and Lin, 2015; Hong et al., 2006; Thong et al., 2006).

Bhattacharjee (2001a) investigated the drivers of e-services continuous usage where loyalty incentives were introduced, directly influencing continuous intention. While the loyalty incentive was found to be insignificant in influencing continuous intention, Bhattacharjee (2001a) found that it still plays an interactive role with perceived usefulness toward continuous intention.

Kang et al. (2009) utilised the ECM to investigate continuous online internet social network website usage in South Korea on undergraduate students with a valid sample of 349. Kang et al. (2009) examined perceived usefulness, perceived enjoyment, confirmation, regret, self-image congruity, confirmation, past use, satisfaction and continuous intention. It is worth noting that Kang et al. (2009) did not examine perceived ease of use in their study. However, they explained that while previous studies on mobile phones show support for ease of use, their study is not in a mobile context. Furthermore, in their study, they hypothesised that perceived usefulness influences satisfaction and continuous intention, and confirmation influences perceived usefulness, enjoyment and satisfaction. Furthermore, past use influences perceived usefulness, perceived enjoyment and continuous intention. Self- image congruity influences perceived usefulness, enjoyment and continuous intention. Regret influences satisfaction and continuous intention negatively. All hypotheses were supported except for past use on perceived usefulness, confirmation on satisfaction, and regret on satisfaction. Interestingly, in their study, the effect of satisfaction on continuous intention was significant but weak; they concluded that 75% of the participants in their study visited the social network website daily over a period of one month, where the respondents formed a habit where they became less evaluative and caused the relationship of satisfaction to continuous intention to weaken.

Kim (2010) conducted a study by integrating the ECM-IT with TPB. The study investigated the continuous usage of mobile data services in South Korea on graduate students and 207 responses were achieved. The variables included in the theoretical model included perceived usefulness, perceived enjoyment, perceived fee, user satisfaction, social norm, perceived behavioural control, confirmation, and continuance intention. Their model hypothesised that perceived usefulness, perceived enjoyment and perceived fee influence satisfaction and continuous intention. It is worth noting that perceived fee is hypothesised to influence continuous intention and also influence satisfaction. Furthermore, social influence and perceived behavioural control influence continuous intention directly. Confirmation in their model influences perceived usefulness, perceived enjoyment, and perceived fee directly. All hypotheses that were tested were supported in their study except for perceived usefulness and perceived enjoyment on satisfaction.

Yuan et al. (2016) investigated the factors that lead consumers to continue mobile banking in China through analysing 434 valid responses from participants. Yuan et al. (2016) incorporated the TAM and the Technology Task Fit (TTF) theory into the ECM theoretical framework. The

variables in their theoretical framework were perceived usefulness, perceived ease of use, perceived task technology fit, confirmation, perceived risk, satisfaction, continuous intention. Yuan et al. (2016) also hypothesised that gender moderates the relation of perceived technology fit, perceived ease of use, perceived risk and satisfaction. They found that perceived usefulness, perceived task technology fit, satisfaction, and perceived risk predicted continuous intention. It is worth noting that perceived risk influences continuous intention negatively. Furthermore, they found that perceived ease of use and perceived task technology fit did not predict satisfaction. However, they found that confirmation, perceived usefulness and perceived risk predicted satisfaction. Confirmation also influences predicted perceived usefulness. It is worth noting that perceived risk had a negative influence on satisfaction. Furthermore, they found that gender moderates the negative relationship between perceived risk on continuous intention.

2.8 Conclusion

This chapter has highlighted established theories that are developed to understand technology use. Thus, this chapter has discussed the TRA, TPB, TAM and its further developments, DTPB, UTAUT and UTAUT2, DIT, and the ECM-IT. It can be noted that the theories discussed in this chapter share some similarities. For example, all the theories discussed in this chapter acknowledge that the individual's beliefs are linked to the individual's behavioural intention. However, some of the discussed theories propose that the individual's beliefs directly influence the individual's behavioural intention such as the TAM without the mediating effect of attitude, the UTAUT, and the UTAUT2. On the other hand, other theories in IS seem to be more consistent with theories such as the TRA and the TPB from the discipline of psychology, in acknowledging the mediating role of an affect (e.g. attitude) in IS research, such as the DTPB. However, the ECM-IT acknowledges the role of affect by emphasising that satisfaction (e.g. an affect) mediates an individual perception of the technological innovation to behavioural intention, while an individual perception may influence the behavioural intention directly even if the individual was not satisfied with using the technological innovation. Similarly, the original TAM that included attitude showed that perceived usefulness can influence an individual's behavioural intention even if the individual did not have a favourable feeling about using the technology.

This current research proposes that the ECM-IT is the most suitable model for this research for several reasons. First, the ECM-IT is specifically developed to investigate the continuous usage of technologies, which is in line with the purpose of this research. Second, the ECM-IT is developed with theoretical notions from consumer behaviour and IS research. Third, it is encouraged that researchers explore additional perceptions that can play a role in continuous use of technologies, as only perceived usefulness was included in the ECM-IT when it was introduced. Fourth, the sample proposed for this study is made up of current consumers who retain traditional retail smartphone apps for a long time, and the ECM-IT was also validated using current consumers of an organisation; therefore, the ECM-IT is methodologically suitable when it comes to the type of sample used in this research.

This study is applied to traditional retailers who operate in a multi-channel context. The next chapter discusses brand reputation, and brand loyalty which are known in the consumer behaviour literature to influence consumers' decision making toward organisations' products and services.

Chapter 3

Brand Image, Reputation and Loyalty

3.0 Introduction

This chapter aims to explore the literature regarding the concept of brand reputation and brand loyalty. In this regard, notions behind the concepts' existence and how the concepts are defined are discussed in this chapter. To develop a better understanding of the concept of brand reputation, the chapter starts by discussing the concept of brand image. Furthermore, the role of brand reputation and brand loyalty on consumers' decision making is discussed.

3.1 The Meaning of Brand

The American Marketing Association (AMA) refers to a brand as follows: a brand is a "Name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers. (AMA, 2018)" Furthermore, the AMA describes that "A brand often includes an explicit logo, fonts, color schemes, symbols, sound which may be developed to represent implicit values, ideas, and even personality" (as cited in Willman, 2014, p.202). According to Keller et al. (2013) practitioners often describe a brand based on concepts such as forming awareness, reputation, fame and dominance in the marketplace.

Kapferer (2012) explains that there is much debate on describing what a brand is by professionals and discusses several ways a brand can be described. Kapferer (2012, p.7) explains that one of the ways that brands are described is based on the financial value, reflected in the "minds and hearts of customers, distributors, prescribers, opinion leaders." Another way a brand is described is that it is a legal establishment as it is registered and "a sign or a set of signs certifying the origin of a product or service and differentiating it from the competition" (Kapferer, 2012, p.8). Interestingly, Kapferer (2012) points out that a brand can be defined based on the two dimensions of intangible assets and conditional assets reflecting what financiers and accountants describe as a brand. The intangible assets represent the value of the brand in relation to balance sheets that could reflect the brand performance, registered patents, and the databases that hosts valuable information for the organisation (Kapferer, 2012). The conditional assets describe the fact that brands do not exist without products and/or services, and the facilities that produce products or services (Kapferer, 2012). Furthermore, Kapferer (2012) explains that a brand is a name that can describe its power which is reflected through

the brand's impact in the marketplace, the community the brand has created, and the relationships the brand has established with its customers, which influence consumers to purchase from the brand. Kapferer (2012, p.9) also mentions that a brand name with power and influence can reflect "trust, respect, passion and even engagement".

To the consumer, brands carry a meaning and identify the source and maker of products and services, and the consumer holds perceptions of the brand generated by past experience and marketing activities that are performed by the brand (Keller et al., 2013). Brand names can be created based on "real people, places, animals, birds, things, and objects or just be made up" (Keller et al., 1998, p.48). When brands introduce new products or services, brand names can help in creating brand awareness, and may help in facilitating consumers to perceive the brand more favourably (Keller et al., 1998).

3.2 The View Behind the Concept of Brand Image

Historically, the concept of brand image became a part of consumer behaviour research since it was formally introduced in Gardner and Levy's (1955) classic article (as cited in Park et al., 1986, Dobni and Zinkhan, 1990). The notion behind the concept proposes that "People buy things not only for what they can do, but also for what they mean" (Levy, 1959, p.118). Similarly, Biel (1992) argues that people could establish a favourable connection with a brand, because of what it means to them. In this regard, Davies (2003, p. 80) explains that, "Brands have a symbolic and emotional role in our lives that is central to their value." These notions appear to be central to the foundation of the brand image concept as it captures the consumers' subjective attitude toward brand consumption. In addition, Levy (1959) explains that people express a bundle of thoughts and feelings regarding things they buy, indicating that people establish emotional connections with brands in order to satisfy their self-desires through seeking pleasure when consuming brands. Therefore, the view behind the concept suggests that organisations are offering consumers not only products and services, but symbols as well (Levy, 1959). It is worth noting that before the formal introduction of the brand image concept in the 1950s, the idea of symbolic behaviour to play a role in product consumption was explored in the late 1940s by Duesenberry (1949), as cited in Dobni and Zinkhan (1990), which indicates that some researchers were interested in trying to capture consumers' thoughts toward brands.

Since the introduction of the brand image concept in the 1950s, academics and marketers began to gradually share a mutual view that brands are purchased for reasons beyond their objective

physical characteristics and functionality aspects, as it became acceptable to acknowledge that also emotive factors play a role in persuading consumers toward purchasing or consuming brands (Dobni and Zinkhan, 1990). Furthermore, the introduction of the brand image concept caused a noticeable transformation to occur in consumer behaviour research with regard to brand consumption. In this regard, the brand consumption literature witnessed a paradigm shift from the notion that brands are only consumed for goal directed reasons that are objective, to the notion that the subjective physiological nature of consumers plays an important role in brand consumption (Davies, 2003). Moreover, it is worth noting that, as the concept continued to gain popularity, Dobni and Zinkhan (1990) suggested that in the 1980s, the brand image concept became “common place” within the area of consumer behaviour research.

In order to build an understanding of the brand image concept, the next section aims to discuss the notions behind the concept’s definitions.

3.2.1 Defining Brand Image

Brand image is a concept that can be applied to any phenomenon within the marketing discipline such as an organisation, service, product, store, an athlete or even a political figure (Hsieh et al., 2004; Cian, 2011). In addition, Kotler and Keller (2011, p.23) suggest that “Universities, museums, performing arts organizations, and nonprofits also use marketing to shape their images and compete for audiences and funds.” Therefore, from a theoretical and pragmatic point of view, the term “image” could be applied to various objects (Cian, 2011).

Levy (1978) refers to brand image as a collection of impressions and images that contributes to establishing the consumers’ knowledge, and influencing their attitudes toward brands. Therefore, the term brand image is suggested to be a reflection of ideas, feelings, and attitudes that consumers hold toward brands (Tillman and Kirkpatrick, 1970; Gardner and Levy, 1999). Furthermore, the brand image is suggested to influence consumers’ attitude toward the brand, and serve consumers to construct a meaning when encountering the organisation’s products, services or various communications received from the organisation (Britt and Boyd, 1968, p.392). In this regard, Tillman and Kirkpatrick (1970, p.342) describe the concept of brand image by using the Ivory soap brand as an example, where they referred to brand image as “what buyers ‘see’ and ‘feel’ when the brand name Ivory is called to their attention. It is Ivory’s mental representation, Ivory’s meaning to buyers; it is Ivory’s impressions on buyers and the

buyer's impressions of Ivory. It is the sum of the concepts and their valences which come to mind when the word 'Ivory' is perceived."

The term brand image is also described as a cognitive psychological process. For example, Reynolds (1965, p.69) refers to brand image as "...the mental construct developed by the consumer on the basis of a few selected impressions among the flood of the total impressions; it comes into being through a creative process in which these selected impressions are elaborated, embellished, and ordered." In this regard, brand image is also suggested to be a psychological process that takes place in the minds of consumers, where consumers select and extract informational contents from the communication activities that they receive or come in contact with (Keller, 2013). Therefore, the image that consumers construct toward a brand is suggested to result from the signals that consumers receive and decode from organisations, in addition to the interpretation that consumers draw from interacting with the organisation's products and services (Britt and Boyd, 1968). For example, Lee et al. (2011) explain that brand image is the knowledge that consumers hold toward the brand, representing overall absorbed information that consumers have formed in their minds toward the brand, which may contain perceptions that are related or unrelated to the brand products and services. It is also suggested that the perceptions consumers hold toward a brand may result in establishing a bundle of expectations toward the brand's products or services, where these expectations are verified through the perceptions consumers hold toward the brand (Britt and Boyd, 1968, p.391). This way of describing brand image could be criticised for not emphasising the role of the consumer's feelings toward brands, as describing brand image as a perceptual "mental construct" or "expectations" might be considered a vague description of the concept (Dobni and Zinkhan, 1990). However, despite the fact that the emphasis on the role of consumers' feelings may not appear to be visible in some definitions, in general, these definitions still circulate around the thought that brand image is the consumer's perception of a brand, and contribute to understanding the brand image concept by emphasising the role of the reasoned behavioural process of consumers (Dobni and Zinkhan, 1990).

Furthermore, brand image is believed to be a concept that is complex in nature, as it is extremely difficult for organisations to capture the subjective diverse process that takes place in the mind of consumers (Reynolds, 1965). The reason is believed to be that consumers may hold a collection of different images in their minds toward a brand (Dowling, 2002). Furthermore, since brand image is a subjective phenomenon, it becomes highly possible that a

consumer's constructed image toward a brand may differ from other consumers toward the same brand (Reynolds, 1965; Balmer and Greyser, 2006; Bullmore, 2006). Furthermore, the consumers' perceptions toward brands are suggested to be diverse in nature, even though these images could be favourable or unfavourable toward the brand (Tillman and Kirkpatrick, 1970; Keller, 1993). Therefore, Reynolds (1965) argues that consumers differ in their ways of absorbing information, and therefore the constructed images by consumers will differ from one another, and even if a group of consumers may share the exact image toward a brand among themselves, there is a high probability that they are a very small percentage. In this regard, brand image is classified to be a subjective phenomenon that resides within the minds of consumers, and reflects the consumer's own personal impression and interpretation toward brands (Dobni and Zinkhan, 1990; Bullmore, 2006). Therefore, Bullmore (2006, p.64) argues "Products are made and owned by companies. Brands, on the other hand, are made and owned by people... by the public... by consumers."

It is worth noting that the image that consumers hold toward brands may develop or be altered. Therefore, Aaker (2012) refers to brand image as the perception of the brand by consumers in the present time. In this regard, Aaker's (2012) definition of brand image highlights that consumers' perceptions of a brand are a reflection of what they think and feel about the brand in the "current time", and consumers' perceptions may evolve and/or change over time. In this regard, the brand image is not something that is stable within the consumer's mind, and it could be affected positively or negatively based on actions that organisations undertake (Martinez and De Chernatony, 2004; Salinas and Pérez, 2009). Therefore, as organisations strive to generate and maintain a positive market performance, it is also a crucial task for marketers to deliver the organisations' goals and objectives through marketing activities, in order for the consumers to initiate a positive image about the organisation (Keller, 1993; Kotler and Keller, 2011). Things also could become more complicated when an organisation releases an improved or a new product or service, where the image creation by consumers may take a long period of time in some circumstances to be constructed (Keller, 1993; Kotler and Keller, 2011). In this regard, Salinas and Pérez (2009) suggest that the introduction of new products to the market may alter the brand image consumers hold toward the brand in a positive way, or it may weaken the consumers' present beliefs toward the brand. Similarly, in the context of researching brand extensions and its influence on the brand image, Martinez and De Chernatony (2004) explain that brand extensions may alter what consumers think and feel toward the brand, in addition to the associations that are embedded in consumers' minds. Therefore, they suggest that when

organisations launch new products, they should focus on marketing the general image of the brand rather than the product's functional features, to increase the probability of maintaining what consumers think and feel about the brand.

Dobni and Zinkhan (1990) conducted a study where 28 brand image definitions were reviewed, in order to establish an interpretation of how the brand image concept is conceptualised. They explained that brand image is expressed in various ways by researchers depending on the context and the nature of the research, which has led to disagreement and not establishing a common classification representing what the term "brand image" stands for (Dobni and Zinkhan, 1990). They also explain that although the term could be found appearing in different forms in the literature, there is an existing pattern, where researchers also display similar views when defining the concept of brand image.

Based on Dobni and Zinkhan's (1990) interpretation and conclusion of the brand image concept, the following four useful insights into the term were documented in their research:

- Brand image is a concept that is apprehended by consumers.
- The brand image concept is mainly a subjective phenomenon, since it is based on the consumer's perception and understandings of brands. Therefore, brand image represents what consumers think and feel about a brand.
- The consumer's perceived image and its establishment is not only dependent on the technical, physical and functional features of products, as initiated marketing activities that organisations undertake directly or indirectly play an important role in affecting the consumer's image construction toward a brand. In addition, brand image is also affected by context variables (the context where the perceptual process of a brand occurs), and the personality traits of the perceiver (consumer).
- The brand image concept is based on people's perception of reality, and not reality itself.

The next section aims to understand the notions behind defining brand image from the brand association perspective.

3.2.1.1 Brand Image as Associations

Researchers also refer to the concept of brand image as a phenomenon resulting from associations that are embedded in the consumer's mind, which are related to the brand. In this regard, Biel (1992, p.RC-7) defines brand image as "the image of a brand as that cluster of attributes and associations that consumers connect to the brand name." Similarly, Blackwell et al. (2006, p.339) refer to the brand image concept as "the entire array of associations that are activated from memory when consumers think about the brand." Moreover, Smith (2004) explains that the associations consumers hold toward a brand get transferred from the brand to consumers' memories. Furthermore, according to Biel (1992), brand associations may also get transferred to consumers' memories from multiple dimensions that can influence the consumers' perceptions of a particular brand, which are the following:

- The image of the organisation that is providing the product/service
- The image of the product/service
- The user imagery (e.g. the image of consumers who purchase and consume the product or service)

Furthermore, Keller (1993, p.3) defines brand image as the "perceptions about a brand as reflected by the brand associations held in consumer memory." In this regard, consumers are believed to establish various networked associations with brands in their minds, which contribute to establishing a perceived image of the brand (Keller, 1993; Aaker, 2012). Similarly, Aaker (1991, p.110) defines brand image as "a set of associations, usually organized in some meaningful way." Brand associations may hold information that may relate to a variety of things such as "product attributes, a celebrity spokesperson, or a particular symbol" (Aaker, 2012, p.25). Thus, the bundle of brand associations in the consumer's mind are believed to be "physiological in nature" (Davies, 2003), and any type of association embedded in the consumer's memory is classified as a brand association that contributes to forming the consumer's perceived image of a brand (Aaker, 1991). It is worth noting that it is highly possible that consumers may hold different types of brand associations toward a certain brand (Aaker, 1991). In addition, brand associations are believed to persuade consumers to behave positively or negatively toward a brand, as these brand associations represent what consumers think and feel about a particular brand (Keller, 1993). It is also worth noting that in a competitive marketing environment, it becomes more difficult for organisations to give the brand a clear bundle of brand associations, which they aim to embed within consumers' minds,

because of the excessive communication from all competitors that is also targeting consumers, which may cause confusion and dilute the brand image (Pitta and Katsanis, 1995).

Moreover, it is worth noting that Keller (1993) suggests that the brand image concept is a multidimensional construct, as various associations may play a role in forming the consumer's perceptions of the brand. Moreover, Smith (2004) also suggests that defining brand image in terms of brand associations, makes the concept of brand image a multidimensional construct, as it acknowledges the complexity of the concept. Similarly, Martinez and De Chernatony (2004) emphasise that the development and growth of the brand image literature, supports the idea that the brand image is a multidimensional construct. In this regard, Smith (2004) indicates that defining brand image in terms of diverse and networked brand associations forming perceptions within the consumer's mind toward a brand seems to offer a deeper understanding of how consumers construct images toward brands, which offers a useful conceptualisation of the term.

According to Keller (1993), there are several types of brand associations that contribute to developing a perceived image of a brand by consumers. Therefore, in his framework, there are three main categories of brand associations, which are attributes, benefits and attitudes. With regard to attributes, they are formed by two dimensions, as the first dimension represents features that are related to the product or the service, and the second dimension represents features that are not related to the product features or the service function. The product related dimension is concerned with the consumer's perception in terms of the product or service functionality. In this regard, Keller (1993, p.4) explains that product related attributes "relate to a product's physical composition or a service's requirements." The second dimension of attributes consists of non-product related elements that are concerned with the consumer's perception of information associated with a product or a service. According to (Keller, 1993), these elements are as follow:

- Price

Price represents information that relates to the costs that are associated with the product or service. Keller (1993) acknowledges price as a non-product related element, merely because it can play an important role in the consumer decision making process. It is worth noting that he also explains that the price element may have an indirect link to the performance of a product or the function of a service.

- User Imagery/ Imagery

User imagery refers to associations that reflect the type of people that use a product or service. According to Solomon (1983), consumers may rely on social information attached to products and services, to evaluate a social fit between products and services. In addition, Keller (2013) explains that consumers may base these associations on demographic and psychographic factors. Furthermore, according to Keller (2013), demographic factors could be related to gender, age, race and income, and physiographic factors may relate to the lifestyle of people who use the brand, their careers or social issues. In this regard, Keller (2013, p. 114) explains that “a brand user might be seen as iconoclastic or as more traditional and conservative.”

Usage imagery associations reflect the type of situations, contexts or scenarios that the product or service is suitable to use. In addition, Keller (2013) states that usage imagery may relate to time, location, occasion, and formal or informal usage of the product or service.

- Brand Personality

Aaker (1997, p.347) defines brand personality as “the set of human characteristics associated with a brand”. Therefore, consumers may assign personal characteristics to brands like they assign personal characteristic to themselves (Lievens and Highhouse, 2003). Consumers also may perceive or judge the character of the brand like they perceive or judge other people. In this regard, Aaker (1991) explains “A brand might be characterized as being modern or old-fashioned, lively or dull, conventional or exotic.” Therefore, it is suggested that brand personality characteristics can stimulate consumers feelings and emotions toward the brand (Keller, 1993).

- Feelings and Experiences

According to Keller (2013), the brand can evoke the feelings of consumers, and therefore consumers may emotionally react and respond to the brand. It is worth noting that the feelings consumers hold toward a brand can be favourable or unfavourable (Keller, 2013). Furthermore, Keller (2013) explains that consumers may establish associations with a brand that reflect particular events or past experiences with the brand. These experiences could be personal experiences in nature with the brand, or shared experiences with other people in their social group (e.g. friends, family, etc...) (Keller, 2013).

Dowling (2002) explains that one of the key components that contributes to establishing a perceived image, in terms of what consumers think and feel about the organisation is “perceived value”. In this regard, Keller (1998) explains that consumers may value a brand based on benefits, which are expectations that consumers form reflecting the benefits that the service or product would offer. These benefits could be functional, experiential and/or symbolic (Park et al., 1986; Keller, 1993). It is worth noting that Park et al. (1986) originally introduced the idea that consumers may base their decision making toward brands based on functional, experiential and/or symbolic needs.

According to Park et al. (1986, p.136) functional benefits are defined as “those that motivate the search for products that solve consumption-related problems (e.g., solve a current problem, prevent a potential problem, solve conflict, restructure a frustrating situation).” It is worth noting that Keller (1993, p. 4) explains that “*Functional benefits* are the more intrinsic advantages of product or service consumption and usually correspond to the product-related attributes.” Furthermore, Park et al. (1986, p.136) define experiential benefits as “desires for products that provide sensory pleasure, variety, and/or cognitive stimulation.” In this regard, Keller (1993, p.4) explains that the “*Experiential benefits* relate to what it feels like to use the product or service and also usually correspond to the product-related attributes.” Finally, Park et al. (1986, p.136) state that symbolic needs are defined as “desires for products that fulfil internally generated needs for self-enhancement, role position, group membership, or ego-identification.” In this regard, Keller (1993, p.4) explains that “*Symbolic benefits* are the more extrinsic advantages of product or service consumption.” In addition, it is worth noting that Park et al. (1986, p.136) argue that no matter what the nature of the product is, it can be placed in the market to reflect functional, experiential or symbolic benefits. Similarly, Kahle et al. (1988) explain that any type of product could be shaped to reflect certain values to consumers, and an old product could also be reshaped to adapt to the values that may attract consumers.

Furthermore, Keller (1993) also suggests that the uniqueness, favourability and strength of the brand associations found in the consumer’s memory may play diverse roles in forming the consumer’s image of the brand. Unique brand associations are associations that are exceptional in the sense that no other competing brand shares the same associations in the consumer’s memory (Keller, 1993). The favour toward brand associations relate to how favourably the associations in the consumer’s memory are evaluated (Keller, 1993). In addition, Keller (1993) explains that consumers favour brands which they believe to have benefits that will probably satisfy their needs, and desire for a positive attitude toward the brand to be established. Finally,

the strength of brand associations reflects the strength of the link between associations in the consumer's memory and the brand (Keller, 1993). In addition, the strength of brand associations represents the sum of information processing that the consumer performs with regard to the brand, and the quality of the information processing that takes place in the consumer's mind with regard to the brand (Keller, 1993). It is worth noting that brands that achieve a noticeable level of success in the market place are the ones that reserve a place in the minds of consumers, in addition to maintaining it (Roy and Banerjee, 2008). Therefore, it is highly important for organisations to attempt to achieve a brand image that is strong, favoured and unique within the minds of consumers (Keller, 1993; Kotler and Keller, 2011).

Keller (1998) explains that consumers' attitudes are an important component of brand image. According to Wilkie (1986), attitudes are defined as the consumers' overall evaluation of the brand, as cited in Keller (1993). Furthermore, Keller (1993) explains that consumers' attitudes play a vital part in governing consumers' behaviour toward brand choice, as research has also shown that it can enable consumers to easily perform decision making toward a product or a service (Keller, 1993). Attitudes may also be related to the product-related features of the product or service, and/or the functional and experiential benefits (Keller, 1993). It is worth noting that in certain research contexts, the brand image is researched from the consumer's attitude perspective. For example, Bird et al. (1970) researched brand image from the perspective of consumer's attitude toward the brand. In their study, Bird et al. (1970, p.313) classified attitude as variables "which express positive or favorable views to the brand in question." Their study demonstrated that a favourable attitude toward a brand is higher for the current user of a brand than consumers that used the brand previously. Also, their study showed that a favourable attitude toward a brand is lowest for consumers who never used the brand.

The next section aims to understand the notions that emphasise that the brand image concept incorporates a cognitive and an affective dimension.

3.2.1.2 Brand Image a Cognitive and an Affective Dimension

As mentioned earlier, the brand image concept suggests that the consumers' consumption behaviour is not only based on the functional features of the brand, but its emotional value as well. Therefore, the introduction of the brand image concept centred on the notion that the consumer behaviour toward a brand incorporates a cognitive and affective dimension. In this regard, Palacio et al. (2002, p.488) state that "Consequently, in the earliest considered

meanings of brand image, there was an underlying cognitive dimension as well as an affective one.” Similarly, Low and Lamb Jr (2000) describe the brand image concept to be a combination of “functional” and “emotional” benefits. Therefore, it is suggested that the physical features of the product are as important as its emotional appeal (Dobni and Zinkhan, 1990), because brands may get valued by consumers based on functional or emotional features (Davies, 2003, p.95). In addition, what makes the affective component important is that brands may share similar physical features with competing brands, but the emotional component may differentiate it from its competitors (Dobni and Zinkhan, 1990). Therefore, Davies (2003, p.95) states that “A company with a price advantage can be undercut. A company with a performance advantage can be outflanked. But a company with an emotional difference can potentially demand a premium forever”.

In this regard, Roy and Banerjee (2008, p.142) defined the concept as follows: “The brand image basically describes the way of thinking by a consumer about the brand and the feelings the brand arouses when the consumer thinks about it.” Based on this definition, the information stored in the consumer’s mind may trigger feelings toward the brand. Biel (1992) explains that studies demonstrated that it is possible to trigger affections and associations that consumers hold toward brands, and therefore, brands can make someone feel happy, sad, satisfied, confused or bored. In this regard, this notion seems to acknowledge the role that subjective hedonistic behaviour plays toward purchasing or consuming brands (Hirschman and Holbrook, 1982). Moreover, Solomon (1983) explains that the symbolic environment may play a role in facilitating the consumer’s perception of reality. Similarly, from the discipline of psychology, Rogers (1951) suggests that although people react to goal directed behaviour based on their own perceptions, emotions may play the role of mediating people’s perceptions toward reality.

It is worth noting that Zajonc (1980) demonstrated that the cognitive and the affective components are two separate dimensions that are of equal importance, and also interrelated with each other. Furthermore, Zajonc (1980) argues that people do not necessarily require extensive cognitive information processing in order for an affective reaction to arise, and in certain life scenarios, affection can happen prior to people’s cognitive evaluation toward a stimulus. Therefore, Zajonc’s (1980) argument is based on the view that as people go through experiences that contributes to forming their cognitive perceptions toward a stimulus, they also go through experiences that form their affective perceptions toward a stimulus. In other words, consumers may form cognitive or affective perception based on the experiences they encounter

with brands they purchase or consume. In this regard, Zajonc (1980) highly disagrees with the traditional approach of cognitive psychology, which suggests that people evaluate and process information extensively, in order to develop some sort of feelings toward a stimulus. In other words, Zajonc's (1980) argument is based on the idea that the affective reaction is not necessarily something that takes place after extensive cognitive information processing has occurred.

Recognising the role of the cognitive and affective dimensions of the brand image concept indicates that there is a paradigm shift from the dominant view that cognitive thinking happens prior to the affective component, to a paradigm that recognises that both components should be considered to share equal importance in consumer decision making research (Malhotra, 2005; Keller, 2003). In this regard, Malhotra (2005, p.481) argues that "More research is needed to understand the nature of the cognitive and affective constructs and how they interact to influence overall attitude, intention, and behaviour".

Moreover, some studies investigated the relationship between the affective and cognitive dimension effect on the brand image. As an example, from the service domain, Palacio et al. (2002) investigated the relation between the cognitive and the affective components in the context of studying the image of a Spanish university. Their findings highlighted three interesting insights. The first insight suggests that the cognitive component of the university's image significantly influences the affective component. The second insight demonstrates that the cognitive and the affective component influences the overall image of the university. More interestingly, the third insight is that the affective component influences the overall image of the university more than the cognitive component, which seems to be a finding consistent with Zajonc's (1980) notions, which emphasised the importance of the affective component.

Another study by Li et al. (1994) aimed to extend a cognitive model toward buying intentions by including an affective component (i.e. liking), while also examining the effects of extrinsic cues such as brand perception, country perception and perceived price. Furthermore, Li et al. (1994) also demonstrated that the affective component is as important as the cognitive component, and research should integrate both components in models when studying product evaluation and buying intentions. They also explained that the nature of products that were chosen for their study are not highly cognitive or affective. In this regard, they advised that more research in this area may offer more insights on how the cognitive and affective factors explain product evaluation and buying intentions across different types of products. It is worth

noting that Park et al. (1986) explain that any type of product can be placed into the market to offer consumers a way to solve/prevent a particular problem or offer pleasure and cognitive stimulation. In other words, any type of product or service placed in the market could incorporate a cognitive and/or an affective component.

The next section aims to discuss brand image subjectivity and reality, in order to develop a better understanding of how the concept is defined.

3.2.1.3 Brand Image's Subjectivity and Reality

The idea that consumers react to brands based on the perceptions that they hold toward a brand, classifies the concept of brand image as a subjective phenomenon that belongs to the consumer (Dobni and Zinkhan, 1990; Bullmore, 2006). Furthermore, consumers' perceptions about a brand could be different from the "actual desired image" that organisations aim to achieve in the minds of their consumers (Bernstein, 1984; Aaker, 2012). Therefore, what consumers perceive as reality with regard to a brand could be different from the reality that an organisation is trying to deliver to its consumers (Bernstein, 1984; Aaker, 2012). In this regard, in consumer behaviour research, the view of consumers reacting to brands subjectively on the basis of perception is philosophically present in Dobni and Zinkhan's (1990) own words as they stated that "Where brand image is concerned, the perception of reality is more important than the reality itself." This view regarding brand image suggests that consumers will react toward products and services based on their own perceptions of the brand. Moreover, it is worth noting that Aaker (1991) also acknowledges that consumers' perceptions toward a brand may be subjective in nature; however, he explains that some consumers could also form perceptions that may reflect "objective reality".

Interestingly, the notion of human behaviour happening as a result of perceptual basis to reality is also visible in research areas other than the marketing discipline. For example, Boulding (1956), who is a behavioural scientist, was among the first to introduce the "image" concept based on the philosophical assumption that human behaviour is not a result of a direct reaction to some sort of a stimulus. In this regard, Boulding (1956) explains that human behaviour is an outcome of learned previous experiences resulting from internal and external stimuli, which then result in the formulations of conscious images in the human mind. Therefore, Boulding (1956) refers to the image concept, as the "subjective knowledge" that people form, which guides their behaviour. In other words, Boulding's (1956) philosophical assumption also

demonstrates that reality is a subjective phenomenon that is formed based on people's perceptions, and people do not necessarily react to a behaviour based on a stimulus, they react to a behaviour based on their perception of a stimulus, which is formulated through past experiences. A similar assumption is made by Rogers (1951) who is a physiologist, which suggests that an individual is an organism surrounded by a "perceptual field", that is developed based on the individual's learned and past-experiences, and therefore people react to reality based on perceptions that they hold in their perceptual field. Furthermore, Rogers (1951) suggests that the human perceptual field will evolve and may be modified based on the experiences that people encounter.

Therefore, the concept of image is not something to be created by organisations, rather it is the consumers' perceptions of the reality that organisations aim to fabricate and deliver to their audiences, and in logic the perceived reality by consumers may rarely match the reality organisations desire to deliver (Bernstein, 1984). In conclusion, the concept of image is based on how we perceive and react to the multiple realities around us and this is based on the previous experiences that have resulted from previous encounters with various sorts of stimuli.

3.2.1.4 Disagreements on the Definitions of Brand Image

Although brand image definitions may appear not to be complex to interpret, an established brand image definition struggles to reach a common ground of agreement among researchers, due to the subjective characteristics of the term (Dobni and Zinkhan, 1990; Stern et al., 2001; Palacio et al., 2002; Stern et al., 2002). The cause of such disagreement is believed to have resulted from researchers defining brand image in different research contexts or situations across the various research areas within the marketing discipline (Dobni and Zinkhan, 1990; Cian, 2011). In addition, in some research contexts, there is no differentiation between the product and the brand. Therefore, Kim (1990, p.65) explains that "The brand is often confused with the product." However, the essential differences between the two allow us to get at the heart of a brand's true meaning." In this regard, Kim (1990, p.65) argues "A product is a physical thing that is made in the factory, or a service that is made available. It exists in the external, temporal world. A brand on the other hand, has no tangible, physical, or functional properties. It is a mental translation, an abstraction of the object or service. It exists solely as a 'a mental construct,' ...in the minds of those who behold it. Nevertheless, the brand is just as real as the product, for it is as real in its consequences."

Stern et al. (2001, p.204) explain that the difficulty in establishing an agreed marketing definition of brand image depends on answering the following three questions:

1. “Ontology: Is an image an object in the external world such as a brand, a store, or a company, or is it a perception in the consumer’s mind?”
2. “Nature: Is an image a state (static entity in world or mind) or a process (transaction between sender and receiver)?”
3. “Number: Is an image a gestalt multidimensional construct or a particularistic unidimensional one?”

Furthermore, Stern et al. (2002) explain that the cause of disagreement on brand image may also arise because the term is studied and researched differently in research areas such as marketing, consumer behaviour, and advertising. For example, marketing research generally approaches the topic of brand image from the perspective of referring to entities such as “stores, brands, organisations”, and the image that the consumer construct is primarily a result of the marketing communication that entities deliver to consumers (Bullmore, 1984, as cited in Stern et al., 2002, p.16). In this regard, Stern et al. (2002, p.16) criticise this approach by stating that “Neither the message nor the consumer’s construction of a mental image is of main interest.” Furthermore, Stern et al. (2002) explain that in consumer behaviour research, the brand image is researched usually based on “the perceiver’s construction of mental image, with psychology being the source of the theory” (Bettman, 1979; Lynch and Srull, 1982; Neisser, 1976, as cited in Stern et al., 2002, p.16).

Furthermore, some researchers point out that it is difficult to find a concrete definition that captures the concept of brand image. For example, Cian (2011, p.166) argues that “To search for a clear and univocal definition of the image is like trying to climb the Tower of Babel, mainly because ‘image’ and ‘brand’ have been used in several thematic areas and have consequently assumed a notable ambiguity and plurivocity.” Similarly, Stern et al. (2001, p.202) argue, that “Despite research agreement on the importance of image, the term is used so inconsistently that no two researchers are necessarily talking about the same phenomenon.” Moreover, although finding a concrete conceptualisation of the brand image concept is a highly debatable topic, Stern et al.’s (2001) pragmatic explanation is that the variety of existing definitions by marketers and researches demonstrate that the brand image concept is highly important and valued within the marketing discipline. Furthermore, Stern et al. (2001) explain

that considering the term's role, history, continuous evolution and its meaning could sometime result in capturing what the concept may stand for. Furthermore and similarly, while the concept may appear to be defined from different perspectives, Dobni and Zinkhan (1990) explain that although some of the brand image definitions are inconstant, some definitions share similarities implying there is an existing pattern. Furthermore, Dobni and Zinkhan (1990) explain that while there are existing disagreements, the concept of brand image keeps developing, and there are many useful views contributing to the concept's evolution.

It is also common to see the term image in the literature appearing in different forms such as brand image, product image and store image (Stern et al., 2001; Cian, 2011). Based on Stern et al. (2001), each concept may have slight differences, but they are related in terms of contributing to forming an overall image within the consumer's mind. For example, Hsieh et al. (2004) conducted research investigating the related images constructed from the perspective on frequent usage of products, in addition to including the corporate and the country's image. In their research context, their findings suggest that the product, corporate and country's image contribute to forming the consumer's overall brand image of the organisation, including its products and service offerings.

The next section discusses the concept of brand reputation.

3.3 Brand Reputation

Bromley (2001, p.317) defines corporate brand reputation as a “distribution of opinions (the overt expressions of a collective image) about a person or other entity, in a stakeholder or interest group.” Furthermore, Fombrun (1996, p.72) corporate reputation “A perceptual representation of a company's past actions and future prospects that describes the firm's overall appeal to all of its key constituents when compared with other leading rivals”. In addition, it suggested that a customers' reputation of a firm or brand forms over time (Gray and Balmer, 1998; Flatt and Kowalczyk, 2000). For example, Flatt and Kowalczyk (2000) explain that the reputation of a firm is a result of the impressions that form over time across people (e.g. customers) about the firm (Flatt and Kowalczyk, 2000).

It is essential to understand the differences between the concept of the reputation and image, as the terms can be used interchangeably by academics and practitioners (Dolphin, 2004). Furthermore, Chun (2005) propose that the firm's identity, image and reputation are concepts

that are associated, however, each concept is different. For example, Gray and Balmer (1998, p.697) describe the difference between a firm's image and a firm's reputation by stating that, "corporate image, as stated earlier, is the immediate mental picture that audiences have of an organization. Corporate reputation, on the other hand, indicates a value judgement about the company's attributes. Corporate reputations, typically, evolve over time as a result of consistent performance, reinforced by effective communication, whereas corporate images can be fashioned more quickly through well-conceived communication programmes (Gray and Balmer, 1998, p.697)." Chun (2005) described Gray and Balmer's (1998) explanation regarding the difference between image and reputation as "useful" because people's reputation of a firm represents interactions and deeper experiences with the firm over time. On the other hand, a customer's image of a firm can be based on few experiences with the firm and the exposure to the firm's communication (e.g. advertisements), and therefore the image a customer holds toward a firm can fluctuate or change quicker than reputation (Chun, 2005). Furthermore, Chun (2005) explains that when the firm's identity and desired identity is not in line with the firm's image, the firm's reputation is distorted. Also, Chun (2005) explain that damages to the firm's image and reputation can happen during a crisis. However, it is worth noting that Delgado-Ballester and Luis Munuera-Alemán (2005, p.193) explain that in some cases brands can "enjoy a substantial reputation despite of the unexpected product-harm crises."

Furthermore, Feldman et al. (2014, p.56) list the main benefits of brands that enjoy a strong corporate reputation:

- Improving the consumer's perception of the quality of products or services (which allows to charge premium prices): sale increases and positive word-of-mouth.
- Improving the capacity of hiring and retaining qualified personnel in corporations.
- Raising the morale of employees and therefore productivity.
- Protecting the value of the enterprise by diminishing the impact of scrutinizing, crisis and/or competitive attacks.
- Preceding and helping international expansion, not only in terms of market penetration but also in preparing the scenery in key communities and facilitating alliances.
- Attracting a greater number of investors (good credibility): rise of market value (EBITDA) and diminishing risks for the organization.
- Differencing the company from its competitors and establishing better market positioning.

- Allowing access to cheaper capital.

The customer's reputation of the brand positively increases customer's loyalty toward the brand (Selnes, 1993). For example, based on data collected from different companies, Selnes (1993) concluded that the relationship of the customer's reputation of the brand to the customer's loyalty is positively strong and consistent. Furthermore, Taylor and Rao (2015) concluded that the customer's positive reputation of the brand decreases the customer's perceived risk to a low level. In addition, Taylor and Rao (2015) found that customers are more confident when their reputation of the brand is positive. Furthermore, it is easier for a brand that operates offline to establish a presence online when it is trusted by consumers in the marketplace, as consumers who trust a brand name are more likely to try the brand's online offerings (Delgado-Ballester and Luis Munuera-Alemán, 2005).

Morgan-Thomas and Veloutsou (2013) provided a theoretical framework to investigate online brand experience and brand relationships. Morgan-Thomas and Veloutsou (2013) integrated brand reputation, brand trust, online branded experience and online brand relationship, while utilising theoretical knowledge from the TAM. Morgan-Thomas and Veloutsou (2013) explained that integrating variables from a consumer behaviour perspective into the TAM help to further our understanding of consumers' use of information systems. Furthermore, Morgan-Thomas and Veloutsou (2013) investigated the online brand experience and brand relationships among online search engine users. Interestingly they found that consumers' understanding of the reputation of a brand indirectly plays a role in establishing the online brand experience; in addition, an interesting finding in Morgan-Thomas and Veloutsou's (2013) study is that consumers' understanding of the reputation of the brand increases the consumers' trust in a brand.

Furthermore, Veloutsou and Moutinho (2009) theorise that the firm's long-term reputation of the brand is formed and can be measured by two dimensions. The first dimension is brand reputation and it represents the consumers' perceived reputation of the brand. According to Veloutsou and Moutinho (2009), the brand reputation dimension is formed by the firm's reputation, trustworthiness and honesty. Delgado-Ballester and Luis Munuera-Alemán (2005, p.193) explain that "the branding literature suggests that trust is the essence of the value that a strong brand provides for consumers, paying attention to how much consumers trust in a brand might be considered as a tool to manage brand equity." The second dimension is the sustainable

image which represents the consumers' perception of the degree that a brand can sustain its image in the long run, and its past and present values.

3.4 The Interrelation of Offline and Online Brand Presence

Several studies investigated the relationship of the retailer's offline brand presence and its relation to the retailer's brand's online presence, to provide deeper theoretical insights into the multi-channel retailing research domain (Marianne et al., 2008; Kwon and Lennon, 2009a; Kwon and Lennon, 2009b).

Delgado-Ballester and Luis Munuera-Alemán (2005) found that consumers' overall satisfaction with the brand influences the brand reliability and brand intention positively. Although the following relationship was not hypothesised in Delgado-Ballester and Luis Munuera-Alemán (2005) study, they found that consumers' overall satisfaction directly increases brand loyalty. Furthermore, brand loyalty contributes to increasing the brand's equity. Furthermore, Delgado-Ballester and Luis Munuera-Alemán (2005) concluded that when consumers develop trust in the brand which is formed by past experiences and interaction with the brand, organisations may continue to benefit from the significant positive reputation despite unexpected and unintentional situations that result for the brand causing "product-harm crises". Furthermore, Delgado-Ballester and Luis Munuera-Alemán (2005) also discussed how brands that run market operations that are related to the brand's offline environment and have a well-established brand reputation benefit from the "halo effect" when providing brand's offerings in the online market environment. Thus, when consumers have trust in the brand, they are willing to try new brand offerings in the brand's online environment (Delgado-Ballester and Luis Munuera-Alemán, 2005). In addition, Kwon and Lennon (2009b) conducted a study in the context of multi-channel retailing; interestingly, they found that consumers use their perceptions of the brand's offline physical store as a reference when brands establish an online presence (e.g. brand's internet website).

Furthermore, in another study, Kwon and Lennon (2009a) found that the beliefs and attitudes consumers hold in the offline and online environment are interrelated, which also suggests the formation of a the "halo effect" mentioned by Delgado-Ballester and Luis Munuera-Alemán (2005). Also, Marianne et al. (2008) conducted a study in a multi-retail context on involving a website magazine and provided support for the idea that what consumers think about the brand offline transfers to the brand's online environment.

The next section aims to discuss brand loyalty since it influences consumers to repurchase and retain consuming brands.

3.5 Brand Loyalty

Jacoby and Chestnut (1978, p.80) defined brand loyalty as “The biased behavioural response, expressed over time, by some decision making unit, with respect to on store out of a set of stores, which is a function of psychological (decision making and evaluative) processes resulting from commitment”. Furthermore, one of the most influential definitions of customer loyalty is by Oliver (1999). Oliver (1999, p.34) defines customer loyalty as “a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, *despite* situational influences and marketing efforts that have the potential to cause switching behaviour”. It is worth noting that Oliver (1999) also explains that in general, definitions of loyalty usually circulate around the notions that brand loyalty is the act of repeated repurchase behaviour (e.g. the frequent measurement of the brand repurchase), or how often the consumer repurchased the brand. Similarly, Keller (2013) mention, that a customer’s loyalty toward the brand can be reflected in how often consumers perform repeated purchases from the brand. Furthermore, customers who are loyal to a brand can develop relationships to the point at which they become entirely synced with the brand (Keller, 2013).

Another view of how brand loyalty is defined in the literature comes from Uncles et al. (2003). It is worth noting that Uncles et al. (2003, p.295) prefer to use the term customer loyalty instead of brand loyalty, “to emphasize that loyalty is a feature of people, rather than something inherent in brands”. Furthermore, Uncles et al. (2003) concluded that there is no generally accepted definition of customer loyalty. However, they explained that there are three common views of how loyalty is conceptualised in the literature as noted in Uncles et al. (2003, p.295):

1. Loyalty as primarily an attitude that sometimes leads to a relationship with the brand.
2. Loyalty mainly expressed in terms of revealed behavior (i.e. the pattern of past purchases).
3. Buying moderated by the individual characteristics, circumstances, and/or the purchase situation.

Aaker (1991) categorises brand loyalty as one of the basics that forms brand equity, along with brand awareness, perceived quality, brand associations and other proprietary brand assets. Furthermore, loyalty plays a very important part in the success of organisations. Therefore, according to Aaker (1991), for organisations, brand loyalty is a strategic value, because of the following assumptions:

- When consumers are loyal to a particular brand, it reduces the marketing costs of the brand. Therefore, it becomes much easier for organisations to retain current consumers that repurchase the brand, than investing to convince new customers to use the brand.
- When consumers are very loyal to particular brands, it influences retailers to display the products or services in key locations, because the consumers' loyalty toward brands influences their decision making. Therefore, loyalty is suggested to benefit the organisation behind the brand, and the retailers are likely to achieve more sales by displaying products that consumers favour in key locations.
- Consumers who are loyal to the brand may influence other potential customers to purchase the brand. Furthermore, loyal consumers are suggested to socially create brand awareness in the market. In addition, potential consumers may purchase the brands based on the assurance that they receive from loyal consumers.
- Brand loyalty gives an organisation "time to respond to competitive moves" (Aaker, 1991, p.49), in scenarios where a competing brand releases a superior product or a service. In this regard, consumers are more likely to wait for the brand to release offerings that will match its competitors.

Furthermore, Oliver (1997) developed a framework which demonstrates that consumers may become loyal to a brand based on a sequential process that consists of four stages. In this regard, the first stage is cognitive loyalty, the second stage is affective loyalty, the third stage is conative loyalty, and the fourth stage is action loyalty. It is worth noting that Oliver (1997) explains that although the consumers' loyalty process may seem to happen in a sequential order, consumers may become loyal to a brand at any of the stages.

The cognitive loyalty stage suggests that consumers first become loyal to a brand in terms of the beliefs that they hold toward it only. At this stage, based on the cognitive beliefs that consumers hold toward a brand, they are able to differentiate the brand from its competitors. Moreover, at this stage, the cognitive information that consumers hold toward the brand is

suggested to be not shallow in nature, since these beliefs are usually established based on recent experiences with the brand (Oliver, 1997). In this regard, Aaker (1991) explains that consumers may not be able to become loyal to a particular brand without prior purchase and going through usage experiences with the brand. Furthermore, Oliver (1997) states that if the consumer becomes satisfied at this stage, they will start to develop loyal affections toward the brand.

The second stage is affective loyalty. At this stage, consumers become affectively attached to the brand and also may develop an attitude toward it based on the satisfaction that is gained from continuous experiences with the brand and its usage (Oliver, 1997). In this regard, it is suggested that brand loyalty shares a tight relationship with consumers' usage experiences that are related to the brand (Aaker, 1991). Feelings that consumers hold toward the brand play an important role toward the brand, because "It can be much harder to compete against a general feeling of liking rather than a specific feature" (Aaker, 1991, p.45). Furthermore, it is worth noting that Oliver (1997, p.433) explains that the affective loyalty "is encoded in the consumer's mind as cognition *and* affect."

The third stage is the conative loyalty, which is also known as behavioural intentions (Oliver, 1997). At this stage the consumer experiences motivations reflecting the intentions to repurchase or continue using the brand (Oliver, 1997). Therefore, Oliver (1997, p.434) explains that at this stage, consumers experience "a deeply held commitment to buy". Finally, the fourth stage is the action loyalty stage, which could also be referred to as behavioural response. In this regard, consumers feel highly committed to repurchase and retain the brand, and also have the desire to overcome any difficulties that may prevent the repurchase (Oliver, 1997). In conclusion, with regard to all the phases, Oliver (1997, p.434) explains that, "Cognitive loyalty focuses on the brand's performance aspects, affective loyalty is directed toward the brand's likeableness, conative loyalty is expressed in the consumer's socially committed intention to rebuy the brand, and action loyalty is commitment to the action of rebuying."

3.5.1 Brand Loyalty and Consumer Retention

Continuous usage research within the IS research domain highlights the notion that it is important for organisations to understand what motivates consumers to continue using the services offered via technological innovations (Bhattacharjee, 2001b). Furthermore, the importance of understanding why consumers continue to use services that are implemented and

delivered by organisations is related to customer retention. This notion is highlighted by Bhattacharjee (2001b), as continuous intention to use a technology in the ECM-IT relates to the notion of repurchasing and/or repeat consumption of a service which increases the likelihood of organisations retaining their customers. Thus, understanding the continuous usage of services is believed to contribute to the organisation's success and sustainability in the marketplace, and the ability to survive unfortunate market situations (Reichheld and Schefter, 2000; Bhattacharjee, 2001b). It is also believed that it costs much less for organisations to retain current customers that are loyal to the brand than investing resources to attract and acquire new customers (Aaker, 1991; Parthasarathy and Bhattacharjee, 1998).

For retailers who carry multi-channel market operations, sustaining customer loyalty contributes to an increase in profits, and enables organisations to survive competitive market situations which are caused by the e-commerce environment (Reichheld and Schefter, 2000). It is also important for organisations to understand that a slight increase in customer retention results in high profits as time passes. In Reichheld and Schefter's (2000, p.106) own words, they argue that, "Only in later years, when the cost of serving loyal customers falls and the volume of their purchases rises, do relationships generate big returns. The bottom line: increasing customer retention rates by 5% increases profits by 25% to 95%." Furthermore, loyal customers can contribute to increasing the firm's value in the marketplace in addition to increasing the organisation's customer base by influencing new customers to be more interested towards the brand (Gremler and Brown, 1999, Reichheld and Schefter, 2000). Furthermore, one key outcome resulting from retaining loyal customers is that current customers attract new customers to be potentially associated with the brand through word-of-mouth (WOM) communications (Gremler and Brown, 1999). Thus, loyal consumers may indirectly market the brand on behalf of the organisation to potentially influence new customers to build an interest toward the brand (Gremler and Brown, 1999, Reichheld and Schefter, 2000).

Klaus and Nguyen (2013) argue that many researchers focus on the concept of e-loyalty when conducting research within the e-commerce research domain, while it is also important to understand how an online channel interrelates to firms who carry market operations through multiple channels. A similar notion is suggested by Grewal and Levy (2009, p.523) A discussion on the emerging issues related to retailing and e-commerce highlights the understanding that "The coordination of online and offline channels", and "The interplay between customers' online and offline activities" are among future research topics of interest.

Furthermore, Verma et al. (2016) developed a theoretical framework based on conducting a meta-analysis based on previous literature. Verma et al. (2016) suggest that relationship marketing within online retailing is capable of influencing the expectation of continuity, word of mouth, and customer loyalty.

Continual changes in consumer behaviour raise noteworthy challenges to bricks and mortar retailers (e.g. traditional retailers who have a physical store presence) triggered by the ongoing innovation and advancement of e-commerce technologies (Verhoef et al., 2015; Blázquez, 2014). Such changes in consumers behaviour due to technological progress of e-commerce is causing retailers to adapt their business operation strategies to cope with changes in consumer behaviour (Verhoef et al., 2015; Klaus and Nguyen, 2013). However, it can be difficult for a retailer to cope with changes caused technological advancements of e-commerce as Mclean et al. (2018, p.325) mention that “First was the introduction of e-commerce websites that challenged the existence of many retailers with numerous well-known brands exiting the market.” This is related to the notion that consumers became challenging to satisfy as they became more demanding due to the shift in consumers behaviour that is caused by their interaction with the competitive marketing environment of the Internet (Schiffrin, 1995; Wu and Wu, 2005). Therefore, it is important for retailers to synchronise their multi-channel (e.g. physical store, website, and branded mobile apps) business operations strategies (Martin et al., 2015; Klaus and Nguyen, 2013; Mclean et al., 2018).

3.6 Conclusion

From a general perspective, brand image is a subjective phenomenon that represents the set of impressions that consumers hold toward a brand reflected by ideas, attitudes and feelings. Furthermore, the development of the brand image concept demonstrates that these ideas, feelings and attitudes that consumers hold toward the brand are a set of diverse brand associations in the consumers’ memory. Furthermore, the brand image concept is conceptualised as a subjective and diverse in nature as the brand image concept reflects subjective reality.

The brand reputation literature suggests that the brand image concept and brand reputation are interrelated, where the reputation of the brand is a reflection of the collective image of the brand over time. Furthermore, it is very beneficial to the success of an organisation to have a

positive reputation in the marketplace. For example, a positive brand reputation can result in increasing the brand's sales, help the brand to retain customers and can lead to an increase in positive word of mouth. In addition, feelings or perceptions of a consumer which are generated from the brand's offline environment could transfer to the brand's online environment.

This chapter has presented notions related to brand loyalty. Organisations benefit from retaining loyal consumers, as they motivate consumers to repurchase and re-consume the brand, spread positive word of mouth to other consumers or new potential customers. Furthermore, the retention of loyal customers helps a brand to survive unfortunate market situations.

Chapter 4

Information Communication Technologies, M-Commerce, and Branded Mobile Applications

4.0 Introduction

As multiple innovations and technologies advance, organisations are able to utilise and offer multiple channels to deliver services to consumers for purchasing products and the consumption of services. In this regard, consumers are able to purchase products and consume services via various channels. For example, consumers have the option to place an order by going physically to a store or through a phone call. Furthermore, they can interact with brands to consume services and/or purchase products via a computer, tablet or a smartphone. The advancement of information and communication technologies plays a big role in the existence of multiple marketing channels and can influence consumers' behaviour to alter or evolve toward the consumption of products and services. In addition, the advancement of technologies enables services to play a critical role in the multiple channels that are offered to consumers through the e-commerce domain.

The main aim of this chapter is to discuss consumer behaviour toward Information Communication Technologies (ICTs), the mobile channel and m-commerce, and mobile branded apps. This chapter begins by building a general understanding of consumer behaviour toward ICTs.

4.1 The Importance of Understanding the Consumer Behaviour toward Information and Communication Technologies (ICTs)

The rapid advancement of technology is substantially contributing to transforming how organisations and consumers interact with each other (Parasuraman, 2000; Parasuraman and Zinkhan, 2002; Cao and Mokhtarian, 2005; Meuter et al., 2005). This transformation is a reaction to the impact that persuasive information and communication technologies have on our daily lives (Parasuraman and Zinkhan, 2002). Interestingly, consumers are adopting new innovations that are made easy to use which offer many benefits to them; however, from a technological perspective, the consumer may not realise that they are interacting with

technologies that are becoming highly sophisticated in nature (Parasuraman, 2000). New technological innovations in general are meant to improve the quality of people's lives, and are not primarily for commercial purposes, but when possible, marketers manage to utilise new technological innovations in order to achieve organisational goals in a highly competitive marketing environment (Deighton and Kornfeld, 2009).

Generally, innovations are able to influence human behaviour and shape various aspects of the human lifestyle. For example, innovations are enhancing the way we collect and process information (Parasuraman and Zinkhan, 2002), and changing the way we work, shop, travel and entertain (Cao and Mokhtarian, 2005). Therefore, new digital innovations empower people to enhance their processing information abilities, and when the technologies develop even further to become ubiquitous, it becomes possible to process information and perform interactive communications on the go (Parasuraman and Zinkhan, 2002; Deighton and Kornfeld, 2009). In addition, technological innovations are not just enabling consumers to expand upon their knowledge to become more aware, but also enabling consumers to become more demanding toward organisations in a competitive marketing environment, where it's becoming difficult for organisations to keep them satisfied (Wu and Wu, 2005). In other words, organisations must consider offering a range of innovations that will deliver the organisation's services to be able to satisfy a range of diverse consumers.

Understanding consumer behaviour toward using information and communication technologies is important because technological innovations are able to cause the consumer behaviour to alter and evolve. In this regard, several scholars highlight the importance of capturing evolving consumer behaviour. For example, Arnould et al. (2002) argue that there is a need for new theories to be developed since human behaviour is in constant evolution, as cited in Parasuraman and Zinkhan (2002). Similarly, Deighton and Kornfeld (2009) also argue that new marketing theories with regard to information and communication technologies need to be developed. This suggests that technological advancements are able to accelerate and shift human behaviour patterns, which sociologists already find problematic to track at a slower pace (Parasuraman and Zinkhan, 2002). Therefore, it is important for organisations to understand the reasons that motivate consumers to accept, use, retain and adopt new technological innovations, regardless of whether they are providing services or products, especially when services play a central role in information and communication technology environments (Bitner et al., 2000). Researchers also need to aim to capture the consumer's perception toward adopting new technological innovations and not only rely on information systems and

engineering theories (Hilton et al., 2013). For example, researchers have taken steps to integrate knowledge from the information systems and consumer behaviour research discipline (Bhattacharjee, 2001a; Bhattacharjee, 2001b; Morgan-Thomas and Veloutsou, 2013).

4.2 Online Shopping

Consumers may prefer to shop in online stores because of its convenience in terms of the ability to make the purchase at any time from any location, to compare prices from various online stores, and save time by not traveling to the physical store to make a purchase (Rowley, 2006; Moshrefjavadi et al., 2012). Similarly, Kolesar and Galbraith (2000) argue that the real benefits of shopping online do not necessarily reside in the tangible products that consumers receive at the end of the transaction, because consumers can obtain products through a traditional shopping channel instead. Therefore, Kolesar and Galbraith (2000) explain that benefits such as convenience, saved time and the online retailing channel's ability to reduce the risk of consumers becoming dissatisfied, are important in motivating consumers to shop online. It is worth noting that it is also argued that to a large extent, consumer purchase orientations in the offline and online shopping environment can be very similar, which also highlights that the consumer behaviour of the offline shopping environment extends to the online shopping environment (Jayawardhena et al., 2007). Therefore, Jayawardhena et al. (2007, p.552) explain that "both academics and businesses should treat the internet as an additional channel of distribution and an extension to existing traditional activities brought about by advances in technology." In addition, consumers may also rely on their past experiences with a product or a brand when shopping online (Kolesar and Galbraith, 2000). Similarly, Jayawardhena et al. (2007) found that prior purchasing motivates consumers' purchase intention to shop online.

It is worth noting that when consumers interact with an e-service such as online shopping, they completely rely on sight and sound (Rowley, 2006). On the other hand, when consumers shop through a traditional channel such as physical stores they are able to experience tangible features of products such as seeing, touching, tasting smelling and hearing (Rowley, 2006; Moshrefjavadi et al., 2012).

4.3 The Mobile Channel and M-Commerce

Mobile commerce was predicted to be a rapidly rising service channel that is able to establish interactive communication between consumers and brands ubiquitously long ago (Newell and Lemon, 2001). In addition, some suggest that mobile phones will outperform any other

available channel. For example, Fogg (2007, p.5) states that “I believe mobile phones will soon become the most important platform for changing behavior. Within 15 years, no other medium--TV, word of mouth, the web---will be more effective at changing what we humans believe and what we do.”

Ubiquitous technologies such as the smartphone have advanced from being a technology that serves people to allow basic communications with each other, to devices that are believed, today, to serve as an extension of the owner’s personality (Chou et al., 2013). Veijalainen et al. (2003) explain that m-commerce is a form of electronic commerce (e.g. e-commerce, and it enables the initiation of transactions between organisations and consumers anytime anywhere. Furthermore, Clarke (2008, p.41) describes mobile commerce as follows: “Mobile commerce, or m-commerce, is the ability to purchase goods anywhere through a wireless Internet-enabled device. Mobile Commerce refers to any transaction with monetary value that is conducted via a mobile network. It will allow users to purchase products over the Internet without the use of a PC.” Furthermore, the advances in mobile technologies have shifted communications that happen through mobile devices from being intrusive to being non-intrusive giving consumers the control to decide when to communicate with brands. This notion of communication and m-commerce is explained by Winer (2009, p. 110) as follows: “the concept underlying m-commerce is that customers can receive messages when and where they want them.” It is very important that mobile marketing adapts its services to be available in the form of pull-based marketing communications, where consumers can have the option to seek the content marketers’ offers non-intrusively through mobile applications whenever they want (Ajax and Irfan, 2012).

M-commerce is believed to significantly increase the overall value of e-commerce, as it is able to provide personalised services and enable consumers to consume services and make purchases, without being limited to time and location (Durlacher, 2000; Clarke, 2008). The technological advancement in mobile devices and the introduction of the smartphone played a major role in m-commerce. Shankar et al. (2016) explain that the smartphone enables consumers to accomplish multiple daily tasks ubiquitously. Furthermore, it is expected that by the year 2020, 80% of the world’s population will own a smartphone (Ericsson, 2015). As smartphones are becoming widely adopted, Criteo (2014) has reported that consumers’ use of m-commerce has exceeded expectations. In addition, WARC (2017) reported that consumers are becoming more and more confident about initiating transactions with organisations via smartphones. More interestingly, Criteo (2014) reported that the value of transactions

generated through m-commerce is getting closer to the value of transactions generated through desktop personal computers. Moreover, transactions generated via smartphones exceed transactions that are generated via other mobile devices such as tablets (Criteo, 2014).

The capability to offer services to consumers that are tailored to their needs ubiquitously will significantly contribute to increasing the overall value of e-commerce (Durlacher, 2000). For example, Durlacher (2000, p. 261) explains that “Mobile commerce is per se not included in the traditional e-commerce market models. M-commerce will be able to increase the overall market for e-commerce, because of its unique value proposition of providing easily personalized, local goods and services anytime and anywhere.”

Clarke (2008) explains that for organisations to implement m-commerce successfully, they must consider overcoming some of the limitations associated with m-commerce. According to Clarke (2008), these limitations consist of the following:

- The operation should be easy to use for the consumer.
- Organisations must ensure that services, transaction and billing services within the m-commerce domain are secure.
- Organisations must consider how billing consumers through mobile devices will perform.
- Organisations should acknowledge the variation in consumer behaviour patterns.
- Organisations should consider tailoring m-commerce customer experiences creatively for the limited screen size of mobile devices.

Mobile commerce has advanced to be capable of offering a variety of services such as commerce, banking services, parking services and entertainment (López-Nicolás et al., 2008). López-Nicolás et al. (2008.p1) define advanced mobile services as “data services that have the look and feel of Internet pages and are accessible via mobile or handheld devices, and operating at 2.5 and 3G+ mobile telecommunication networks.” This definition attempts to describe advanced mobile services to offer a similar user experience to services offered through an Internet website. Although, modern mobile services may resemble the look and feel of an organisation’s website, there are factors that differentiate using a service on a mobile device from using a service on a personal computer. For example, Wang and Wang (2010) explain

that the two main factors that differentiate m-commerce from e-commerce are accessibility and mobility; accessibility is where consumers are able to use the service on demand at any time, and mobility is where consumers are able to use the service anywhere.

Ajax and Irfan (2012) argue that the real value of a mobile service is most likely evaluated by consumers based on its convenience, efficiency, flexibility, and relevance, more than the traditional approach that may be centred on marketing practices such as coupons and useful information offerings. In addition, service delivery in mobile marketing highlights the importance of the concept that the services delivered to consumers must be pull-based (e.g. not intrusive), productive and personalised (Ajax and Irfan, 2012). In Ajax and Irfan's (2012, p.438) own words, "The content provided, as well as the format (audio, video, graphics, text, etc.) and timing of delivery, must be personalized, contextual, and helpful without being intrusive".

4.3.1 Branded Mobile Apps

The term mobile application is also referred to as "mobile app" and relates to downloadable software for a smartphone or other mobile device (Purcell et al., 2010; Garg and Telang, 2013). Smartphone apps have been defined as "end-user software applications that are designed for a cell phone operating system and which extend the phone's capabilities by enabling users to perform particular tasks" (Purcell et al., 2010, p. 2). Furthermore, Purcell et al. (2010) mention that although the term "app" became very popular and is associated with software that is downloaded to a smartphone's operating system, there is no existing explanation that identifies what can be called an app. However, they explain that generally, it is downloaded software that gives the end-user (e.g. consumer) the capability to perform certain tasks on smartphones. From a marketing discipline point of view, Bellman et al. (2011, p.191) explain that there is a high interest among marketers to utilise mobile apps to provide products and services and they define branded apps "as software downloadable to a mobile device which prominently displays a brand identity, often via the name of the app and the appearance of a brand logo or icon, throughout the user experience."

Mobile apps are available to download to smartphones through a dedicated app store; for example, users can download apps to smartphones through the Apple App Store (i.e. for iPhone users), and the Google Play Store (i.e. for users who use Android devices) (Garg and Telang, 2013). Bellman et al. (2011) explain that branded mobile apps carry the brand's identity as apps that are downloaded by consumers display the brand's logo on the screen of smartphones

and other mobile devices. Purcell et al. (2010) explain that smartphone apps are different to websites, because app developers can develop apps that utilise the advanced technological hardware and capabilities of smartphones to enable consumers to perform specific tasks.

Mobile apps contribute to the rapid adoption rate of the smartphone (Garg and Telang, 2013). The technological advancement of smartphones and the introduction of mobile apps have transformed how consumers communicate with the brand (Chiem et al., 2010). For example, Chiem et al. (2010) explain that the mobile marketing channel witnessed shifts from being mainly a channel that aimed to achieve brand awareness to a channel that enables consumers and brands to interact with each other. Furthermore, Consumers are in control when communicating with brands through mobile apps, as consumers decide when and where to interact with brands through mobile apps (Ajax and Irfan, 2012; Bellman et al., 2011). Therefore, it is essential for brands to offer pull-based services when communicating with consumers through branded apps (Ajax and Irfan, 2012; Bellman et al., 2011). Furthermore, Bellman et al. (2011) explain that mobile apps have changed how consumers communicate with brands in two ways. Firstly, mobile apps are promoting pull-based forms of communication with brands, which gives consumers control over when to communicate with brands. In other words, brands are not initiating intrusive forms of communication that may result in consumers getting annoyed. Secondly, consumers are the ones to select which apps they want to download on their smartphones, in addition to getting the opportunity to customise the app and to be in control of how much information they are willing to reveal.

It is worth noting that according to Bellman et al. (2011), consumers are more likely to be interested in downloading smartphone apps that they are familiar with. Consumers can shop for various products and consume services ubiquitously when interacting with brands through branded mobile apps (Kim et al., 2013; Shankar et al., 2016). Thus, branded mobile apps can enable consumers to perform a variety of tasks on the go, to consume services from brands such as buying the brand's products, checking for deals and offers, locating stores and finding directions, and planning purchases or reading reviews posted by consumers who have previously purchased the same product (Bellman et al., 2011; Kim et al., 2013; Wang et al., 2015).

App Annie (2016) reports that it is projected that the value of the mobile apps market is going to achieve a substantial increase from \$70 billion in 2015 to \$189 billion by 2020. Branded mobile apps can be very beneficial for brands, as branded mobile apps can reinforce

consumers' relationships with brands, in addition to influencing consumers' attitudes and purchase intentions. Furthermore, branded mobile apps can raise the brand's awareness, and can affect consumers' loyalty toward the brand (Shankar et al., 2010; Bellman et al., 2011; Shankar et al., 2016).

4.4 Conclusion

This chapter has generated an understanding of consumer behaviour toward ICTs, the mobile channel and m-commerce, and branded mobile apps. The technological advancement of smartphones and the availability of mobile applications (apps) have caused a shift in consumer behaviour when interacting with brands on the go. Consumers are in control of choosing when to interact with brands through a pull-form of communications. Branded apps can be very beneficial for brands. For example, branded apps can raise awareness, reinforce consumers' relationships, influence attitudes, intentions, and influence customers loyalty toward the brand. As industry reports show the mobile app market is going to witness substantial growth, mobile apps can contribute to the success of organisations if consumers continue to use them.

Chapter 5

Conceptual Development and the Theoretical Framework

5.0 Introduction

This chapter presents the development of the initial theoretical framework for this study, which was developed based on notions covered in the literature in previous chapters. Previously, in Chapter two, theories about technology acceptance and continuous usage were discussed. Chapter three discussed brand reputation and brand loyalty, and their influence on consumers' decision making. Chapter four discussed the concept of a service, m-commerce and branded mobile apps. Thus, the literature review contributed to offering the theoretical basis which contributed to the development of the initial theoretical framework for this study. Furthermore, from the literature, it is noticed that some theoretical approaches contributed to understanding consumers' continuous usage or acceptance of technological innovations based on integrating theoretical notions from Information Systems (IS) research and consumer behaviour to build a better understanding of consumers' technology use (Bhattacharjee, 2001b; Dennis et al., 2009; Morgan-Thomas and Veloutsou, 2013). Dennis et al. (2009) proposed an integrated theoretical model to investigate e-shopping consumer behaviour, which utilises theoretical notions from Fishbein and Ajzen's (1975) and Ajzen and Fishbein's (1980) TRA while recognising theoretical assumptions from the IS research area such as the TAM (Davis et al., 1989) and the UTAUT (Venkatesh et al., 2003a). Furthermore, Bhattacharjee's (2001b) ECM-IT borrowed theoretical knowledge from the TAM, while also recognising significant work in consumer behaviour research by Oliver (1980). In addition, Morgan-Thomas and Veloutsou (2013) utilised theoretical notions from consumer behaviour research and technology acceptance research to understand online brand experience and online brand relationships. Such pragmatic approaches to integrating theoretical approaches is consistent with Baker (1976) in the sense that it is essential for researchers within the marketing discipline to borrow and integrate theoretical disciplines in a pragmatic manner, since the practice of marketing in the field is pragmatic in nature.

The next section presents and discusses the theoretical basis for this research, which will be further developed and enhanced through the qualitative exploratory study at a later stage in this study.

5.1 The Initial Theoretical Framework for this Study

The initial theoretical framework for this study recognises that consumers' satisfaction with the branded app experience is an important central predictor of consumers' continuous intention to use the branded app (Bhattacharjee, 2001b). Furthermore, the theoretical framework includes four dimensions. The first dimension represents the utilitarian variables that are capable of influencing consumers' satisfaction and continuous intention. The second dimension represents the hedonic motivation variables capable of influencing consumers' satisfaction and continuous intention. The third dimension represents the direct role of social influence (e.g. subjective norm) on continuous intention. The fourth dimension represents the brand related factors which are unrelated to the technical characteristics of the technology.

5.1.1 The Utilitarian Dimension

Through discussing theories within the technology acceptance and continuous usage research domain, it can be noted that there are variables that are suggested to play a general role toward influencing people to accept technologies. For example, the TAM suggests that perceived usefulness and perceived ease of use are two main utilitarian predictors capable of influencing individuals to accept and use technologies (Davis et al., 1989). The perceived usefulness and perceived ease of use also appear in technology acceptance and use theories such as the DTPB (Taylor and Todd (1995b), UTAUT (Venkatesh et al., 2003a) and UTAUT2 (Venkatesh et al., 2012). It is worth noting that perceived usefulness is also known as performance expectancy and perceived ease of use is known as effort expectancy in the UTAUT (Venkatesh et al., 2003a) and the UTAUT2 (Venkatesh et al., 2012). According to Taylor and Todd's (1995b) DTPB, it is suggested that, based on the literature, the three consistent predictors that can predict peoples' technology acceptance and use are perceived usefulness, perceived ease of use and compatibility. In other words, the DTPB labels compatibility to be an additional main predictor which plays a role in the acceptance and use of technological innovations (Taylor and Todd, 1995b).

It is worth noting that the UTAUT which unified similar variables from various theories and aimed to develop a general theory for technology acceptance and use, had four main variables that play a role in predicting behavioural intention and actual usage (Venkatesh et al., 2003a). The four variables in the UTAUT are performance expectancy (e.g. perceived usefulness), effort expectancy (e.g. perceived ease of use), facilitating conditions, and social influence (Venkatesh et al., 2003a). In the UTAUT, performance expectancy, effort expectancy and

social influence predict intention directly, while facilitating conditions predict actual usage directly (Venkatesh et al., 2003a). Interestingly in the UTAUT, compatibility was categorised to represent facilitating conditions along with other similar variables from other theories (Venkatesh et al., 2003a). Therefore, based on Taylor and Todd (1995b) and the UTAUT unification of variables from various theories, it can be noticed that perceived usefulness, perceived ease of use and compatibility are viewed as consistent utilitarian variables that influence individuals to accept and use technologies.

Based on theoretical notions from Bhattacharjee's (2001b) ECM-IT which was developed to understand consumers' usage of technologies in a continued usage setting, the initial conceptual model development for this study recognises satisfaction to be a key predictor of consumers' continuous intention. Furthermore, Bhattacharjee (2001b) accounted for perceived usefulness in consumers' continued use setting, and empirically validated that satisfaction mediates the relationship of perceived usefulness to continuous intention, while perceived usefulness can influence continuous intention directly. As mentioned earlier in Chapter two, the ECM-IT only validated the post-expectation of perceived usefulness and encouraged future research to examine more factors that are capable of motivating consumers' continuous usage of technologies (Bhattacharjee, 2001b). Furthermore, researchers were able to validate additional variables capable of influencing consumers' continuous intention directly or indirectly through satisfaction (Kim, 2010; Hsu and Lin, 2015; Hong et al., 2006; Thong et al., 2006). Studies highlighted the importance of perceived usefulness and perceived ease of use in e-services (Hung et al., 2013), Multimedia Messaging Services (MMS) (Pagani, 2004) and m-commerce (Chang et al., 2015). The role of compatibility is highlighted in mobile marketing; for example, Ajax and Irfan (2012) suggest that consumers will be less likely to participate in mobile marketing when it is not compatible with their shopping lifestyle and behaviour. In addition, the role of compatibility can be stronger than the role of perceived usefulness in m-commerce research (Wu and Wang, 2005).

5.1.2 The Hedonic Dimension

The hedonic aspect of enjoyment is found to motivate users' behavioural intention to use computers (Davis et al., 1992). Also, in later theoretical developments, enjoyment plays a role in technology acceptance (Venkatesh, 2000; Venkatesh and Bala, 2008). Furthermore, people who are highly engaged with using Self-Service Technologies (SSTs) may experience enjoyment (Agarwal and Karahanna, 2000). Qualitative studies also highlight the important

role of enjoyment, suggesting that when consumers enjoy their experience with using the SST, they are more likely to use it (Hilton et al., 2013). The hedonic motivation (e.g. perceived enjoyment) is one of the main predictors to directly influence behavioural intention in UTAUT2, which was validated on people's use of the mobile internet (Venkatesh et al., 2012). It is worth noting that the UTAUT2 is an extended version of the original UTAUT that predicts consumers acceptance and use of technological innovations (Venkatesh et al., 2012). Furthermore, since the UTAUT's aim was to unify variables that are similar in the literature to predict technology acceptance and use, the integration of perceived enjoyment in the UTAUT2 recognises perceived enjoyment as an additional construct that is capable of influencing consumers to accept and use technologies (Venkatesh et al., 2012).

Furthermore, as consumers become more familiar with shopping online, they are more likely to find the shopping process more enjoyable (Blázquez, 2014). Shankar et al. (2016) encourage brands to develop branded mobile applications that provide a hedonic and a utilitarian experience to consumers. Enjoyment is capable of influencing consumers' levels of satisfaction toward using mobile apps (Hsiao et al., 2016). Hsu and Lin (2016) found that the utilitarian value and hedonic value influence satisfaction in the context of in-app purchases.

The hedonic aspect of enjoyment was previously hypothesised to influence continuous intention directly and indirectly through the mediating relationship of satisfaction (Kim, 2010; Thong et al., 2006). Kim (2010) found enjoyment to predict continuous intention but not satisfaction. On the other hand, Thong et al. (2006) found that enjoyment is a predictor of consumers' satisfaction, while having a direct influence on continuous intention. Furthermore, enjoyment is an important predictor that influences consumers toward online shopping (Monswé et al., 2004), and predicts the consumer's attitude toward shopping online (Ha and Stoel, 2009).

Another aspect of hedonic behaviour is escapism. Grant and O'Donohoe (2007) suggest that, as mobile devices are available to consumers anytime anywhere, they are a great way for consumers to escape from reality in situations where consumers may feel they need to pass time or feel bored. Studies have found that escapism plays an important role in the online shopping environment (Hofacker, 2008; Monswé et al., 2004).

5.1.3 The Social Dimension

Social influence which is also known as subjective norm, is an important predictor that is found to influence the acceptance of technological innovations (Venkatesh et al., 2012). Social influence represents the perceptions of an individual that are related to what important referents (e.g. family, friends) think about the individual taking an action toward the behaviour (Simons-Morton et al., 2011; Venkatesh et al., 2012). In other words, what do other people whose opinions are valuable to the individual, think about the continued use of branded apps. Although, the TRA (Fishbein and Ajzen, 1975), which served as the theoretical basis for the TAM highlighted the role of social influence in predicting individuals' behavioural intention to perform a behaviour, Davis et al. (1989) argued against including the subjective norm in to the TAM. However, in a later TAM development, Venkatesh and Davis (2000) recognised that social influence plays a role in influencing consumers to accept and use technologies. The TPB (Ajzen, 1991) and DTPB (Taylor and Todd, 1995b) also recognise the importance of socially influencing consumers' behavioural intention toward a behaviour. Furthermore, social influence predicts consumers' behavioural intention to accept e-services (Bhattacharjee, 2000; Hung et al., 2013).

In the context of continuous usage, Bhattacharjee (2001b) did not recognise the role of social influence in the ECM-IT; however, it could be because Bhattacharjee (2001b) established the ECM-IT which borrowed theoretical knowledge from the TAM version which did not include subjective norm. It is worth noting that Kim (2010) integrated the TPB into the ECM-IT and found that social influence has a significant influence on consumers' continuous intention to use mobile data services. Some researchers believe that it is essential to capture the influence of social influence when conducting research on technology acceptance in the B2C context, as it reflects the nature of consumers' reaction to word of mouth (Schepers and Wetzels, 2007). In addition, consumers are capable of distributing communication that may impact on the decision making of other consumers through social networks and influence the reputation of an organisation (Deighton and Kornfeld, 2009).

5.1.4 The Brand Related Dimension

The brand related dimension represents characteristics that are not related to the technology characteristics that are capable of predicting continuous intention. The notion that the brand related factors toward the traditional retailer's brand may play a role in influencing continuous intention to use a smartphone traditional retail branded app is indirectly suggested in the

literature. For example, consumer decision making involves affective and cognitive components, which relate to the development of a consumer's perception of the brand (Dowling, 2002). Building upon this, the theoretical model includes cognitive and affective components that are related to the branded app, which influence a consumer's overall image of the traditional retailer that operates in the multi-channel context. Furthermore, when these components formulate, maintain and restructure the consumer's reputation of the brand, it influences consumers' decision making related to continuing or discontinuing using the retail branded app. Thus, consumers' image of the brand is believed to play an important role toward influencing consumers to continue using branded apps, since consumers' perceived image of the brand helps a consumer make decisions that are related to choice, preference and their response to the brand's marketing mix activities (Keller, 1993). Consumers' perceived image persuades consumers' decision making and reaction toward purchasing and consuming brands' products and services (Bernstein, 1984; Dowling, 2002; Balmer and Greyser, 2006; Dennis et al., 2009). Importantly, with the rapid technological advancements and growing competitive marketing environments, the perceived image of a brand is utilised by consumers to justify why they purchase and consume products and services, reduces uncertainty (Stern et al., 2001), reduces information processing in the decision making process (Keller, 2013), and assists consumers in differentiating between similar products and services (Aaker, 2012).

As discussed earlier in Chapter three, several studies showed that in a multi-channel retail context, the brand elements in the offline environment transfer to the online environment (Delgado-Ballester and Luis Munuera-Alemán, 2005); Marianne et al., 2008; Kwon and Lennon, 2009a; Kwon and Lennon, 2009b). Delgado-Ballester and Luis Munuera-Alemán (2005) explain that organisations, which have the advantage of positive reputation that creates trust, are superior to organisations that do not have such an advantage.

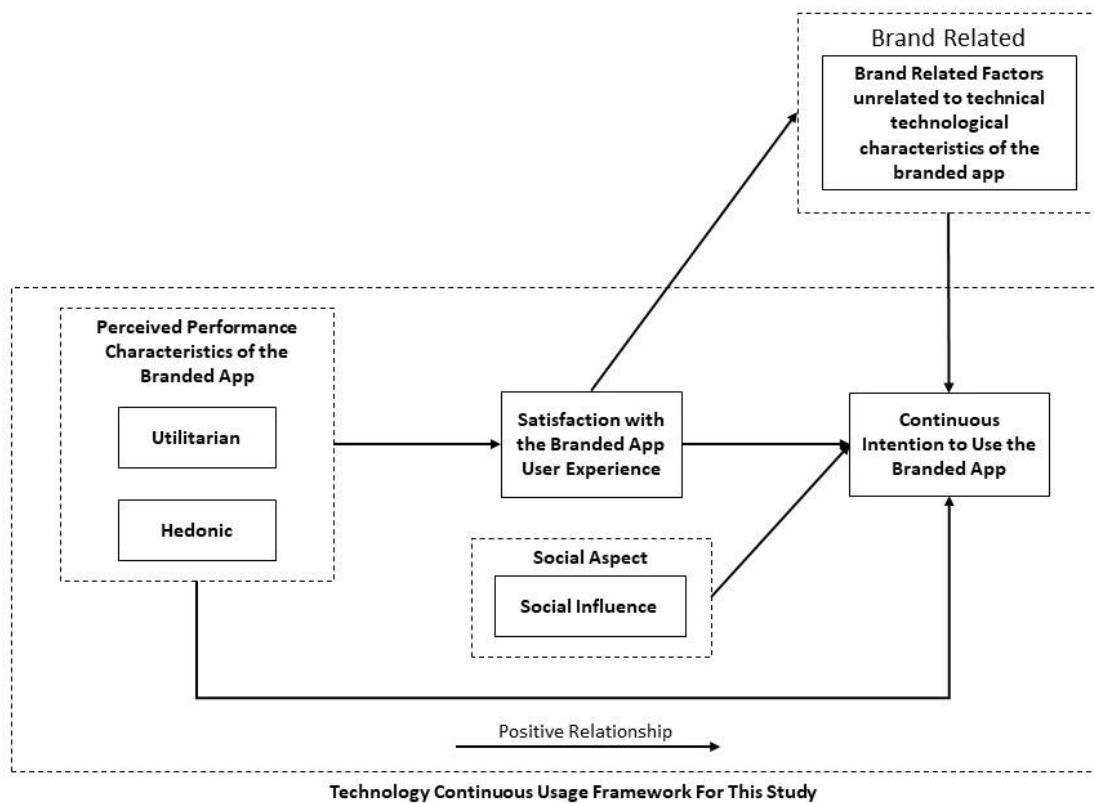
Examining consumers' continuous intention to use a technological system reflects customer retention and consumption, which in other words, reflects customer conative loyalty explained by Oliver (1997). For example, the notion of examining what leads consumers to hold intentions involving repeat consumption of services offered by organisations through technological innovations, also reflects repeat purchase intention within consumer behaviour research (Bhattacharjee, 2001b). The ECM-IT by Bhattacharjee (2001b) reflects such a notion in examining factors that predict consumers' usage intention within the IS research domain. Thus, the ECM-IT investigates the technological innovation in question, but does not account

for external variables for retailers who operate in a multi-channel retail setting. For example, Klaus and Nguyen (2013) argue that most research within e-commerce research focuses on e-loyalty, given that it is important to understand how the e-commerce market channel relates to retailers who operate in a multi-channel context. A similar notion was raised by Grewal and Levy (2009), that the interrelation between the offline and online channels is among topics of interest within retailing and e-commerce for future research. The concept of loyalty is highly important for organisations in maximising the organisation's profits (Reichheld and Scheffer, 2000) and loyal customers can influence new customers to be interested in the brand through positive word of mouth (Gremler and Brown, 1999). Furthermore, in e-commerce, generating word of mouth, customer loyalty, and repurchase and consumption are consequences of satisfaction (Verma et al., 2016). Thus, the theoretical model suggests that loyalty toward the traditional retailer could play a role in influencing consumers' continuous intention to use the traditional retail smartphone branded app.

The integration of brand related factors that are unrelated to the technical characteristics of the technology in the theoretical model that is mainly derived from IS research is justifiable. Interestingly, Morgan-Thomas and Veloutsou (2013) integrated online brand experience and brand relationships in utilising theoretical knowledge from the TAM, which referred to it as an approach looking beyond the TAM. Furthermore, Bhattacharjee's (2001b) ECM-IT theoretical framework combined notions from consumer behaviour and IS. Thus, the theoretical model proposes the inclusion of brand related factors to enhance our knowledge of the factors that motivate consumers' continuous intention to use traditional retail smartphone apps.

Figure 5.1 presents the initial conceptual model for this research.

Figure 5. 1 Initial Theoretical Framework for this Research



5.2 Conclusion

This chapter has presented the initial development of the theoretical framework of this research. The initial theoretical model theorises that there are four dimensions that play a role in influencing consumers' behavioural intention to continue to use traditional retail smartphone apps. Borrowing theoretical notions from the ECM-IT, the initial theoretical framework of this research theorises that the utilitarian and hedonic dimensions influence continuous intention to use traditional retail smartphone branded apps directly and indirectly through satisfaction with the branded app user experience. Furthermore, the initial theoretical model recognises that there are factors that are related to the brand which are unrelated to the technology in use (e.g. branded apps) that could influence consumers' intention to continue to use branded apps that are provided by traditional retailers who provide shopping services to consumers through multiple shopping channels. Also, the model theorises that the social dimensions could play a role in influencing consumers' intention to continue using traditional retail smartphone branded apps.

Chapter 6

Methodology

6.0 Introduction

This chapter discusses the research methodology (research strategy) used in this study, in addition to discussing various philosophical positions (paradigms), and justifying the philosophical approach selected to answer the study's research question. In this regard, the chapter discusses the reasons behind the selection of the philosophical position (paradigm) and the methodological approach for this study. The chapter also discusses the research design, the methods chosen for collecting the data, and the methodological techniques used in this study.

6.1 The Nature of Conducting Research

Research is an important activity that is central to business organisations and academics. However, a precise definition of what research means is considered not to have been well established in the literature, due to the various interpretations of the term, causing research to mean different things to different people (Collis and Hussey, 2013). There are three main features of the term research in the business research area, which emphasise the notion that research is a systematic practice to discover and seek answers to solving research problems. According to Saunders et al. (2015, p.5), these three main features are as follow:

- Data are collected systematically.
- Data are interpreted systematically.
- There is a clear purpose: to find things out.

From this perspective, Saunders et al. (2015, p.5) define research as “a process that people undertake in a systematic way in order to find out things, thereby increasing their knowledge.” Similarly, Collis and Hussey (2013, p.2) define research as “a systematic and methodical process of inquiry and investigation with a view to increasing knowledge.” Furthermore, from the many definitions available in the literature, describing research as a systematic process to seek knowledge development, seems to be the most agreed way of defining research in the business research area (Collis and Hussey, 2013).

It is encouraged that the systematic process of conducting research should engage and aim to contribute to the world of theory and managerial practice in the field, and therefore researchers

should be open to borrowing knowledge from other research disciplines (Saunders et al., 2009; Saunders et al., 2015). This notion is also consistent with Easterby-Smith et al. (2012), who argue that it is important to utilise relevant knowledge from other disciplines in business and management research, as cited in Saunders et al. (2015). Also, Baker (1976) displayed the same notion for the marketing research area, in the sense that for marketing research to become creative and deliver fruitful knowledge to managerial practice in the field, we need to be open to utilising knowledge and information from other disciplines when needed. Therefore, in conclusion, Saunders et al. (2015, p.6) explain, “using knowledge from a range of disciplines enables management research to gain new insights that cannot be obtained through all of these disciplines separately.” It is worth noting that Saunders et al. (2009) also warn that conducting research in a heavy practical fashion is not a good thing, as it can cause research to lack the support of theoretical knowledge.

6.2 Research Philosophy

Philosophy in research is a creative and a progressive process with a goal of driving the production of knowledge further. In this regard, Greetham (2006 p.7) defines the role of philosophy in research as follows: “It is a method involving thinking skills that lifts us above the simple and uncreative activity of merely reproducing the ideas of others, so that we are able to search for and discover answers for ourselves.” Through the utilisation of philosophy in research, we can enhance our imagination and creativity through the reproduction and utilisation of previous and current ideas of the scientific community, which play a major role in enabling us to explore, search and discover to seek answers for ourselves (Greetham, 2006).

Research philosophy is central to knowledge development, where the knowledge development can range from being a modest addition to knowledge, or a dramatic knowledge development such as the introduction of a new theory (Saunders et al., 2009). In this regard, Saunders et al. (2009, p.107) also refer to research philosophy as an “over-arching term [which] relates the development of knowledge and the nature of that knowledge.” Also, research with a philosophical foundation showcases the standards that are followed by the researcher, which in turn enhances the quality of the research (Fitzgerald and Howcroft 2015; Easterby-Smith et al., 2015).

Research philosophy can be thought of as a research belief system, culture or tradition, that is formed and supported by a scientific community, where norms are placed signifying the values

and principles that govern, influence and reinforce the way research is conducted within a particular belief system (Morgan, 2007; Neuman, 2013; Saunders et al., 2009). This notion relates to what is known as the philosophical research “paradigm”, a term that gained popularity after its introduction by Kuhn (1970). One of the ways that Kuhn (1970, p.175) described the term paradigm is that “...it stands for the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community.”

Additional definitions appeared in the literature to build on Kuhn’s work and ideas, with the attempt to describe the term paradigm in greater detail. For example, Ritzer (1975, p.157) defines the term paradigm as follows: “A paradigm is a fundamental image of the subject matter within a science. It serves to define what should be studied, what questions should be asked, and what rules should be followed in interpreting the answers obtained. The paradigm is the broadest unit of consensus within a science and serves to differentiate one scientific community (or sub-community) from another. It subsumes, defines and inter-relates the exemplars, theories, and instruments that exist within it.”

Four terminologies play a major role in the research process and reflect the research paradigm (the research philosophical stance, or the belief system relating to a scientific community). In this regard, Easterby-Smith et al. (2015) explain that ontology, epistemology, methodology and methods, are the four terminologies of the research process that play an important role in reflecting the research paradigm. The four terminologies mentioned above are presented in Table 6.1:

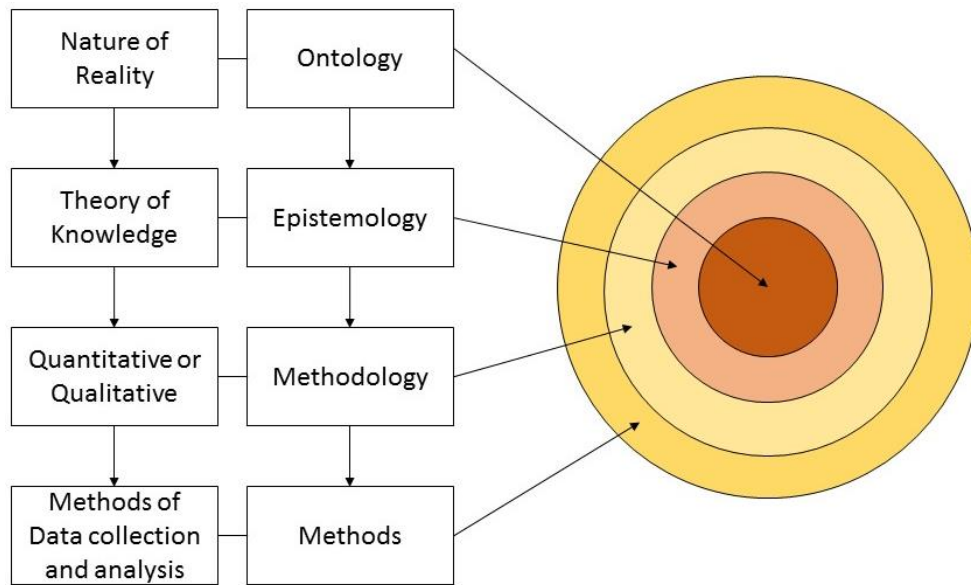
Table 6. 1 The four terminologies in the research process

Term	Meaning
Ontology	Philosophical assumptions about the nature of reality
Epistemology	A general set of assumptions about ways of inquiring into the nature of the world
Methodology	A combination of techniques used to inquire into a specific situation
Methods	Individual techniques, for data collection, analysis, etc

Source: Easterby-Smith et al. (2015)

A graphical representation that is adapted from Easterby-Smith et al. (2015) and Guba and Lincoln (1994), which explains how the research process works, is presented in Figure 6.1.

Figure 6. 1 How the research process works



Source: Adapted from Easterby-Smith et al. (2015) and Guba and Lincoln (1994)

In this regard, Figure 6.1 illustrates the four terminologies that are involved in describing how the research process works, which plays an important role in reflecting the philosophical stance of the researcher (Easterby-Smith et al., 2015). It is worth noting that all of the terminologies in the research process are interconnected with each other and function as a process (Guba and Lincoln, 1994). For example, philosophical assumptions that are made toward ontology should correspond and be consistent with assumptions that are made toward the rest of the terminologies in the research process (Guba and Lincoln, 1994).

The first terminology in the research process is ontology, which represents the nature of reality (Easterby-Smith et al., 2015; Saunders et al., 2015). The nature of ontological questions that the researcher aims to answer involve, “What is the form and nature of reality and, therefore, what is there that can be known about it?” (Guba and Lincoln, 1994, p.108). The second term is epistemology which is knowledge, and questions regarding how we gained the knowledge available to us, and what the valid and acceptable knowledge is to reach the truth (Neuman, 2013). It is worth noting, as mentioned earlier, that the epistemological assumptions a researcher makes would correspond with the ontological assumptions made by the researcher, and this notion will also apply to the methodology and methods (Guba and Lincoln, 1994).

The third term is methodology which is a general representation of the research strategy; it includes techniques and methods used to answer the research question (Easterby-Smith et al., 2015). The fourth and final term in the research process is the methods and techniques used to

collect the data and the techniques used to analyse them (Easterby-Smith et al., 2015). It is worth mentioning that in Guba and Lincoln's (1994) description of the research process, the discussion of methods was part of the methodology, but in Easterby-Smith et al. (2015), the methods were presented as standalone terminology, illustrating a process that happens after the methodology. However, both notions from Guba and Lincoln (1994) and Easterby-Smith et al. (2015) are in line with each other, as the choice of methods is still dependent on the assumptions of the ontology, epistemology and methodology (Guba and Lincoln, 1994). This notion can be found in Guba and Lincoln (1994, p.108) as follows: "The methodological question cannot be reduced to a question of methods; methods must be fitted to a predetermined methodology."

It is worth mentioning that Easterby-Smith et al. (2015) explain that usually the data collection and the analysis are the most visible part of the research process to people. However, the other discussed terminologies (ontology, epistemology, and methodology) are a very important part of the research process, as they contribute to strengthening and supplying the research project with assumptions that are logical and consistent throughout the research process, which enhances the research quality (Easterby-Smith et al., 2015).

6.2.1 Ontology and Epistemology

The ontological and epistemological assumption are a critical part of the research process and the research paradigm (the philosophical approach of the research) (Easterby-Smith et al. 2015; Guba and Lincoln, 1994; Saunders et al., 2009; Fitzgerald and Howcroft, 2015). Neuman (2013, p.93) argues that "All scientific research rests on assumptions and principles from these two areas whether or not a researcher acknowledges them." In this regard, Saunders et al. (2009) explain that the ontological and epistemological assumption should be the priority concern to the researcher, and the methods the researcher is going to adopt is also necessary but comes as a secondary concern (Saunders et al., 2009). Similarly, Guba and Lincoln (1994, p.105), while defining the term research paradigm, explain that "Questions of method are secondary to questions of paradigm, which we define as the basic belief system or worldview that guides the investigator, not only in choice of method but in ontologically and epistemologically fundamental ways." In other words, the ontological and epistemological assumptions play an integral part in the research philosophy which contributes to guiding the systematic research process, by influencing the methodology, methods, the data collection and its interpretation (Creswell 2014b; Easterby-Smith et al., 2015; Saunders et al., 2009).

6.2.1.1 Ontology

Ontology is defined as “An area of philosophy that deals with the nature of being, or what exists; the area of philosophy that asks what really is and what the fundamental categories of reality are” (Neuman, 2013, p.94). In this regard, the ontology questions what the reality is and how the world operates; in other words, it questions the nature of reality (Saunders et al., 2009).

There are two aspects of ontology. The first aspect of ontology is based on objectivism, and promotes the idea that “social entities exist in reality external to social actors” (Saunders et al., 2009, p.110). In other words, the reality is out there and is waiting to be discovered, which relates to the idea that there are solid tangible objects that exist in the external world, and these hard-tangible objects exist while being independent of our cognition (Fitzgerald and Howcroft, 2015). Also, since the first aspect of ontology promotes objectivism, it views reality to be singular.

In contrast, the second aspect of ontology is subjectivism which promotes the idea that reality is socially constructed by the social actors, which also means that there are multiple realities (Saunders et al. 2015). When the ontology is subjective, it means that reality could be in constant revision since it is based on interpreting and understanding the meanings that are constructed through the social actors (Saunders et al. 2009). For example, Saunders et al. (2015, pp.131-132) explain, “The subjectivist view is that customer service is produced through the social interaction between service providers and customers and is continually being revised as a result of this. In other words, at no time is there a definitive entity called ‘customer service’. It is constantly changing.” Similarly, Fitzgerald and Howcroft, (2015) explain that, from a subjectivist point of view, the perception of reality across cultures and languages will differ.

6.2.1.2 Epistemology

Epistemology is defined as “An area of philosophy concerned with the creation of knowledge; [it] focuses on how we know what we know or what are the most valid ways to reach truth.” (Neuman, 2013, p.95). In this regard, epistemology is about knowledge or theory of knowledge and asks what knowledge is acceptable in an area of research to help us achieve answers to our questions (Neuman, 2013; Easterby-Smith et al. 2015; Saunders et al., 2009).

The epistemological assumptions in an area of research enable the researcher to choose from various acceptable methodologies and methods to answer a research question (Saunders et al., 2015). For example, Saunders et al. (2015) explain that because of the multidisciplinary nature

of the business and management research area, knowledge is generated from various forms of data that are based on numbers, text or visuals (Saunders et al., 2015). Therefore, the assumptions made could be based on facts (objectivity) or interpretations (subjectivity).

Like ontology, epistemology also has an objective and a subjective aspect (Burrell and Morgan, 1979; Guba and Lincoln, 1994; Saunders et al., 2015), since the knowledge available and valid ways to seek answers for our research questions are based on objectivity (e.g. observable measurable facts) or subjectivity (e.g. perceptions, understanding and interpretation) (Saunders et al., 2015). Therefore, it is argued that the roots of the epistemological assumptions are embedded in the theoretical position of the research and the methodology's strategic planning, the research design, and the choice of methods available to answer research questions (Crotty, 1998).

6.3 Research Paradigms

Ontological, epistemological and methodological assumptions play an important role in reflecting the belief system of a scientific community or how they view the world, which in turn, also reflects the philosophical approaches in terms of how they conduct research (Guba and Lincoln, 1994). There are two main research paradigms (philosophical approaches to research), which are positivism (post-positivism) and interpretivism (also known as social construction or constructivism) (Easterby-Smith et al., 2015; Fitzgerald and Howcroft, 2015; Saunders et al. 2009; Saunders et al. 2015). A positivist approach to research is based on objective ontological, epistemological and methodological assumptions; on the other hand, an interpretivist approach is influenced by subjective ontological, epistemological and methodological assumptions (Easterby-Smith et al., 2015; Guba and Lincoln, 2015; Fitzgerald and Howcroft, 2015,).

It is worth noting that, positivism (post-positivism) and interpretivism are the two dominant research paradigms in the business research area (Easterby-Smith et al., 2015; Collis and Hussey, 2013). Moreover, the two research paradigms are also considered to be two valid research philosophical approaches that are influential in terms of how research is shaped and applied in the marketing research area (Malhotra and Birks, 2007).

Because of the fundamental role of ontological and epistemological assumptions in the research process and its philosophy, most of the disagreements and debates among scientific communities are focused primarily on matters concerning the two assumptions (Easterby-

Smith et al., 2015). Newman and Benz (1998) explain that positivism and interpretivism can be represented at both ends of a continuum as cited in Creswell (2014b). Similarly, Burrell and Morgan (1979) explain that there are two main dimensions to social science research represented on a continuum; one dimension favours an objective approach, and the other dimension favours a subjective approach. In this regard, Figure 6.2 presents an adaptation of Burrell and Morgan (1979) showing the two paradigms on opposite sides of the Objective-Subjective Continuum.

Figure 6. 2 The objective-subjective continuum



Adapted from: Burrell and Morgan (1979)

It is worth noting that Creswell (2014b) argues that the two paradigms should not be viewed on the continuum as “polar opposites”, or two totally “distinct categories”, but they should be viewed as two research approaches that differ in their ways of solving research problems, which are placed on different ends on a continuum (Newman and Benz, 1998), as cited in Creswell (2014b). It is worth noting that in the literature, positivism is sometimes referred to as the quantitative methods paradigm, and interpretivism is referred to as the qualitative methods paradigm (Creswell, 2014b). Also, in the literature, some researchers refer to the positivist approach as the hard approach, and to interpretivism as the soft approach (Fitzgerald and Howcroft, 2015).

A positivist approach relates to the ontology of realism, which promotes objectivism (Fitzgerald and Howcroft, 2015; Saunders et al., 2015). In this regard, positivists believe there is one single reality or truth (Creswell and Clark, 2011; Saunders et al., 2015), that is external to the human mind (Saunders et al., 2015). It is worth noting that positivism in its extreme form suggests that all people should experience one truth (Saunders et al., 2015). On the other hand, interpretivism relates to the ontology of relativism, which promotes subjectivism (Fitzgerald and Howcroft, 2015; Saunders et al., 2015). In this regard, an interpretivist believes that there are multiple realities that are socially constructed through the social actors, and therefore, the

reality may be different across cultures and languages (Saunders et al., 2015; Fitzgerald and Howcroft, 2015).

Moreover, at the epistemological level, a positivist aims to discover the reality or truth by utilising fixed fundamental causal laws (cause and effect) through the usage of measurements while the researcher is distant and independent of what is being studied (Fitzgerald and Howcroft, 2015). On the other hand, at the epistemological level, an interpretivist aims to understand the reality through being engaged with the social actors (Fitzgerald and Howcroft, 2015), interpreting the meanings and experiences encountered through socially interacting with the social actors (Saunders et al., 2015), while acknowledging that these situations are subjective and context depended (Fitzgerald and Howcroft, 2015). In other words, an interpretivist is part of the research and engaged in the field analysing and interpreting the social actors (Easterby-Smith et al., 2015; Fitzgerald and Howcroft, 2015; Saunders et al. 2009).

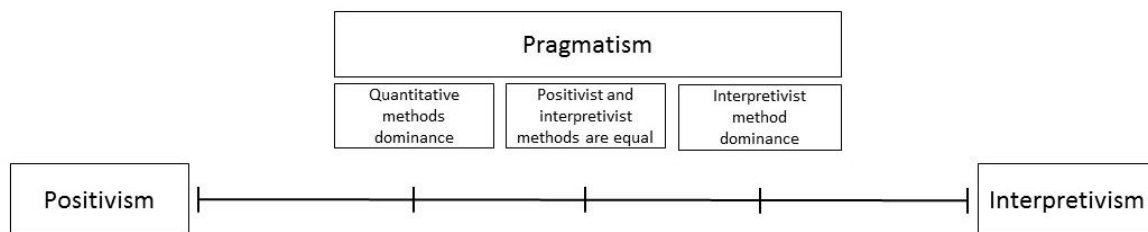
Because of the differences between positivism's and interpretivism's philosophical assumptions, there are endless debates between the two research paradigms, as each research paradigm claims that it is the right paradigm for solving research problems (Fitzgerald and Howcroft, 2015; Saunders et al. 2009). Some believe that the debates and the extreme one-sidedness create a fundamental divide between the two paradigms, resulting in causing more harm than good, and each paradigm should be regarded as a paradigm that contributes to knowledge one way or another (Fitzgerald and Howcroft, 2015; Schwandt 2000). In this regard, Fitzgerald and Howcroft (2015) argue "This becomes dogmatic orthodoxy and there is a desire to denigrate the opposing perspective, with criticisms characterised by excessive one-sidedness. Given that both positions have limitations, there is no point in replacing one approach with the other. However, rather than rejecting the other side from a position of knowledge, researchers from each perspective are often relatively ignorant of the strengths of the other" (Fitzgerald and Howcroft, 2015, p.88).

Similarly, Schwandt (2000) argues that the notion of categorising research that is qualitative in nature as something entirely different from research that is quantitative in nature and is "highly questionable". Furthermore, Schwandt (2000, p.210) argues that "...*all* research is interpretive, and we face a multiplicity of methods that are suitable for different kinds of understandings... the traditional means of coming to grips with one's identity as a researcher by aligning oneself with a particular set of methods (or by being defined in one's department as a student of

‘qualitative’ or ‘quantitative’ methods) is no longer very useful. If we are to go forward, we need to get rid of that distinction.”

Although positivism and interpretivism are two paradigms that are opposed to each other with their different research philosophy approaches, other paradigms do exist along the continuum presented in Figure 6.2 earlier, such as pragmatism (Creswell, 2014b; Easterby-Smith et al., 2015; Saunders et al., 2015). It is worth noting that pragmatism is regarded as the third main research paradigm in social sciences, which favours using mixed methodological approaches by utilising quantitative and qualitative approaches to answer research questions (Creswell, 2014b). Figure 6.3, adapted from Johnson et al. (2007), illustrates how the pragmatist approach places itself on the continuum between positivism and interpretivism.

Figure 6. 3 Pragmatism on the objective-subjective continuum



Source: Adapted from Johnson et al. (2007)

Pragmatism falls somewhere in the middle of the continuum between positivism and interpretivism, accepting that positivist and interpretivist approaches can be utilised together to solve the research questions (Easterby-Smith et al., 2015; Saunders et al., 2009). A pragmatist's primary focus is the research question, and if the researcher chooses to use a pragmatic approach, the ontological and epistemological assumptions of positivism and interpretivism should be respected (Morgan, 2007). Moreover, pragmatism promotes practicality in research, and therefore, recognises that the meanings from lived human experiences play a role in answering research questions (Easterby-Smith et al., 2015; Morgan, 2007).

Easterby-Smith et al. (2015), Burrell and Morgan (1979) and Fitzgerald and Howcroft (2015), raise a very important point, which explains that even if a researcher has a mindset by which a philosophical position will be followed toward answering a research question, the researcher should not be ignorant of other philosophical positions, because every philosophical position has its strengths and weaknesses. In this regard, Burrell and Morgan (1979, p.ix) argue that “In order to understand alternative points of view it is important that a theorist be fully aware of

the assumptions upon which his own perspective is based. Such an appreciation involves an intellectual journey which takes him outside the realm of his own familiar domain. It requires that he become aware of the boundaries which define his perspective. It requires that he become familiar with paradigms which are not his own. Only then can he look back and appreciate in full measure the precise nature of his starting point.”

Therefore, it is important that the researcher is aware of and understands the values and principles of other philosophical positions, which in turn, will enhance the quality of the research (Easterby-Smith et al., 2015; Fitzgerald and Howcroft, 2015). In this regard, Easterby-Smith et al. (2015) explain the importance and usefulness of gaining an understanding of the philosophical matters in research through the following four reasons:

- It helps the researcher develop an understanding of the core issues of epistemology (what is adequate knowledge) in the research area, which helps the researcher gain a basic knowledge of the potential methods that can be used to answer the research question.
- It helps the researcher in the process of identifying what evidence and information need to be gathered and how it will be analysed and interpreted and sets the standards of what is considered to be good answers in the research area. In this regard, the understanding of the philosophical issues in the research area helps the researcher “clarify research designs”.
- Gaining an understanding of the philosophical knowledge helps the research to identify the best research design to answer the research question, as it will help the research avoid research designs that would not be successful in answering the research question. In this regard, exploring the philosophical knowledge helps the researcher identify the advantages and disadvantages of the different research designs available.
- Gaining an understanding can help the researcher explore different research designs, and this could also involve research designs that could be new to the researcher. Therefore, it also gives the researcher an opportunity for the adaptation of different research designs in complex research situations.

6.3.1 Positivism

Positivism in social science is defined as “an organized method for combining deductive logic with precise empirical observations of individual behavior in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity”

(Neuman, 2013, p.97). Positivists believe that the social reality is observable, where a researcher adopts the philosophical position of natural science, and investigates the social reality in the same manner it would be investigated by physical and natural scientists (Saunders et al. 2009). For example, a positivist ontology assumes that reality is external and it is out there to be discovered, while reality is independent of individual cognition, and therefore it follows objective assumptions and approaches of natural science that are adapted to the context of social science, while maintaining that the reality is singular and objective (Fitzgerald and Howcroft, 2015). Therefore, positivism promotes the idea that the properties of the social world can be treated as hard objects that are observed and measured like the ways of natural science, and therefore it ignores the subjective measurement of the social world through the human senses or intuition which promotes subjectivity (Easterby-Smith et al., 2015). Moreover, the positivist approach promotes objectivism where reality is external, independent of the social actors and waiting to be discovered (Easterby-Smith et al., 2015; Saunders et al. 2009; Fitzgerald and Howcroft, 2015).

The positivist approach adopts quantitative methodologies to investigate the research questions and to discover reality (Easterby-Smith et al., 2015). Therefore, a researcher would collect data that reflects quantifiable observations that are analysed statistically through mathematical calculations and algorithms to predict patterns in human behaviour (Saunders et al., 2009). In this regard, the positivist paradigm seeks answers to research questions based on the verification or falsification of causal relationships (Creswell and Clark, 2011).

The quantitative methods utilised by the positivist paradigm to investigate research questions in the social science research area require a high number of participants such as using a survey for example (Easterby-Smith et al., 2015; Saunders et al., 2009).

It is highly important that the researcher in the positivistic paradigm performs the collection of the data while being external and detached from it, to ensure that there is no influence from the researcher on the subjects of the study while the data is being collected, because it is believed that if the researcher engages with subjects of the study then an alteration in the results of the research may happen and lead to the results being biased (Easterby-Smith et al., 2015; Fitzgerald and Howcroft, 2015; Saunders et al. 2009). Therefore, in the positivist paradigm, the researcher builds research assumptions that are based on objective, distant observations, and deductive research methods (Arndt, 1985). It is also more likely that a researcher adopts a positivistic position to conduct research based on theory that already exists, where the

researcher collects data on the formulated hypotheses based on the theory the research is investigating (Fitzgerald and Howcroft, 2015; Saunders et al. 2009). In this regard, the positivist approach guides studies in a confirmatory fashion, and therefore, it is known to be a good approach for theory testing (Fitzgerald and Howcroft, 2015).

The positivist paradigm is known to be a dominant paradigm in the marketing academic research for a while (Arndt, 1985). Holden and Lynch (2004) explain that positivism is a favoured paradigm within the academic marketing research area, due to the notion that it is a successful in applying its research methods. Moreover, it was suggested that the dominance of positivism in marketing academic research could be related to promoting rationality, objectivity, methods of application, measurement, and the lack of attention to other research methods (Arndt, 1985). However, Fitzgerald and Howcroft (2015) argue that indeed positivism remains a dominant paradigm in social science, but the interpretivist paradigm has come a long way to establishing itself as a competing paradigm, and because it was able to raise a debate against positivism, it proves and shows its strength in providing a valuable contribution to social science research.

6.3.2 Social Constructionism (Interpretivism)

Interpretivism is also referred to as social constructionism, constructivism (Easterby-Smith et al., 2015). Crotty (1998, p.42) defines constructionism as *“the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context.”* In addition, from the constructionism paradigm point of view, an object has no meaning until human beings encounter, engage with and interpret the object to give it its meaning (Crotty, 1998). The interpretivist approach is centred on the notion that, since reality is socially constructed, it means that multiple realities could exist and therefore, the interpretivist approach promotes subjectivity and acknowledges that reality may be different depending on the context (Saunders et al. 2009). In addition, the interpretivist approach in determining what is adequate knowledge is based on generating subjective meanings by interpreting the information in detail from the socially constructed reality through the interpretation of the social actors (Saunders et al. 2009).

The interpretivist paradigm is known for theory building or generation, because of its inductive approach while conducting research (Fitzgerald and Howcroft, 2015). Moreover, the interpretivist approach adopts qualitative methodologies to understand and interpret meanings

that are socially constructed by the social actors (Easterby-Smith et al., 2015; Fitzgerald and Howcroft, 2015; Saunders et al. 2009). The qualitative methodologies include data collection methods such as focus groups or in-depth interviews, usually conducted in small numbers, where the researcher is interpreting patterns in the social behaviour (Easterby-Smith et al., 2015; Saunders et al. 2009).

6.3.3 Pragmatism

Pragmatism is the main philosophical paradigm when it comes to mixed methods research (Creswell, 2014b; Johnson et al., 2007). A pragmatist's starting point is focusing on the research question, where the research question determines the ontology and epistemology to seek answers (Morgan, 2007; Saunders et al., 2009; Tashakkori and Tiddlie, 1998). In this regard, Johnson et al. (2007) explain that pragmatism takes into consideration the importance of using theory and practice to understand the truth, by utilising multiple viewpoints from quantitative and qualitative research.

Pragmatism is also known as the "what works" approach (Creswell and Clark, 2011). Therefore, pragmatism plays an important role in guiding social science research methods for research that combines mixed methods (qualitative and quantitative), where the focus is directed at the methodological aspects (Morgan, 2007). Similarly, Crotty (1998) explains that the philosophical aspect of pragmatism proposes the ability to reach the outcome in a practical fashion, which means that the researcher should apply methodological strategies that will be most appropriate and effective in answering the research questions. For example, researchers would adopt a pragmatic approach when they feel the research problem cannot be solved with either a positivist approach or an interpretivist approach alone because adopting one philosophical approach is not practical and is unrealistic (Saunders et al., 2009). Therefore, the pragmatist's approach argues that in practice, it is impossible to conduct research in a completely objective or subjective fashion (Morgan, 2007). It is important to note that the researcher should respect the epistemological, ontological assumptions, and the philosophical knowledge available from paradigms that are being employed, when utilising a pragmatist approach (Morgan, 2007).

The pragmatist approach steps aside from endless debates between the positivist or interpretivist paradigms with their fundamental ontological and epistemological assumptions and rejects that there is one ultimate way to know the truth (Tashakkori and Tiddlie, 1998). In this regard, pragmatism rejects "...the top-down privileging of ontological assumptions in the

metaphysical paradigm as simply too narrow an approach to issues in the philosophy of knowledge” (Morgan, 2007, p.68). Similarly, Crotty (1998, p.74) argues “The view of culture and society that pragmatism came to adopt is essentially optimistic and progressivist. The pragmatist world is a world to be explored and made the most of, not a world to be subjected to radical criticism.”

To understand how the philosophy of pragmatism differs from the positivist and interpretivist paradigm, Table 6.2 adapted from Creswell and Clark (2011, p.42), explains the differences in the ontological, epistemological, methodological, axiological and rhetorical philosophical views of the three paradigms.

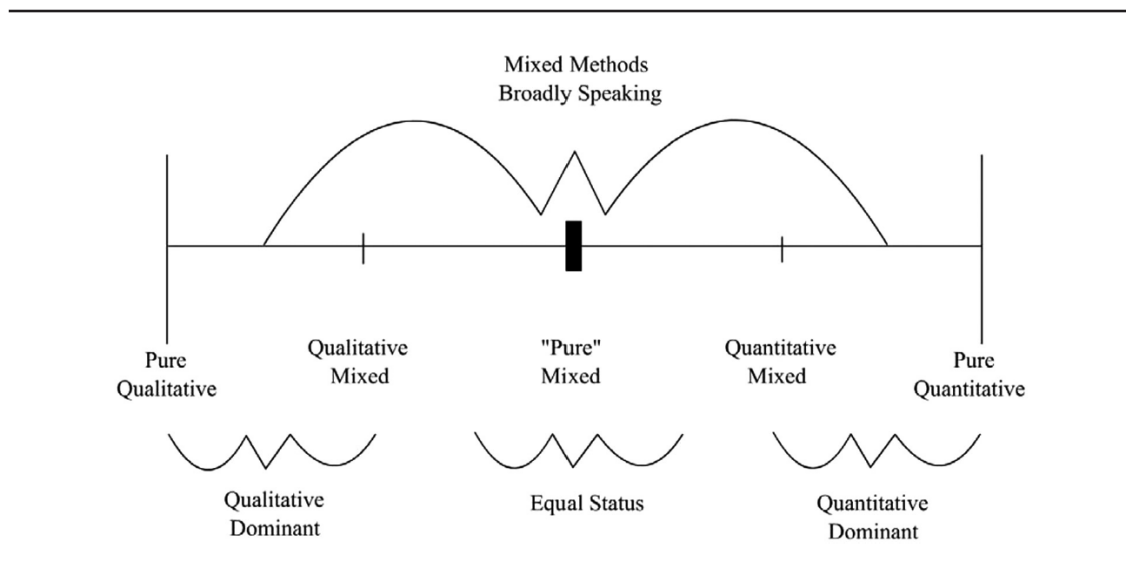
Table 6. 2 Philosophical differences in the postpositivist, interpretivist and the pragmatist paradigms

The Philosophical Characteristic	Postpositivist Approach	Interpretivist Approach	Pragmatist Approach
Ontology (what is the nature of reality?)	Singular reality (e.g. researchers reject or fail to reject hypotheses)	Multiple realities (e.g. researchers provide quotes to illustrate different perspectives)	Singular and multiple realities (e.g. researchers test hypotheses and provide multiple perspectives)
Epistemology (What is the relationship between the researcher and that being researched?)	Distances and impartiality (e.g. researchers objectively collect data on instruments)	Closeness (e.g. researchers visit participants at their sites to collect data)	Practicality (e.g. researchers collect data by “what works” to address research questions)
Axiology (What is the role of values?)	Unbiased (e.g. researchers use checks to eliminate bias)	Biased (e.g. researchers actively talk about their biases and interpretations)	Multiple stances (e.g. researchers include both biased and unbiased perspectives)
Methodology (What is the role of research?)	Deductive (e.g. researchers test an a priori theory)	Inductive (e.g. researchers start with participants’ views and build “up” to patterns theories, and generalisations)	Combining (e.g. researchers collect both quantitative and qualitative data and mix them)
Rhetoric (what is the language of research?)	Formal style (e.g. researchers use agreed-on definitions of variables)	Informal style (e.g. researchers write in a literary, informal style)	Formal or informal (e.g. researchers may employ both formal and informal styles of writing)

Source: Adapted from Creswell and Clark (2011, p.42)

Pragmatism places itself “somewhere” close to the middle between positivism and interpretivism on the continuum (Morgan, 2007; Johnson et al., 2007; Saunders et al., 2015; Tashakkori and Tiddie, 1998). This notion is explained by Figure 6.4 below.

Figure 6. 4 Graphic of the three major research paradigms, including subtypes of mixed methods research



Source: Johnson et al. (2007, p.124)

The reason that it was mentioned earlier that pragmatism is placed “somewhere” around the middle of the continuum is because pragmatism has multiple forms (left, right, middle) (Johnson et al., 2007). A pragmatic approach could fall exactly in the middle of the continuum where a qualitative and quantitative approaches are purely treated equally within one study (Johnson et al., 2007). Furthermore, it can also lean toward the right or left of the continuum, where either a qualitative or quantitative methodology is treated as dominant in one study (Johnson et al., 2007). For example, Johnson et al. (2007, p.124) define a pragmatic mixed method approach that is qualitatively dominant as follows: “Qualitative dominant mixed methods research is the type of mixed research in which one relies on a qualitative, constructivist-poststructuralist-critical view of the research process, while concurrently recognizing that the addition of quantitative data and approaches are likely to benefit most research projects.” On the other hand, Johnson et al. (2007, p.124) define a pragmatic mixed methods approach that is quantitatively dominant as follows: “Quantitative dominant mixed methods research is the type of mixed research in which one relies on quantitative, postpositivist view of the research process, while concurrently recognizing that the addition of qualitative data and approaches are likely to benefit most research projects.”

Moreover, Morgan (2007) explains the main differences between a pragmatist, positivist and interpretivist approach which are illustrated in Table 6.3.

Table 6. 3 A pragmatic alternative to the key issues in social science research methodology

	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

Source: Morgan (2007, p.71)

Morgan (2007) argues that abduction, intersubjectivity and transferability are three main factors that differentiate a pragmatic from a quantitative and a qualitative approach. In this regard, Morgan (2007) explains the following regarding the three factors:

- In a pragmatic approach, pragmatists utilise abductive approach to enable them to “move back and forth between induction and deduction” (Morgan, 2007, p.71). For example, the researcher may use a qualitative inductive approach for theory building or modification, and then use a deductive approach to test the theory, while going back again to the inductive approach to assist in further explanations.
- With regard to intersubjectivity, the pragmatist approach rejects the idea that research can be conducted in a completely objective or subjective way because it is not practical. Therefore, a pragmatist approach accepts borrowing from the objective and subjective paradigms interchangeably. In this regard, Morgan (2007, pp. 70-71) argues “Yet any experienced researcher knows that the actual process of moving between theory and data never operates in only one direction. Outside of introductory textbook, the only time that we pretend that research can be either purely inductive or deductive is when we write up our work for publication. During the actual design, collection, and analysis of data, however, it is impossible to operate in either an exclusively theory- or data-driven fashion.” In addition, pragmatists are open to working with both the objective world of single reality and the subjective world where reality is multiple and socially constructed.
- Transferability in the pragmatic approach rejects the idea that research results can be only context dependent in certain research settings or on the other hand, empirically

generalisable. In this regard, Morgan (2007, p. 72) argues “From a pragmatic approach, an important question is the extent to which we can take the things that we learn with one type of method in one specific setting and make the most appropriate use of that knowledge in other circumstances.”

The philosophical stance of pragmatism fits the context of this study. In this regard, the justification regarding the use of pragmatism will be discussed in the following section.

6.4 Justification for the Paradigm Adopted for this Study

The previous sections of this chapter have discussed various philosophical positions in conducting research. Due to the nature of the topic of this research which investigates the retention of smartphone mobile applications from high-street retailers on non-student consumers within the United Kingdom, this research believes that a pragmatic approach is a suitable approach for answering the research questions.

Furthermore, to build an understanding of what leads consumers to retain branded smartphone apps from high-street retailers in the United Kingdom, this research requires a qualitative exploratory research to be conducted to understand the characteristics of the sample required, and to improve the theoretical foundations adopted in this study. For example, Malhotra and Birks (2007) explain that conducting a qualitative stage can help in exploring the research problem and identifying the characteristics of the individuals that are targeted in the quantitative (main) stage, which in turn, will assist the researcher in applying the quantitative stage to a representative sample.

From reviewing the literature, it can be clearly noticed that the positivistic approach highly drives research in the adoption of technology, continued usage and mobile services, and this is due to existing theories in the field that require the use of deductive methods that are measured quantitatively. Moreover, although, that there is high amount of research in the adoption of mobile devices or services, it is argued in the literature that there is a lack of research in the area, especially when the technology of mobile devices improves very fast (Roach, 2009), and existing research is based on classic mobile phones and the findings are viewed to be inconsistent (Ajax and Irfan, 2012). Furthermore, there are very few studies which investigate the continuous usage and the retention of mobile services, and to the researcher’s knowledge, none of these studies are applied in the same context as this study. Interestingly, from reviewing the literature on the adoption or continuous usage of mobile services, there is a clear lack of

integrating factors that are related to the brand (e.g. brand reputation or brand loyalty) especially in the continuous usage context, where most of the focus is directed at factors that are related to technical aspects of the mobile services being investigated. In addition, the mobile services apps research area in particular, has a clear gap that is in need of investigation in a developed context by researchers (Nysveen et al., 2015).

Furthermore, the Theory of Reasoned Action (TRA) which served as the theoretical foundation of the highly popular Technology Adoption Model (TAM) which also influenced other theories which emerged with regard to adoption of technological innovations, did require some form of exploratory work to help in identifying the beliefs that will be plugged into the TRA and to construct the questionnaire. However, the research area of technology adoption does require a positivistic approach to reach the truth. Researchers have argued that expansion of the technology adoption model is recommended through identification of the appropriate factors based on the study's context, which will help reflect the human and social change process (Legris et al., 2003), especially if the context of the study is related to mobile services or mobile commerce (Chong et al., 2012).

In this regard, When the topic of research is investigating a research area that is not well developed, where little or no research is available, researchers use the qualitative exploratory phase in research to further gain understanding of the research problem, where qualitative exploratory research helps in gaining insights on the research problem, which will also help the researcher at a later stage of the research (Collis and Hussey, 2013). Similarly, Creswell (2014b) explains that a justification for using a mixed methods approach is when there is limited available literature or knowledge on the topic the researcher is investigating.

6.5 Mixed Methods Research

Mixed methods research is defined as, “An approach to research in the social, behavioural, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems” (Creswell, 2014a, p.2). Moreover, Johnson et al. (2007, p.129) investigated a variety of mixed method research definitions in the literature and concluded that “Mixed methods research is the research paradigm that (a) partners with the philosophy of pragmatism in one of its forms (left, right, middle); (b) follows the logic of mixed methods research (including the logic of the

fundamental principle and any other useful logics imported from qualitative or quantitative research that are helpful for producing defensible and usable research findings; (c) relies on qualitative and quantitative viewpoints, data collection, analysis, and inference techniques combined to the logic of mixed methods research to address one's research questions(s); and (d) is cognizant, appreciative, and inclusive of local and broader sociopolitical realities, resources, and needs.”

In this regard, the core assumption of mixed method research is that both qualitative and quantitative methods are used in a form of combination and utilised to complement each other, as it enables the researcher to build a clearer understanding toward solving the research problem, when the researcher feels the research cannot be solved through a qualitative or quantitative approach alone (Creswell and Clark 2011; Creswell, 2014b; Wilson, 2012; Morgan, 1998; Sale et al., 2002). Moreover, Creswell and Clark (2011, p.5) explain the characteristics of a researcher utilising a mixed method approach:

- collects and analyses persuasively and rigorously both qualitative and quantitative data (based on research question);
- mixes (or integrates or links) the two forms of data concurrently by combining them (or merging them), sequentially by having one build on the other, or embedding one within the other;
- gives priority to one or to both forms of data (in terms of what the research emphasises);
- uses these procedures in a single study or in multiple phases of a program of study;
- frames these procedures within philosophical worldviews and theoretical lenses; and
- combines the procedures into specific research designs that direct the plan for conducting the study.

In certain situations, the researcher may feel that the research question requires the use of a qualitative stage and a quantitative stage in one study; for example, the researcher may utilise the qualitative stage to complement, assist and help formulate the quantitative stage (Malhotra and Birks, 2007). It is worth noting that Morgan (1998) explains that researchers should respect and not ignore or violate the philosophical assumption of quantitative and qualitative paradigms when using a mixed methods approach.

It also is important to understand the differences between qualitative, quantitative and mixed method side by side. In this regard, Table 6.4 from Creswell, (2014b, p.18) illustrates the differences between qualitative, quantitative and mixed method approaches.

Table 6. 4 The differences between qualitative, quantitative and mixed methods approaches

Tend to or Typically...	Qualitative Approaches	Quantitative Approaches	Mixed Methods Approaches
<ul style="list-style-type: none"> Use these philosophical assumptions Employ these strategies of inquiry 	<ul style="list-style-type: none"> Constructivist/transformational knowledge claims Phenomenology, grounded theory, ethnography, case study, and narrative 	<ul style="list-style-type: none"> Postpositivist knowledge claims Survey and experiments 	<ul style="list-style-type: none"> Pragmatic knowledge claims Sequential, concurrent, and transformational
<ul style="list-style-type: none"> Employ these methods 	<ul style="list-style-type: none"> Open-ended questions, emerging approaches, text or image data 	<ul style="list-style-type: none"> Closed-ended questions, predetermined approaches, numeric data 	<ul style="list-style-type: none"> Both open- and closed-ended questions, both emerging and predetermined approaches and both quantitative and qualitative data and analysis
<ul style="list-style-type: none"> Use these practices of research as the researcher 	<ul style="list-style-type: none"> Positions him- or herself Collects participant meanings Focuses on a single concept or Phenomenon Brings personal values into the study Studies the context or setting of participants Validates the accuracy of findings Makes interpretations of the data Creates an agenda for change or reform Collaborates with the participants 	<ul style="list-style-type: none"> Tests or verifies theories or explanations Identifies variables to study Relates variables in questions or hypotheses Uses standards of validity and reliability Observes and measures information numerically Uses unbiased approaches Employs statistical procedures 	<ul style="list-style-type: none"> Collects both quantitative and qualitative data Develops a rationale for mixing Integrates the data at different stages of inquiry Presents visual pictures of the procedures in the study Employs the practices of both qualitative and quantitative research

Source: Creswell, (2014b, p.18)

There are various forms of how mixed method research can be conducted. Referring back to Figure 6.4 from Johnson et al. (2007, p.124) which was presented in the section of pragmatism earlier in the chapter, it was explained that a quantitative method could be dominant in one study or vice versa, or both a quantitative and a qualitative method can be treated equally within one study. Similarly, Creswell, (2014b, pp.15-16) explains three primary forms of mixed method research designs that are popular in social science studies:

- **Convergent parallel mixed methods** is a form of mixed method design in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In this design, the investigator typically collects both forms of data at roughly the same time and then integrates the information in the interpretation of the overall results. Contradictions or incongruent findings are explained or further probed in this design.
- **Explanatory sequential mixed methods** is one in which the researcher first conducts quantitative research, analyses the results and then builds on the results to explain them in more detail with qualitative research. It is considered explanatory because the initial

quantitative data results are explained further with the qualitative data. It is considered sequential because the initial quantitative phase is followed by the qualitative phase.

- **Exploratory sequential mixed methods** is the reverse sequence from the explanatory sequential design. In the exploratory sequential approach the researcher first begins with a qualitative research phase and explores the views of participants. The data are then analysed, and the information is built into a second, quantitative phase.

Moreover, Morgan (1998) also offers four ways of how mixed method approaches are used in a complementary fashion which are presented in Figure 6.5.

Figure 6. 5 Complementary combinations of qualitative and quantitative research: the priority-sequential model

		Priority Decision	
		Principal Method: <i>Quantitative</i>	Principal Method: <i>Qualitative</i>
Sequence Decision	Complementary Method: <i>Preliminary</i>	<p>1. Qualitative Preliminary qual → QUANT</p> <p>Purposes: Smaller qualitative study helps guide the data collection in a principally quantitative study.</p> <ul style="list-style-type: none"> • Can generate hypotheses, develop content for questionnaires and interventions, etc. <p>Example: Focus groups help to develop culturally sensitive versions of a new health promotion campaign.</p>	<p>2. Quantitative Preliminary quant → QUAL</p> <p>Purposes: Smaller quantitative study helps guide the data collection in a principally qualitative study.</p> <ul style="list-style-type: none"> • Can guide purposive sampling, establish preliminary results to pursue in depth, etc. <p>Example: A survey of different units in a hospital locates sites for more extensive ethnographic data collection.</p>
	Complementary Method: <i>Follow-Up</i>	<p>3. Qualitative Follow-up QUANT → qual</p> <p>Purposes: Smaller qualitative study helps evaluate and interpret results from a principally quantitative study.</p> <ul style="list-style-type: none"> • Can provide interpretations for poorly understood results, help explain outliers, etc. <p>Example: In-depth interviews help to explain why one clinic generates higher levels of patient satisfaction.</p>	<p>4. Quantitative Follow-up QUAL → quant</p> <p>Purposes: Smaller quantitative study helps evaluate and interpret results from a principally qualitative study.</p> <ul style="list-style-type: none"> • Can generalize results to different samples, test elements of emergent theories, etc. <p>Example: A statewide survey of a school-based health program pursues earlier results from a case study.</p>

Source: Morgan (1998, p.368)

According to Morgan (1998), the first way of using mixed method research in a complimentary manner is by using a qualitative preliminary approach. This approach is in line with the exploratory sequential mixed method design mentioned earlier by Creswell (2014b). In this approach, the researcher would first use an exploratory qualitative method that is conducted on a small-scale to help guide and prepare the researcher for the main quantitative method stage of the research. In this regard, it will help the researcher in the data collection, and the generation hypotheses for the quantitative stage of the research.

The second way is the opposite of the first approach as the researcher uses a quantitative method as a preliminary approach which is conducted on a small-scale to help guide the main qualitative method. In this regard, the quantitative preliminary approach helps establish preliminary results that will assist the researcher with sampling purposes within a field setting, and gathering relevant contextual information about the population in a field setting which may reveal the possibility that interesting patterns exist (Morgan, 1998). Moreover, after conducting the preliminary quantitative analysis, the larger qualitative stage of the research is then carried out to investigate the research problem in-depth and to understand why certain patterns exist and how these patterns work and relate to each other (Morgan, 1998).

Unlike the first and second approach in a preliminary manner, the third and fourth approach are used in a complementary follow-up manner. In this regard, the third approach is called a qualitative follow-up approach. In this approach, the researcher conducts a qualitative method on a small-scale to interpret, understand and explain the results of the main quantitative study. Approach three can also be useful in situations when it is difficult for the researcher to understand poor results generated from the main quantitative study, in addition to identification of outliers.

Finally, the fourth approach is the quantitative follow-up approach. In this approach, the main method is qualitative in nature, followed by a small-scale quantitative method. The smaller scale quantitative method study helps the researcher to evaluate the results from the main qualitative study. As mentioned earlier, qualitative studies are considered good in theory development or generation, but the theories are hard to generalise because qualitative methods results are criticised not to be generalisable because they are context depended (Fitzgerald and Howcroft, 2015). In this regard, Morgan (1998) considers that conducting a smaller scale quantitative study after the main qualitative study is useful for theory testing and generalising the results to different samples. It is worth noting that Morgan (1998) mentions that the first

approach which was discussed earlier, where a preliminary qualitative approach is utilised to complement the main quantitative approach, is usually the most utilised method used by researchers.

The next section discusses the selected mixed method design for this study.

6.5.1 Mixed Methods Approach for this Study

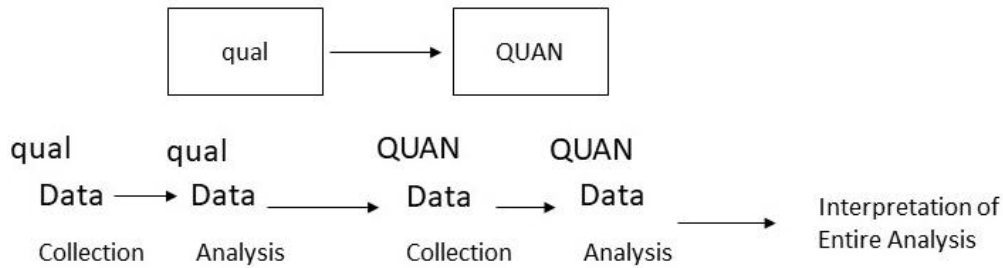
This study adopts a mixed methods research design to answer the research questions regarding factors influencing consumers to retain smartphone mobile apps from high street retailers. When combining qualitative and quantitative methods, where one of the methods plays a complementary role to the other, Morgan (1998) explains that practically, the priority decision for the researcher is which of the methods (qualitative or quantitative) is going to play the dominant role in the research, and then a decision on how sequencing of the complimentary assisting method is going to take place. In this regard, Morgan (1998, p.366) highlights the two necessary steps involved in the research design process when utilising a mixed method approach:

- The first step in the research design process is to select a principle data collection method that has the strengths that are most important to the project's goals.
- The second step is to select a contrasting complementary method that offers a set of strengths that can add to the research design's overall ability to meet the project's goals.

In this regard, it is learned from the literature that the research area of investigating the adoption and continuous usage of mobile services or devices is dominated by quantitative approaches, where consumers' beliefs and intentions are measured through constructs and investigated through causal relationships. Therefore, the quantitative method is the dominant one in this study, since this study builds on theoretical foundations from the positivist quantitative paradigm. Moreover, in order to learn and understand the relevant constructs that are important in answering the questions of this research, a complimentary exploratory qualitative method is needed prior to the main principle quantitative method (Creswell et al., 2003). In this regard, an exploratory sequential research design is adopted, where a qualitative study is first conducted on a small-scale to explore and identify factors that are important in influencing consumers to retain and continue to use branded smartphone applications from high-street retailers, followed by the main quantitative study that investigates the hypothesised relationships. Figure 6.6 presents the exploratory sequential research design which is slightly

adapted from Creswell et al. (2003, p. 225) by capitalising the term "QUAN" to show that the quantitative method is the dominant method for this study.

Figure 6. 6 The exploratory sequential design research approach adopted for this study



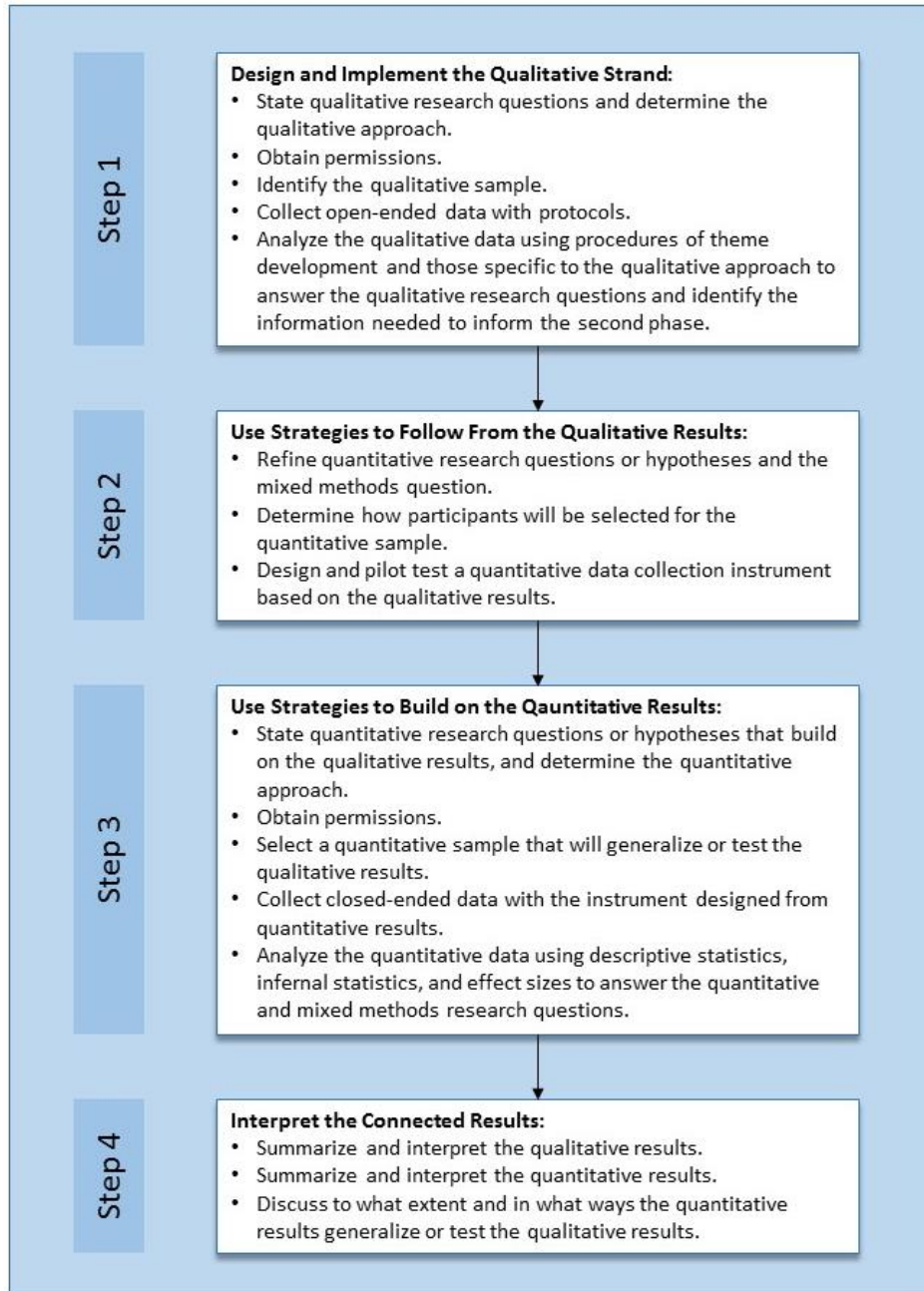
Source: Adapted from Creswell et al. (2003, p. 225)

The researcher must recognise the appropriate set of motivations to combine qualitative and quantitative methods to reach the goals of the research and solve the research problem (Morgan, 1998). In this regard, Creswell and Clark (2011, p.9) explain “In some research projects, the investigators may not know the questions that need to be asked, the variables that need to be measured, and the theories that may guide the study. These unknowns may be due to the specific, remote population being studied (e.g., Native American in Alaska) or the newness of the research topic. In these situations, it is best to explore qualitatively to learn what questions, variables, theories, and so forth need to be studied and then follow up with a quantitative study to generalise and test what was learned from the exploration.”

Much of the mentioned notions apply to the context of this study. For example, as mentioned earlier, when investigating the adoption of technological innovations it is argued that it is important to identify the relevant variables that fit the context of the study (Legris et al., 2003). Moreover Legris et al. (2003) explain that identifying the relevant variables in technology adoption research will help the researcher account for the human behaviour changes that new technological innovations may have caused. Also, identifying the relevant variables is recommended when researching the adoption of technological innovations related to mobile services or mobile commerce (Chong et al., 2012). Moreover, Nysveen et al. (2015) argue that there is lack of research into mobile services apps. Similarly, Roach, (2009) also argued that there is a lack of research in the adoption of mobile devices and services, which is believed to be caused by the rapid technological development of mobile technologies, in addition to the results and findings which are viewed to be inconsistent in the mobile marketing research area (Ajax and Irfan, 2012). Therefore, the inclusion of the exploratory qualitative study before the quantitative method will help in sampling decisions and the development of the theoretical

framework (Creswell and Clark, 2011). Moreover, Creswell and Clark (2011) demonstrate four major steps involved in utilising the exploratory sequential research design, which is presented in Figure 6.7.

Figure 6. 7 Flowchart of the basic procedures in implementing the sequential exploratory design for the current study



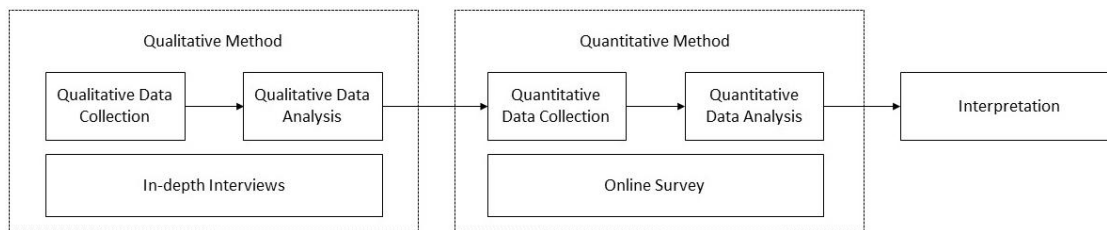
Source: Creswell and Clark (2011, p.88)

Creswell and Clark (2011) explain that the four steps in Figure 6.7 show how the qualitative method links with the quantitative method in the exploratory sequential design. In this regard, it is explained that the first step involves the researcher exploring the research questions and

phenomenon by collecting and analysing qualitative data. In step two, the researcher refines the research questions and identifies the variables that build into the theoretical framework, in addition to evaluating the possible instruments to measure the identified variables; moreover, the researcher identifies the instruments needed to measure and modify the hypotheses as required. In step three, the researcher collects the quantitative data, and then the quantitative data is analysed through statistical techniques. In step four, the researcher provides a summary of the research results and interprets to what degree the quantitative results generalise the results of the qualitative method.

This study aims to utilise the exploratory sequential design by conducting semi-structured in-depth interviews (qualitative method), followed by an online survey (quantitative method) to verify the results from the in-depth interviews. In this regard, Figure 6.8 presents the exploratory sequential design of this study based on the adapted design from (Creswell et al., 2003) shown in Figure 6.6 earlier.

Figure 6. 8 The exploratory sequential design utilised for this study



Source: Adapted from Creswell et al. (2003)

The exploratory sequential mixed design adopted for this study is in line with Creswell, (2014b), and notions from Morgan, 1998, and Johnson et al. (2007), which explain that a qualitative method is useful in complementing and assisting the quantitative method.

It is important for the researcher to understand the strengths and challenges of the exploratory sequential design. In this regard, Creswell and Clark (2011, p.89) outline the following strengths and challenges shown in Table 6.5.

Table 6. 5 Strengths and challenges of utilising an exploratory sequential design

Strengths of the Exploratory Design	Challenges in using the Exploratory Design
<ul style="list-style-type: none"> • Separate phases make the exploratory design straightforward to describe, implement, and report. • Although this design typically emphasises the qualitative aspect, the inclusion of a quantitative component can make the qualitative approach more acceptable to quantitative-biased audiences. • This design is useful when the need for a second, quantitative phase emerges based on what is learned from the initial qualitative phase. • The researcher can produce a new instrument as one of the potential products of the research process. 	<ul style="list-style-type: none"> • The two-phase approach requires considerable time to implement, potentially including time to develop a new instrument. Researchers need to recognise this factor and build time into their study’s plan. • When using a two-phase research approach, the researcher is required to get two separate ethical research approvals, which may take time and cause the progress of the research to be slower. • Researchers should consider using a small purposeful sample in the first phase and a large sample of different participants in the second phase to avoid questions of bias in the quantitative strand. • If an instrument is developed between phases, the research needs to decide which data to use from the qualitative phase to build the quantitative instrument and how to use these data to generate quantitative instruments and how to use these data to generate quantitative measures. • Procedures should be undertaken to ensure that the scores developed on the instrument are valid and reliable.

Source: Adapted from Creswell and Clark (2011, p.89)

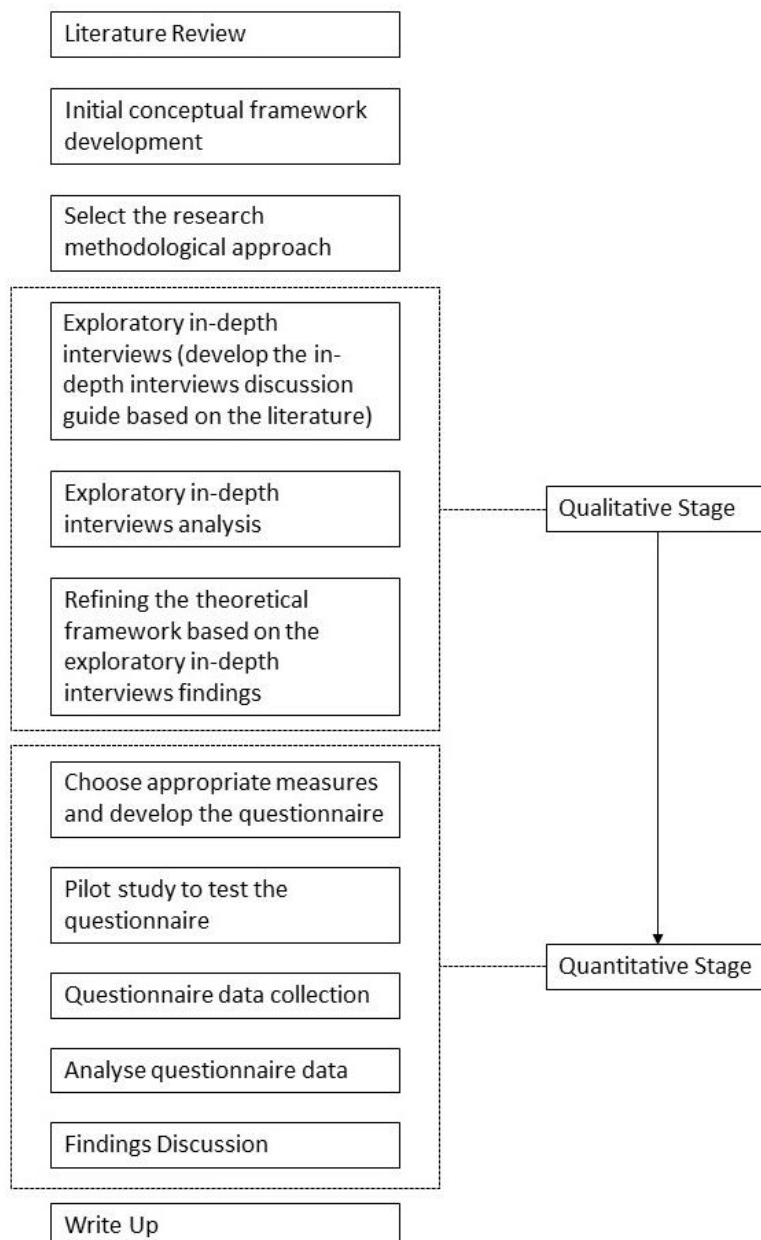
It is worth noting that the exploratory sequential mixed method design is the most frequently used in many studies (Morgan, 1998), and also adopted by many studies in the marketing research area (Wilson 2012). In this regard, Wilson (2012) explains that many studies in the marketing research area use a mixed method approach (qualitative and quantitative), where a qualitative approach is conducted first to explore attitudes and behaviours of subjects relating to the topic of study, and then the quantitative approach is conducted in a conclusive or confirmatory fashion to gauge how widespread the attitudes and behaviours are across the population under study.

The next section presents the overall research design process for this research.

6.5.1.1 Research Design Process

The research process is a general representation of the systematic process and stages followed to answer the questions of this study. In this regard, the research design can be described as a design plan of the research, where it acts as an organised strategic guide for the research, helping the researcher through the various stages of the research under study (Dillon et al., 1994). Therefore, the research design is a general reflection or an abstract of the research methodology (research strategy), which also includes the stages of the research methods and the types of data collection (Saunders et al., 2009). The research design and the process for this study is presented in Figure 6.9.

Figure 6. 9 Research design and process



It is worth noting that the research process looks like an organised, sequential process, but it is actually not, as the researcher may be required to revisit any of the stages when a revision is necessary (Saunders et al., 2009). Therefore the research process could also be thought of as a research guide or a research project map guiding the researcher toward the completion of the research project (Saunders et al., 2009).

The following section discusses the qualitative and the quantitative data collection methods for this study.

6.5.2 Qualitative Method and Data Collection

Qualitative research is defined as “research which is undertaken using an unstructured research approach with a small number of carefully selected individuals to produce non-quantifiable insights into behaviour, motivations and attitudes” (Wilson, 2012, p.103). Qualitative research is exploratory in nature and enables the researcher to gain deeper understanding of research problems (Malhotra, 2010; Johnson et al., 2007). It is worth noting that Saunders et al. (2015) explain that in the context of mixed method research, qualitative research can also be utilised in an explanatory fashion to further explain relationships between variables that have resulted from a quantitative study. However, as indicated earlier, this study utilises qualitative exploratory interviews to assist the quantitative phase.

Malhotra (2010) outlines multiple benefits associated with incorporating exploratory qualitative research in the research design:

- Exploratory research is useful in situations where the researcher needs to gain precise and further clarification of the research problem.
- New insights gained from the exploratory research can help in redirecting the focus on new ideas that arise from the exploratory research, and therefore it enhances the creativity of the researcher.
- The researcher can differentiate between relevant variables and non-important ones. Therefore, the researcher can seek further explanations of the relevant variables.
- Exploratory research can highlight important issues that can be researched further.
- Exploratory research helps the researcher in the development of hypotheses.

Three forms of qualitative methods are used in marketing research, which are individual depth interviews, focus groups (also known as group discussions), and projective techniques (Malhotra, 2010). Malhotra (2010) explains that individual in-depth interviews and focus

groups are types of research that are categorised as direct approaches; on the other hand, projective techniques are categorised as indirect approaches. Moreover, in the direct approach, the researcher discloses what is being researched to the subjects participating in the research; on the other hand, the indirect approach involves projective techniques where the actual purpose of the research is not known to the subjects participating in the research (Malhotra, 2010). The three forms of qualitative methods are defined as follow:

- Individual in-depth interviews “are interviews that are conducted face-to-face, in which the subject matter of the interview is explored in detail using an unstructured and flexible approach” (Wilson, 2012, p. 105).
- Focus groups “are depth interviews undertaken with a group of respondents” (Wilson, 2012, p.108).
- Projective technique “are techniques used in group discussions and individual depth interviews to facilitate a deeper exploration of a respondent’s attitudes towards a concept, product or situation” (Wilson, 2012, p. 115).

Qualitative interviews help in discussing and gathering information from the subjects being interviewed in a contextual fashion, which enables the researcher to learn and explore the area of interest when the area of interest cannot be easily observed (Easterby-Smith et al., 2015; Wilson, 2012). Also, qualitative interviews such as individual depth interviews and focus groups utilise unstructured or semi-structured open-ended questioning formats, which enable the researcher to explore the research problem in greater depth (Creswell, 2014b; Wilson, 2012). According to Saunders et al. (2015), interviews can also be structured, but structured interviews are used to collect quantifiable data, and therefore they are associated with quantitative research. In this regard, structured interviews are viewed as being similar to survey methods (e.g. questionnaire that is completed by the interviewer), which would not be appropriate in exploratory research (Malhotra, 2010; Saunders et al., 2015).

There are a couple of reasons for choosing individual in-depth interviews over focus groups (group interviews) and projective techniques. For example, projective techniques are techniques that are utilised when conducting focus groups or in-depth interviews (Wilson, 2012). However, “In projective techniques, respondents are asked to interpret the behaviour of others, rather than describe their own behaviour” (Malhotra, 2010, p.190). In this regard, it is felt that projective techniques are not a good option for this study, because the aim is to understand the consumer's personal attitudes, beliefs, and feelings, regarding branded

smartphone apps from high-street retailers that the consumer personally retains and continues to use.

Furthermore, individual in-depth interviews were favoured over focus groups in this study, because the attention of the interviewer is fully directed at each respondent being interviewed privately (Wilson, 2012). Therefore, the researcher can further explore and focus on comments raised by the participants in greater depth (Malhotra, 2010; Wilson, 2012). In addition, because of the complex nature of this study, conducting individual in-depth interviews offers the researcher flexibility in increasing the level of understanding toward the topic being explored after conducting multiple individual interviews, which helps the researcher improve and develop the content of discussions for upcoming interviews (Wilson, 2012).

Wilson (2012) also outlines other advantages of using in-depth interviews over focus groups:

- Recruiting respondents for in-depth interviews can be a less complicated process than other qualitative methods such as focus groups.
- There is more flexibility when it comes to setting the time to conduct the in-depth interview with the respondent, in order to suit the respondent's busy schedule.
- Setting the location to hold the in-depth interviews is also flexible, to what suits the respondent's needs. For example, the in-depth interview can be held in locations such as the respondent's home, office, or other locations that suit the respondent's time and schedule.
- There is no group pressure in in-depth interviews. Therefore, individuals being interviewed are able to express what they really think freely, rather than making comments that are thought acceptable to other individuals in the group.

Moreover, the utilisation of individual in-depth interviews is useful in situations in which the researcher needs to understand complex consumer behaviour that involves shopping or the brand consumption experience (Malhotra, 2010). In this regard, conducting in-depth interviews on a one-to-one basis is felt to be more beneficial than the utilisation of group discussions for this study. It is important that when conducting qualitative interviews, the interviewer must ensure that the respondents do not feel like they are being interrogated (Easterby-Smith et al., 2015; Wilson, 2012). Therefore, the researcher must ensure that the respondent becomes the centre of attention, where they feel more relaxed to express their thoughts and feelings toward sensitive and critical issues in the discussion (Wilson, 2012).

6.5.2.1 Exploratory Semi-Structured Individual In-Depth Interviews

To explore the factors that play a role in influencing consumers to continue to retain smartphone branded apps from high-street retailers, face-to-face semi-structured individual in-depth interviews are the data collection method chosen for this study. In addition, the adoption of the exploratory research helps the researcher refine the conceptual model by identifying the important variables and eliminating irrelevant ones (Malhotra, 2010).

Gillham (2005, p.70) argues that semi-structured interview could be considered the most valuable approach to be implemented in a research interview, “because of its flexibility balanced by structure, and the quality of the data so obtained”. Semi-structured interviews require a topic list (discussion guide) prepared by the researcher, which contains key questions and themes relevant to the research topic (Saunders et al., 2015). The topic list is developed from a comprehensive literature review that helps the researcher develop ideas relating to the objective of the research, and gain an understanding of the knowledge in the research area of interest (Gillham, 2005). It is worth noting that there could be a variation in how the questions are asked when conducting semi-structured interviews, depending on the flow of the conversations (Saunders et al., 2015). Also the researcher may ask additional questions to participants to further elaborate on events or experiences that may arise during the interview (Saunders et al., 2015).

The topic list for the individual in-depth semi-structured interviews was created based on the recommendations offered by Wilson (2012). The topic list should include an introduction phase, a discussive phase and a summarising phase Wilson (2012). The three phases involved in creating a topic list are described in Table 6.6.

Table 6. 6 Phases involved in the creating the topic list (discussion guide)

Phase One: The Introduction Phase
<ul style="list-style-type: none">• The objectives of the session• Explanation of the nature of a group discussion• The general agenda of topics to be followed• Prompts for the participants to introduce themselves
Phase Two: The Discussive Phase
<ul style="list-style-type: none">• General topic areas to be discussed• Potential prompts and stimulus material
Phase Three: The Summarising Phase
<ul style="list-style-type: none">• Prompts for summarising what has been discussed• Thanks to participants

Source: Adapted from Wilson (2012, p.111)

As can be seen in Table 6.6, Wilson (2012) recommends the use of potential stimulus materials. Stimulus material can help the researcher to stimulate clearer discussions with participants regarding topics relevant to the research (McDaniel and Gates, 2010).

The individual semi-structured in-depth interviews included two forms of stimulus techniques. The researcher provided participants with graphical representations which included various high-street retail brands that are popular in smartphone application stores (Google Play and App Store) within the United Kingdom. Therefore, the researcher could ask further questions to understand reasons regarding situations where participants consume products from high-street retail brands but are not interested in downloading the app, or downloaded and used the smartphone's app but were not interested in retaining it.

In addition to the graphical representation, the researcher also asked participants to identify other shopping smartphone applications on their smartphone. In this regard, participants would navigate through their smartphone home screens and identify any branded shopping apps. Also, this process helps the researcher to gain further insights from participants, to ease the process of having participants recall high-street branded apps that they may have forgotten to mention. For example, participants may have retained branded high-street retail apps on their smartphones which are rarely used or not used anymore, and they may have reasons for still having the apps on their smartphones. In this regard, employing the mentioned stimulus techniques helps the researcher understand the differences, various reasons and situations for retaining smartphone branded high-street retail apps.

6.5.2.2 Sampling for the Exploratory Semi-Structured Individual In-Depth Interviews

Sampling plays an important role in research, particularly in situations where it is not practical for the researcher to collect data from the whole population, in addition to constraints of time and budget (Saunders et al., 2015). Furthermore, determining the sample of a research project is linked to the research's questions and objectives (Saunders et al., 2015).

Probability and non-probability sampling are two type of sampling techniques that researchers can utilise to collect data (Easterby-Smith et al., 2015; Wilson, 2012). Probability sampling is defined as “A set of sampling methods where an objective procedure of selection is used, resulting in every member of the population of interest having a known probability of being selected” (Wilson, 2012, p.186). In this regard, when a researcher uses a probability sampling technique, every member of the targeted population has an equal chance of being included in the data collection method (Couper, 2000). Moreover, probability sampling techniques involve the researcher in determining the selection of the sample based on statistical probability (Saunders et al., 2015). Types of probability sampling are simple random sampling, systematic sampling, stratified random sampling, and cluster sampling.

Non-probability sampling, on the other hand, is defined as “A set of sampling methods where a subjective procedure of selection is used resulting in the probability of selection for each member of the population of interest being unknown” (Wilson, 2012, p.187). In this regard, in non-probability sampling techniques, the total targeted population is unknown to the researcher, therefore, the sample is selected based on the researcher's subjective judgment depending on the research questions and objectives (Saunders et al., 2015). There are four types of non-probability sampling, which are convenience, purposive, quota, and snowball sampling (Easterby-Smith et al., 2015; Wilson, 2012). When using non-probability sampling, the generalisations that the researcher makes are related to theory, and not to the entire population (Saunders et al., 2015). In this regard, making generalisations to the total population is considered not to be possible when using non-probability sampling techniques, because the total of the targeted population is unknown (Saunders et al., 2015). However, it is argued that non-probability techniques, such as purposive sampling methods or techniques, are considered a more practical approach that is more likely to be used by researchers (Shadish et al., 2002). In this regard, Shadish et al. (2002, p.24) argue, “Although these purposive sampling methods are more practical than formal probability sampling, they are not backed by a statistical logic that justifies formal generalizations. Nonetheless, they are probably the most commonly used of all sampling methods for facilitating generalizations.”

This research utilises non-probability quota sampling for the exploratory research for individual in-depth interviews, which is a sampling procedure that is also known as the two-stage restricted purposive or judgmental sampling technique (Malhotra, 2010). Quota sampling is defined as “A non-probability sampling technique that is a two-stage restricted judgmental sampling. The first stage consists of developing control categories or quotas of population elements. In the second stage, sample elements are selected based on convenience or judgment” (Malhotra, 2010, p.380). Moreover, in the quota sampling technique, the researcher identifies specific criteria relating to the sample number required for selecting participants in each age group, of each gender or/and education level (Malhotra, 2010), for example, when a researcher ensures the collection of relevant information to the research from a variety of age groups based on a specified number of participants in each age group (Easterby-Smith et al., 2015).

As noted by Malhotra (2010), quota sampling incorporates features from purposive sampling (Malhotra, 2010). In this regard, for a purposive sampling technique, the researcher selects participants based on specific characteristics and conditions, especially in situations where the information the researcher requires for the research is difficult to obtain from other forms of sampling methods (Maxwell, 1997).

This research requires collecting data from consumers with specific characteristics and circumstances to investigate the continuous usage and retention of branded mobile apps from high-street retailers. The following conditions are:

- Non-student consumers who live in the United Kingdom.
- Has retained branded app from a high-street retailer for a couple of months.
- Age range from 18 to 55. The researcher requires the age to be equally distributed as far as possible between the divided four age groups (18-24, 25-34, 35,44, 45-55).
- The distribution is equal between male and females.
- Willing to be individually interviewed for 60 minutes.
- Any participant that participated in interviews in the last three months would not be recruited for the study.

Consumers with specific characteristics required to satisfy the data collection for the exploratory qualitative interviews are not easy to find. In this regard, the researcher constructed a screening questionnaire, and a market research agency was contacted only to allocate and

recruit the participants to fit the context of this study, and to facilitate the timing schedule for the interviews. The screening sheet is helpful when conducting interviews, as the researcher can evaluate the appropriate selection of candidates to participate in qualitative interviews (Wilson, 2012).

Furthermore, the researcher also provided the market agency with an information sheet and consent form containing initial information, participants' rights, confidentiality, and the expected duration times of the individual in-depth interviews as recommended by Easterby-Smith et al. (2015). The information sheet and consent form were provided to participants, so they fully understood their rights when participating in this research (Easterby-Smith et al., 2015). For example, the participants had the right to stop being a part of this study at any time without any explanation (Easterby-Smith et al., 2015). Furthermore, the information sheet also explained that data collected from individual depth interviews were audio recorded and used for the research purpose, potential publications related to this study, and the data collected would not contain any personal information, where a code would be assigned to each of the participants. The participants were also required to sign the consent form, so the researcher could ensure that participants fully understood their rights, before participating in the individual in-depth interviews.

Sample sizes for semi-structured individual in-depth interviews are small and may range from 5 to 25 interviews (Saunders et al., 2015). For this research 21 participants were recruited to participate in this study. Furthermore, Table 6.7 contains the given code, gender, age and the time duration of the 21 conducted interviews.

Table 6. 7 Sampling for the exploratory interviews

Respondent	Gender	Age	Length of Interview
1	Male	48	Approximately 60 minutes
2	Male	47	Approximately 60 minutes
3	Male	26	Approximately 60 minutes
4	Female	43	Approximately 60 minutes
5	Female	40	Approximately 60 minutes
6	Female	24	Approximately 60 minutes
7	Female	29	Approximately 60 minutes
8	Female	53	Approximately 60 minutes
9	Female	28	Approximately 60 minutes
10	Male	26	Approximately 60 minutes
11	Male	24	Approximately 60 minutes
12	Male	32	Approximately 60 minutes
13	Male	28	Approximately 60 minutes
14	Female	26	Approximately 60 minutes
15	Male	34	Approximately 60 minutes
16	Female	36	Approximately 60 minutes
17	Male	24	Approximately 60 minutes
18	Female	26	Approximately 60 minutes
19	Female	43	Approximately 60 minutes
20	Female	23	Approximately 60 minutes
21	Male	45	Approximately 60 minutes

It is worth noting that individual in-depth interviews can be time-consuming, and the interview usually ranges from 60 to 90 minutes depending on the topic and discussion (Wilson, 2012). Furthermore, it is recommended that the researcher should try to conduct the in-depth interviews in a location with minimum interruptions to avoid the individual in-depth interview being impacted negatively (Wilson, 2012). As indicated earlier, the duration time for the individual in-depth interviews for this study was 60 minutes. The researcher conducted the interviews in two locations. A few of the interviews were carried out at the University of Strathclyde, and most of the interviews were carried out at the site of the market research agency because it was easier to schedule more than one interview at the same place, which was more convenient for the participants.

6.5.3 Quantitative Method and Data Collection

Quantitative research is defined as “research which is undertaken using a structured research approach with a sample of the population to produce quantifiable insights into behaviour, motivations and attitudes” (Wilson, 2012, p.130). Moreover, unlike qualitative methods where the sample size is usually small, the sample size in quantitative research is large (Wilson, 2012).

Following the qualitative exploratory individual in-depth interviews, this study applies a quantitative method in the form of a self-administrated structured online survey questionnaire to verify the hypothesised relationships in the conceptual model for this study developed from the literature and the exploratory qualitative phase of this research. Self-administrated surveys are defined as “Surveys where the respondent completes the questionnaire with no help from an interviewer. The questionnaire can be delivered to the respondent via the mail (postal surveys), by hand, by fax or online (e-mail, web surveys)” (Wilson, 2012, p.137). Moreover, the online survey followed a structured format, where it included a fixed set of questions, and the participants were asked to choose from a predetermined set of responses for each question (Malhotra, 2010). Participants’ responses to the fixed set of questions in the survey reflect participants’ opinions and information that are gathered specifically for the research purpose (Malhotra, 2010).

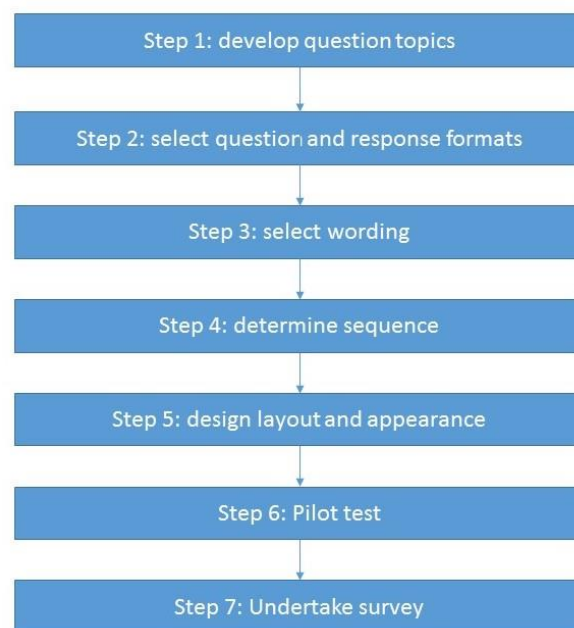
It is worth noting that survey methods are viewed as a useful data collection method, as the researcher can collect information relating to attitudes, opinions and behaviours from a large sample (Easterby-Smith et al., 2015). When using quantitative methods such as survey, the researcher utilises statistical procedures to verify the hypotheses of the research (Creswell, 2014b). Furthermore, a single cross-sectional design was followed for the quantitative phase of this study, which is defined as follows: “A cross-sectional design in which one sample of respondents is drawn from the target population and information is obtained from this sample once” (Malhotra, 2010, p.108). It is worth noting that researchers who use a cross-sectional questionnaire or survey design usually belong to the positivist paradigm (Easterby-Smith et al., 2015). Furthermore, cross-sectional surveys that are well designed can serve as a suitable alternative to longitudinal survey designs (Rindfleisch et al., 2008). For example, Rindfleisch et al. (2008, p.264) argue that, “in some cases a well-designed cross-sectional survey may serve as an adequate substitute for longitudinal data collection”.

Furthermore, utilising a cross-sectional survey method to test the hypothesised relationships is appropriate and fits the context of this study, as the constructs in the conceptual model are previously validated in the literature quantitatively through a questionnaire method.

6.5.3.1 Questionnaire Design

This design of the questionnaire of this study followed seven steps that are involved in the process of designing a questionnaire recommended by Wilson (2012) which are presented in Figure 6.10.

Figure 6. 10 Questionnaire design process



Source: Wilson (2012)

Wilson (2012) emphasises that although the steps involved in the questionnaire design process are presented in sequential fashion, the steps are also interactive and interrelated in nature. In this regard, the researcher may have to go to previous steps if required to make necessary adjustments or changes to reach the final step of distributing the actual survey (Wilson, 2010). For example, Wilson (2012) explains that in certain cases, the pilot testing (step six) may reveal that there is an issue about how the questions are worded (step three), or the sequencing of the questions (step four), or the design layout and appearance of the survey (step five). In such cases, the researcher may go back and forth between steps to solve any issues found. Once the researcher ensures that there are no any changes to be made, the researcher may start distributing the actual survey to the targeted population.

6.5.3.1.1 Developing the Questions Topics

The research objectives play an important role in the process of questionnaire design (Wilson, 2012). As the research progresses, the researcher starts to have a clearer idea regarding the information needed to answer the research questions and to satisfy the objectives of the research (Malhotra, 2010). Moreover, the researcher particularly determines the relevant information for the questionnaire design process, based on the results of evaluating and reviewing the research hypotheses and the research questions (Malhotra, 2010). As indicated in a previous a section of this chapter, qualitative exploratory research helps researchers explore the research problem, so the researcher has a clearer idea of the relevant topics to be investigated in the quantitative study (Wilson, 2012). In this regard, the questionnaire covers topics that are related to constructs resulting from the exploratory qualitative phase and the literature, which helped identify relevant constructs that are represented in the theoretical framework and its hypotheses, to answer the research questions (Creswell and Clark, 2011). In other words, the topics covered in the questionnaire reflect the hypothesised relationships of this research.

Determining the characteristics of respondents is also important in the questionnaire design process. Wilson (2012) explains that the researcher should think from the respondents' point of view when designing the questionnaire. In this regard, the researcher should make the necessary effort to ensure that respondents are able to provide the knowledge of the topics being researched by the researcher (Wilson, 2012). For example, Saunders et al. (2009) notes that one of the limitations of self-administrated questionnaires is that uninformed responses may occur contaminating the data and affecting their reliability. The possibility of this happening is when the respondent does not have the knowledge or experience, where they may end up randomly guessing answers. In addition, Saunders et al. (2009) explain that designing a questionnaire is very different from in-depth and semi-structured interviews in the sense that in in-depth interviews and semi-structured interviews the researcher is capable of rapidly exploring issues further, while in a questionnaire, this is not possible, because the researcher only gets one chance to distribute the questionnaire, as it can be difficult to reach the same respondents again or return to collect additional information.

In addition, the researcher should aim to make the research topic appeal to the subjects under study, as the subjects may become less interested in completing the questionnaire if they experience a loss of interest, which may negatively impact on the quality of responses.

6.5.3.1.2 Selecting the Questions and Response Formats

Wilson (2010) classifies three response formats that researchers can utilise when designing a questionnaire, which are open-ended question, closed-ended questions, and scaling questions. Open-ended questions are defined as “Questions that allow respondents to reply in their own words. There are no pre-set choices of answers and the respondent can decide whether to provide a brief on-word answer or something very detailed and long. Sometimes known as unstructured questions” (Wilson, 2012, p.157). Open-ended questions are commonly used with semi-structured interviews (Saunders et al., 2015). Furthermore, open-ended question can be utilised in self-administrated surveys, in situations where the researcher provides additional options for specific questions, to allow the respondent to further explain a behaviour (Saunders et al., 2015).

Closed questions are defined as “Questions that require the respondent to make a selection from a predefined list of responses. There are two main types of closed questions: dichotomous questions with only two responses and multiple response questions with more than two” (Wilson, 2012, p.159). Dichotomous closed-ended questions provide the respondents with only two answers, such as yes or no questions, or gender questions such male or female (Wilson, 2012). Another type of closed-ended question is called multiple response or multiple-choice questions (Wilson, 2012).

Scaling questions are “Questions that ask respondents to assign numerical measures to subjective concepts such as attitudes, opinions and feelings” (Wilson, 2012, p.161). The adapted measurement scales that are utilised to measure the constructs reflecting beliefs, attitudes and behavioural intentions in this study, are adapted from previous literature, and use a 7-point Likert-style rating scale ranging from strongly disagree to strongly agree.

6.5.1.1.3 Question Wording

The researcher should aim to ensure that the wording of each question employs simple expressions that are familiar and can be easily understood by respondents undertaking the questionnaire (Easterby-Smith et al., 2015). Furthermore, Wilson (2012) explains that poorly worded questions are likely to result in respondents misinterpreting the meaning of questions, which increases the chances of respondents giving unexpected answers.

Furthermore, questions should direct people’s attention to one idea at a time (Easterby-Smith et al., 2015). In other words, the researcher should avoid wording questions that ask two things

at the same time. Furthermore, if more than one idea is included in a question, it is recommended that the researcher break the question into separate parts that express one idea at a time (Wilson, 2012).

A questionnaire that includes questions that include negatively worded questions can be confusing to respondents, particularly when the research is using a Likert scale format where the answers range from strongly disagree to strongly agree (Easterby-Smith et al., 2015). In this regard, researcher should avoid using negatively worded questions, and direct the focus to making the questions simpler to understand (Easterby-Smith et al., 2015). This study applied positive wording to all questions in the online self-administrated survey. It is worth noting that negatively worded question could potentially lead to an increased random error which reduces the validity of responses (Lietz, 2010).

6.5.1.1.4 Question Sequencing

Question sequencing plays an important role in reducing the amount of frustration the respondent may go through while taking a survey (Wilson, 2012). In certain scenarios, a researcher may need to use a complex form of question sequencing to solve the research problem, where the assistance of information technology is required to facilitate the sequencing of questions (Saunders et al., 2009).

Malhotra (2010) explains that the researcher should sequence the questions of the survey in a logical way based on the respondent's perspective. Similarly, Wilson (2012) also mentions that the researcher should think from the respondent's position or point of view, where the researcher's aim is to sequence the questions in an interesting and logical manner. Moreover, the researcher should strongly avoid instantly jumping to different topics in the questionnaire, as it may confuse and frustrate the respondents (Wilson, 2012). In this regard, Wilson (2012, p.174) argues "If respondents feel that they are jumping from subject to subject, the questioning can feel more like an interrogation than a relaxed marketing research survey." Therefore, the purpose of question sequencing helps the respondent interpret the questions being asked more clearly which will help the respondents understand the questions being asked, and will reduce the possibility of the respondent feeling frustrated or annoyed while answering the questionnaire.

6.5.1.1.5 Design Layout and Appearance

Especially in self-administrated Internet surveys and other self-administrated methods, designing a survey that is visually appealing to respondents, is more likely to motivate respondents to fully complete the survey (Saunders et al., 2015). Similarly, Wilson (2012, p.175) explains that a questionnaire that incorporates a good design and layout is essential for the researcher as “Response rates are likely to be higher if the questionnaire looks attractive, uncluttered and easy to understand”. Furthermore, it is known that short surveys are likely to receive higher response rates because they are simpler and faster to complete than longer surveys (Easterby-Smith et al., 2015). However, this notion does not mean that the researcher should squeeze many questions onto one page to make the survey appear shorter as doing so may frustrate respondents (Easterby-Smith et al., 2015; Wilson, 2012). Therefore, the researcher should use appropriate spacing and font size to improve the visual appearance of the survey (Wilson, 2012). It is worth noting that Wilson (2012) explains that splitting a question or its responses into two different pages is not recommended and should be avoided.

De Vaus (2014) suggests that a sufficient questionnaire length that does not impact response rates negatively is not clear, as the views on adequate length are mixed as cited in Saunders et al. (2015). However, Saunders et al. (2015, p. 468) recommend using De Vaus’ (2014) advice which states that:

- Do not make the questionnaire longer than is really necessary to meet your research questions and objectives.
- Do not be too obsessed with the length of your questionnaire.

6.5.1.1.6 Pilot Test

Pilot testing (pre-testing) the questionnaire is an important procedure that is encouraged before the distribution of the actual final questionnaire (Bell and Waters, 2014). The purpose of pre-testing is “to refine the questionnaire so that participants will have no problems in answering the questions and there will be no problems in recording the data” (Saunders et al., 2015, p.473). Therefore, pilot testing the questionnaire enables the researcher to identify problematic issues and make necessary improvements to prepare the questionnaire for its actual main distribution to the population (Bell and Waters, 2014).

It is recommended that the survey pre-test should be applied to a small sub-sample that relates to the the population of the research (Bell and Waters, 2014; Webb, 2002; Wilson 2012). The sub-sample, in general, is usually small where it may range from 10-15 (Webb, 2002), or 10-

40 participants (Wilson, 2012). This research conducted pilot testing (pre-testing) of the online questionnaire on 17 volunteering participants who have continued to use a branded smartphone app. Furthermore, this study asked the volunteers through the outlined questions recommended by Bell and Waters (2014, pp.167-168) to evaluate the pre-testing phase of the questionnaire:

1. How long did it take you to complete?
2. Were the instructions clear?
3. Were any of the questions unclear or ambiguous? If so, would you say which and why?
4. Did you object to answering any of the questions?
5. In your opinion, has any major topic been omitted?
6. Was the layout of the questionnaire clear/attractive?
7. Any comments?

Based on the feedback given by the volunteers that participated in the pre-testing phase, rewording to clarify the questions being asked in the online questionnaire, and question sequencing was also evaluated. Feedback was also gathered regarding the design of the online questionnaire. In this regard, the researcher evaluated a number of questions being asked on each page, based on feedback received from the participants. Participants also felt that the survey was not too long and the time to complete the online questionnaire was acceptable.

Wilson (2012) explains that if there were a significant amount of design flaws in the pre-testing phase, the researcher should correct the design flaws and repeat the pre-test. In line with this, the necessary changes were made to the online questionnaire and it was sent again to the volunteers to evaluate the changes that has been made. Also, the online questionnaire was distributed to five additional volunteers to ensure there were no problematic issues with the design of the online questionnaire.

6.5.4 Measurement Scale Items Used for this Study

According to Bourque and Clark (1994) as cited in Saunders et al. (2015, p.452) researchers choose between three of the following options to select the questions to measure the attitudes and behaviours of the targeted population:

- Adopt questions used in other questionnaires;
- Adapt questions used in other questionnaires;
- Develop their own questions.

This research used existing validated scales that are adapted (slightly modified wordings) to fit the context of this study. It is worth noting that it is common in the area of mobile marketing to adapt validated measurement scales when investigating technology adoption and continuous usage of technological innovations. Furthermore, this study identified 11 constructs driven by the exploratory interviews and the literature, to investigate the consumers' continued use of smartphone branded apps from traditional retailers. It is worth noting that all the constructs were measured on a 7-point Likert scale. The constructs utilised in this study are presented in Table 6.8:

Table 6. 8 Scale items used in this study

Scale items for this Study	The construct being measured	Likert type	Adapted from
<ul style="list-style-type: none"> • Learning to use the app is easy for me. • I find it easy to get the app to do what I want it to do. • My interaction with the app is clear and understandable. • I find the app to be flexible to interact with. • It is easy for me to become skilful at using the app. • I find the app easy to use. 	Perceived Ease Of Use (PEOU)	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Davis, 1989)
<ul style="list-style-type: none"> • Using the app enables me to accomplish shopping tasks more quickly. • Using the app enhances my shopping performance. • Using the app increases my shopping productivity. • Using the app enhances my shopping effectiveness. • Using the app would make it easier to shop. • I find the app to be useful. 	Perceived Usefulness (PU)	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Davis, 1989)
<ul style="list-style-type: none"> • Using the app is compatible with all aspects of my life and work. • I think that using the app fits well with the way I like to live and work. 	Compatibility	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Taylor and Todd, 1995b)

<ul style="list-style-type: none"> Using the app fits into my work-style. 			
<ul style="list-style-type: none"> I find using the app to be enjoyable. The actual process of using the app is pleasant. I have fun using the app. 	Enjoyment	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Davis et al., 1992) (Venkatesh et al., 2012)
<ul style="list-style-type: none"> Shopping from the app "takes me away from it all". Shopping from the app makes me feel like I am in another world. I get so involved when I shop from the app that I forget about anything else. 	Escapism	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Mathwick et al., 2001)
<ul style="list-style-type: none"> I feel that my needs have been met using the app or doing transactions with this app. This app provides me with information and products according to my preferences. It feels like the app is talking personally to me as a customer. It is important to me that the app feels like my personal area when I use it. The requirement to log into the app makes me feel recognised as a customer. 	Personalisation	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Rose et al., 2012)
<ul style="list-style-type: none"> People who influence my behaviour would think that I should use the app. People who are important to me would think that I should use the app. People whose opinions I value would prefer that I use the app. 	Social Influence	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Venkatesh et al., 2012)
<ul style="list-style-type: none"> I am satisfied with the experience. The experience is exactly what I need. 	Satisfaction with the Branded App User Experience (SBAUE)	7-point Likert scale ranging from (Strongly	(Song and Zinkhan, 2008)

<ul style="list-style-type: none"> The experience has worked out as well as I thought it would. 			Disagree - Strongly Agree).	
<ul style="list-style-type: none"> I plan to continue to use the app in the future. I intend to continue to use the app in the future. I predict I would continue to use the app in the future. 	Continuous Intention to Use the Branded App (CIUBA)		7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Venkatesh et al., 2012)
<ul style="list-style-type: none"> This brand is trustworthy. This brand is reputable. This brand makes honest claims. 	Brand Reputation (BR)	Long-term Brand Reputation (LBR)	7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Veloutsou and Moutinho, 2009)
<ul style="list-style-type: none"> This brand has a sustainable image that is long lasting. In the past, today and in the future, the values behind this brand are unlikely to change. 	Brand Sustainability (BS)			
<ul style="list-style-type: none"> I encourage friends and relatives to shop with the brand. I say positive things about the brand to other people. I intend to shop for the brand in the next few years. I would recommend the brand to someone who seeks my advice. 	Brand Loyalty Intention (BLI)		7-point Likert scale ranging from (Strongly Disagree - Strongly Agree).	(Zeithaml et al., 1996)

The survey also included the demographic questions such as age, gender, occupation and education, in addition to questions to ensure the right participants were selected for this study, which will be further discussed in the sampling section for the online questionnaire.

6.6 Sampling and Data Collection Procedure

The quantitative cross-sectional online questionnaire utilised non-probability quota sampling technique which was discussed earlier in the chapter. The reason for utilising the quota sampling technique is that the total targeted population was unknown to the researcher and therefore, a probability sampling technique could not be applied in this study (Saunders et al.,

2015). Furthermore, quota sampling was chosen because the researcher aimed to achieve the following:

- Collecting responses from consumers that have retained one of the selected branded smartphone applications for this study, which are M&S, John Luis, H&M and NEXT.
- To receive 250 responses for each of the branded smartphone apps selected for this study. Therefore, the sample size for the quantitative self-administrated online questionnaire aimed to achieve 1000 responses in total.
- Find consumers to participate in this study who had retained the branded smartphone application for a period of more than six months.
- Conduct the study on non-student consumers, as the selection of a student samples may cause hypothesised relationships to inflate and introduce biasness causing issues related to decreasing the external validity of the research (Burnett and Dune, 1986). Furthermore, Legris et al. (2003) explain that conducting technology acceptance research in an actual commercial environment with the use of a non-student sample can be more beneficial. Additional factors were as follow:
 - Data were collected as far as possible from an equal number of males and females, at least a 60% to 40% distribution within the gender category.
 - Consumers had to be residents in the United Kingdom.

Furthermore, since the online questionnaire was distributed to a large number of potential participants, where the responses were self-reported, it was necessary to further implement data collection techniques to enhance the design of the online questionnaire to enhance the validity of the data and reduce response bias (Osborne and Blanchard, 2010). Therefore, the use of a Random Response Scale (RRS) question is encouraged when conducting surveys in computerised environments and one was included in the survey (Beach, 1989). The RRS technique was introduced by Beach (1989) and discussed by Meade and Craig (2012) and Osborne and Blanchard (2010). An RRS scale is defined by Beach (1989, p.102) in the following way: "Such a scale is made up of questions that all subjects who read and understand the question can only answer in one way". Therefore, the RRS scale helps identify respondents who are providing random answers to questions in the online questionnaire. Liu and Wronski (2018) recommend avoiding using a trap question that could be difficult for respondents to interpret, as a difficult trap question can confuse the respondents when answering an online survey. In addition, the online questionnaire included a time filter (e.g. questionnaire

completion speed check), which helps the researcher identify speedy respondents. The industry standard time filter calculation for this study involves taking the value of the median and dividing by two.

As the required sampling criteria for this study utilising the non-probability quota sampling technique was very specific, it was very difficult to collect the required data for this study. In this regard, to satisfy the criteria of selecting the sample for this study, a research agency was hired to facilitate the distribution of the online questionnaire to relevant respondents in research panels within the United Kingdom, to reach consumers meeting the criteria for this study.

The launch of the online questionnaire was promising as enough responses for the targeted branded smartphone apps for this study were received; as mentioned earlier, these were M&S, John Luis, H&M and NEXT.

6.7 Confidentiality/Ethical Issues

The current study followed the accepted standards of research practice. The online questionnaire did not contain any personal information which could result in the identification of the participants. In this regard, a code was applied to each participant in this study.

6.8 Conclusion

The main purpose of this chapter has been to present and justify the selected research methodology for this study. In this regard, it was important to build a philosophical foundation by gaining an understanding of the various philosophies discussed in this chapter, which helped in the decision-making process for selecting the appropriate research methodology (research strategy) for this study.

A pragmatic approach utilising a sequential exploratory design was adopted for this study. The sequential exploratory design was conducted in two phases. In the first phase, exploratory semi-structured individual in-depth interviews were performed, to help select the sample for this study, and to identify the relevant constructs that influence the continuous usage and retention of branded smartphone application from high-street retailers. The second phase included a quantitative online questionnaire to confirm the results of the qualitative method employed in this study. Furthermore, the pragmatic mixed-method approach was selected, due to the lack of understanding that surrounds consumers' retention of high-street branded smartphone

applications, and based on the literature highlighting that mobile phone technologies have rapidly improved which has caused a shift in consumer behaviour.

The chapter also discussed the sampling methods employed in this study for the qualitative and the quantitative phase. Furthermore, the measurement scale items to measure the constructs in the theoretical framework were also presented.

The data analysis of the qualitative and the quantitative phase of this study is discussed in the next two chapters.

Chapter 7

Exploratory Qualitative Analysis and Hypotheses Development

7.0 Introduction

The previous chapter discussed the research philosophy and the mixed method methodology for this study. This chapter discusses the qualitative analysis of the exploratory individual in-depth interviews, which is the first method phase applied in this study. In this regard, this chapter discusses the analysis and findings of the exploratory individual in-depth interviews, which will help the researcher distinguish relevant and irrelevant constructs that influence consumers' retention of smartphone apps from high-street retailers to improve the theoretical framework of this study. Therefore, the aim of this chapter is to enhance and clarify the theoretical framework and its hypotheses, which is going to be tested in the second phase of this study through the quantitative method using Structural Equation Modelling (SEM).

The application of the qualitative method in this study is seen as important as the insights and information that is gained from consumers who retain smartphone apps from high-street brands are discussed. Therefore, in the individual in-depth interviews, the participants discuss the beliefs that represent the factors that influence their continuous use and retention of smartphone apps from the traditional retailers that they shop with. In addition, as mentioned earlier in the previous chapter, the technology adoption and continuous usage theories are quantitative in nature, and applying individual in-depth interviews to support the theoretical model in this study enables the researcher to capture information from stories that are provided by the participants in the exploratory qualitative phase of this study, which will help in understanding the factors that influence the continuous use and retention of smartphone apps in greater depth.

7.1 Perceived Usefulness

Perceived Usefulness (PU) is an important factor that influences consumers' intention to continue to use and retain branded smartphone apps from traditional retailers. The PU of the retail shopping smartphone apps demonstrates that the consumers would perceive the smartphone branded app to perform shopping tasks well so that consumers are able to accomplish shopping tasks quickly and productively.

The in-depth individual interviews highlighted the importance of PU in influencing consumers' intention to continue to use and retain traditional retail smartphone branded apps. For example, the following respondent explains that there is no point in having an app that it is easy to use if it is not useful, indicating that usefulness is more important than ease of use. Furthermore, the respondent emphasises the importance of usefulness in terms of completing shopping tasks quickly. This view is expressed in the following comment:

“Usefulness. There is no point having an easy to use app if when you get in, it doesn't do what you want it to do... I think nowadays we are so programmed into getting things instantly. You click a button and it comes up; I don't mind putting some details in but having to actually put in username and password it's... Five years ago it wouldn't have been a big thing, it would have been great – we're in – but nowadays everything is so quick, quick quick.” [Respondent 1]

Additionally, other respondents also confirmed that the ability to complete shopping tasks quickly is important. Examples of this view are expressed in the following comments:

“Functionality. Quickness of using the app... So, speed is important. You know, usability.”
[Respondent 6]

“It's very simple to use. My Internet is not fast; the app loads quickly, it's not graphic intensive. The pictures and items load quickly. It's a speed thing for me. It's very simple and intuitive.”
[Respondent 12]

Furthermore, Respondent 15 explained that it is important that the smartphone branded app is able to complete shopping tasks quickly and efficiently like when consumers shop from the retailer's physical store. For example, Respondent 15 explained that, when consumers walk into the retailer's they usually know the product section they are looking for, and they go straight to that section. This view is explained in the following comment:

“I think it’s how quickly I can get to what I’m looking for. I don’t go on to browse; I just want to get to the place, which is the same as if I’m in the physical store. I’m not much of a browser; I would go in specifically for something; I would go straight into the section... it’s more of a need, I think. I’d be thinking I need a new jacket, or a new pair of shoes, and I’ll look at what the different stores have got so I know I won’t need to spend as much time on the high street.”

[Respondent 15]

Furthermore, the following respondents explained that the usefulness of the branded app enables them to accomplish tasks more quickly over using the brand’s mobile website. In addition, it also enhances the shopping productivity and performance leading consumers to hold a positive intention to continue to use and retain the branded app. This view is reflected in the following comment:

“...I think ones that are useful and easy to use. Ones that have a purpose, they are not just the website created into an app because I don’t think that serves a purpose really.”

[Respondent 3]

“...if you are able to quickly flick... within one minute rather than having to wait for the mobile website to load. It’s a lot more efficient than the mobile website and that is important to me.” [Respondent 11]

“...yes, it definitely does because it is much simpler. If I go onto the website and I don’t purchase it then it’s more steps or clicks to get back to that point again. If it’s on the app, it’s just a case of doing it on my phone really quickly.” [Respondent 18]

“A lot of them are quicker than the website to be honest.” [Respondent 20]

On the other hand, when retail shopping branded apps do not function and perform well, it causes consumers to perceive the branded app not to be useful, and it may lead consumers not to have the intention to continue to use and retain the branded app. It is worth noting that, in the following example, Respondent 3 compared the Amazon and eBay retail smartphone branded apps which are pure online businesses to Topman and River Island which are traditional retailers. In the following comment, Respondent 3 expresses why the Topman and River Island smartphone branded apps were not retained:

“There are a number of different ones that I’ve used. I’ve used the Amazon app and I’ve ordered a few different things through the app. It’s very handy; as soon as you are logged in you can just click buy and that is things ordered, without even having to put your card details

in. It's so easy. Same goes for eBay. You can buy and sell very quickly through their app. I also had another couple of retail store apps where they weren't as good. I felt as though they were buggy, they used to crash a lot. It was Topman and River Island. I didn't like them so I got rid of them. You know poor functionality, they weren't easy to use. The websites were a lot better. That's why I got rid of them... An app that just doesn't work, an app that isn't easy to use, it crashes and it is buggy. I can do what it needs to do on the website and do it better on the website. Where it's just not useful to me... If the app isn't useful for me there is no point of me having it... If it doesn't work well I wouldn't have it on my phone. [Respondent 3]

Similarly, the following comments from Respondents 8 and 16 confirm this view:

"...that it wasn't as good as I thought it was going to be. I can't think. If I did I probably would have deleted it because I would have thought it's not good at doing what I thought it would be going to do." [Respondent 8]

"I have to be honest, I do use the apps and I do use online to shop too. I think if I didn't think they were as good as the website I would probably remove them... the fact that it has remained on there means that it is of use to me. So, I think one leads into another... You are not going to download something that isn't going to be of use to you." [Respondent 16]

The individual in-depth interviews also highlighted that when traditional retail smartphone branded apps are perceived to be useful, this can influence consumers to have a favourable satisfied experience which can lead the consumer to hold positive intention to continue to use and retain the smartphone branded app. The following comment of a respondent explains that because the app was productive, it didn't cause the respondent frustration and it also helped the respondent make shopping decisions, which reflects that the respondent is satisfied with the app experience.

"It helped me make the decision, it didn't put me off. Again, with the apps, I would rarely use the website to browse through because I find the app is a lot quicker at loading the data. I just use the app to browse through quite quickly." [Respondent 13]

Similarly, Respondents 8, 11 and 15 confirmed this view:

"I think it's good. It's clear. You have the option to shop, to do offers, you can have a shopping bag that you can alter... More satisfaction. Happy to do something and know that I've done it and knowing that it's done, and it will be able to do what I want it to do... It's

fast, it's efficient, and it's quite simple... Yes, you don't feel that you are being frustrated." [Respondent 8]

"I think the ones that I've got tick all the boxes for things that I'm looking for. I'd say there isn't much that they could do to improve them. They are efficient and that's all I'm looking for, so they satisfy what I'm looking for." [Respondent 11]

"Well I think they do make things quicker, especially on the phone, they allow you, you don't have to go through the loading process so much; I think it feels a lot more streamline. I like to use them. It really is very efficient and good in the way that it works... It was a positive outcome." [Respondent 15]

Additionally, the following respondents, when asked about satisfaction with the branded app user experience, explained that it comes from the traditional retailer branded app being useful. This view is reflected in the following comment:

"I think there is a sense of satisfaction that you've done something that is quicker and easier and it's a bit different. Me and my friends sometimes have a joke that you order something online, you walk there to pick it up straight away. You're saving all the hassle and bypassing people queuing. You do think, oh you should have got it online, should have done this. It is quite satisfying." [Respondent 14]

"...it should be useful; you don't want to be messing about with it... Yes, a lot. It's a very good app. Very handy. They've done well on that." [Respondent 17]

"It's more satisfaction if it's working or frustration if it's not." [Respondent 20]

It is also highlighted that respondents may perceive the branded high-street app to be handy and useful. However, they might not be really satisfied with the branded app experience. For example, the following comment expresses that the respondent would like the app to have other useful features, when asked about satisfaction with the app experience.

"The M&S app. But if you go on the website, if you click on a coat it will say other customers that viewed this coat viewed something else. I don't think it does that as much on the app." [Respondent 8]

Additionally, the following respondent stated:

"It's swipe and touch and most of the information is there. Most of the content there is great. Definitely. It's just it doesn't have some things that I would like on it." [Respondent 10]

Additionally, more comments from respondents confirm this view:

“John Lewis on the app... the app closes and I have to open it up again. It’s quite frustrating; its closed when I’ve been looking at shoes, when I’ve been on page 4 of 500, its closed and when I’ve re-opened it’s gone right back to the beginning, so that can be quite frustrating.”

[Respondent 14]

“I’ve always found this one to be a little bit more, I mean, I have to look a bit harder. I mean I can use it; it’s just not as instant. I suppose I’d compare John Lewis as an Apple system which is a bit more intuitive to me but whereas this is a bit more like Microsoft.” [Respondent 15]

“Yes, definitely it is not functioning, if you can’t buy anything on the app and stuff, it’s a bit frustrating. I think if you go into the shop anyway, I think for girls anyway, if you go into a shop anyway you will keep on going.” [Respondent 20]

Additionally, the following comment is interesting as the respondent explains that the satisfaction with the app experience was affected because the location for collecting orders from the physical high-street store was all the way at the back of the store. This comment was thought to be interesting, as some consumers seem to associate the idea that satisfaction with the app experience extends to the experience in the physical store until the product is received and the services associated with the purchase are completed. Moreover, the following comment shows that, in some cases, consumers may not necessarily be fully satisfied with the high-street retailer’s branded app, but still retain it because it is useful. The following comment explains this view.

“...one of the things that I do is the click to collect option. I’ve not used it with Zara but I’ve used it for Marks and Spencer’s and House of Frasers. The only thing I will say is that the click and collect seems to be the back and beyond of the stores and that affected my experience. I think these things do add to the experiences but I think because I know you are ordering from an online store.” [Respondent 18]

7.2 Perceived Ease of Use

Perceived Ease Of Use (PEOU) of smartphone apps is a factor that is highlighted as playing a role in influencing consumers' continuous intention to use traditional retail smartphone branded apps. Consumers could use smartphone apps at home or on the go, and therefore the branded smartphone app operation needs to be easy to use, straightforward, understandable, clear, easy to interact with and access. In this regard, the PEOU plays a role toward motivating consumers to continue to use and retain smartphone shopping branded apps from traditional retailers.

One of the features that causes consumers to perceive a smartphone branded app to be easy to use is that the interaction with a branded app would have to be clear and understandable. Examples of this view are reflected in the following comments:

"I would expect them to have good technology and be quite sophisticated. Because both of them are retailers that you would expect to sell to all ages you would expect it to be simpler. I mean the Topman app is quite stylish – in your face. That's all right, but I find that the M&S one is quite clean. They are obviously hoping that older people will use it so they don't want to make it more complicated." [Respondent 13]

"clarity. Information and interesting details and things. So, if I'm looking at John Lewis and things, I want to see a proper description of the product... yes but I would probably put that under clarity." [Respondent 16]

"A clear layout. A sub section- divided into men's and women's sections, so if I'm looking for something particular, I don't need to scroll through the whole stock to find it. A search bar that you can put product codes into." [Respondent 20]

Additionally, Respondent 15 expressed that the experience of the smartphone branded app should be clear and it is similar to the experience of the traditional retailer's physical store, while mentioning that retailers should make the branded app as easy to use as possible, because of the smartphone's screen size. The following comment by Respondent 15 reflects this view:

"...it just seems very clear to me. It's almost like in the store its clear how it's laid out so in the app it's the same... I think that John Lewis is good at having simple information on the screen. Some apps are quite complex, but I think for a screen of this size it has to be quite simple...The easier I can do it, the better for me." [Respondent 15]

Additionally, it's important for the branded app to do what it intends to do easily. Examples from respondents express this view in the following comments:

“Easy to use. You don't want it to seem crap if you know what I mean. Say it was an H&M app, you would want it to work properly.” [Respondent 9]

“It's quite similar. The things I've been ordering is easy; there isn't much complexity to it. It's quite easy to go in and buy Christmas gifts for other people. I've been buying menswear and things for older women, things that I wouldn't buy for myself, and it's generally quite easy to go in and navigate about; it's quite straight forward.” [Respondent 14]

“It's really easy to use. I tend to go in and take a picture of the tag. I'm not sure if it's this one but I think you can take a picture of the tag and then it will load it up. Let me check that it is Zara and I'm not making that up. (CHECKS PHONE.) It was Zara. I literally bought a playsuit last week in a bigger size than they had in store.” [Respondent 18]

“On a day like today, I'm in both walking distances of Marks and Spencer's and Waitrose from my office but I might still use it. It's easier; it's simplicity. [Respondent 21]

In addition, Respondent 14 explained that ease of use is important but expressed a dislike for when retailers update the branded apps frequently. Furthermore, Respondent 14's comment reflects that retail smartphone branded apps should maintain a consistent easy to use experience, even when the retailer decides to add a new feature to the app through updates. The following comment by Respondent 14 reflects this view:

“It's just if I'm on there, I'm looking to browse the app to buy something. If I wanted to sign up for a newsletter, I would do it. It's important that it's easy and quick and you don't need to update all the time. I think it should be straightforward; you shouldn't have to update all the time. That's about it though, as long as it's easy to use.” [Respondent 14]

The in-depth individual interviews also demonstrated that consumers find smartphone branded shopping apps easier to use than the brand's mobile website. Therefore, the ease of use of the retailer's branded app is important in motivating consumers to continue and retain the smartphone branded app, because it offers consumers a more straightforward experience in terms of ease of use than the retailers' mobile websites. Examples of this view are demonstrated in the following comments:

“My gripe with the web is clunky websites, but apps really simplify. They are a simple tool. I don't have any complicated apps. They simplify the web.” [Respondent 12]

“I know there are differences, but in terms of the basic functionality, just to browse through, I would say they were quite clear and straightforward... I hadn't really thought about that but certainly on the website you have the option to view a lot of the one collection on the one page. But as I say, I find it so straightforward and simple that it doesn't bother me... yes it was either Topman or Zara...I find it easier to scroll through on the phone... I find it easier to enter data. Even things like drop down menus and entering any values, I find that a lot easier on the app than on the website.” [Respondent 13]

“I wanted it to be easier to use than the website so I wanted the search facility to be clear cut. I wanted the speed. But that's more down to my phone and Wi-Fi availability and things. I wanted it to be easy to use.” [Respondent 16]

The individual in-depth interviews also show that when apps are easy to use, this will lead consumers to be satisfied with the user experience of the smartphone branded app, which in turn, will motivate consumers to continue to use and retain the smartphone branded app. In addition, these comments express that PEOU may generate favourable feelings regarding the consumer's satisfaction with the branded app user experience. Examples of this view are reflected in the following comments:

“...for me it comes down to about how good the app is, how easy it is to use. The ease of use one is vital. I'm not going to do it on the app if I can do it more easily on the website. I think if you look at the Amazon one as a comparison, it is very easy to use; everything is there for you to see. I would be quite happy to do it there. If you compare the RBS app which is a totally different context, Okay, there isn't a huge amount of information on it, but you can still do your task there; you can do what you want. Whereas even if the River Island one didn't offer you that much to do, it wouldn't fulfil its purpose...There are some at the moment that are very buggy, aren't easy to use and don't give a good user experience but then there are some that are good, that are useful and easy to use... I would say so and I think the more you experience a good app and the more you experience an app that is easy to use and it does have a purpose and easy to navigate, you start to expect that from other apps as well.” [Respondent 3]

“Even if I had the iPad I would use my phone; it's just easier to use, it's smaller. Because the app is so good, it doesn't bother me.” [Respondent 10]

“Easy, simple to use. I don’t particularly like anything that pops up that you have to opt in or opt out of. I don’t mind it once but it irritates me if it’s all the time. I think if they make the experience really easy for me, I find it more pleasant.” [Respondent 14]

“They have quite a good app, I think. It’s easy to browse things and it’s all in the categories... that you can find what you are looking for easily.” [Respondent 17]

On the other hand, when consumers are dissatisfied with an app because it is not easy to use, it may lead consumers to feel disappointed, frustrated or even angry, which could potentially increase the chances of consumers not being motivated to continue to use and retain the traditional retailer’s smartphone branded app. This view is expressed in the following comments:

“It just really frustrated me. I found it really slow and I couldn’t work it. I found it easier to just go on the website than using the app.” [Respondent 6]

“If it wasn’t easy to use I would get frustrated with it.” [Respondent 11]

“...if it was difficult to navigate I would be angry” [Respondent 21]

Additionally, in the following comment, the respondent finds John Lewis’s smartphone branded app easier to use than another traditional retail branded app which is also retained and used by the respondent. This demonstrates that consumers may still retain and use branded apps from traditional retailers because they are easy to use, but they might not be fully satisfied with the branded app user experience. In this regard, consumers may think or feel that there are some improvements to be made by the brand regarding the ease of use of the app. It is worth noting that the respondent indicates that if the app was complicated to use where the experience is bad, the respondent would not continue to use and retain the branded app. This view is expressed in the following comment:

“Well they are all pretty easy to use but, well I can always get to where I want to go, but with John Lewis it feels easier, it’s not as confusing, it’s a nicer experience... Well that sounds like a bit of a contradiction but it’s like when you go into a shop. I know how to find something in a shop; it doesn’t take more time but it’s a nicer experience if you feel you can move around and not think so much, because it’s intuitive... if it was really bad I would get rid of it.”
[Respondent 15]

Additionally, Respondent 15 added that they like the John Lewis branded smartphone app more than the Debenhams smartphone branded app with regard to ease of use. The following comment expresses this view:

“I don’t like it as much as the John Lewis one; it’s a little bit more in your face. The design and layout with the John Lewis one – I like the way you have the drop downs at the top and you can get right into what you’re looking for. With this it is a bit more complicated and there is a lot of photography on it – which is okay on a website but with an app it’s a bit more complicated.” [Respondent 15]

This view is also confirmed by Respondent 21 who retained smartphone apps from two different high-street brands and indicated being satisfied with the clear interaction with the John Lewis branded smartphone app, but not with the Next branded smartphone app. This view is expressed in the following comment:

“...yes, I was on the NEXT site the other day and the first thing I saw was a model, you know, and that’s fine in itself. But with John Lewis you come up to a menu and then you navigate. I think with Next there is an image straight away; it maybe did not appeal to me, and it’s difficult to put into words.” [Respondent 21]

Retail shopping branded apps should also be consistently easy to use across different mobile platforms, which are downloaded from the Apple app store or the Google Play Android app store. For example, consumers may switch their smartphone from an iPhone to a smartphone which runs on Google’s android platform. In such cases, the consumers expect the exact same retail shopping branded app ease of use experience across different mobile platforms which the consumers are used to. Therefore, it is important that the app’s ease of use is consistent across different mobile platforms. In addition, if the app is not easy to use it will negatively influence the continuous usage of the app. The following comment expresses this view:

“I think it’s just easy, I’m not technically minded at all and it’s about finding something easy to work. My husband will talk me through using the Samsung but I find it easier on this. My husband finds it’s a lot easier but I don’t. Yes, it’s got to be easy for me... if I find it difficult to work there is no point of having it on my phone... I have been using things and I’ve thought you could do this easier.” [Respondent 5]

This previous experience was also described by another respondent with regard to the Asda shopping retail smartphone branded app and the Groupon branded app that provide offers for

consumers from various brands. The following comment shows that the respondent understands that there are differences between the phones' platforms in terms of how they operate, but also mentions that the app ease of use itself should stay consistent across different platforms. Additionally, it can also frustrate consumers when brands do sudden dramatic changes to branded apps, where the branded app may not be perceived as being as easy to use as it was perceived to be by the consumers before the branded app was updated. This also may cause a negative impact on the satisfaction with the app experience which can result in not retaining the branded app. The following comment expresses these views:

"I think that's more annoying; I'd like it on the page. For ages I didn't know how to get the options up. On Groupon I have to click that button to access my Groupon page, to see my old purchases and things. For ages I was sitting saying why can't I find this button? I could do it on the iPhone so easily. So, there are slight differences between the phones more so than the app, but when you are using the app you notice the difference." [Respondent 6]

"I just want them there for ease; I want to press buttons and know where they are and get on with my day. Asda had a big change to their app quite recently and I think it was between my switch between iPhone and android. I went on and didn't have a clue where to find my shopping and it took me ages looking that I have to go from this to go to that. Whereas before I could sign on and do my shopping and get on with it. Whereas it doesn't let you browse before you sign in. Now I've got to spend time signing in and going between things. To be honest I've always used the app. I like their products. They always deliver fairly quickly. They offer good deals, once a week anyway! I have tried other ones... There were a lot more options that could have been given to make it a bit easier. It just annoyed me so I deleted it." [Respondent 6]

7.3 Compatibility

The individual in-depth interviews also highlighted that consumers intended to continue to use and retain traditional retail branded smartphone apps because they are compatible with respondents' busy lifestyles. In addition, compatibility reflects that the branded app is compatible with the way the consumer lives and works. In this regard, one of the reasons that consumers retain and continue to use the branded app is that the respondents expressed that they have busy working hours. The following comments express this view:

"I see them the same as far as they both make my life easier... I just work Monday to Friday office hours and I don't drive so I often don't get to the shopping centres or whatever so it's just easier to order it and collect it from a store... Because when I think about it there isn't that big of a difference between using an app and shopping on the website. It seems to make your life easier – it's an easier way of doing things." [Respondent 14]

Additionally, Respondent 16 explains that shopping on the high-street can sometimes be difficult in situations such as shopping with children. Therefore, it is indicated that compatibility plays a role in motivating consumers' intention to continue to use and retain the smartphone branded app. This view is expressed in the following comment:

"I would personally find that shopping with three children is a complete nightmare. If I am going to do something, I want to know that I'm not going to waste my time." [Respondent 16]

Additionally, Respondent 5 explains that the traditional retail branded smartphone apps are retained when taking care of a big family, making the smartphone branded app compatible with the respondent's lifestyle. This view is expressed in the following comment:

"Probably my life, what I'm doing, for the likes of food or whatever, my mum comes for dinner a lot so I'm feeding 6 people." [Respondent 5]

In the following comment, Respondent 8 explains that continuing to use and retain smartphone branded apps reflects that the apps are compatible with the consumer's lifestyle. Also, the respondent mentions that in the case of upgrading the smartphone to a new one, the respondent will download and retain the branded apps that are compatible with the lifestyle. This view is expressed in the following comment:

"I think you just sort of adapt your apps to suit your own lifestyle and if you find you are not using them you should delete them. But then if you upgrade your phone you just download the ones that you know you're going to use and sometimes you forget and then do so later. I

probably don't use as many apps as I could. There would be times when I will go into something through safari and I will think, why have I not downloaded an app for it.” [Respondent 8]

The following comment expresses that smartphone branded apps are becoming compatible with consumers' lifestyles, while highlighting that brands should also work on making their branded apps easy to use. The following comment expresses this view:

“I think now it is a lifestyle. If you have to leave your phone in the house you are lost without it when you are out. You do everything on your phone these days. I think it's important for brands like Marks and John Lewis to get their apps right and make sure that it is easy access and it is as simple and straightforward as possible.” [Respondent 19]

The qualitative in-depth interviews highlighted that compatibility may lead consumers to develop favourable feelings related to the experience of using the traditional retail smartphone branded app. For example, Respondent 16 explained that when the traditional retail smartphone apps are perceived to be compatible with the consumers' lifestyle, it adds to the shopping experience because they are able to interact with the brand through the traditional smartphone branded app. This view is reflected in the following comment.

“I'm afraid that a mum of three in suburbia doesn't know what's out there very much!... I probably used it more often when there was a Next store near to us, if I needed to get something I would have a look beforehand so I wasn't having to drag the children around... personally my life has changed so much anyway. Three children I would have been interacting a lot more anyway. I guess that's why the apps are so perfect because they make you able to interact anyway. You can use them as an add-on to the shopping experience – as a research tool – or you can use them as a convenience tool in themselves.” [Respondent 16]

Additionally, Respondent 16 described the app to be a lifestyle assistant while describing John Lewis and Next to be the perfect branded apps as lifestyle assistants. In other words, the following comment reflects that the respondent is satisfied with the branded app user experience from it being the perfect lifestyle assistant. The following comment reflects this view:

“It's like a lifestyle assistant. You know that's exactly what it's there for. John Lewis is the perfect example. Or Next is the perfect example.” [Respondent 16]

Furthermore, Respondent 12 described becoming used to the experience of shopping with the traditional retailer smartphone branded app and perceived the smartphone branded app to be compatible with their lifestyle. Additionally, the respondent explained that it would be difficult to go back to the old ways of shopping, which reflect that the consumer is satisfied with the branded app user experience. The following comment reflects this view:

“...my wife works Mon to Wed. I have two days where I look after the baby on my own... I got the app when I got the iPhone, 6 months or so ago. I downloaded the app; I’m not a huge fan of shopping especially with a 7-month-old baby. You can use click and collect on the app; it suits me because of my lifestyle. Apps make my life easier, especially with my 7-month year old. Anything that can simplify life and give you an extra 10 minutes per day... It would be difficult for me to go back to my old way of shopping.” [Respondent 12]

Similarly, Respondent 19 described having limited time, a busy and rushed lifestyle. In addition, the respondent indicated that they are satisfied with the branded app user experience, and if there were unfortunate scenarios that occurred with shopping through the branded app, they would be resolved. The following comment reflects this view:

“You know again it probably goes down to a time thing. Because I have young children I’m always rushing; you want something that you can do quickly and you want the reality that it will be there in three days. If there is a problem, you know it will be resolved... I think the easy thing for it is that it is there.” [Respondent 19]

Similarly, Respondent 4, confirms this view with regard to compatibility and satisfaction with the branded app user experience by describing that the branded app makes the respondent feel relaxed when the smartphone branded app is compatible with the way the respondent likes to shop, as the branded app also helps the respondent to manage their busy time schedule. The following comment reflects this view:

“I’m more relaxed. I can look at things and I’m more relaxed. But in the store, I’m more harassed and on a time schedule and buying anything.” [Respondent 4]

An interesting comment with regard to compatibility and satisfaction with the branded app user experience, was made by Respondent 6. The respondent expressed that the app is retained because it had become a part of how the respondent lives and works. However, in this particular comment, the respondent mentioned that there is a feeling of sadness and guilt, which could reflect that the respondent may not be actually satisfied with the branded app experience, but

the branded app must be retained because it fits in with the respondent's lifestyle. This view is reflected in the following comment:

"The Tesco and Asda grocery shops, if I'm stuck in with a toddler, I can put the shopping in and I'll know I have it the next day.... It has changed the way everyone goes around their daily life. It is sad as well though... I'm guilty of it as well, I and my partner will both sit on our phones in the house... The majority of my apps are for convenience and making my life easier."

[Respondent 6]

7.4 Personalisation

Personalisation is another factor that the in-depth individual interviews highlighted that plays a role for consumers in continued use and retention of traditional retail smartphone branded apps. Personalisation reflects that the smartphone branded app needs to offer a tailored experience to consumers. The following respondent expressed that traditional retail brands can offer a more tailored personal experience as the traditional retail smartphone branded app enables the consumer to save their favourite shopping and items and previous purchases. This view is expressed in the following comment:

"I've moved from Tesco to Asda; all my favourites are saved. When I go into my app, I just click favourites and my previous shopping list comes up and it's really easy. Whereas if I was to go back to Tesco, I would have to type in apples and check 400 different types of apples."

[Respondent 4]

Similarly, Respondent18 confirms this view:

"The apps tend to be personalised. Well, in my case they are because they are logged into my account. I can save things directly onto the app and save them and delete them; it's been good for Christmas presents and things. The other things I do are save items then check them on Boxing Day to see if they have gone into the sale." [Respondent 18]

Moreover, it is worth mentioning consumers are aware that when logging into branded apps, retail brands can offer a targeted shopping experience that is tailored to consumers' shopping needs based on previous purchases. For example, a retail brand can keep track of the consumer's past purchases, which helps the retail brand to suggest products to the consumer through the branded app, that may be of interest to the consumer. This view is expressed in the following comment:

“...as soon as they know who it is, it’s more targeted. So, I get boots, they know I have a thing for boots because they’ve kept track of my purchases.” [Respondent 16]

Furthermore, offering a personalised tailored experience to consumers motivates consumers’ intention to continue using the traditional retail smartphone branded app, even when the consumers would have other alternatives for engaging with the brand from home. The following comment reflect this view:

“When I’m at home I tend to use my app rather than using my laptop to go on the website because I find they are a bit more tailored for me.” [Respondent 11]

Additionally, personalisation enables consumers to not have to sign in to the branded app every time they use the branded smartphone app. It is noticed that, in the following comment, the respondent has no concerns with sharing their personal information with brands that are familiar to the respondent and have a good reputation as retailers:

“I have to say that what I hate is having to download new apps and put in information over and over again. I’m quite happy to put in information like address and bank details; I wouldn’t do that with everyone but with them being big companies you know there is a safety, there is credibility with them.” [Respondent 19]

Additionally, the respondent highlighted that it is important for the branded traditional retail smartphone apps to offer a tailored experience based on gender. In addition, the respondent also explained that brands should enhance the tailored experience by helping the shopper choose products that match with each other:

“In terms of the apps, in the likes of Zara and stuff, Zara is complicated to compare with Topman, because it’s not unisex. As soon as you go into the Zara app, it’s women’s first then you scroll down for the men’s section. I think if I was going into another type of app, like gaming, right away when you open the app, Zara could store whether or not you’re male or female... I know I keep coming back to Zara and Topman but it’s just because I use them a lot. This might sound stupid, when you go into the shop and you see a shirt and a tie on a mannequin and you think of that goes together because you see it together on a thing, well I was expecting a bit more – if you are buying this, what about this. They do make it simple for you by categorising the clothes but really when I’m out shopping for an outfit. So, I will try and find a jacket and a jumper and what jeans to wear, so it surprises me that there is not more of that sort of thing... Even in different things, I was messing about looking at the BMW website and

you can build the car. It astonishes me that you can't use like an outfit builder or something. I always thought that would be a way to make it. I've seen similar stuff on that Mr Porter that will give you a collection of outfits and stuff." [Respondent 13]

The following respondents expressed liking the feature when branded apps remember the personal log in details, as it offers a personalised experience, that can contribute to the consumer's satisfaction with the app user experience:

"I like some of the apps that remember your log in on your phone." [Respondent 1]

"I think with the app you get more of a personalised experience because you are already signed into the app on your phone. Some people would say that is a security risk; if your phone was stolen, people could get into the app. However, it does offer you a good experience if you are able to." [Respondent 3]

"I like that they save your details and you don't need to go through that... I think you can go in and see your past orders so that's quite good." [Respondent 7]

"It's quite intuitive, most apps are very well designed. You click men, jumpers ... it leads on well. I like to pre-select sizes. You can tell them your size in advance and you only see what is in your size! So, you don't end up disappointed. It's a nice personal touch." [Respondent 12]

Additionally, the following comment explains that having personalisation within the retained traditional retail smartphone app can make customers not only satisfied with the branded app, but the shopping experience as a whole:

"The way that I have used the Zara app recently, basically there was a playsuit that I wanted and they only had it in the tiniest size, and I was able to scan the barcode and order it when I got online. When I was in the store, I was able to ask them if another store had it. The whole customer experience was great. They were able to check for me but because my details were already on the app, because I had shopped with them that way before, I was able just to scan the bar code and put in my security code and that." [Respondent 18]

Additionally, the same respondent discussed that personalisation is important by expressing that it is important for some high-street branded smartphone apps to personalise the experience to more suit the age group of the customer. This view is expressed in the following comment:

"It's different from Debenhams. Have you been to TKMAXX? It's messy – the only way that I can describe it. Also, because ASOS demographic is more me. Although items that are coming

up might not be my personal style with Debenhams it's much more of a search. I can't narrow it down. I can easily come across things for 20-30 year olds as I can for 50-60 year olds."
[Respondent 18]

Traditional retail brands may have many products in various options. The following respondent gave an example from a well-known traditional retail brand. The respondent expressed that it is exhausting to search for products through many pages within the branded app, indicating that the respondent is annoyed and not satisfied with the branded app user experience. In this regard, if the branded app offers more of a personalised experience that caters to its customer's taste, it could result in a more satisfactory user experience with the high-street branded smartphone app. This view is expressed in the following comment:

"...it's exhausting. There is so much and it feels like you are just trawling through pages and pages of rubbish." [Respondent 20]

Similarly, the following respondent explained that it is annoying for the branded smartphone high-street branded app to require the respondent to enter the customer number which negatively affect the satisfaction with the branded user app experience. This view is expressed in the following comment:

"I found them all quite similar. I found Next quite annoying if you want to change the quantity or put the wrong size in. With Next you have to put in your customer number etc. With M&S you can just go in and view without having to go through everything; with Next you have to get the details and it's a bit of a pain really." [Respondent 19]

Furthermore, the following comment explains that satisfaction with the branded app user experience can be negatively affected when customers have to enter their details again. It is worth noting that, in the following example, the respondent compares logging through the mobile website versus the branded mobile app. This view is expressed in the following comment:

"The things that annoy me having to get through the mobile website and having to put all the details in again. All your details are there and it's just confirming your method of payment."
[Respondent 18]

The following respondent explained that a tailored branded high-street retail smartphone app experience is more than saving billing details, as the branded app should be refined in terms of the consumer's shopping preferences. In addition, its noticed that one of the reasons the

respondent still continued to use and retain the branded app was because the apps are able to store the billing information, but there is an indication of not being satisfied with branded app experience. This view is expressed in the following comment:

“Both of them have a mad profile function. I don’t use them that regularly but the profile section seems like it’s to store your address, which is good for billing and stuff, but in terms of preferences and stuff it would be a bit better if it was a bit more refined, I guess.” [Respondent 13]

7.5 Perceived Enjoyment

Perceived Enjoyment is one of the factors that is found to play a role in influencing consumers’ intention continue to use and retain branded smartphone apps from traditional retailers. The perceived enjoyment demonstrates that consumers find the app to be fun to use when performing shopping activities with traditional retailers. The following comments from respondents express this view:

“For me there’s a lot of apps, and I could do some shopping on it.... Well I enjoy using them. It gives you a sense of enjoyment.” [Respondent 2]

“I suppose when I’m looking, I have other apps for department stores, I suppose that’s more enjoyable but you go in and have a look at things. If you are looking at clothes and things. I suppose for Christmas presents for the kids on Tesco Direct and that’s another app, and that’s enjoyable.” [Respondent 4]

“I would say most of them are enjoyable.” [Respondent 7]

Furthermore, Respondent 13 explained that when starting to use a traditional retailer’s smartphone branded app to shop and make purchases, the respondent finds the experience to be enjoyable. In this regard, the perceived enjoyment can play an important role in influencing consumers’ intention to continue and retain the traditional retail smartphone branded app for their shopping activities:

“But that was a barrier I got through in the end. There was a period maybe two or three years ago when I still shopped through a website or go in store. But when I started making purchases through apps and I enjoyed it.” [Respondent 13]

Similarly, Respondents 6, 12, and 17 confirmed this view by expressing that they enjoy shopping through a branded app:

“I always get enjoyment out of shopping.” [Respondent 6]

“Yes, anything you really want is enjoyable to shop for! I like jeans, I might get excited about looking at jeans!” [Respondent 12]

“...it is enjoyable, everyone likes shopping and buying things.” [Respondent 17]

The following respondent explained that the retained shopping apps from traditional retailers are different from other retained branded apps that are used for utilitarian purposes. The view is expressed in the following comment:

“...but these are brands that I’m familiar with. The other ones seem a bit more necessary whereas these are a bit more for fun if you like.” [Respondent 15]

Furthermore, Respondent 5 and Respondent 20 explained that enjoyment can be experienced when using branded apps for the purpose of generating ideas or using the app to check on new products:

“...enjoyable, you can just go and have a look and get ideas.” [Respondent 5]

“I prefer to be in the shop, looking, feeling and seeing the items physically. But it’s nice to see new stuff through the app; it’s fun.” [Respondent 20]

“If I wasn’t enjoying it so much, it would sit on my phone untouched for a few months before I would get rid of it. If it wasn’t easy to use, I would get rid of it – that would be my main thing.” [Respondent 11]

The enjoyment of high-street branded smartphone apps is different from the entertainment that someone may get out of sports activities or watching a movie, as expressed in the following comments:

“Not sure about entertaining, but enjoyable yes. The type of thing that I would tend to look at would be shopping apps. The idea of entertaining sounds like something that makes you laugh but definitely enjoyable.” [Respondent 18]

“I enjoy using the app. It’s not the same enjoyment that you get from the movies or playing football.” [Respondent 21]

Interestingly the respondents were asked to express how they think and feel about enjoyment with traditional retail smartphone apps compared to a branded banking smartphone app. Some respondents expressed that their banking branded apps are viewed to be more functional rather than hedonic. This view is expressed in the following comments:

“The banking app, I’ve only used it for the past couple of months. I always used online or on the phone. Then my sister said I don’t know why you are bothering using that, I got the app and it’s so much easier. I don’t know if I find it enjoyable because I’m just going on to transfer money but it’s so convenient that if they were to take it away it would be a big inconvenience.” [Respondent 14]

“I’d probably check my banking apps as functionality rather than an enjoyable experience. It’s a necessity and functionality; it’s a process for transferring or something. It’s used in a different capacity; it’s not something that I do for fun. I do it because you have to check your statements I guess.” [Respondent 18]

“I would say that the bank is something that is more of a necessity whereas the John Lewis, Marks and Spencer’s etc. are a bit more for leisure, a bit more for relaxing. I think that they allow you to see different styles, to see different ideas. I think your bank one is a bit more essential; you’ve checked your accounts of what has come out etc. You could browse with John Lewis, but you wouldn’t sit and browse on your bank. On your bank you go on and come out. Whereas with Next and John Lewis you have a whole range of things to view and it’s quite enjoyable.” [Respondent 19]

The following respondent explained that most of the time spent on the smartphone is for leisure, and that they prefer to shop through the branded smartphone app, which reflects that the respondent is satisfied with the branded app user experience. The following comment expresses this view:

“I find more realistically that I spend most of my leisure time on my iPhone. Whenever I have the laptop open, I’m doing work. So, when I’m on my phone, I’m really familiar with it. All these things, I live five minutes away; Debenhams and John Lewis are so close to my office but I still prefer to shop via the app.” [Respondent 13]

Additionally, the following respondent associated the satisfaction of the branded app user experience with enjoyment, which reflects that there is a relationship between enjoyment and satisfaction with a branded app user experience:

“...you get the enjoyment of the experience. I suppose you do.” [Respondent 14]

Furthermore, Respondent 11 explained that using the traditional retail smartphone branded app is much more enjoyable than using the mobile website. In addition, the respondent expresses the that productivity of the app and enjoyment are able to provide a satisfactory user experience. The respondent also indicated that if the smartphone branded app is not productive and not enjoyable it will lead to anger and frustration. This view is expressed in the following comment:

“I find it much more enjoyable to use than the mobile website, the desktop website is fine but the mobile website I found it would crash more than the apps... If the app isn’t great – anger and frustration. I think efficiency and being able to get stuff done and then it’s enjoyable.” [Respondent 11]

The following comment explains that the sense of enjoyment leads to excitement which reflects that enjoyment influences the consumer to be satisfied with the branded app user experience.

“I think there is a sense of excitement, if you have ordered something on your phone and you know it’s coming. I’m not technology-minded and my family laugh at me for this.” [Respondent 5]

Additionally, Respondent 12 explained that finding and purchasing wanted products through the traditional smartphone branded app is fun and gives a sense of excitement which reflects that the respondent is satisfied with the branded app user experience. This view is expressed in the following comment:

“Two years ago, I got a leather jacket and I went through a whole load of places and eventually found the jacket I wanted in Next... and ordered it for collection in store. It was exciting because it was an item I wanted. I knew what I wanted it to look like so it was fun to hunt for it.” [Respondent 12]

In addition, Respondent 10 explained that using apps is enjoyable, and if the respondent did not have access to the smartphone, it could lead to negative feelings. In other words, enjoyment can relate to favourable and non-favourable feelings in the context of traditional retail smartphone branded apps. This view is expressed in the following comment:

“I do really enjoy using apps. My day to day use, as I said at the start, I don’t know how I would function without my phone now which is very sad.” [Respondent 10]

Additionally, the following respondent mentioned that the experience of using the app was not enjoyable, and the experience of using the app was annoying. Interestingly, the respondent indicated that the branded app would still be retained. This scenario illustrates that consumers may retain branded apps, even if they are not satisfied. In addition, the following comment explains that other alternatives such the traditional retailer’s website would be used to shop with the brand.

“No, because I’ll still use it; I just didn’t enjoy the app. I don’t have anything against the app; I’ll still happily use the website... it was just the app that annoyed me.” [Respondent 7]

7.6 Escapism

As mentioned earlier, escapism is conceptualised as an aspect of hedonic behaviour; escapism also is an important feature of mobile phones (Grant and O’Donohoe, 2007). Interestingly respondents expressed that they think they do encounter escapism when using traditional retail smartphone apps, which is likely to play a role in influencing consumers’ intention to continue to use traditional retail smartphone branded apps. The following comment by Respondent 1

explains that consumers can escape from the current reality that they are in to seek a different one:

“I think people like to revert back into their own world and what’s comfortable for them... I notice it. I notice it in work. Unless it’s a really good conversation, the conversation will last about 10 minutes and the eyes will all go down and everybody is doing something... They’ll be doing something, on their favourite app. Sometimes you don’t want to be but I think everyone secretly likes knowing that they can touch an app and be back in touch with the whole world again.” [Respondent 1]

Furthermore, traditional retail smartphone branded apps enable consumers to escape from their daily routine and pass time. Therefore, escapism is likely to play a role in influencing consumers’ intention to continue to use the traditional retail smartphone branded apps positively. The following comments reflect this view:

“...probably more apps that have news information or clothes ones that are shopping apps, or any types of shopping apps. I think to pass time it’s definitely that type of app that I use and I do.” [Respondent 3]

In the following comment, the view is expressed that it is likely that consumers may use traditional retail branded apps in situations when they feel bored. The following comment expresses this view:

“I guess if I’m bored I can just go into it and scroll through.” [Respondent 2]

Furthermore, respondents explained that escapism can happen during the lunch break at work or while traveling to work by train. This view is expressed in the following comment:

“I do it on my lunch break and on the train to work, killing time. If I’m sitting at home rather than sitting on Facebook or Twitter rather, I would go in and scroll through John Lewis to see if they have got anything new in.” [Respondent 14]

“A bit of both. If I’m sitting on the train on the way home from work sometimes I will look through them... it’s just something to do.” [Respondent 20]

Similarly, Respondent 11 explained that escapism helps them to pass time quicker when traveling. The following comment reflects this view:

“It definitely passes quicker. I think that was one of the things that I noticed the most when I didn’t have my phone. The subway is only 10 minutes but it felt longer without the phone.”
[Respondent 11]

Furthermore, Respondents 12 and 18 explained that they lose track of time when using traditional retail smartphone apps, which confirms that they encounter escapism when using traditional retail smartphone branded apps.

“...especially with electrical stuff. You can get sucked in, especially with gadget luxury items; I was also looking for brown leather boots and 3 hours passed through various apps! The apps were a big part to that; I looked through them first then I looked on a website.”
[Respondent 12]

“I do know what you mean. I do it a lot when I get into bed. I will think I will just check this quickly and before I know it, I will have been looking at things for an hour.” [Respondent 18]

Interestingly, Respondent 16 highlighted that escapism and the functional aspect of the traditional retail smartphone branded are important. Furthermore, the respondent explained that in some cases, traditional retail smartphone branded apps can be used for escapism and in some cases for the functionality aspect. The following comment reflects this view:

“...because I want them there. Also, the day dreaming that we were speaking about before, it will help at some point. For example, if you want to buy boots and need to – I will look way before I buy them so it helps achieve the planning... They are available for escapism or functionality... I suppose there is an aspect of that when you are browsing. You can look at a ball gown that you are never going to wear and think that would be nice, or some hideously expensive champagne in Waitrose... again there is that fact of convenience aspect of it as well. You can do whatever it is you need to do, whether it is putting through purchases or whatever. Not necessarily escapism but you know.” [Respondent 16]

In addition, the same respondent explained that branded high-street retail apps make escapism easy, and sometimes escapism can cause the respondent to look at something completely different. This view is expressed in the following comment:

“...ended up looking for something completely different. Absolutely yes! It’s so easy because your chain of thought, the way they are put together and things... I probably would look at John Lewis or House of Frasers because of the large amounts of concessions they have in there. It makes it easier for you.” [Respondent 16]

Additionally, Respondent 15 confirmed this view:

“I’d tend to look for the thing I’m looking for in the special offers section. It might sway my mind. It might not be exactly what I was looking for but if it was something similar and it was a good deal it might sway my choice.” [Respondent 15]

As mentioned earlier, escapism is an aspect of hedonic behaviour. In this regard, escapism may lead consumers to have favourable feelings of being satisfied with traditional retail smartphone branded apps. The following comment reflects that escapism makes the respondent relaxed, in addition to looking forward to using the branded apps. Interestingly, the respondent’s following comment reflects that escapism is one of the reasons the traditional smartphone branded app is used:

“One of the reasons is that is because it’s there. I think if it wasn’t there I would find something else... You just sit down and you don’t realise the time that has past. Thursday, Friday I don’t work and I will come in from school and I’ll set a time until 10 o’clock to sit and switch off and look at things. And before that you will think, oh, I should check that on my phone... I think my phone is purely what I need on it. With a few wee things, like the relaxation things. Its wee things for switching off... you can switch off and get some ideas, rather than buying things. I do look forward to sitting down and using my phone.” [Respondent 5]

Additionally, the following comment by Respondent 19 confirms this view and explains that escapism with traditional retail smartphone branded apps, helps to take the mind away from everyday pressures, while the following comment also reflects that the respondent is satisfied with the branded app user experience:

“I’m quite good; I tend not to get caught up in it. The girl next to me at work was looking for personalised gifts; you know diaries with your name on it and stuff. We never bought anything but after half an hour we realised that we were engrossed. I think you can’t help it; one page leads to another before you know it. When you are physically out shopping you physically come out of John Lewis then go into Marks and Spencer’s. I think that when you are using your apps,

it's very easy to come out and go into another one. You know someone will recommend another one... With Next and M&S, it does relax, it takes your mind of pressure of everyday things and you can have a wee browse." [Respondent 19]

Additionally, the following comments also reflect that escapism can cause consumers to have favourable feelings that reflect being satisfied with smartphone branded app experiences when shopping through traditional retail smartphone branded apps:

"Very much so. I was looking for a shirt on John Lewis; I had a red shirt when I was a teenager and before I knew it I was sitting looking at all these different shirts that I had no intention of buying but just wanted. It was maybe more of a case of reminiscing about these stupid shirts that I had when I was a teenager. I certainly got lost in that moment there. It was an unexpected thing; there was a right smile on my face when I was doing it." [Respondent 21]

Interestingly, the following respondents continue to use and retain a branded traditional retail smartphone app that they are not necessarily satisfied with, but the app is retained to use it to do something out of the routine when the respondent has free time. This indicates that escapism can influence intention directly even if the customer is not satisfied with the branded app user experience. This view is expressed in the following comment:

"...it's all right but I don't love it. It's the same as the catalogue. I used to get it and I'd look through it and might not buy anything. I like having it there to look through it... I don't really have any free time! The only thing I would do in my free time is go into Next or look at the weather." [Respondent 4]

It is worth noting that the in-depth individual interviews suggest that escapism plays a role in influencing consumers' intention to continue to use and retain traditional retail smartphone branded apps. However, there are few respondents who explain that sometimes escapism can lead to feeling frustrated and they prefer to do something else in their leisure time than escaping through traditional retail smartphone branded apps. For example, Respondent 17 explained that traditional retail branded apps can be used for escapism in situations that require them to pass time. However, Respondent 17 mentioned that escapism can lead to feeling frustrated, as the respondent feels that escapism is resulting in wasted hours on the app, and the hours spent on the app could have been utilised in other activities. The following comment expresses this view:

“I will pass time on any old app. In a waiting room at the dentist or doctors – any situation that you are passing time. I try not to do it at home so much because I just get so frustrated... I don’t know. For a long time, I found myself flicking through these apps and wasting time. I thought if I just read, or watch a movie, you will feel so much more fulfilled afterwards. You feel that you have done something in your leisure time rather than wasting 7 hours every evening.” [Respondent 17]

Additionally, the following respondents explained that escapism can be quite dangerous, which reflects that although consumers experience escapism, they might not like to do so. For example, Respondents 7 and 14 labelled escapism to be dangerous in the following comments:

“...suddenly you are like god an hour has passed; I think it’s quite dangerous.” [Respondent 7]

“...it is dangerous that way. If you are wasting time, it’s easy to go on and have a look at things. And, for example, ASOS always have offers on. I have a registered account so it’s so easy for me to go on and order something and it will come the next day. It’s so convenient and easy. John Lewis is the same; it’s easy too.” [Respondent 14]

Additionally, Respondent 17 explained that traditional retail smartphone branded apps are used to pass time by looking at things and not only always used with the intention of making a purchase. However, it is noticed in this comment that the respondent seems to relate escapism to wasting hours browsing through the traditional retail smartphone branded apps. The following comment expresses this view:

“you are not always going onto these apps with the intention of buying anything; it’s more like, I’ve got my phone in front of me and I’m going to waste hours and hours looking at anything.” [Respondent 17]

Additionally, Respondent 6 mentioned that escapism can make a person lose track of time; however, the respondent also mentioned that the phone is constantly used, and the respondent felt bad about that. Therefore, the following comment could indicate that the respondent may be describing feelings of guilt, from escaping through traditional smartphone branded apps. The following comment reflects this view:

“Before I know it will be half ten and I think I’ll need to go to bed. I’m quite bad for that, I’m constantly on my phone.” [Respondent 6]

7.7 Social Influence

Subjective norm, which is also known as social influence, was a factor that is also highlighted in the individual in-depth interviews. Respondents mentioned that it is important that referents could have played a role in influencing them to start shopping with traditional retail smartphone branded apps. It is worth noting that the respondents do continue to use and retain these traditional retail smartphone branded apps. Therefore, social influence is likely to play a role in influencing consumers’ intention to continue to use traditional retail smartphone branded apps. For example, in the following comment, the respondent explained that it was friends who influenced the respondent:

“Yeah I have some friends that got me into Waitrose and subsequently John Lewis; I looked up to them and they were shopping there.” [Respondent 1]

Similarly, comments from other respondents confirm this view:

“My girlfriend uses John Lewis a lot; I don’t know if she influenced me; well I guess she did because I see her all the time!” [Respondent 6]

“Yes, it was an old colleague. I don’t work with her anymore. She was quite into technology and into IT.” [Respondent 8]

“House of Fraser one; they said they had used it and enjoyed being able to use it; I’m that easy a sell it’s ridiculous, and then I downloaded it.” [Respondent 16]

“The last few months, I’m a bit of a latecomer. My wife teaches IT. Coming up to the holidays etc. I can see her adopting shopping online a bit more and for that reason I’ve been looking at more apps and messing about with them.” [Respondent 21]

Furthermore, respondents explained that social influence can be related to their youth as their parents shop with traditional retailers, which resulted in the respondents adopting the traditional retail smartphone branded app and continuing to use it and retain it. In other words, the respondents may subjectively feel a social influence from family members, as the respondents

think that their family members would approve the continued use and retention of traditional smartphone branded apps from traditional retailers that family members shop with. This view is reflected in the following comments:

“I used to go when I was a kid. It’s been around for years. My mum used to get the Next Directory catalogue so I know it from that. I used to get a lot of clothes from there when I was a teenager.” [Respondent 15]

“It really is. Some people just prefer Asda and some people prefer Tesco. My parents have always shopped in Marks and Spencer’s or Tesco so automatically as an adult I’ve just followed this pattern. So, if I’m going food shopping I will go to Tesco or Marks and Spencer’s.” [Respondent 17]

“Family. When I was younger there wasn’t the store in Glasgow but when we were in Edinburgh my mum and dad would go out their way to go there so again it was that reputation and we were fans of the store. When they opened their branch here, I started using it here. When the website and app grew I’ve been using that just because it’s so easy... Mostly clothing but once or twice I’ve used the flower delivery service. I’ve used it for my mum through the app as well which is straightforward. I don’t order food; normally it is clothes and the odd thing that I can’t get when I’m in store. It’s not somewhere that I would often go in store but if there is something I can’t get in the store I will order it on the app.” [Respondent 14]

“Well, I’d always go to John Lewis with my parents when I was younger so it’s something I’ve been brought up with. I’m very familiar with it in that way. They have a price promise when they match anything else, never knowingly undersold it’s called; they are a trusted brand in that way. You expect to get quality and guarantees I suppose.” [Respondent 15]

Additionally, the following respondents explained that social influence plays a role in retaining a branded high-street smartphone app, while interestingly mentioning that the reputation of the brand also plays a role, which is one of the factors that is also discussed later in this chapter:

“...it was a girl from work who had said they were quite decent for prices and things like that and I think I recognised them as quite a good department store. I have to say that before that I can’t remember the last time that I shopped there. I guess probably a little bit as well that you trust that recognised high street brand a little bit more – I did find some online stores that were a little bit cheaper – online stores and things – but when you have something like that, and you

know the name and its fairly respected high street trader you know that there is a store down the road you can go to.” [Respondent 13]

The following respondent expressed a love of reading reviews from other people who shop with the high-street retail brand, where the respondent values the opinion of other people who shop with the same high-street retail brand.

“...especially John Lewis; you can buy everything there. Price comparisons. I love reading peoples reviews on John Lewis. I feel that when shopping in all three, people that shop in these stores, I can relate to the comments on it. I can relate to them because I think it’s a similar type of person that shop in these stores.” [Respondent 19]

Additionally, the following comment reflects this view:

“A quick look at the reviews more likely. If people say this is a waste of time or it has lots of jags or whatever, I wouldn’t bother.” [Respondent 8]

It is worth noting that a few respondents mentioned that they do not think that they were socially influenced to get and continue to use the apps. The following comments reflect this view:

“I understand what you mean but no. The ones I’ve got are for my convenience; I have never got an app because someone else has got it.” [Respondent 2]

“No, I think I just went into them myself. I’ve probably recommended it to other people rather than it being recommended to me.” [Respondent 5]

“No, because they were three that I really wanted.” [Respondent 7]

“I think if he had recommended it to me and then I hadn’t got it I might feel a bit guilty about not getting it. I don’t know if that would be enough to get it but I don’t know. I would say that if someone definitely recommends an app to me, I would definitely consider it. Especially family.” [Respondent 11]

Furthermore, the following comment is interesting in the sense that the respondent explains that social influence would play a role if it is a brand that the respondent wants to shop with. This view is expressed in the following comment:

“Yeah, I have some friends that got me into Waitrose and subsequently John Lewis. I looked up to them and they were shopping there. In terms of clothes shopping, I am my own person; my wife or brother might suggest something, but only 3 or 4 people would recommend something that I would trust they would know what I want.” [Respondent 12]

7.8 Brand Loyalty

One of the interesting factors that is gained from the in-depth individual interviews, is that respondents indicate that they are loyal to the brand. Therefore, if consumers intend to repurchase and consume services from the brand in the future, they are more likely to hold positive intentions to continue to use the branded high-street smartphone apps. In this regard, respondents expressed that they have the intention to shop with the brand in the future, by indicating that they frequently shop with the brand, and indicating that they are committed to shopping with the brand. For example, the following respondent expressed that they frequently shop for clothes from the brand, and the traditional retail smartphone app is used to choose products in the app and then go to the physical store to try them out. The following comment reflects this view:

“John Lewis is the type of place I buy a lot of clothes from. A lot of the time I’d like to try things on, so I’d pick things out beforehand and then go in and try them on.” [Respondent 15]

Additionally, the following respondents explained that they continue to use the traditional smartphone branded apps because they mostly buy products from these traditional retail stores. In other words, consumers frequently buy products which also reflect that they are committed to shopping from the brand in the future:

“I always get my shorts from Next” [Respondent 12]

“Mostly clothes. Would buy clothes more often. I have bought electronics. I bought my camera from John Lewis, a nice Nikon one. I bought speakers with my dad from John Lewis as well. But it would be more frequently clothes. And gifts. Now it’s Christmas just random bits. Also, homeware. Actually, most departments, fragrance as well... Topman I would use quite a lot. That would be the main one. I buy a lot from them. H&M for clothes.” [Respondent 17]

“Zara and H&M are ones that I will always go to. Next is where I go when I can’t find something and broaden out a bit more.” [Respondent 18]

“It’s a store that I would certainly shop in it. Its relatively good value for money. I remember a change in Next. I think it’s changed demographic. It’s a store that I’ve come back to actually. You can pick up things relatively cheaply.” [Respondent 21]

Furthermore, consumers may continue to use and retain traditional retail smartphone apps from different competing traditional retailers. For example, respondent 4 discussed that Asda and Tesco were retained and used by them because the respondent felt that they had loyalty toward both brands. This view is expressed in the following comment:

“Tesco. Asda. That’s where I shop the most... I feel that I don’t then delete my Tesco one because sometimes I like to switch between them and look at both. I feel a bit of loyalty to them both because I have them both on my phone and I feel like I should use them both.” [Respondent 4]

Similarly, Respondent 12 confirmed this view by stating that there is a tie to both brands from youth, while discussing the reputation of the traditional retailer brand. The following comment reflects that the respondent is committed to shopping with traditional retailers and the intention to continue to use and retain the smartphone branded app. This view is reflected in the following comment:

“John Lewis seems more premium; in terms of clothing, it’s very similar. John Lewis isn’t as trendy but they still have decent clothing department. House of Fraser is ahead of John Lewis instead of clothing. John Lewis is more polished. Frasers has upped its game; it has also always seemed like a Glasgow institution. I have a tie to it from my youth.” [Respondent 12]

On the other hand, Respondent 18 explained that if there is no intention to purchase from the traditional retailer in the future, the traditional smartphone branded app is likely to be deleted. This view is expressed in the following comment:

“Just because I’m not regularly using it. I deleted Superdry just last week. I had Superdry at one point because I really liked the brand and I bought a couple of items. Since then, although I like what I did purchase, I think a lot of their stuff is very generic and I don’t want to purchase anymore at the moment... I wouldn’t use the Nike shop app or Sports Direct because I would only go in there once in a blue moon, in which case I would just shop on the website. I have a

tablet and my smartphone and that is what I tend to use so that is what is suitable for me. If it wasn't a shop that I would go to often I would go on the mobile website.” [Respondent 18]

Similarly, Respondent 14 confirmed this view:

“I wouldn't bother having an app for a shop when I thought, oh, I can just go on their website. I only have apps for these because I go on them quite a lot so it feels like it serves a purpose. It's not places that I shop in that often so I would just use the website. I wouldn't really download an app if I didn't think I was going to use it that often. If I downloaded the app I would just delete it again. I wouldn't keep it on my phone.” [Respondent 14]

An aspect of being loyal to the brand is sharing the brand with other people in a positive way. Respondents who continue to use traditional retail smartphone branded apps explained that they do share products or services from the brand with family and friends, which reflects that they do share their thoughts about the brand's products with other people. This view is expressed in the following comments:

“a lot of the time I take a screenshot and send it to my friends and ask on their opinion on it... My relationship with the bank is necessity; I don't like it, but with Zara it's a choice, it's a massive choice. [Respondent 20]

“I certainly talk to my friends about the John Lewis app. My dad and my mum, they are late adopters to technology.” [Respondent 21]

“A regular thing that we do, we have this girls' WhatsApp group, we do exchange screen shots and different pictures. The Zara one is because we both really like Zara and purchase from it a lot.” [Respondent 18]

In addition, the respondent explained that the brand is followed on social networking channels, in order to stay updated with updates from the traditional brand. In addition, the respondent also mentioned the act of taking screenshots to share products and thoughts with people. The following comment reflects this view:

“My sister is a big online shopper and because we speak on WhatsApp and its free and so easy we often take screenshots and send them to each other. And with it being this time of year and we are buying joint presents, we would screen grab and send it around... Again, I follow, John Lewis have their twitter. Marks and Spencer's, I follow them on Instagram and they share

pictures of their new products. I think that is really good because they often share images of products that we maybe don't get in the smaller stores here and only in the larger flagship stores in London. I find that really, really good that they usually direct you to the app or website. I know that's not the app, it's more social media but it's really good." [Respondent 14]

Additionally, the respondent added that communicating with friends involves sharing information from brands, which also reflects that it is a form of encouraging friends to shop with these brands through sharing information positively:

"There is an aspect of that. If you are out, I will take screenshots and email. A while ago you could email an item to a friend but now I would screenshot something and send it to someone. There is that aspect to it. You can sit on your lunch or the train and you can screenshot it and send it, so there is that aspect that you can share it with other people... We do it all the time. Especially with Christmas. So, if we are planning for a night out or special occasion, we all shop in the same place so we will often Snapchat pictures so we know who's wearing what and that. Also same with big gifts, we will all chip in for big gifts, and we will send pictures of what we've looked at and what we seen." [Respondent 14]

The individual in-depth interviews showed that respondents who are satisfied with branded app user experiences are more loyal toward the brand. In other words, if the consumer's satisfaction with the branded user experience increases, it enhances the consumer's loyalty toward the brand which, in turn, will influence the consumer's intention to continue to use the traditional retail smartphone branded app. This view is expressed in the following comments:

I see myself as a loyal customer and having the app enhances that." [Respondent 12]

"For me if you get good service, I will probably come back. Maybe the app is an extension of that, if the app is good; there is that kind of yeah." [Respondent 21]

Furthermore, Respondent 18 described the branded app to be good quality which reflected that the consumer is satisfied with the branded app user experience. The respondent also mentioned that the traditional retailer is a preferred brand that the respondent always shops with. Therefore, the following comment confirms the view that consumers who are satisfied with the branded app user experience are likely to have enhanced consumer loyalty intention toward the

brand which will motivate consumers' intention to continue to use the traditional retail smartphone branded app:

"I personally love it; it's a shop that I would always go to. I would always scroll through the app and look at things to keep myself occupied, the way that you do sometimes with Facebook. But Zara is one of my favourite shops anyway. It's also not a shop that tends to be, some brands that you can get via ASOS, Frasers, etc., but it's one that isn't available anywhere else. It's independent in that sense and I like the quality of the things they get. The app is quality and easy to use and I do use it regularly." [Respondent 18]

In addition, Respondents 14, 19 and 21, who continue to use traditional retail smartphone branded apps, confirmed this view by also describing that they did not have any issues or bad experiences when shopping with traditional retailers through the app, while reflecting on satisfaction with app user experiences and loyalty toward the brand. This view is expressed in the following comment:

"Just because the company, the stores are just generally so good, I would just expect their app to be of a decent standard. Quick, easy to function. I had used the website before and that was quite good, so I just kind of expected that of the app... It's just them taking that extra bit of hassle on themselves and making it easier for you. It makes me buy more; it works I suppose!... I would always go on the website for years. Now as soon as you go on the website, you are prompted pretty much to download the app instead of using the website. For me, you shop online in your mobile more and more. You become more confident. I used to be quite strange; I would shop online and then print off the confirmation. But now I would just do it and have that sort of faith that it would work and there would be no issue. I have been using John Lewis and ASOS for a couple of years with no issue." [Respondent 14]

"I'm not someone who would put apps on my phone for brands that I wouldn't use regularly; I would rather have the three brands that I use consistently. The experience I've had in store has been good and then you expect the experience in the app to be the same. I've never had any bad experiences with them. Previously if I've ever ordered anything from John Lewis, it's always been first class." [Respondent 19]

"I think with John Lewis and M&S I was drawn to the apps because I regularly shop there (in both shops); it's definitely drawing me to the apps. As I was saying earlier on, if an online

presence is bad, it reflects the store. It's all about the experience of shopping in store; it's an experience of shopping online or on the app." [Respondent 21]

7.9 Long-term Brand Reputation

The individual in-depth interviews also demonstrated that respondents hold a positive view of traditional retail brands for which they continue to use the branded smartphone app for shopping activities. In this regard, when a consumer holds a positive view of a traditional retail brand, it is more likely that the consumer's intention to continue to use the smartphone branded app increases. The following comments reflect examples of this view:

"To be honest I've always used the app. I like their products. They always deliver fairly quickly. They offer good deals, once a week anyway!... You know they are a brand name for a reason and although I think there are a lot of good apps out there, I don't have time to sit and look through them and download them all." [Respondent 6]

"John Lewis is my favourite brand; I have the app. I shop there from time to time... I really like them, spot on with customer care; price match guarantee, aftercare and customer service is second to none. Electrical products will be replaced up to 5 years, no questions asked. Store is always open when you need it, well-lit and knowledgeable staff." [Respondent 12]

"Similar to M&S. for me they are quite high quality and good customer service." [Respondent 13]

"M&S, it's a traditional brand that I would associate with quality. The service is good. I think it's on the present; it's a strong and respected high street brand... If I was buying something from Next, I have an expectation of what the Next brand will be. If you are buying from John Lewis you think it's going to be up market. If I was buying something from Next, I would be pretty comfortable with that... The brand influences what I have as an app... As I said, I think that John Lewis is a quality brand. I feel that they deliver a coherent service and I expect that anything to do with John Lewis would be good. For me there is a direct correlation between the quality of the store and the app." [Respondent 21]

Furthermore, respondents also expressed that they continue to use traditional retail smartphone branded apps from traditional retailers that are trustworthy and make honest claims. It is worth noting that customer trustworthiness toward a brand and the customers' perception that the

brand makes honest claims reflect the customer's view of the reputation of the brand (Veloutsou and Moutinho, 2009). The following comments reflect this view:

"Reliable, trustworthy, does what it says on the tin. You know you are getting a good quality product if you go to M&S" [Respondent 8]

"I have these brands because they are brands that I trust and brands that I like. I have only had them for a year or so... I couldn't see myself being without the John Lewis app, for electrics. I use John Lewis as a point of reference rather than using Google. I trust John Lewis." [Respondent 12]

"There is an element of common sense, because you know going into the store and trying something on and purchasing something there and then is going to be completely different to tapping a couple of buttons, but because your faith and trust and connection with that brand is established and continued through the app." [Respondent 16]

"Very reliable; you get what you see. It's probably a middle range. You can buy for everything, you can buy for children and for adults. You can buy trendy stuff but also classics. It's always reliable. I always think the product you get from M&S is great... Even on the food side of things, it might be a better more expensive than Tesco or Asda but its better quality... It's probably a brand that's always been about; it's very established. I think no matter where you go in the world, there are always M&S. You just know that it's safe. It's always the safe, it's consistent... You always get very good customer service which I think for now is very important... I think John Lewis, Next and Marks and Spencer's have reputation of being established and being around a long time... it's just that you know what you're getting. Reliability. Good customer service. You just know that if there is anything wrong you know that it will get sorted. I tend to stick with brands that I am aware of... I think you just know because you have the familiarity of John Lewis, M&S's and places like that. You can just relate to it because you've been there." [Respondent 19]

Furthermore, the following comments confirmed this view as the respondents explained that they are confident and certain that the brand will deliver quality products and services, which reflects that the respondents hold positive views of the brand reputation for the traditional retail smartphone branded apps that the respondents continue to use. It is worth noting that the following comments also indicate that past experiences with the traditional retailer are positive,

which helped form a positive view of the reputation of the traditional retailer. The following comment expresses this view:

“I feel confident using them. They have a very good reputation. Very customer service orientated. I’ve shopped in their stores, but also shop online, I’ve used the app. I’ve never had any issues taking anything back or delivery; they are a good company to use... it’s a confidence that it’s going to be okay; there will be no problems. If something goes missing or doesn’t arrive it will be okay.” [Respondent 14]

“I know that if I want to get something, I am going to be absolutely certain of the quality if I will look at Waitrose and M&S.” [Respondent 16]

“I have a lot more confidence in purchasing online from M&S and Zara because I know what is coming is going to be of good quality.” [Respondent 18]

“I love Marks and Spencer’s as a brand. More food but recently I pick up the odd bit of clothing. I have used it online for clothing not for food. It comes down to quality. I know it’s going to be good and I know the sizing. I would use them online as well as in store.” [Respondent 18]

Moreover, respondents’ comments reflect that brand reputation is established through past experiences that are based on interacting and shopping with the brand over time. The following comments reflect this view:

“I do shop there; I used to work there and I do have the app... I think it’s a very good brand, it represents quite good quality. It’s different from other brands on the high street. I know from personal experience it’s very busy.” [Respondent 20]

In addition, while reflecting on the brand reputation and past experiences, the following comments from Respondents 14, 16 and 17 demonstrate that traditional retail brands they shop with are well established, which reflects that the respondents perceived that the brand image is long lasting, and the brand is likely to sustain its brand values in the future. The following comments reflect this view:

“As a brand, I like M&S. I still see them as a traditional; it was a place my family shopped years ago. I think there is a good reputation and I like to shop in there. It is a good place to

shop. It's not as up there as John Lewis. It doesn't have the same range of products that I'm looking for, like electronics or make-up. I like the shop and I like the store. I see John Lewis slightly better as they are very customer focused. With their price match and things, I think they are good for a high street store. I've never had any issues with Marks; I think they are quite good." [Respondent 14]

"I love them as a brand... I was brought up shopping with them. It's an established brand... And they sometimes surprise me with their prices. They surprise with how reasonable they can be... I think it's just that they've had time to establish themselves and as an adult I've got used to them. I think they've got a link with my past but I have had to establish that link with them further by myself... the fact that I have the apps shows that I value them. You are not going to download something that isn't going to be of use to you." [Respondent 16]

"For all of them you would expect them to be good because they are big names. They are companies that have a lot of money. John Lewis, for example, put a lot of time and money into this image that they have created for themselves. John Lewis's branding is very specific and they have created a strong presence in the market so you would expect the app to be well developed... most apps that I have, because they are big name apps so to speak, you presume that they are going to pour money into it and the development of the apps." [Respondent 17]

The respondents were asked to express their thoughts on the relationship between the satisfaction with the branded app user experience and the long-term brand reputation. The respondents explained that being satisfied with the app experience confirms their view of the reputation of the traditional retail brand. Therefore, although the relationship between satisfaction and brand reputation is positive, it reflects confirming, reinforcing or an expectation met of the consumer's reputation of the traditional retailer brand. For example, the following comments explain that being satisfied with the branded app user experience is an expectation met, which reflects that the experience of using the smartphone branded app is consistent with the respondent's perception of the brand:

"I think they are very good. The app meets my expectations; it's very good, I've never had a problem with it." [Respondent 1]

"John Lewis – I really like what they have got, the products, the store, and general vibe. It's a premium brand; their app really met my expectation. It didn't really add my feelings or 'Wow'

me; it enhanced my shopping experience, but it was more of an expectation met.” [Respondent 12]

“The Next one is what I would expect from. I don’t like it because the way it works. But it is clean and it has a fashion element to it which is how I see them.” [Respondent 15]

“I’m always going to like M&S food because it’s always nice... That is the expectation. I’m pleased with it but I’m not surprised but it doesn’t alter much.” [Respondent 17]

“I think if you have a picture of your experience of where you are shopping you automatically assume that it will be the same on the app.” [Respondent 19]

“I think it’s a very strong brand. It’s got a very positive ethos. I like it as a store... I think their service delivery is really up there... The level of service I have experience with John Lewis and M&S has always been excellent and on the app, it’s always been great as well. It seems to be designed with the customer in mind.” [Respondent 21]

Furthermore, the respondents also explained that being satisfied with the branded app user experience confirms their view of the reputation of the traditional retailer brand. This view is expressed in the following comments:

“I think with something like Tesco they would do it well. I would take it for granted that whatever they do, they will do it well. [Respondent 5]

“The message always seems to be that the customer is first and the website is good so it did seem to confirm this. The app shows that they are keeping up with the times and bringing out an app, which is quite expensive, which is purely for the customers’ benefit and experience.” [Respondent 14]

“My thoughts of the brand were already pretty high so it was just confirming what I thought.” [Respondent 15]

“I think they’ve made their brand very strong and people know what to expect and therefore, it doesn’t have much influence on them... I think because they did these things you didn’t have any other expectations of them, people understood the brand... I do think they can confirm what you think. The Zara one confirmed what I think. The Debenhams one confirms how I feel about Debenhams about store; that there is a lot going on and it can be confusing

at times and it can be hard to find what you are looking for. I do think they can confirm and have an influence on the customer and the consumer.” [Respondent 18]

“Certainly complements them and confirms it.” [Respondent 21]

7.10 Theoretical Framework

The exploratory qualitative phase in this research plays an important role in understanding consumers’ continuous use of smartphone apps in the context of traditional retail shopping which is an area that is in need of research. It has assisted this research by exploring and confirming the relevant variables involved in influencing consumers’ intention to continue to use smartphone apps in the context of traditional retail shopping.

In this study, the qualitative research identified four utilitarian variables (usefulness, ease of use, compatibility and personalisation), two hedonic variables (enjoyment and escapism), one social factor (social influence), and two brand related variables (long-term brand reputation and brand loyalty intention) that are involved in influencing consumers’ intention to continue to use traditional retail smartphone apps. Therefore, the qualitative research helped identify four dimension that play a role in motivating consumers’ intention to continue to use traditional retail smartphone apps. Furthermore, the qualitative research interestingly confirms that brand related factors (long-term brand reputation and brand loyalty intention) play an important role in motivating consumers to continue to use traditional retail smartphone apps.

The next section discusses the hypotheses of the outlined variables from the qualitative research in relation to the literature. Therefore, the next section presents the finalised theoretical model and its hypotheses that are constructed based on the qualitative phase of the study and the literature. The hypotheses in the theoretical model are related to the variables of perceived usefulness, ease of use, compatibility, personalisation, enjoyment, escapism, satisfaction with the branded app user experience, long-term brand reputation, and loyalty intention toward the traditional retail brand. All the presented hypotheses will be tested in the quantitative analysis phase of this study.

7.10.1 Perceived Usefulness

Perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p.320). The qualitative research in this study suggests that perceived usefulness is likely to influence consumers’

satisfaction with the branded app experience and intention to continue using the traditional retail smartphone branded app. Furthermore, perceived usefulness is a well-established construct that is capable of predicting individuals' technology acceptance and use, that is included in various theories (Davis et al., 1989; Bhattacharjee, 2001b; Rogers, 1995; Taylor and Todd, 1995b; Davis and Venkatesh, 1996; Hong et al., 2006; Venkatesh et al., 2012).

The ECM-IT empirically validated that perceived usefulness influences consumers' intention to continue to use a technology directly and indirectly through consumers' satisfaction with the technology use (Bhattacharjee, 2001b). Consumers who find a Self-Service Technology (SST) useful, are satisfied when interacting with the SST, suggesting that perceived usefulness of an SST leads to consumers' satisfaction (Meuter et al., 2000). Furthermore, perceived usefulness plays an important role in influencing consumers to shop online (Dennis et al., 2010b). It is worth noting that in Kim's (2010) study, it is theorised that perceived usefulness will influence the behavioural intention to continue to use technology directly, while perceived usefulness also influences consumers' satisfaction with technology use. Kim (2010) found that although perceived usefulness predicted consumers' continuous intention it did not predict satisfaction with technology use. However, there are studies that have validated the idea that perceived usefulness influences satisfaction with technology use and consumers' intention to continue to use the technology. For example, Bhattacharjee (2001b) showed that perceived usefulness influences consumers' satisfaction with technology use, and also influences consumers' continuous intention to use the technology in the context of online banking. It is worth noting that Bhattacharjee (2001b) also showed that perceived usefulness influences consumers' continuous intention to use the technology directly and indirectly through consumers' satisfaction with technology use. Therefore, Bhattacharjee's (2001b) study showed that satisfaction with technology use mediates the relationship of perceived usefulness to continuous intention. Furthermore, Yuan et al.'s (2016) study in the context of mobile banking showed that perceived usefulness predicts consumers' satisfaction with technology use and continuous intention. Therefore, the following is hypothesised:

H1a. Satisfaction with the branded app user experience mediates the relationship between perceived usefulness and continuous intention to use the branded app.

H1b. Perceived usefulness positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.2 Perceived Ease of Use

Perceived ease of use is defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989, p.320). Furthermore, perceived ease of use is a valid construct that is capable of predicting individuals’ technology acceptance and that is part of various theoretical establishments (Davis et al., 1989; Rogers, 1995; Taylor and Todd, 1995b; Davis and Venkatesh, 1996; Hong et al., 2006; Venkatesh et al., 2012). The qualitative research in this study suggests that the perceived ease of use is likely to influence consumers’ satisfaction with the branded app experience and intention to continue using the traditional retail smartphone branded app.

As mentioned earlier, this study borrows theoretical notions from Bhattacharjee’s (2001b) ECM-IT. It is worth noting that Bhattacharjee (2001b) did not include perceived ease of use to predict consumers’ satisfaction with technology use and consumers’ continuous intention to use the technology. Furthermore, Bhattacharjee (2001b) argued that as consumers become more experienced with using a technological innovation, the role of perceived ease of use in motivating consumers to continue to use a technology decreases and becomes less effective in predicting technology use. In addition, Bhattacharjee (2001b) informally tested perceived ease of use when establishing the ECM-IT, and it was found that perceived ease of use did not have a significant influence on consumers’ satisfaction with the technological innovation use, which may have been considered as an additional confirmation to justify excluding perceived ease of use from ECM-IT. Similarly, Yoon (2010) found that perceived ease of use is not a significant predictor of consumers’ satisfaction for consumers with high and low experience with using online banking. Interestingly, Bhattacharjee’s (2001b) and Yoon’s (2010) studies were conducted in the online banking context and did not find an influence of perceived ease of use on satisfaction. On the other hand, some studies found that perceived ease of use influences satisfaction and continuous intention (Thong et al., 2006; Hong et al., 2006). Interestingly, in Hong et al.’s (2006) study, perceived ease of use has a significant positive influence on consumers’ satisfaction with technological innovation use and continuous intention to use the technological innovation is stronger than perceived usefulness.

Clarke (2008) explains that one of the challenging tasks for marketers is making mobile commerce service delivery easy to use for consumers. Shankar et al. (2016, p.41) argue that “apps need to be sticky to induce shoppers to continue using them and should be continuously updated and redesigned to the state-of-the-art.” Therefore, branded apps may get frequent or infrequent updates by organisations in order to add new offerings and/or features, fix current

issues with branded apps, and make improvements to enhance the ease of use and operation of the branded app to enhance the service delivery. Furthermore, it is suggested that due to the small form factor of the smartphone, organisations should creatively develop features to make their apps easy to use when adapting their services to the small screen size of smartphones (Yuan et al., 2016). Furthermore, Dennis et al. (2010b), found that the perceived ease of use is an important variable that influences consumers' online shopping. Also, Newman et al. (2018) found that ease of use influences consumers' intention to purchase from traditional retail branded apps. Therefore, the following is hypothesised:

H2a. Satisfaction with the branded app user experience mediates the relationship between perceived ease of use and the continuous intention to use the branded app.

H2b. Perceived ease of use positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.3 Compatibility

Compatibility is defined as “the degree to which an innovation is perceived as consistent with the existing valued, past experiences, and the needs of potential adaptors” Rogers (2003, p.240). The qualitative research in this study suggests that when consumers perceive that the traditional retail smartphone branded apps are compatible with their lifestyle, their satisfaction with the smartphone branded app user experience and the intention to continue to use the branded app is likely to increase.

The DTPB which predicts technology acceptance and use categorises compatibility to be one of the antecedents of attitude (e.g. a favourable or non-favourable feeling), in predicting behavioural intention (Taylor and Todd, 1995b). Furthermore, the DTPB views compatibility as one of the consistent variables that play a role in predicting technology acceptance and use (Taylor and Todd, 1995b). Furthermore, Venkatesh et al. (2003a) view compatibility to be a similar concept to facilitating conditions in the UTAUT. Tezcan and Akturan (2012, p.445) explain that “consumers assume and expect that through a phone they can readily attain fast, convenient and compatible service on demand.”

Koenig-Lewis et al. (2010) found that compatibility is a strong predictor that influences young consumers' behavioural intention to use mobile banking services. Furthermore, Koenig-Lewis et al. (2010) also showed that compatibility can indirectly influence consumers' behavioural intention to use mobile banking services. Ewe et al. (2015) suggest that compatibility and ease

of use play a role in motivating consumers' intention to use mobile banking. Furthermore, Ewe et al. (2015) found that when a mobile banking service offers several types of mobile banking transactions to consumers, consumers can perceive that the mobile banking service are easy to use and compatible with their lifestyle. In the context of online shopping, Chen et al. (2002) extended the TAM and found that compatibility influences the users' attitude to use the online virtual store. Wu and Wang (2005) found that compatibility (e.g. compatible with people's lifestyle) directly influences the behavioural intention to use mobile commerce. It is worth noting that in Wu and Wang's (2005) study, compatibility is more significant than perceived usefulness. Furthermore, compatibility is found to influence consumers be loyal to a mobile hotel booking service (Ozturk et al., 2016). It is worth noting that in Ozturk et al.'s (2016) study, mobile loyalty represents consumers' continuous behavioural intention to use the mobile hotel booking service and recommend it to other users. Therefore, it is hypothesised:

H3a. Satisfaction with the branded app user experience mediates the relationship between compatibility and the continuous intention to use the branded app.

H3b. Compatibility positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.4 Personalisation

Technological innovations, such as branded mobile apps, enable organisations to provide consumers with personalised user experiences that are tailored to their needs (Srinivasan et al., 2002; Blázquez, 2014). The term personalisation for mobile services can be defined as the capability of the service to provide a tailored customer experience by adapting to fit consumers' needs and tastes (Jorstad et al., 2005). The qualitative research in this study suggests that when consumers value traditional smartphone branded apps offer services that are tailored to their tastes, it reflects that personalisation is likely to play an important role in influencing consumers' satisfaction with the branded app user experience and intention to continue to use the smartphone branded app.

It is argued that the pull-based services that are delivered via the smartphone "must be personalised" (Ajax and Irfan, 2012). Similarly, Rowley (2006) states that, for e-services in general, offering consumers a personalised experience is important. Furthermore, it is suggested that personalisation is related to the repeat consumption of e-services; for example, Chia-Hui and Hsi-Peng (2008) conceptualised that personalisation leads to e-loyalty. In the

context of internet banking, personalisation is found to influence consumers to accept internet banking (Chau and Lai, 2003).

In some cases, personalisation may not influence consumers' satisfaction in the repeat consumption of electronic services. For example, in Jung-Hwan et al.'s (2009) study that was conducted on consumers' e-loyalty, Jung-Hwan et al. (2009) interestingly found that personalisation did not play a role in predicting consumers' satisfaction, as it was insignificant, indicating that personalisation does not play a role in predicting consumers' satisfaction and e-loyalty. However, it is argued that in m-commerce, tailoring services that are delivered to consumers through the smartphone makes personalisation an important factor that is essential to m-commerce (Clarke, 2008). Furthermore, Clarke (2008) explains that personalisation is argued to be an important variable when conducting m-commerce research, especially when taking into account the small size of the smartphone and its screen size. Therefore, the following is hypothesised:

H4a. Satisfaction with the branded app user experience mediates the relationship between perceived personalisation and continuous intention to use the branded app.

H4b. The personalised experience positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.5 Perceived Enjoyment

Perceived enjoyment is defined as "the activity of using a specific system which is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use" (Venkatesh, 2000, p. 351). In technology acceptance research, Davis et al. (1992) showed that the user's perceived enjoyment plays a role in motivating the user to accept a technological innovation. Later, theoretical notions in technology acceptance research also support that perceived enjoyment plays a role in motivating users to accept a technological innovation (Venkatesh, 2000; Venkatesh and Bala, 2008; Venkatesh et al., 2012). The qualitative research in this study suggests that perceived enjoyment is likely to play an important role in influencing consumers' satisfaction with the branded app user experience and intention to continue to use the smartphone branded app.

SST research suggests that perceived enjoyment plays a role in motivating consumers to use an SST (Agarwal and Karahanna, 2000; Hilton et al., 2013). For example, it is suggested that consumers who are engaged when using an SST can experience enjoyment when using the SST

(Agarwal and Karahanna, 2000). Furthermore, Hilton et al. (2013) show that when the SST provides consumers with an enjoyable experience, consumers are motivated to use the SST. The hedonic value of enjoyment plays an essential role in influencing consumers' attitude toward e-shopping (Jayawardhena, 2004). Also, Izogo and Jayawardhena (2018) propose that the consumer's perceived shopping enjoyment of a website predicts the consumer's attitude toward the online shopping experience. Blázquez (2014) explains that in multi-channel retail fashion shopping, as consumers become more experienced with the online shopping process, they are more likely to find the online shopping experience more enjoyable. Building upon this notion, this research is conducted on consumers who retain and use a smartphone branded app for one of the traditional retail brands that is selected for this research. Therefore, the consumers participating in this research are considered to be familiar with performing shopping activities through traditional retail smartphone branded apps.

Shankar et al. (2016) states that brands should consider both utilitarian and hedonic factors when developing their mobile branded apps. In addition, perceived enjoyment motivates consumers to continue using mobile internet services (Venkatesh et al., 2012). Furthermore, in mobile app research, it is suggested that perceived enjoyment plays an essential role in the mobile research area (Kim, 2010; Hsiao et al., 2016; Hsu and Lin, 2016). For example, in Kim's (2010) study in the context of mobile data services, it was found that enjoyment predicts continuous intention directly, while the relationship of perceived enjoyment to satisfaction is insignificant. In addition, it is worth noting that Kim's (2010) finding indicates that enjoyment does not influence consumers' continuous intention indirectly through satisfaction. On the other hand, in Hsiao et al.'s (2016) study, it is suggested that consumers' perceived enjoyment influences consumers' satisfaction with using the mobile app. In addition, in Hsu and Lin's (2016) study in the context of in-app purchases, it is found that both utilitarian value and hedonic value predict consumers' satisfaction. It is worth noting that perceived enjoyment is capable of influencing continuous intention directly, while also influencing satisfaction indirectly. For example, Thong et al.'s (2006) study suggests that enjoyment directly influences continuous intention, and indirectly influences continuous intention through satisfaction. Therefore, the following is hypothesised:

H5a. Satisfaction with the branded app user experience mediates the relationship between perceived enjoyment and the continuous intention to use the branded app.

H5b. Perceived enjoyment positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.6 Escapism

Hirschman (1983, p.64) refers to escapism as an aspect of hedonic behaviour that allows individuals to escape from "a reality that the individual finds difficult or is unable to deal with adequately." It is suggested that consumers can find the mobile phone enables them to drift away mentally from a current reality that consumers find difficult or unpleasant to deal with (Grant and O'Donohoe, 2007). It is worth noting that escapism is categorised by Grant and O'Donohoe (2007) as a feature of the mobile phone. The qualitative research in this study suggests that escapism is likely to play a role in influencing consumers' satisfaction with the branded app user experience and intention to continue to use the branded app.

Escapism is considered an aspect of hedonic value when investigating consumer shopping behaviour (Babin et al., 1994; Yu and Bastin, 2010). Furthermore, the smartphone and branded smartphone can display multimedia and therefore they can display pictures, videos, colours and sound. Therefore, retailers may utilise these features to display their products and offer a better shopping experience. For example, Hofacker (2008) suggests that the interface that consumers engage with in e-tailing can include multimedia elements that can create a hedonic experience for consumers and can result in consumers' escapism.

It is found that consumers' happiness and improved well-being is a result of consumers spending more time shopping via a mobile device (Dennis et al., 2016). Monsuwé et al. (2004) suggest that enjoyment of e-services consumption can reflect escapism. Furthermore, escapism plays an essential role in motivating consumers' attitudes toward online shopping (Kim and Kim, 2005), and mobile shopping (Tojib and Tsarenko, 2008). In addition, in the context of consumers continuous use of mobile social network sites, Chaouali (2016) found that escapism predicts consumers' satisfaction positively. Therefore, the following is hypothesised:

H6a. Satisfaction with the branded app user experience mediates the relationship between perceived escapism and the continuous intention to use the branded app.

H6b. Escapism positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.7 Social Influence

Social influence represents the perceptions of an individual that are related to what important referents (e.g. family, friends) think about the individual taking an action toward the behaviour (Simons-Morton et al., 2011; Venkatesh et al., 2012). In other words, what do other people whose opinions are valued by the individual, think about the continued use of branded apps. The qualitative research in this study suggests that social influence is likely to play a role in influencing consumers' intention to continue to use the branded app.

Although Fishbein and Ajzen's (1975) TRA, which served as the theoretical basis for the TAM, highlighted the role of social influence in predicting individuals' behavioural intention to perform a behaviour, Davis et al. (1989) argued against including the subjective norm in the TAM. However, in a later TAM development, Venkatesh and Davis (2000) recognised that social influence plays a role in influencing consumers to accept and use technologies. The TPB (Ajzen, 1991) and DTPB (Taylor and Todd, 1995b) also recognise the importance of social influences on consumers' behavioural intention toward a behaviour. Furthermore, social influence predicts consumers' behavioural intentions to accept e-services (Bhattacharjee, 2000; Hung et al., 2013).

In the context of continuous usage, Bhattacharjee (2001b) did not recognise the role of social influence in the ECM-IT; however, this could be because Bhattacharjee (2001b) established the ECM-IT having borrowed theoretical knowledge from the TAM version which did not include subjective norm. It is worth noting that Kim (2010) integrated the TPB into the ECM-IT and found that social influence has a significant influence on consumers' continuous intention to use mobile data services. Some researchers believe that it is essential to capture the influence of social influence when conducting research on technology acceptance in the B2C context, as it reflects the nature of consumer reactions to word of mouth (Schepers and Wetzels, 2007). In addition, consumers can distribute communication that may impact on the decision making of other consumers through social networks and that can influence the reputation of an organisation (Deighton and Kornfeld, 2009). In Venkatesh et al.'s (2012) study, which introduced an extended version of the original UTAUT which is referred to as the UTAUT2, social influence is among the factors that are suggested to influence consumers to use mobile internet services. Therefore, it is hypothesised:

H7. Social influence positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.8 Satisfaction

Consumers' positive attitude toward e-shopping can influence multiple intentions and e-shopping behaviour (Jayawardhena, 2004). For example, A positive attitude influences consumers' desire to browse with an e-tailer and repatronage intentions (e.g. shop again with an e-tailer) positively and switching intentions negatively (e.g. unlikely to change from one e-retailer in favour of another) (Jayawardhena, 2004). In the ECM-IT, Bhattacharjee (2001b) explains that satisfaction is like attitude in the TAM, which represents the consumer's favourable or non-favourable feeling toward the use of a technology system. Furthermore, Bhattacharjee (2001b) argues that satisfaction is more suitable for predicting consumers' intention toward repeat consumption (e.g. continuous intention) than attitude in the TAM. Furthermore, Bhattacharjee (2001b) demonstrated, with the introduction of the ECM-IT, that consumer satisfaction with using the technology system is the strongest predictor of continuous intention. In the areas of information systems and consumer behaviour research, satisfaction is considered to be a valid and robust construct that predicts consumers' behavioural intention (Bhattacharjee, 2001b; Oliver and Burke, 1999). Satisfaction is also defined by Hsu and Lin (2016, p.43) who investigated in-app purchases as the "degree to which a user favourably perceives the overall assessment of performing the target behaviour." Furthermore, Kim et al. (2015) assert that, to understand what influences consumers to continue to use branded apps, it is important for organisations to understand what leads consumers to be satisfied.

In the consumers' decision-making process, satisfaction plays an essential role in consumers' purchasing and post-consumption behaviour (Puccinelli et al., 2009), and satisfaction plays an important role in the value of service delivery (Hilton et al., 2013). Furthermore, Consumers' attitude toward online purchasing and their satisfaction with past online shopping experiences influence their behavioural intention to purchase online (Dennis et al., 2010a). Various studies have validated the relationship of satisfaction in predicting continuous intention, and continuous intention also represents e-loyalty since continuous intention is the repeat consumption of a technological innovation that delivers e-services. Furthermore, satisfaction predicts continuous intention to use mobile data services (Kim, 2010), online services (Kang et al., 2009), knowledge-based virtual communities (Jin et al., 2008) and Internet-based learning technologies (Limayem and Cheung, 2008).

Also, satisfaction predicts loyalty and continuous consumption. For example, satisfaction influences word of mouth, loyalty and repurchase toward an e-service (Ha, 2006). In addition, satisfaction increases website loyalty (Flavián et al., 2006; Jung-Hwan et al., 2009; Chia-Hui

and Hsi-Peng, 2008). Reichheld and Schefter (2000) suggest that, when consumers are satisfied and loyal, they will hold the motivation to repeatedly consume from the multi-channel retailer.

As this research is conducted on traditional retailers that operate through multiple shopping channels (e.g. physical store, website, and branded mobile apps), the research proposes that there are two types of loyalty in the theoretical model. The first type of loyalty is related to the technological innovation (e.g. m-loyalty), and the second type is consumers' loyalty toward the traditional retail brand. Therefore, the research proposes that the consumers' satisfaction with the branded app user experience will influence continuous intention directly, and indirectly through consumers' loyalty intention toward the traditional retailer.

Furthermore, the research also proposes that satisfaction with the branded app user experience indirectly influences continuous intention through the consumer's long-term view of the reputation of the brand. In other words, satisfaction positively maintains or increases the consumer's long-term view of the reputation of the brand, leading to an increase in the consumer's intention to continue to use the traditional smartphone branded app. Selnes (1993) demonstrated that customer's satisfaction could positively influence the customer's reputation of the brand, while the customer's reputation of the brand influence customer's loyalty directly. Furthermore, Izogo and Jayawardhena (2018) study proposed a conceptual framework that suggests that consumer's favourable or non-favourable attitude which reflects the consumer's online shopping experience of a retailer's website may influence the consumer's perception of trustworthiness toward the online retailer. Also, the proposed conceptual model in Izogo and Jayawardhena (2018) study suggests that the consumer's favourable or non-favourable attitude which reflects the consumer's online shopping experience can motivate the consumer's willingness to spread word of mouth electronically about the online retailer. Furthermore, the consumer's e-shopping excitement influences the consumer's intention to return the e-shopping retailer, and the consumer is more likely to spread positive word of mouth about the e-shopping retailer (Jayawardhena and Tiu Wright, 2009). In the context of mobile shopping, satisfaction influences continuous intention, while also influencing trust toward the mobile shopping store (Hung et al., 2012). It is worth mentioning that Hung et al. (2012) find that satisfaction also influences trust toward the mobile shopping store, while influencing continuous intention, which could suggest that trust in the mobile shopping store could mediate the relationship of satisfaction to continuous intention. In this regard, this research hypothesises that the satisfaction with branded app user experience will increase or maintain the long-term view of

the reputation of the brand, leading consumers to retain and continue to use the traditional smartphone branded app.

In conclusion, satisfaction will influence continuous intention in three ways. First, satisfaction influences consumers' continuous intention to use the branded app directly. Second, satisfaction influences consumers' continuous intention to use the branded app indirectly through the consumers' long-term view of brand reputation. Third, satisfaction will indirectly influence consumers' continuous intention to use the branded app indirectly through consumers' loyalty intention toward the traditional retail brand. Therefore, the following is hypothesised:

H8a. The long-term brand reputation mediates the relationship between satisfaction with the app user experience and continuous usage intention of the retailer's branded mobile app.

H8b. Loyalty intention toward the traditional retailer mediates the relationship between satisfaction with the app user experience and continuous usage intention of the retailer's branded mobile app.

H8c. The satisfaction with a retailer's branded mobile app user experience positively influences the continuous usage intention of the retailer's branded mobile app.

7.10.9 Long-term Brand Reputation

The consumer's perception of the brand plays an important role in influencing consumers' decision making (Gardner and Levy, 1999; Stern et al., 2001; Dennis et al., 2009). The qualitative research in this study suggests that the consumer's long-term reputation of the traditional retail brand plays a role in influencing the consumer's intention to continue to use the traditional retail smartphone branded app. In the multichannel retail context, it is suggested a consumer's perception of the brand, from offline shopping (physically in store) experiences, can influence their perceptions and loyalty toward the retailer's website (Kwon and Lennon 2009b). In addition, it is suggested that there is an interrelated link between consumers' beliefs and attitudes of the brand's offline and online market environment (Marianne et al., 2008; Kwon and Lennon, 2009a).

Brand reputation plays an important role in explaining the online brand experience (Morgan-Thomas and Veloutsou, 2013). It is suggested that consumers who develop trust toward a brand that operates in the offline market environment are more likely to try the brand's offerings (e.g.

products and services) when the brand establishes a presence online (Delgado-Ballester and Luis Munuera-Alemán, 2005).

Veloutsou and Moutinho (2009) found that a consumer's long-term reputation of the brand influences the consumer's relationship with the brand. Thus, when consumers perceive a brand as trustworthy, honest, reputable, has a positive sustainable image in the marketplace and can sustain its past and present values, consumers are more likely to establish a positive relationship with the brand (Veloutsou and Moutinho, 2009). Furthermore, Dennis et al. (2010a) found that consumers hold a positive behavioural intention to purchase from the e-retailer when they perceive the e-retailer is perceived to be trustworthy.

Therefore, considering the suggested connection between the brand's offline and online environment, the following is hypothesised:

H9. The long-term brand reputation influences the continuous usage intention of the retailer's branded mobile app.

7.10.10 Loyalty Intention toward the Traditional Retailer's Brand

This research is conducted on traditional retailers who operate through multiple retail shopping channels. Therefore, consumers have the option to shop from the traditional retailers' multiple channels (e.g. physical stores, website, and branded apps). The qualitative exploratory in-depth interviews suggest that a consumer who retains and continues to use a traditional retailer smartphone branded app, demonstrates a degree of loyalty to the traditional retailer brand, where the consumer speaks positively of the brand, and is willing to make future purchases from the brand. Therefore, this research theorises that when a consumer holds positive loyalty intention toward the brand, where the consumers socially speak positively about the brand and are willing to purchase from the brand in the future, the consumer will be more likely to retain and continue to use the smartphone branded app. This type of loyalty is referred to as conative loyalty by Oliver (1997), and it is known as behavioural loyalty intention (Zeithaml et al., 1996), whereby consumers experience "a deeply held commitment to buy", while also being socially committed to the brand (Oliver, 1997, p.434). There are theoretical notions in the literature from Aaker (1991), Zeithaml et al. (1996) and Gremler and Brown (1999) on how brand loyalty motivates the consumer's behaviour toward brands:

- It motivates consumers to repurchase and to continue to consume from the brand, and therefore it plays a vital role in influencing the consumer's decision making toward the brand.
- It motivates the consumer to speak positively about the brand, which creates brand awareness, which potentially motivates new consumers to shop with the brand.
- It increases the brand's profits.

It is suggested that consumers who are loyal to electronic commerce (e-commerce) service provider are more likely to continue to use and repurchase from the e-commerce service provider (Johar and Awalluddin, 2011). Similarly, in Liao et al. (2017) study there was evidence that a consumer's prior loyalty toward an online store influences the consumer's intention to repurchase from the online store. Therefore, it is hypothesised that a consumer's loyalty intention toward the brand influences the consumer's intention to continue to use the traditional retailer's smartphone branded app:

H10. Loyalty intention towards the traditional retailer influences the continuous usage intention of the retailer's branded mobile app.

7.11 The Hypothesised Structural Model

It is worth noting that although several theories were discussed in Chapter 2 in this thesis, this study utilises the theoretical foundation of Bhattacharjee's (2001b) ECM-IT to investigate the factors that influence consumers' intention to continue to use traditional retail smartphone branded apps. The ECM-IT is developed specifically to investigate factors that influence consumers' continuous intentions to use technologies (Bhattacharjee, 2001b). Furthermore, Bhattacharjee (2001b) argues that satisfaction is more suitable and stronger than attitude in predicting a consumer's intention to continue to use a technology. It is worth noting that studies that have utilised the ECM-IT theoretical foundation have validated that satisfaction predicts consumers' intention to continue to use technologies such as mobile Internet services (Hong et al., 2006; Thong et al., 2006, Kim, 2010), and mobile banking (Yuan et al., 2016).

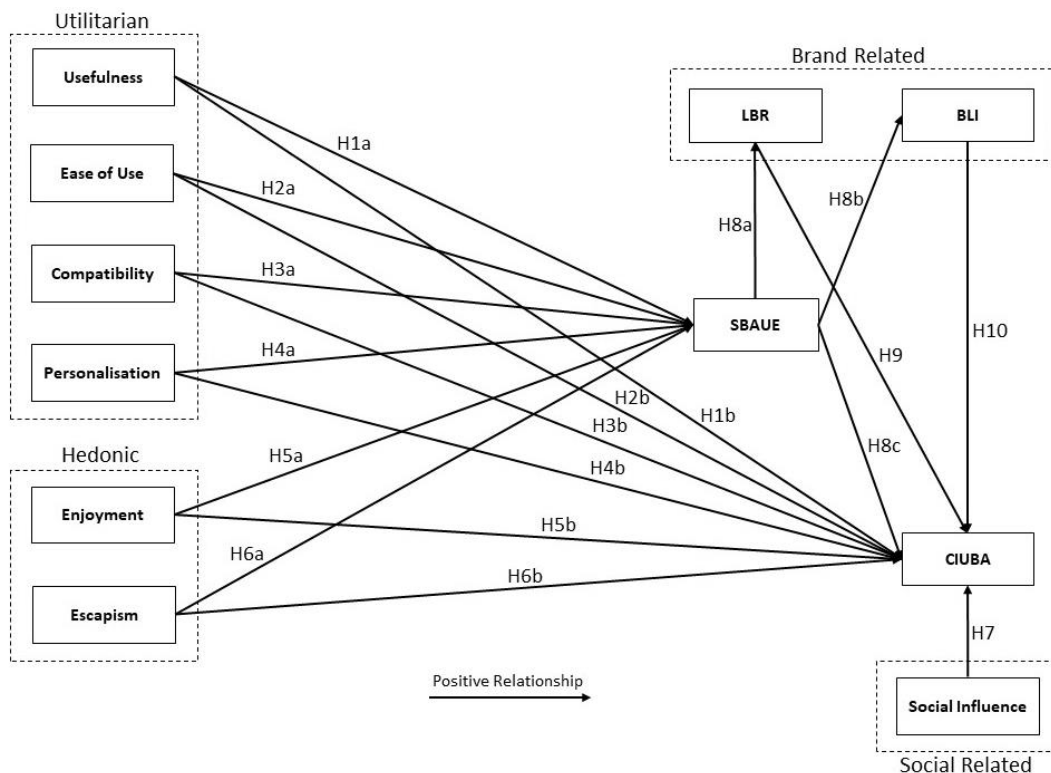
Furthermore, the ECM-IT is developed by combining knowledge from the consumer behaviour and the information systems research areas (Bhattacharjee, 2001b), which is in line with the ideas presented in this study. Additionally, the fact that Bhattacharjee (2001b) combined knowledge from the consumer behaviour and information systems research areas indicates that it is possible to discover additional variables from the consumer behaviour research area to

investigate consumers' continuous intentions to use technologies. For example, this study integrates variables for the consumer's long-term reputation towards the brand, and the consumer's loyalty intention towards the brand into the ECM-IT theoretical foundation. It is worth noting that researchers are encouraged to further explore variables while utilising the ECM-IT theoretical lens (Bhattacharjee, 2001b). Similarly, Thong et al. (2006) explain that it is important to expand our understanding of consumers continued technology usage by identifying additional variables that are relevant to the context of the technology under research.

In addition, the validation of the ECM-IT involved testing the theoretical model on current consumers who continue to use a service from an organisation (see: Bhattacharjee, 2001b), which is similar to the type of sample in this study.

All the discussed hypotheses presented in this chapter are presented in Figure 7.1, where all discussed hypotheses are reflected by the hypothesised theoretical structural model.

Figure 7. 1 The hypothesised structural model



Note: SBAUE: Satisfaction with the Branded App User Experience, LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention, CIUBA: Continuous Intention to Use the Branded App.

The next chapter presents the quantitative data analysis which involves validating and testing the hypothesised structural model.

Chapter 8

Quantitative Data Analysis

8.0 Introduction

This chapter presents the quantitative study, and the procedures that were followed in conducting the quantitative analysis of the data collected from the online questionnaire. This chapter starts by discussing the steps that were taken to ensure the quality of responses in the online questionnaire and also displays basic information on the characteristics of the sample. Following the descriptive analysis, the chapter discusses the preliminary data analysis which includes distribution of normality, multicollinearity, reliability and validity of all measures, using IBM SPSS 25 and the Structural Equation Modelling (SEM) AMOS 25 Software. The chapter will also report on tests of the theorised hypotheses using the SEM statistical technique.

8.1 Data Screening Procedure

The data collection was performed and there were 1,447 responses received from the distributed online questionnaire. The received data contained missing and incomplete responses, due to participants who did not complete the online questionnaire, or failed the sample selection criteria, which is explained in the following:

- A trap question was included in the survey, to ensure that the respondents for the online questionnaire were reading the questions carefully. Therefore, respondents who failed to answer the trap question correctly were excluded from the survey.
- A threshold time of 2 minutes and 20 seconds (140 Seconds) was applied to the survey. The industry standard time filter threshold was applied to exclude respondents who answered the survey too quickly. Therefore, any respondents who answered the online questionnaire in under 2 minutes and 20 seconds were excluded from the data analysis. The 2 minutes and 20 second threshold represents half of the median time to complete the online questionnaire.
- Any participants who answered the online questionnaire for retail smartphone apps that were not part of this study (e.g. Amazon, Argos, etc.) were also excluded from the data analysis.
- Any participant that selected that they were students were excluded.

- Incomplete questionnaires that included missing values were excluded from the survey.

8.2 Sample Demographics

After screening the data collected based on the criteria mentioned above, a total of 1,009 valid responses were achieved. The sample demographics and characteristics are presented in Table 8.1 below. With regard to branded high-street smartphone apps, 261 responses were received for the John Lewis App, 262 responses were received for the M&S App, 258 responses were received for the NEXT App, and 228 responses received for the H&M App.

The distribution of responses for gender is almost equal. For gender, 466 male responses were received which accounts for 46.2% of the total responses and 543 female responses which accounts for 53.8% of the total responses that were received.

Table 8.1 Complete representation of the sample’s demographic characteristics

		n	%
Gender	Males	466	46.2
	Females	543	53.8
Age	18-24	101	10.0
	25-34	344	34.1
	35-44	275	27.3
	45-54	183	18.1
	55-64	102	10.1
	65+	4	0.4
Education	High school or less	132	13.1
	Some further education	202	20.0
	Graduated from further education (college/ diploma etc.)	277	27.5
	Graduated from further education (university)	398	39.4
Occupation	Working full-time	677	67.1
	Working part-time	168	16.7
	Looking for work	29	2.9
	Carer	25	2.5
	Retired	32	3.2
	Unemployed	40	4.0
	Other	38	3.8
	Apple iPhone	437	43.3

Phone Type	Android smartphone (e.g. Samsung, LG, HTC or similar)	515	51.0
	Windows smartphone	51	5.1
	Other	6	.6
Preferred Shopping Method	Going to the store	479	47.5
	Through the website	221	21.9
	Through the app via a tablet	107	10.6
	Through the app via the smartphone	203	20.0
Type of App Use	Shopping	353	35.0
	Browsing	591	58.6
	Keeping up to date with the latest news	65	6.4
Phone Screen Size	Large screen size (iPhone 6+ or similar)	231	22.9
	Regular screen size (iPhone 6 or similar)	778	77.1

The study also aimed to analyse the data based on the shopping characteristics of consumers who retain high-street retail smartphone apps. With regard to the preferred shopping method, 479 (47.5%) respondents preferred to shop physically in store, 221 (21.9%) respondents preferred to shop via the retailer's website, 107 (10.6%) preferred to shop via the app on a tablet, and 203 (20.0%) preferred to shop via the app on their smartphone. With regard to consumers' type of use of the app (purpose of using the app), 353 (35.0%) used the app for shopping, 591 (58.6%) used the app for browsing, 65 (6.4%) used the app to stay up to date with the latest news.

Data for the type of smartphone owned by the consumer and screen size were also collected. With regard to the type of phone, 437 (43.3%) owned an Apple iPhone, 515 (51.0%) owned an Android smartphone (e.g. Samsung, LG, HTC or similar), 51 (5.1%) owned a Windows smartphone, and 6 (0.6%) owned other type of smartphone (ex. Blackberry). With regard to the smartphone screen size, 231 (22.9%) owned a large screen smartphone (iPhone 6+ or similar), 508 (50.3%) owned a midsize screen smartphone, 270 (26.8%) owned a small screen size (iPhone 5 or similar).

Before conducting the regression path analysis using the Structural Equation Modelling (SEM) analysis technique on the data to test the hypothesised structural model, it was necessary to evaluate the data through a series of statistical procedures, in order to assess if the multivariate analysis techniques used in this study can be used with the data collected. In this regard, the next couple of sections in this chapter discuss the methods applied to evaluate the data. The first step taken to evaluate the data was to explore the presence of outliers in the data.

8.3 Outliers (Univariate and Multivariate)

Outliers are observations that have a unique combination of characteristics that are distinct and substantially different from other observations in the sample (Hair et al., 2013; Field, 2013), and it is very important to acknowledge that outliers should not be viewed either as a benefit or a problem for the analysis (Hair et al., 2013). It is worth noting that in the social science research discipline, outliers are common, and an outlier is viewed as a true reflection of a valid observation, even if the observation is different from the majority of other observations (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). The following two sections aim to explore and assess the presence of univariate and multivariate outliers, and to determine if the presence of outliers influences the results of the data analysis. It is worth noting that univariate outliers are assessed through investigating the extreme values on each variable (measurement scale item), where multivariate outliers are assessed through the combination of values on a set of variables (Tabachnick and Fidell, 2013; Kline 2010). In this regard, the next section assesses univariate outliers in the data set.

8.3.1 Univariate Outliers

Univariate outliers can be described as observation that are extreme on a measurement scale item (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). Furthermore, univariate outliers are investigated separately for each value on a variable (Tabachnick and Fidell, 2013). According to Gaskin (2016a), univariate outliers do not really exist in Likert scale data, even though the values could be extreme. This notion is driven by the difficulty of ruling out that an observation is truly an outlier even though the observation value is extreme, as it may reflect the true opinion of the observation. In addition, it is not possible to eliminate any observations that are identified as extreme outliers, unless there is a very strong justification by the researcher to do so (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013).

Considering that outliers do not really exist in Likert scales as mentioned earlier, we can rely on the method suggested by Pallant (2013) to determine if extreme outliers will impact on the findings of the analysis, by analysing the 5% trimmed mean of the data distribution for each measurement scale item. The 5% trimmed mean eliminates both ends of the data distribution for each scale item, where the 5% trimmed mean is then compared with the original mean. If the value of the 5% trimmed mean does not vary substantially from the original mean, it can be concluded that the extreme univariate outliers do not impact on the results of the analysis (Pallant, 2013). The results of the calculated mean and the 5% trimmed mean are shown in Table 8.2 below.

Table 8. 2 Assessing univariate outliers influence

Item	Mean	5% TM	SD	Item	Mean	5% TM	SD
PEOU1	5.87	5.96	1.028	PERS1	4.55	4.58	1.480
PEOU2	5.78	5.87	1.042	PERS2	4.76	4.81	1.431
PEOU3	5.81	5.89	1.010	PERS3	4.77	4.82	1.444
PEOU4	5.66	5.74	1.074	SI1	4.06	4.06	1.466
PEOU5	5.74	5.81	1.062	SI2	4.10	4.11	1.496
PEOU6	5.92	6.02	1.029	SI3	4.07	4.07	1.510
PU1	5.51	5.60	1.243	BREP1	6.10	6.18	.897
PU2	5.22	5.28	1.275	BREP2	6.16	6.23	.854
PU3	5.22	5.29	1.290	BREP3	5.92	5.98	.920
PU4	5.26	5.33	1.268	BSUS1	5.98	6.05	.937
PU5	5.41	5.50	1.284	BSUS2	5.64	5.70	1.119
PU6	5.67	5.75	1.104	BLOYAL1	5.28	5.36	1.297
COMP1	5.16	5.21	1.214	BLOYAL2	5.65	5.71	1.061
COMP2	5.33	5.41	1.184	BLOYAL3	6.03	6.10	.935
COMP3	5.24	5.31	1.265	BLOYAL4	5.87	5.93	.973
ENJOY1	5.36	5.41	1.163	SAT1	5.70	5.80	1.056
ENJOY2	5.42	5.47	1.099	SAT2	5.38	5.45	1.198
ENJOY3	5.09	5.14	1.270	SAT3	5.54	5.63	1.140
ESCA1	4.32	4.35	1.526	INT1	5.89	5.98	1.043
ESCA2	3.99	3.98	1.641	INT2	5.86	5.95	1.068
ESCA3	3.71	3.68	1.774	INT3	5.85	5.95	1.092

Note: 5% TM is the 5% trimmed mean

It can be seen from the table above, which contains the measurement scale items, original mean and the 5% trimmed mean, that the values of the 5% trimmed mean for the measurement items do not substantially vary from the original mean. In this regard, it can be concluded that the univariate outliers do not impact on the results of the analysis. In this regard, the next section explores the presence of multivariate outliers in the data.

8.3.2 Multivariate Outliers

A common method to identify multivariate outliers is by evaluating the Mahalanobis distance (d^2) for each of the observations in the data set (Byrne, 2016). Furthermore, the Mahalanobis distance (d^2) is described as measuring "...the distance in standard deviation units between a set of scores for one case and the sample means for all variables (centroids) (Byrne, 2016, p.120)." Moreover, the Mahalanobis distance (d^2) values of the observations are evaluated based on the difference in the distances between them. If a Mahalanobis (d^2) value for an observation happens to stand out substantially from other observations, then a potential multivariate outlier is likely to be present (Byrne, 2016). The output for evaluating the multivariate outliers using the AMOS 25 SEM software is presented in Table 8.3 below.

Table 8. 3 Observations farthest from the centroid (Mahalanobis distance)

Observation number	Mahalanobis d-squared
3	226.868
9	219.910
205	179.460
27	176.563
656	170.574
70	157.461
648	157.186
207	157.093
649	153.356
825	145.892
657	145.349
231	141.619
824	138.396
229	136.279
336	133.447
230	131.735

The multivariate outliers' assessment revealed that there are two observations that are slightly distant from the rest of the observations in the data set. As seen in Table 8.3 above, observation numbers 3 and 9 vary slightly in their distances from the rest of the observations. In situations such as this, Byrne (2016) explains that the researcher may omit such observations that show a great distance from other observations. On the other hand, it can be noticed that the distance is not major, and considering that there are only two observations from a sample size of 1,009, it is not likely that the observations will distort the analysis. To be more certain that any

multivariate outliers are not going to distort the analysis, it was decided to assess the Cook's distances for the multivariate outliers, in order to determine how much of an effect outlying cases have in terms of distorting the analysis.

The Cook's distance evaluates if there are any influential multivariate outliers that may influence the results of the analysis when the hypothesised model is tested. This test was conducted using SPSS 25, where the dependent variable is set as the case number variable and all the variables in the model are categorised as independent variables (Tabachnick and Fidell, 2013). All Cook's distance values were substantially below the recommended threshold value of 1 (Field, 2013; Tabachnick and Fidell, 2013), where the highest value is for observation number 884, which had a Cook's distance value of (.05007).

It is worth mentioning that observation number 884 had a higher Cook's distance value than observations 3 and 9 which had a gap between their Mahalanobis distance values from the rest of the other observations. This shows that observations 3 and 9 which have a greater Mahalanobis distance than other observations as shown in Table 8.3 above, will not influence or distort the analysis, and therefore, there is no need to omit observations 3 and 9.

Therefore, it is concluded that all of the Cook's distance values are substantially below the recommended threshold. In this regard, the assessment of multivariate outliers revealed that although there were two multivariate outlying observations based on the Mahalanobis distance assessment, there are no serious outliers present in the data set, and there are also no influential multivariate outliers that may influence the result of the analysis.

The next section assesses the univariate and multivariate normality distribution of the sample.

8.4 Normality (Univariate and Multivariate)

The assessment of normality is an important procedure in the preliminary stages of analysing the data. One of the best ways to describe normality is to think of it as a symmetrical, bell-shaped curve, where the largest data points are located in the middle, and smaller data points are located on both sides of the bell-shaped curve, in order for a perfect normal distribution to be formed (Field, 2013; Gravetter and Wallnau 2000).

According to Field (2013, p.133), assessing the assumption of normality "can be a tricky and misunderstood assumption because it means different things in different contexts." Furthermore, Field (2013) explains that, depending on the research context and the data

analysis, the assumption of normality regarding hypothesis testing could mean that the researcher is just required to meet the assumption of normality by assessing the degree of normality in the sample distribution, and in other cases, the researcher may be required to assess the assumption of normality by checking the distribution of errors in the hypothesised model. It is worth noting that the assumption of normality is often ignored by researchers (Looney, 1995; Tabachnick and Fidell, 2013). Looney (1995) explains that researchers are often hesitant in testing the assumption of normality, especially the multivariate normality for the following five reasons:

- The researcher may be unaware that there are methods to evaluate multivariate normality.
- Testing for multivariate normality is not available in the software the researcher is using.
- Even if software exists to evaluate the multivariate normality, the researcher may have difficulty assessing the multivariate normality.
- The researcher is hesitant to assess multivariate normality, because little is known about the robustness and reliability of the multivariate normality assessment available to the researcher.
- Finally, the researcher may completely ignore the multivariate normality assessment, worrying about what is to be done if the multivariate normality assumption is not met.

In this study, two normality assessments were conducted, which were univariate and multivariate normality. Univariate normality was assessed by examining the normality distribution of the measurement scale items individually. On the other hand, multivariate normality was assessed by examining the normality distribution for the residual errors in the hypothesised model.

When assessing the assumptions of normality in this study, there were a number of aspects to be considered. In the social sciences research discipline, it is very unusual to collect data that is normally distributed, since the data point may fall heavily at either end of the distribution (Micceri, 1989; Pallant, 2013), especially when using Likert scale data. For example, using data that is based on a Likert-scale questionnaire, where the majority of respondents may happen to select the same answer for a set of questions may create data distribution that deviates from normality (Byrne, 2016).

Another very important factor to consider is the size of the sample. In large sample sizes, although a deviation from normality may be present, the researcher may judge that it is acceptable to continue with multivariate statistical techniques, as the deviation from normality impacting on the analyses is negligible based on the size of the sample (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). In this regard, it is known that in large sample sizes, non-severe deviations from normality with regard to the skewness and kurtosis will not have a serious influence on the analysis (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). Moreover, it is suggested that high values of kurtosis may cause an under estimation of the variance; however, when the sample size is over 200 cases, the chances of the values of kurtosis distorting the analysis is unlikely (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). From this perspective, Micceri (1989, p. 161), states that “adequate research is available to suggest that most parametric statistics should be fairly robust to both alpha and beta given light tail weights and moderate contaminations”.

The most important type of normality when testing a hypothesised model when conducting SEM data analysis, which is the case in this study, is to meet the assumptions of multivariate normality (Byrne, 2016). However, Weston and Gore (2006) suggest that when conducting SEM analysis, it is practical to only assess univariate normality without the need to assess multivariate normality. In this regard, Weston and Gore (2006, p.735) argue that “Testing whether the assumptions for multivariate normality are met is impractical as it involves examining an infinite number of linear combinations. One solution is to examine the distribution of each observed variable. This screening for univariate normality can inform researchers whether multivariate normality may be an issue.” It is important to note that the assumption of multivariate normality assumes that the assumption of univariate normality is also met (Byrne, 2016; Hair et al., 2013; Looney, 1995). In this regard, meeting the assumption of univariate normality may indicate multivariate normality, but some researchers suggest that this notion is not necessarily true, as in some cases univariate normality may be established for a sample and multivariate normality may not (Byrne, 2016; Hair et al., 2013; Looney, 1995).

In this regard, it was decided in this study to also assess the multivariate normality of the data, since it is suggested that in some cases, univariate normality does not necessarily determine multivariate normality (Byrne, 2016; Hair et al., 2013; Looney, 1995). It is worth mentioning that although this study could have relied only on Weston and Gore’s (2006) recommendation to assess only univariate normality as an indication that multivariate normality exists, it is decided to assess for multivariate normality in order to confirm there were no normality

distribution issues in the data that may distort the analysis, following Hair et al.'s (2013) indication that it is better for a researcher to conduct multiple analyses to assess the data, as it will help the researcher gain more knowledge, and a better understanding of the data that the researcher is working with.

In this regard, the next two sections present the assessment of the univariate normality, which is then followed by the assessment of multivariate normality.

8.4.1 Univariate Normality

Univariate normality in this study is assessed by evaluating the skewness and kurtosis values for the measurement items. It is not clearly known when exactly the data distribution starts to deviate from normality (Byrne, 2016). However, the recommended threshold values for the assumption of normality to be established is less than two for skewness and less than seven for the kurtosis, in order to conduct SEM analysis (West et al., 1995). It is worth noting that when analysing data using the multivariate SEM analysis technique, it is particularly the kurtosis that can cause problems in the analysis if its values are very high (Byrne, 2016; West et al., 1995). The values of the skewness and kurtosis for all measurement items used in this study are presented in Table 8.4 below.

Table 8. 4 Assessment of univariate normality using the skewness and kurtosis values

Item	Skewness	Kurtosis	Item	Skewness	Kurtosis
PEOU1	-1.151	2.182	PERS1	-.233	-.442
PEOU2	-1.114	1.793	PERS2	-.457	-.165
PEOU3	-1.026	1.597	PERS3	-.446	-.132
PEOU4	-.778	.589	SI1	-.130	-.211
PEOU5	-.823	.681	SI2	-.145	-.269
PEOU6	-1.269	2.433	SI3	-.149	-.275
PU1	-.864	.809	BREP1	-1.276	2.793
PU2	-.540	.027	BREP2	-1.100	1.926
PU3	-.590	.216	BREP3	-.702	.179
PU4	-.621	.309	BSUS1	-.815	.456
PU5	-.798	.595	BSUS2	-.777	.515
PU6	-1.054	1.913	BLOYAL1	-.664	.299
COMP1	-.496	.290	BLOYAL2	-.719	.845
COMP2	-.681	.594	BLOYAL3	-.938	1.215
COMP3	-.573	.209	BLOYAL4	-.739	.541
ENJOY1	-.485	.096	SAT1	-1.321	3.021
ENJOY2	-.600	.434	SAT2	-.795	.671
ENJOY3	-.242	-.348	SAT3	-1.037	1.644
ESCA1	-.115	-.456	INT1	-1.291	2.810
ESCA2	.033	-.675	INT2	-1.349	2.932
ESCA3	.142	-.930	INT3	-1.356	2.769

It is worth noting that the statistical analysis software SPSS which was used in this study subtracts three from the kurtosis values. In this regard, the threshold value of less than seven, which is suggested by West et al. (1995), is based on taking the numbers of kurtosis for each measurement scale item from the statistical software and then rescaling the value by adding 3 to it. In this regard, when the values of the kurtosis which are shown Table 8.4 above are rescaled by adding three to each kurtosis value, the rescaled kurtosis values are still less than seven.

In this regard, as shown in Table 8.4 above, the values of skewness and kurtosis are within accepted limits. Therefore, it is concluded that the assumption of univariate normality is established. The next section discusses the method used to assess multivariate normality.

8.4.2 Multivariate Normality

The assessment of multivariate normality is an important step to take when conducting multivariate data analysis (Byrne, 2016), because parametric statistical analysis assumes that the data in the sample are normally distributed (Pallant, 2013). Therefore, the researcher must ensure that the assumption of normality is met, in order to proceed with analysing the data using SEM (Byrne, 2016).

Unlike univariate normality where the assessment is based on evaluating the distribution of normality for each measurement item, multivariate normality bases the assumption on a combination of variables (Field, 2013). It is worth noting that multivariate normality is often confused with univariate normality (Field, 2013). In this regard, Field (2013, p.311) argues, “some people confuse this assumption with the idea that predictors have to be normally distributed. In fact, predictors do not need to be normally distributed.”

One well known method to assess multivariate normality when using SEM analysis is to assess multivariate normality by using the Mardia’s normalized estimate (Byrne, 2016; Tabachnick and Fidell, 2013). The Mardia’s normalized estimate assesses the data in terms of the multivariate kurtosis, and it is known that when data is suffering from multivariate kurtosis, they can cause problematic issues when using the SEM analysis technique (Byrne, 2016). However, the Mardia’s normalized estimate is very sensitive to sample size, and when the sample size is large, it will produce very high estimates indicating that the data are suffering from high multivariate kurtosis, although the distribution of multivariate normality is normal

(Byrne, 2016). In this regard, the issue with using Mardia's normalized estimate becomes very problematic and unreliable when the sample size is large, as it produces highly significant values indicating no multivariate normality even if multivariate normality actually exists (Byrne, 2016).

One other way to evaluate multivariate normality is to evaluate the distribution of the standardised observed residual errors in the model (Field, 2013; Hair et al., 2013; Tabachnick and Fidell, 2013). Tabachnick and Fidell (2013) explain that if the residual of error plot looks normally distributed, there is no need to even screen the individual variables for normality (univariate normality). As mentioned earlier, if the multivariate normality is met, then the assumption of univariate normality is also assumed (Byrne, 2016; Hair et al., 2013; Looney, 1995). The normality distribution of the standardised residual errors to assess multivariate normality is presented in Figure 8.1, 8.2, 8.3 and 8.4 below.

Figure 8. 1 Histogram of Regression Standardised Residual

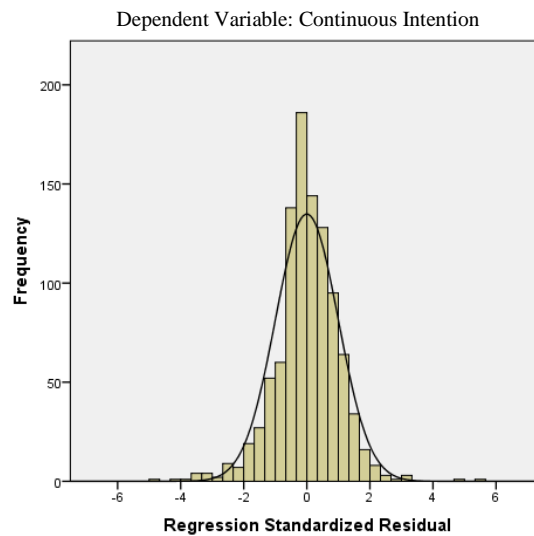


Figure 8. 2 Normal P-P Plot of Regression Standardised Residual

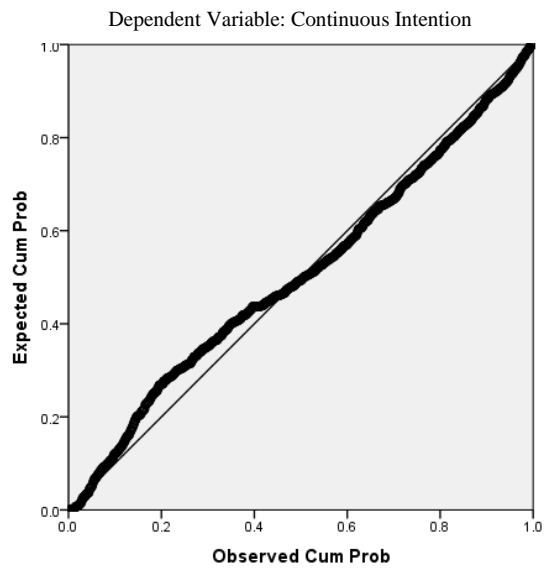


Figure 8. 3 Histogram of Standardised Residual

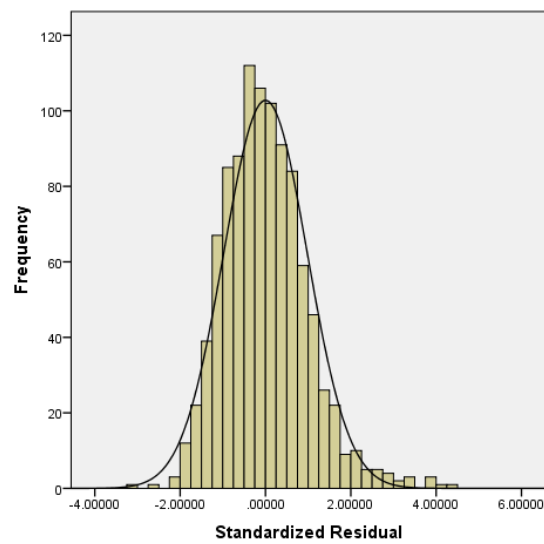
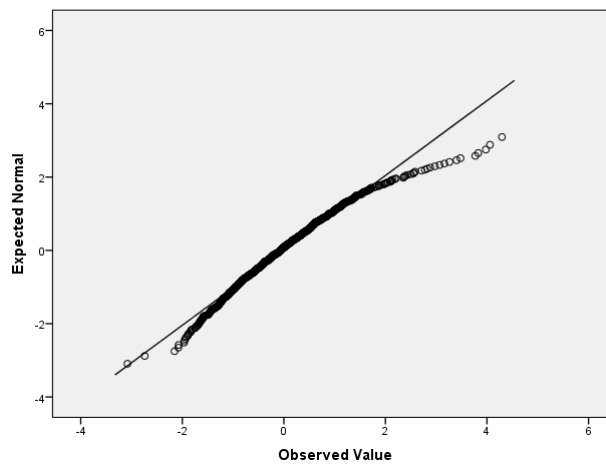


Figure 8. 4 Normal Q-Q Plot of Standardised Residual



Field (2013) suggests that if the histogram represents a fairly normal distribution and the P-P plot represents what indicates a diagonal line, then the assumption of multivariate normality can be assumed.

As can be seen from the histogram in Figure 8.1, the errors in the model are fairly normally distributed. Moreover, Figure 8.2 evaluates the distribution of the errors using the P-P plot, where it also can be seen that, for the most part, the errors in the model follow a diagonal line indicating normality, except for a slight deviation from normality towards the end of the P-P plot. As mentioned earlier, for sample sizes of 200 and above, minor deviations from normality should not influence the results of the analysis (Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). In addition, the standardised error residuals were also evaluated using the histogram represented by Figure 8.3 and the Q-Q plot represented in Figure 8.4, and it can be seen that the errors are fairly normally distributed. The standardised error residuals in Figure 8.3 have a skewness value of .694 and a kurtosis value of 1.357, which shows that the standardised errors for all the variables in the model are within acceptable levels. In this regard, it is concluded that the assumption for multivariate normality is established for this study.

8.5 Reliability of Measures

Assessing the reliability of the measures used in this study is another important step that is conducted in the preliminary phase of the analysis (Churchill, 1979). The reliability of measures assessment is conducted to evaluate the overall internal consistency of each measure used, in order to evaluate the quality of measures to determine if it meets the recommended criteria applicable for the analysis (Churchill, 1979). The reliability of the scale measures was assessed by evaluating the value of the Cronbach's Alpha, where a Cronbach's Alpha value above .7 is an indication of a reliable scale (DeVellis, 2012; Field, 2013; Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). It is worth noting that this study used scales that have been validated many times in various studies. However, the reliability of the measurement scale can vary depending on the sample of the study, and therefore assessing the reliability of the measurement is a highly recommended step during the preliminary analysis (Pallant, 2013). The measurement scales and their Cronbach's Alpha values are presented in Table 8.5 below.

Table 8. 5 Reliability of measures based on the Cronbach’s Alpha

Scale	Cronbach’s Alpha
Perceived Ease of Use	.945
Perceived Usefulness	.947
Compatibility	.925
Perceived Enjoyment	.913
Escapism	.916
Personalisation	.889
Social Influence	.958
Brand Reputation	.885
Brand Sustainability	.729
Brand Loyalty Intention	.886
Satisfaction with the Branded App User Experience	.928
Continuous Intention to Use the Branded App	.960

As can be seen from Table 8.5 above, all Cronbach’s Alpha values for the measurement items, when they are combined to represent their construct, are above the recommended threshold of 0.7.

It is worth mentioning that the Brand Reputation (BR) and Brand Sustainability (BS) measures are two dimensions that together measure the higher order construct of the Long-term Brand Reputation (LBR), and they were assessed individually as recommended by Churchill (1979). The next section presents the results of the multicollinearity assessment.

8.6 Multicollinearity

Before proceeding to further data analysis, it is important to run a multicollinearity check on the independent variables in the theoretical model, to evaluate if the independent variables in the theoretical model are distinct from each other, and not redundant (Field, 2013; Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). Moreover, when there is a high inter-correlation between independent variables, a multicollinearity issue may be present, because two variables are redundant (could be measuring the same thing), which would impact on the reliability of the analysis, in terms of producing false relationship estimates in the theoretical model (Field, 2013; Hair et al., 2013; Pallant, 2013; Tabachnick and Fidell, 2013). If multicollinearity is present, a researcher would be left with the following solutions as suggested by Farrell (2010):

- Combine the variables where the multicollinearity is present, if it makes theoretical sense.

- If the variables are theoretically not distinct from each other, then the researcher may wish to continue collecting additional data until the multicollinearity issue falls to acceptable levels. According to Bollen (1989), issues of multicollinearity may arise from sampling error.
- Another option is to drop the variable causing the problem by not including it in the theoretical model and the analysis.

Checking for multicollinearity is an essential step before conducting the SEM analysis, and adds to the validity of the research. According to Hair et al. (2013, pp.196-197), to assess multicollinearity "...each independent variable becomes a dependent variable and is regressed against the remaining independent variables."

In this study, there were no multicollinearity issues present. The multicollinearity check was assessed by calculating the Variance Inflation Factor (VIF). According to Hair et al. (2013), a VIF equal to 10 or less is a common threshold value to assess multicollinearity, especially when the sample size is large. All VIF values were below the threshold of 10, the highest VIF value was 3.051 for perceived usefulness, which is below the VIF threshold value of 10. Therefore, the multicollinearity assessment suggests that the multicollinearity among the variables is below the VIF threshold value of 10, and should not affect the results of the analysis.

After a series of assessments which evaluated the presence of outliers (univariate and multivariate), assessing normality (univariate and multivariate), multicollinearity, and the reliability of measures, it was concluded that the data are ready to be tested by using the SEM analysis technique using AMOS 25 software.

It is worth mentioning that the SEM analysis began with conducting a Confirmatory Factor Analysis (CFA), which assessed the Goodness Of Fit (GOF) measures, and the construct validity (composite reliability, convergent, and discriminant validity) for the factors presented in the measurement model in the CFA. After the construct validity assessment for the measurement model, the assessment of common method bias within the CFA using the Common Latent Factor (CLF) method is discussed, followed by the results of the hypothesis that reflect the structural model presented and discussed using the SEM analysis technique.

8.7 Structural Equation Modelling

This study adopted the SEM statistical technique through the use of IBM AMOS version 25. Bagozzi and Yi (2012, p.8) refer to structural equation models as “statistical procedures for testing measurement, functional, predictive, and causal hypotheses.” Structural equation modelling is considered a popular technique that is used to conduct data analysis through a statistical methodology that follows a confirmatory approach, in order to analyse a structural theory (Byrne, 2016; Tabachnick and Fidell, 2013).

According to Byrne (2016), there are two important features when using structural equation modelling for hypothesis testing. The first feature of SEM is the ability to conduct a series of structural mathematical equations of causal relationships in the theoretical model. The second feature of SEM is that it enables the researcher to model the structural relationships at the same time, which gives the researcher a clear representation of all relationships that are expressed in the theoretical model. Therefore, the use of the SEM statistical procedure enables the researcher to conduct simultaneous statistical analyses of all hypotheses in the theoretical model being studied (Byrne, 2016). The first step in conducting the SEM analysis is to start by conducting a Confirmatory Factor Analysis (CFA) to validate the hypothesised model structure. In this regard, the next section discusses the CFA.

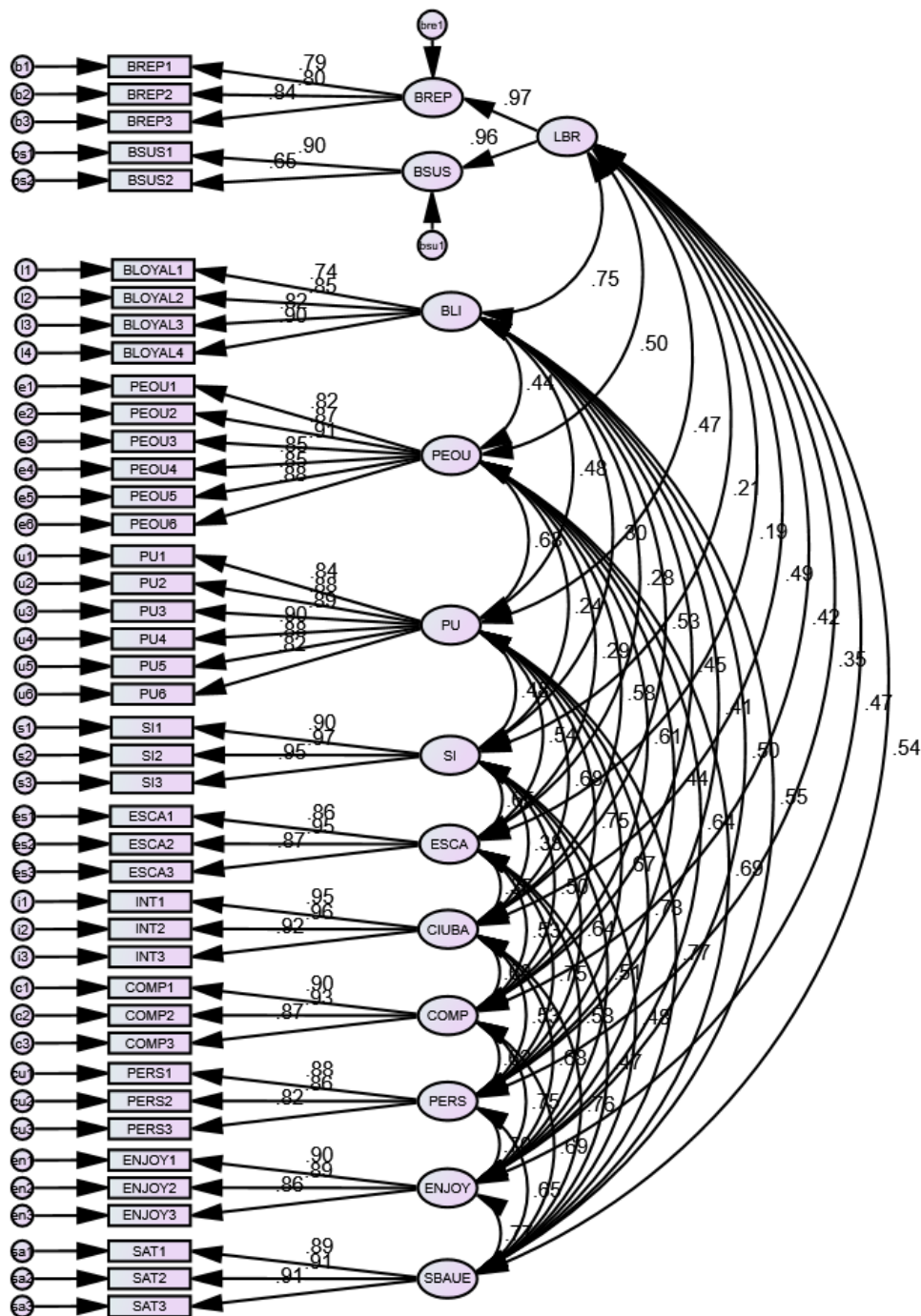
8.7.1 Confirmatory Factor Analysis (CFA)

This study applied CFA, which is a very popular technique to evaluate the hypothesised model's relation to the structure of the sample (Lei and Wu, 2007). The purpose of conducting a CFA is to test the degree of the data fitting and to replicate the hypothesised measurement model. Therefore, the CFA helps to understand the casual relationship between the observed variables and their underlying latent variables, and to what extent the measurement variables represent the factor structure in the hypothesised model. It is worth noting that when conducting a CFA analysis, there is no differentiation between the independent and dependent variables in the hypothesised model (Byrne, 2016). In the CFA analysis each latent variable (construct) in the hypothesised model is represented by an oval shape in the CFA, where each observed variable (measurement item) is represented by a rectangular box (Byrne, 2016). Furthermore, each double headed arrow which connects the constructs to each other represents the covariance relationship in the CFA, and the single headed arrows represent the reflection link between the construct and its measurement items (Byrne, 2016). Moreover, when testing the

structural model, which happens after the CFA assessment is completed, the single headed arrows also will represent the casual path relationships between the constructs.

Through conducting a CFA, the researcher is able evaluate to what extent the data fits the hypothesised measurement model (Byrne, 2016; Hair et al., 2013). In addition, the CFA helps in conducting reliability and validity analyses, such as assessing the construct validity (composite reliability, convergent and discriminant validity) for all constructs in the measurement model (Hair et al., 2013). Before presenting the results of the construct validity analysis in the CFA, the next section presents the GOF measures criterion, which helped in evaluating how the data fits the hypothesised measurement model in the CFA. Figure 8.5 presents the structure of the CFA.

Figure 8. 5 CFA measurement model for examining consumers' continuous intention to use traditional retail smartphone branded apps



CMIN = 3.282, CFI = .959, RMSEA = .048 (PCLOSE= .972), and the SRMR = .0423

Notes: BREP = Brand Reputation, BSUS = Brand Sustainability, LBR = Long-term Brand Reputation, BLI = Brand Loyalty Intention, PEOU = Perceived Ease Of Use, PU = Perceived Usefulness, SI = Social Influence, ESCA = Escapism, CIUBA= Continuous Intention to Use the Branded App, COMP = Compatibility, PERS = Personalisation, ENJOY = Enjoyment. SBAUE = Satisfaction with the Branded App Experience.

The measurement model in Figure 8.5 above is evaluated based on several GOF measures. In this regard, the values of the GOF determine how well the hypothesised model replicate and fit the data (Byrne, 2016). This study uses the GOF values of the normed chi-square divided by the model's degrees of freedom (CMIN/DF), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR) and the Square Root of the Mean Error of Approximation (RMSEA) to evaluate the validity of the measurement model in the CFA and also the structural analysis. It is worth noting that there is no clear rule of thumb in terms of what the exact threshold values of GOF should be; however, there are recommended threshold values for the GOF measures that have been proposed and used when analysing hypothesised models using the SEM analysis technique (Hu and Bentler, 1999).

As mentioned earlier, the CMIN, CFI, SRMR and RMSEA are the GOF measures used to evaluate the validity of the CFA and the structural model. Table 8.6 presents the GOF recommended threshold values to assess the fit of the model in the CFA and the structural model.

Table 8. 6 Fit indices and model fit threshold values

Measure Type	Goodness of Fit Value	Thresholds	Authors
χ^2/df (CMIN/df)	3.282	<3 is good <5 is acceptable	Brown, 2006; Byrne, 2016; Hair, et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2004
CFI	.959	>0.95 is superior >0.90 is good	Byrne, 2016; Hair, et al., 2013; Hu and Bentler, 1999;
SRMR	.0423	<0.05 is superior <0.08 is good	Byrne, 2016; Hu and Bentler, 1999 Greenspoon and Saklofske, 1998
RMSEA	.048	<0.05 superior fit <0.08 good fit <0.1 acceptable fit	Byrne, 2016; Hu and Bentler, 1999; Taylor and Todd, 1995a; Taylor and Todd, 1995b
Standardised factor loading for each item	All above 0.7 except for BSUS at .65 which is acceptable	> 0.7 is superior > 0.50 is good	Brown, 2006; Byrne, 2016; Hair, et al., 2013; Kline, 2010; Stevens, 1992
Correlation between the constructs	All correlations below .085	<0.85	Kline, 2010; Weston and Gore, 2006

Notes: CFI= Comparative Fit Index; SRMR=Standardised Root Mean Square Residual; RMSEA=Root Mean Square Error Approximation.

8.7.1.1 Normed chi-square divided by the degrees of freedom (CMIN/DF)

The CMIN/DF has an acceptable fit measure threshold value of less than 5 (Schumacker and Lomax, 2004). As is shown in Table 8.6, the CMIN/DF Value for the CFA is 3.282 which is below the recommended threshold of less than 5, and considered to be acceptable.

8.7.1.2 The Comparative Fit Index (CFI)

The CFI is another very popular GOF measure, and a value above .95 is viewed to be very good (Hu and Bentler, 1999). It is worth noting that the CFI is considered to be a very robust measure, because it is not sensitive to deviations from normality (Byrne, 2016), which makes the CFI a preferred GOF measure used by researchers in the marketing research area (Ping,

1996). The reported value for the CFI value is .959 which exceeds the .95 threshold value suggested by Hu and Bentler (1999) as shown in Table 8.6 above.

8.7.1.3 The Square Root of the Mean Error of Approximation (RMSEA)

The RMSEA is also a very common reported measure to assess the fit of hypothesised models. A threshold value of 0.6 or less is recommended for the RMSEA (Hu and Bentler, 1999). The RMSEA value for the hypothesised measurement model is .048 with a PCLOSE .972 as shown in Table 8.6 above. Therefore, the RMSEA value demonstrates a well-fitted model.

8.7.1.4 Standardized Root Mean Square Residual (SRMR)

The SRMR calculates the average value of all the standardised residuals in the hypothesised model, and the value of SRMR ranges in value from 0-1 (Byrne, 2016). A very good threshold for the SRMR is less than .05 (Byrne, 2016); however, a threshold value of less than .08 is acceptable (Hu and Bentler, 1999). The reported threshold value for the CFA is .0423 as shown in Table 8.6 above, which is less than the ideal threshold value of .05, reflecting a very good fitting model (Byrne, 2016).

8.7.2 Construct Validity

Convergent and discriminate validity were evaluated to assess the validity of the constructs in the model. Convergent validity is the assessment of the degree to which the measurement items reflect and represent the construct they are intended to measure (Hair et al., 2013). On the other hand, discriminant validity is an assessment to evaluate that the measurement items which intend to measure a construct do not cross load with other constructs, and that the constructs in the hypothesised model are unique and distinct from each other (Hair et al., 2013).

One of the methods that is used to assess convergent validity is to evaluate the values of the standardised factor loading of the measurement items of a construct. With regard to the standardised factor loadings, a value above 0.7 is considered to be very good, and a value of above 0.5 is considered to be good (Brown, 2006; Byrne, 2016; Hair et al., 2013; Kline, 2010; Stevens, 1992). All standardised factor loading for each construct exceeded the ideal threshold of 0.7, except for BSUS2 with a factor loading value of 0.65 as shown in Figure 8.5, which is still above the threshold of 0.5 and very close to the ideal threshold of 0.7. This is a good indication that convergent validity is established.

Another robust convergent validity assessment is by evaluating Average Variance Extracted (AVE) for each construct. The AVE were calculated using the Microsoft Excel software by

utilising the macro called Stat Tool Package, which is provided by Gaskin (2016b). According to Hair et al. (2013), the AVE should be above the threshold value of 0.5 for convergent validity to be established. In this regard, based on the convergent validity assessment, all constructs exceeded the suggested threshold value of 0.5, demonstrating that the convergent validity of all constructs is achieved as can be seen in Table 8.7 below.

Table 8. 7 Discriminant and convergent validity assessment

	CR	AVE	MSV	ENJOY	PEOU	PU	SI	ESCA	CIUBA	COMP	PERS	LBR	BLI	SBAUE
ENJOY	0.916	0.783	0.605	0.885										
PEOU	0.946	0.744	0.471	0.645	0.863									
PU	0.948	0.752	0.605	0.778	0.678	0.867								
SI	0.958	0.884	0.426	0.508	0.243	0.482	0.940							
ESCA	0.922	0.799	0.564	0.583	0.286	0.535	0.653	0.894						
CIUBA	0.961	0.891	0.582	0.677	0.581	0.678	0.384	0.352	0.944					
COMP	0.926	0.806	0.567	0.753	0.607	0.753	0.503	0.530	0.634	0.898				
PERS	0.889	0.728	0.564	0.704	0.443	0.665	0.643	0.751	0.530	0.617	0.853			
LBR	0.962	0.927	0.557	0.468	0.500	0.473	0.215	0.193	0.492	0.422	0.351	0.963		
BLI	0.897	0.686	0.557	0.499	0.444	0.478	0.298	0.279	0.530	0.450	0.413	0.746	0.828	
SBAUE	0.930	0.815	0.599	0.774	0.686	0.772	0.481	0.469	0.763	0.688	0.646	0.544	0.548	0.903

Notes: LBR = Long-term Brand Reputation, BLI = Brand Loyalty Intention, PEOU = Perceived Ease Of Use, PU = Perceived Usefulness, SI = Social Influence, ESCA = Escapism, CIUBA= Continuous Intention to Use the Branded App, COMP = Compatibility, PERS = Personalisation, ENJOY = Enjoyment. SBAUE = Satisfaction with the Branded App Experience.

With regard to discriminant validity, a good indication that the discriminant validity may have been established is when the correlations between the constructs in the hypothesised model do not exceed the absolute threshold value of 0.85 (Kline, 2010; Weston and Gore, 2006). As can be seen in Table 8.7, none of the correlations between the constructs exceeds the threshold of .85 correlations in absolute value.

To further ensure that discriminant validity is established, the study also applies another popular method recommended by Hair et al. (2013) to assess discriminant validity. This procedure is conducted by calculating the AVE values, Component Reliability (CR), the square root of the AVE, Maximum Shared Variance (MSV), and the inter-correlations between the constructs. It is worth noting that the AVE, CR, MSV, and the square root of the AVE were calculated using the Microsoft Excel software utilising the Stat Tool Package macro provided by Gaskin (2016b).

Moreover, the composite scale reliability demonstrates the internal consistency and the reliability of measures. The rule of thumb requires that the composite reliability for each construct should be .7 or higher, as a recommended threshold (Hair et al., 2013). In this regard, all composite reliability values are higher than .7, exceeding the recommended threshold as

shown in Table 8.7. It is worth noting that the reported values of the CR also provide further evidence of convergent validity.

Furthermore, the discriminant validity test was performed to ensure that all constructs in the model were distinct from each other (Hair et al., 2013). The discriminant validity was assessed, by calculating the square root of the AVE for each construct, where it should exceed the inter-correlation for each of the constructs in the hypothesised model (Hair et al., 2013; Hulland, 1999). In this regard, the square root of the AVE exceeded the inter-correlation between the constructs in the hypothesised model, as shown in Table 8.7. In this regard, it is concluded that convergent and discriminant validity is established.

The next step of the SEM CFA analysis is to check if there are any measurement items that have large error terms that correlate within its own construct.

8.7.3 Post Hoc Analyses of the CFA Model

The modification indices section in AMOS 25, suggested some measurement items have large error terms that may need to be force correlated with each other. According to Kenny (2016) this occurs when the variance between two measurement items within its own theoretical construct is un-explained. It is important to note that none of the large error terms relating to the measurement items which require force correlation by the modification indices are outside of its own construct.

The GOF measures were within the suggested acceptable limits as mentioned earlier, reflecting a well-fitted measurement model, and it is worth noting that correlating error terms may improve the GOF measures fit of the hypothesised measurement model in the CFA (Byrne, 2016). Therefore, before deciding to manually force or not to force any error terms for the measurement items to correlate, it is very important to elaborate on what are the recommended options when there are large error terms for measurement items within its own theoretical construct, as Joreskog (1993) argues that correlating error terms must be strongly supported by a justification that is substantive and/or based on empirical rationale.

According to Bentler and Chou (1987 p.108), “A problem that frequently occurs, not only in measurement models but path models as well, is that predictor independent variables, or criterion dependent variables residuals, are not allowed to co-vary. A measurement model with a highly restricted loading structure that forces the factors to be un correlated will rarely be appropriate for real data.” In this regard, large error terms are common when the researcher is

using real data which is the case in this study, as the data were collected through a self-reported online questionnaire. In addition, Byrne (2016) explains that large error terms can occur when the researcher is using repeated measures to measure a theoretical construct. In this regard, it is justifiable to correlate large error terms when repeated measures are used in the questionnaire, where a construct is measured by items that overlap in their content, when the same question is repeatedly asked of a respondent to measure a theoretical construct, even though the wording of the questions is slightly different (Byrne, 2016). Although deciding to force correlate the error terms may be theoretically justifiable in this study, Byrne (2016) advises that it is not recommended that researchers force correlate error terms for measurement items when they have already achieved acceptable GOF measures, which reflects that the measurement model in the CFA already fits the data very well. Furthermore, it is also argued that when researchers start correlating error terms, they may not realise that they are committing the mistake of over fitting hypothesised models (Byrne, 2016). In this regard, MacCallum et al. (1992, p. 501) have warned that, “When an initial model fits well, it is probably unwise to modify it to achieve even better fit because modifications may simply be fitting small idiosyncratic characteristics of the sample” (as cited in Byrne, 2016, p.108).

In this regard, Byrne (2016) recommends the following in order to determine when it is not necessary to force error terms for measurement items to correlate:

- 1- All parameter estimates show a statistical significance.
- 2- The measurement model in the CFA has already reached a good model fit.
- 3- There is no evidence available to the researcher that the measurement model is not fitting the data well.

The measurement model in this study meets the recommended suggestions by Byrne (2016) to not force correlate error terms when an acceptable model fit has been achieved, all parameters estimates are statistically significant, and there is no evidence that the measurement model is not fitting the data. In this regard, it was decided not to correlate any error terms that are suggested by the modification indices in AMOS 25, as recommended by Byrne (2016).

8.7.4 Common Method Bias

The fact that the data were collected through an online questionnaire, in addition to all responses to the questionnaire being self-reported, means a Common Method Bias issue in the data set may occur (Eichhorn ,2014; Gaskin, 2016c; Podsakoff et al., 2003). Furthermore, Common Method Bias could happen when things that are external and unrelated to the

measures used in the questionnaire influence the way participants respond to questions in the survey which may cause a bias issue in the data set (Gaskin, 2016c). In addition, bias could also occur when the sample selected for the study does not represent the targeted population (Easterby-Smith et al., 2015).

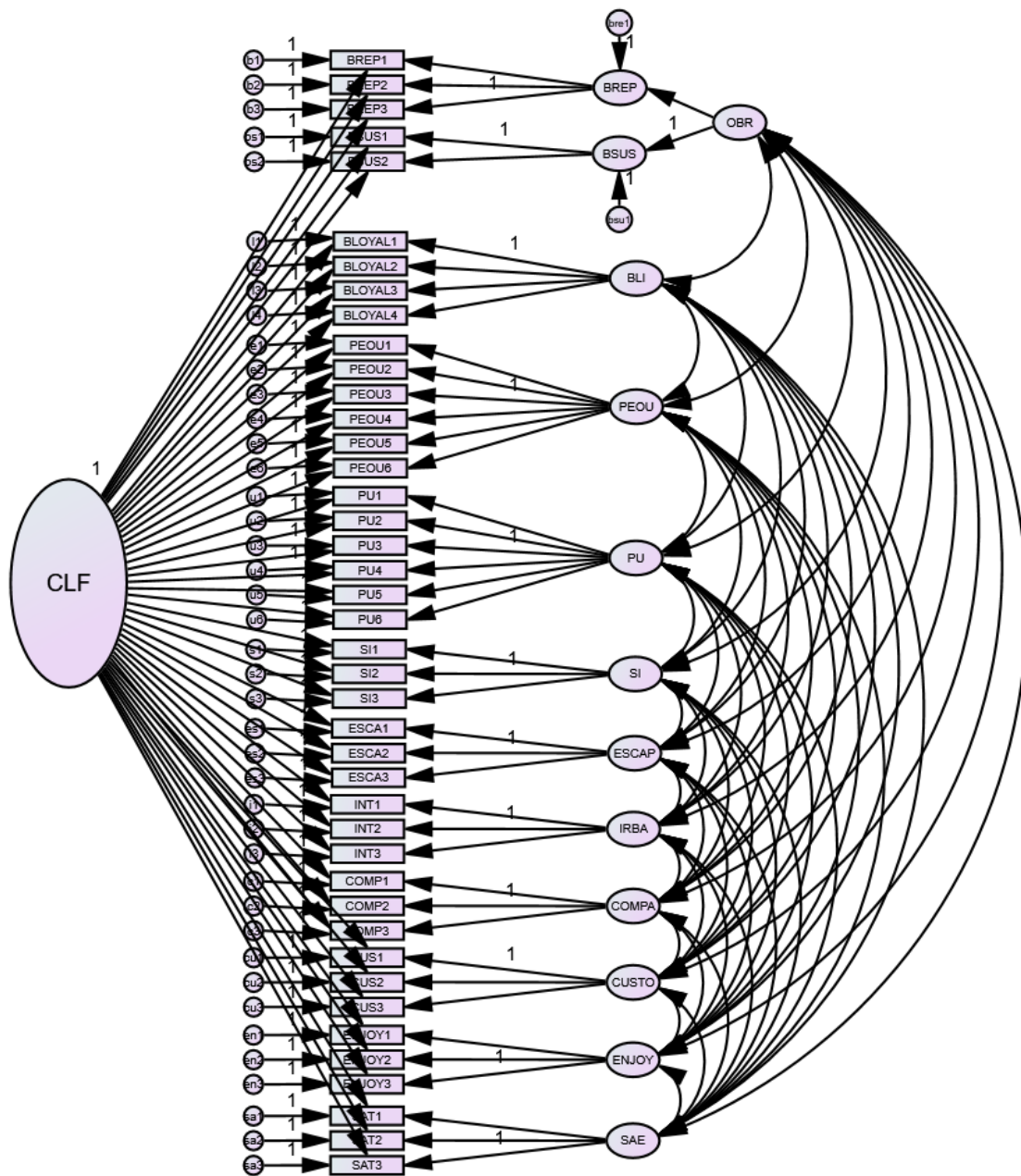
It is worth mentioning that this study first conducted the Harman's Single Factor test which is a popular method to assess CMB that was introduced by Harman (1960) to help researchers assess if their datasets suffer from a common bias issue or not. The Harman's Single Factor test was conducted through a factor analysis in SPSS 25, by constraining all factors to one, while not applying any rotation method to the variables. The result of the Harman Single Factor test showed that the data set in this study does not suffer from a CMB issue.

However, some researchers have criticised and questioned the performance of the Harman (1960) Single Factor test to assess CMB. For example, Podsakoff et al. (2003) acknowledge that the Harman's Single Factor test is widely used; however, they criticised the Harman's Single Factor test based on their research experience and questioned its reliability to assess and evaluate CMB. Moreover, Gaskin (2016c) also mentions that the Harman's Single Factor test is most likely to be categorised as an outdated method by researchers for CMB assessments, and therefore, its utilisation to assess CMB is not widely accepted. In this regard, Podsakoff et al. (2003) have suggested other methods to assess CMB such as the Common Latent Factor (CLF) approach. In addition, Eichhorn (2014) compared the results of the Harman's Single Factor test with other methods such as the Common Latent Variable (CLV) and the Marker Variable technique to assess for CMB on a dataset, and they found that the Harman's Single Factor test showed higher CMB test value than the value of the CLV Marker Variable technique.

As mentioned earlier, in this study, the Harman's Single Factor technique showed there are no bias issues in the data, but since there seems to be criticism in the literature on the use of the Harman's Single Factor technique to assess CMB, it was decided to use another method to ensure that the dataset in this study does not have a bias issue that can distort the SEM analysis. Therefore, this study used the Common Latent Factor (CLF) method which requires constraining the variables in the CFA measurement model that is shown in Figure 8.5 using a common latent variable shown in Figure 8.6 below, where each standardised regression path value from the constrained measurement model is compared with the corresponding standardised regression path value from the original CFA measurement model in Figure 8.5.

Gaskin (2012) and Gaskin (2016c) suggest that the difference in value between the standardised regression path value from the original CFA measurement model and the value from the constrained CLF measurement model should not exceed the recommended 0.2 threshold value. The difference in value between the standardised regression path value from the original CFA measurement model and the value from the constrained CLF measurement model is presented in Table 8.8.

Figure 8. 6 Common Latent Factor (CLF) measurement model for examining consumers’ continuous intention to use traditional retail smartphone branded apps



Notes: CLF = Common Latent Factor, BREP = Brand Reputation, BSUS = Brand Sustainability, LBR = Long-term Brand Reputation, BLI = Brand Loyalty Intention, PEOU = Perceived Ease Of Use, PU = Perceived Usefulness, SI = Social Influence, ESCA = Escapism, CIUBA = Continuous Intention to Use the Branded App, COMP = Compatibility, PERS = Personalisation, ENJOY = Enjoyment, SBAUE = Satisfaction with the Branded App Experience.

Table 8. 8 CLF result comparison between the constrained and unconstrained measurement models

Item			Constrained Standardised Regression Values	Unconstrained Standardised Regression Values	Differences in values (constrained/unconstrained)
BREP	<---	LBR	0.968	0.971	0.003
BSUS	<---	LBR	0.958	0.955	-0.003
PEOU1	<---	PEOU	0.793	0.819	0.026
PEOU2	<---	PEOU	0.858	0.872	0.014
PEOU3	<---	PEOU	0.896	0.91	0.014
PEOU4	<---	PEOU	0.857	0.847	-0.01
PEOU5	<---	PEOU	0.844	0.847	0.003
PEOU6	<---	PEOU	0.863	0.879	0.016
PU1	<---	PU	0.84	0.835	-0.005
PU2	<---	PU	0.854	0.877	0.023
PU3	<---	PU	0.864	0.891	0.027
PU4	<---	PU	0.877	0.897	0.02
PU5	<---	PU	0.875	0.88	0.005
PU6	<---	PU	0.845	0.819	-0.026
BREP1	<---	BREP	0.747	0.794	0.047
BREP2	<---	BREP	0.739	0.797	0.058
BREP3	<---	BREP	0.856	0.845	-0.011
SI1	<---	SI	0.816	0.902	0.086
SI2	<---	SI	0.871	0.968	0.097
SI3	<---	SI	0.857	0.95	0.093
ESCA1	<---	ESCA	0.794	0.856	0.062
ESCA2	<---	ESCA	0.824	0.95	0.126
ESCA3	<---	ESCA	0.714	0.872	0.158
INT1	<---	CIUBA	0.93	0.948	0.018
INT2	<---	CIUBA	0.945	0.963	0.018
INT3	<---	CIUBA	0.9	0.921	0.021
BLOYAL1	<---	BLI	0.794	0.737	-0.057
BLOYAL2	<---	BLI	0.879	0.849	-0.03
BLOYAL3	<---	BLI	0.779	0.817	0.038
BLOYAL4	<---	BLI	0.871	0.901	0.03
COMP1	<---	COMP	0.89	0.896	0.006
COMP2	<---	COMP	0.931	0.929	-0.002
COMP3	<---	COMP	0.86	0.868	0.008
PERS1	<---	PERS	0.8	0.879	0.079
PERS2	<---	PERS	0.8	0.857	0.057
PERS3	<---	PERS	0.79	0.823	0.033
ENJOY1	<---	ENJOY	0.885	0.898	0.013
ENJOY2	<---	ENJOY	0.899	0.894	-0.005
ENJOY3	<---	ENJOY	0.84	0.863	0.023
BSUS1	<---	BSUS	0.873	0.899	0.026
BSUS2	<---	BSUS	0.659	0.648	-0.011
SAT1	<---	SBAUE	0.897	0.892	-0.005
SAT2	<---	SBAUE	0.912	0.907	-0.005
SAT3	<---	SBAUE	0.907	0.91	0.003

As shown in Table 8.8, the results reveal that there is no value exceeding the threshold of 0.2 when subtracting the standardised regression weight values of the original CFA measurement model from the constrained CLF measurement model. In this regard, it is concluded that there is no bias issue in the dataset of this study.

The next section will discuss the results of the hypotheses in the structural model.

8.8 The Structural Model and Hypothesis Testing

Following the series of assessments that were conducted on the hypothesised measurement model in the CFA phase to assess the construct validity (convergent and discriminant validity), GOF measures, the next step was to test the hypothesised structural model using the SEM analysis technique with AMOS 25.

The development of the hypothesised structural model was done through the literature review, in addition to conducting the exploratory qualitative in-depth interviews with consumers who retain high-street branded apps, which helped to develop the structural model and its hypotheses. There are 10 hypotheses to be tested to complement the aim of this study; they were previously mentioned in chapter 7:

H1a. Satisfaction with the branded app user experience mediates the relationship between perceived usefulness and continuous intention to use the branded app.

H1b. Perceived usefulness positively influences the continuous usage intention of the retailer's branded mobile app.

H2a. Satisfaction with the branded app user experience mediates the relationship between perceived ease of use and the continuous intention to use the branded app.

H2b. Perceived ease of use positively influences the continuous usage intention of the retailer's branded mobile app.

H3a. Satisfaction with the branded app user experience mediates the relationship between compatibility and the continuous intention to use the branded app.

H3b. Compatibility positively influences the continuous usage intention of the retailer's branded mobile app.

H4a. Satisfaction with the branded app user experience mediates the relationship between perceived personalisation and continuous intention to use the branded app.

H4b. The personalised experience positively influences the continuous usage intention of the retailer's branded mobile app.

H5a. Satisfaction with the branded app user experience mediates the relationship between perceived enjoyment and the continuous intention to use the branded app.

H5b. Perceived enjoyment positively influences the continuous usage intention of the retailer's branded mobile app.

H6a. Satisfaction with the branded app user experience mediates the relationship between perceived escapism and the continuous intention to use the branded app.

H6b. Escapism positively influences the continuous usage intention of the retailer's branded mobile app.

H7. Social influence positively influences the continuous usage intention of the retailer's branded mobile app.

H8a. The long-term brand reputation mediates the relationship between satisfaction with the app user experience and continuous usage intention of the retailer's branded mobile app.

H8b. Loyalty intention toward the traditional retailer mediates the relationship between satisfaction with the app user experience and continuous usage intention of the retailer's branded mobile app.

H8c. The satisfaction with a retailer's branded mobile app user experience positively influences the continuous usage intention of the retailer's branded mobile app.

H9. The long-term brand reputation influences the continuous usage intention of the retailer's branded mobile app.

H10. Loyalty intention towards the traditional retailer influences the continuous usage intention of the retailer's branded mobile app.

The next section presents the results of testing the mentioned hypotheses which are discussed above.

8.8.1 The SEM Findings of the Hypothesised Model

Before presenting and discussing the results of the path analysis that is represented in the structural model that was shown in Figure 7.1 in chapter 7 earlier, the first important step is to check the result of GOF Measures in order to evaluate the validity of the structural model. Therefore, the next section presents the results of the GOF measures for the structural model presented in Figure 7.1 that was presented in earlier in chapter 7.

8.8.1.1 The Goodness of Fit (GOF) Measures of the Structural Model

Evaluating the GOF measures for the hypothesised structural model is similar to the procedure that was followed during the assessment of the CFA hypothesised measurement model earlier. In this regard, the hypothesised structural model is assessed based on the values of GOF measures of the normed chi-square divided by the model's degrees of freedom (CMIN/DF), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR) and the Square Root of the Mean Error of Approximation (RMSEA) to evaluate the validity of the measurement model in the CFA and also the structural analysis. The results of the GOF measures are presented in Table 8.9 followed by a discussion of the results of each GOF measure.

Table 8. 9 GOF measures of the hypothesised structural model

Measure Type	Goodness of Fit Value	Thresholds	Authors
χ^2/df (CMIN/df)	3.447	<3 is good <5 is acceptable	Brown, 2006; Byrne, 2016; Hair, et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2004
CFI	.956	>0.95 is superior >0.90 is good	Byrne, 2016; Hair, et al., 2013; Hu and Bentler, 1999
SRMR	.0634	<0.05 is superior <0.08 is good	Byrne, 2016; Hu and Bentler, 1999; Greenspoon and Saklofske, 1998
RMSEA	.049	<0.05 superior fit <0.08 good fit <0.1 acceptable fit	Byrne, 2016; Hu and Bentler, 1999; Taylor and Todd, 1995a; Taylor and Todd, 1995b

Notes: CFI= Comparative Fit Index; SRMR=Standardised Root Mean Square Residual; RMSEA=Root Mean Square Error Approximation.

8.8.1.2 Normed Chi-square Divided by the Degrees of Freedom (CMIN/DF)

A threshold value of less than 3 for CMIN/DF demonstrated that the structural model achieved a good fit (Kline, 1998). However, according to Schumacker and Lomax (2004) a threshold value of less than 5 demonstrates an acceptable fit to the model. As can be seen in Table 8.9 above, the structural model achieved a CMIN/DF value of 3.447 which is considered an acceptable fit.

8.8.1.3 The Comparative Fit Index (CFI)

As mentioned before, the CFI is favoured within marketing research and it is robust even if the data suffer a deviation from normality (Ping, 1996). The recommended threshold value for CFI is .95 or above (Hu and Bentler, 1999). As can be seen in Table 8.9, the CFI value of the structural model is .956, which exceeds the .95 threshold value. In this regard, it is concluded that the CFI value of the structural model is good.

8.8.1.4 The Square Root of the Mean Error of Approximation (RMSEA)

The RMSEA is also a very common reported measure to assess the fit of hypothesised models. For the RMSEA measure, a threshold value of 0.6 or less is recommended (Hu and Bentler, 1999). The RMSEA value for the hypothesised measurement model is .049 with a PCLOSE .718. Therefore, the RMSEA value demonstrates a well-fitted model as shown in Table 8.9 above.

8.8.1.5 Standardized Root Mean Square Residual (SRMR)

As mentioned earlier, the SRMR calculates the average value of all the standardised residuals in the hypothesised model, and the value of SRMR ranges from 0-1 (Byrne, 2016). A very good threshold for the SRMR is less than .05 (Byrne, 2016); however, a threshold value of less than .08 is acceptable. As shown in Table 8.9 above, the reported value for the hypothesised structural model is .0634, which is less than the acceptable threshold value suggested by Hu and Bentler (1999).

After checking the GOF measures for the initial structural model, it is highly recommended that the modification indices of the regression weights for the path relationships in the structural model be assessed, to evaluate if there are any modification indices that are causing a misfit to the structural model (Byrne, 2016). Before testing the results of the path relationships in the structural model, the modification indices were evaluated first (Byrne, 2016). In this regard, the next step involves evaluating the modification indices for the hypothesised structural model.

8.8.2 Modification Indices Assessment for the Regression Weights

The modification indices for the regression weights which are shown in Table 8.10 below revealed that there is a very strong link between the Long-term Brand Reputation (LBR) and the Brand Loyalty Intention (BLI) construct.

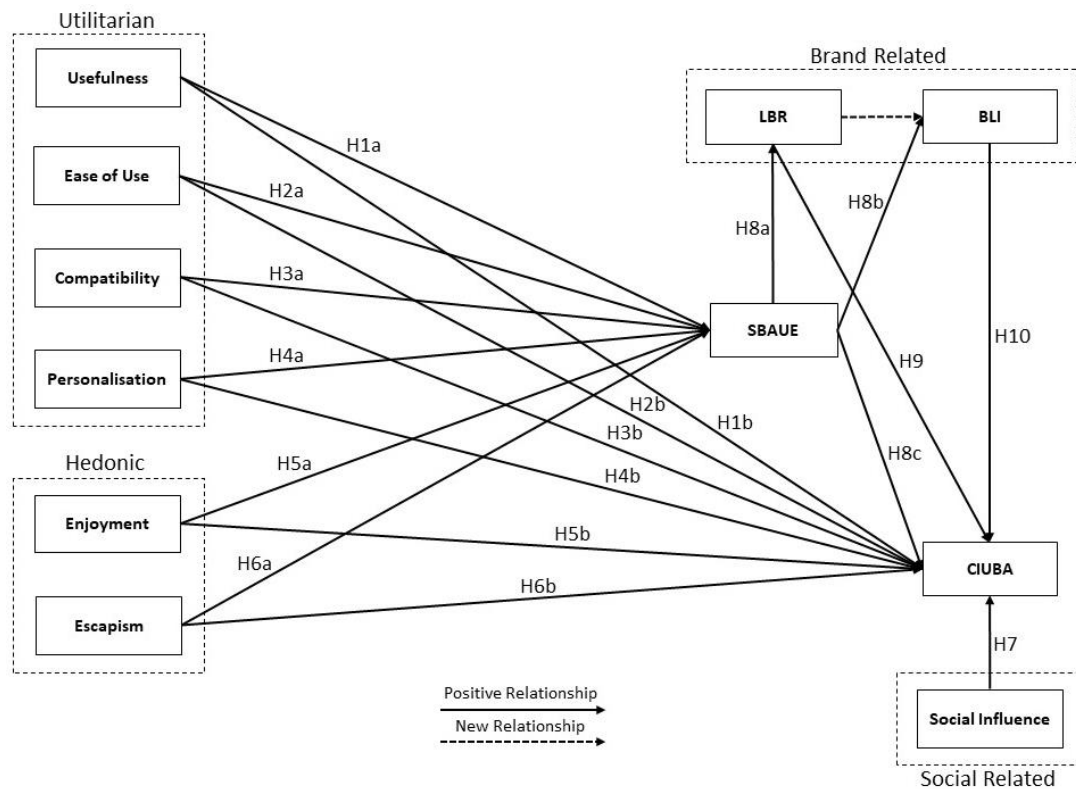
Table 8. 10 Regression weights: (Default model)

	M.I.	Par Change
LBR <--- BLI	181.437	.382
BLI <--- LBR	173.157	.407

Notes: LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention.

In this regard, the modification indices suggest there is a path that could be added to account for the relationship between LBR and BLI which will result in a better identification of the structural model, and will also most likely result in improving the validity of the structural model (Byrne, 2016). It is very important to note that researchers can modify the structural model and add the path which was suggested by the modification indices only when the unaccounted relationship between two constructs makes logical sense and this is supported by theory (Byrne, 2016). In addition, when checking the regression weights modification indices for a structural model, the researcher should focus on the aim of the research in question (Byrne, 2016). In this regard, the aim of this study is to explore what leads consumers to retain and continue to use high-street branded apps in the future. In this regard, the suggested link between LBR and BLI suggests that LBR may influence the intention to continue to use high-street branded apps in the future. From a theoretical perspective, previous research suggests that consumers' perception of the brand influences their loyalty toward the brand (Selnes, 1993; Kwon and Lennon, 2009b; Zhang, 2015). For example, Kwon and Lennon (2009b) showed that a consumers' offline brand image influences their loyalty intention toward the online retailer. Therefore, it was decided to modify the structural model by including an additional path from LBR to BLI. The modified model is presented in Figure 8.7:

Figure 8. 7 The modified hypothesised structural model



Notes: SBAUE: Satisfaction with the Branded App User Experience, LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention, CIUBA: Continuous Intention to Use the Branded App.

Byrne (2016) suggests that the process of modifying a structural model, involves adding one path at a time and then evaluating the GOF measures for the structural model and this process should be repeated if necessary. Therefore, the next step was to evaluate the GOF measures, and then refer to the modification indices again to double check if there were any further modifications that needed to be added to the model.

However, it appears from the modification indices that after the addition of the path between LBR and BLI, there were no additional necessary modifications to the hypothesised structural model.

8.8.2.1 The Goodness of Fit (GOF) Measures of the Structural Model

When modifications are done to hypothesised structural models in SEM, it very important to re-evaluate the GOF measures model.

As mentioned earlier in the previous sections. The hypothesised structural model was assessed based on the values of GOF measures of the CMIN/DF, CFI, SRMR and the RMSEA. The

results of the GOF measures are presented in Table 8.11 followed by discussing the results of each GOF measure.

Table 8. 11 GOF measures of the modified hypothesised structural model

Measure Type	Goodness of Fit Value	Thresholds	Authors
χ^2/df (CMIN/df)	3.013	<3 is good, <5 is acceptable	Brown, 2006; Byrne, 2016; Hair, et al., 2010; Hu and Bentler, 1999; Schumacker and Lomax, 2004
CFI	.963	>0.95 is superior >0.90 is good	Byrne, 2016; Hair, et al., 2013; Hu and Bentler, 1999
SRMR	.0509	<0.05 is superior <0.08 is good	Byrne, 2016; Hu and Bentler, 1999; Greenspoon and Saklofske, 1998
RMSEA	.045	0.05 superior fit <0.08 good fit <0.1 acceptable fit	Byrne, 2016; Hu and Bentler, 1999; Taylor and Todd, 1995a; Taylor and Todd, 1995b

Note: CFI= Comparative Fit Index; SRMR=Standardised Root Mean Square Residual; RMSEA=Root Mean Square Error Approximation.

8.8.2.2 Normed Chi-square Divided by the Degrees of Freedom (CMIN/DF)

The value of the CMIN/DF for the modified structural model was 3.013. As discussed earlier, a threshold value of less than 5 demonstrates an acceptable fit to the model (Schumacker and Lomax, 2004), and a threshold value of less than 3 demonstrates a good fit to the model (Kline, 1998). In this regard, it was concluded that the CMIN/DF value of 3.013 demonstrates a good fit as shown in Table 8.11.

8.8.2.3 The Comparative Fit Index (CFI)

As can be seen in Table 8.11, the CFI value for the modified model was .963, which exceeds the recommended threshold value of 0.95. In this regard, it was concluded that the CFI value of the structural model is good.

8.8.2.4 The Square Root of the Mean Error of Approximation (RMSEA)

For the RMSEA measure, a threshold value of 0.6 or less is recommended for the RMSEA (Hu and Bentler, 1999). The RMSEA value for the hypothesised measurement model was .045 with a PCLOSE 1.000. Therefore, the RMSEA value demonstrated a well-fitted model as shown in Table 8.11.

8.8.2.5 Standardised Root Mean Square Residual (SRMR)

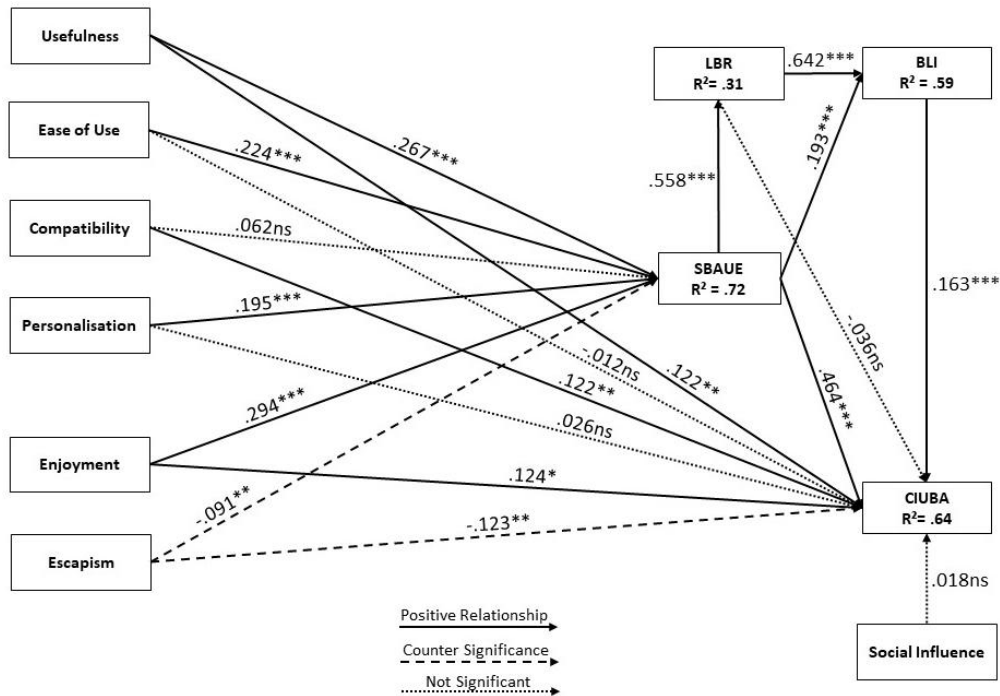
As mentioned earlier, a very good threshold for the SRMR is less than .05 (Byrne, 2016); however, a threshold value of less than .08 is acceptable. The reported value for the hypothesised structural model was .0509, which is less than the ideal threshold value suggested by Hu and Bentler (1999). In this regard, it is concluded that the SRMR value of .0509 demonstrates that the modified model is well-fitted as shown in Table 8.11.

In this regard, the hypothesised relationships in the structural model were ready to be tested. The next section discusses the results of testing of the relationships in the hypothesised structural model.

8.9 The Standardised Parameter Estimates for the Structural Model

The graphical representation of the structural model showing the hypothesised relationships and the standardised regression weights results for each relationship are presented in Figure 8.8.

Figure 8. 8 Structural model results



Note: SBAUE: Satisfaction with the Branded App User Experience, LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention, CIUBA: Continuous Intention to Use the Branded App, ***<.001 = significant, **<.01 = significant, *<.05 = significant, ns= not significant.

As seen in Figure 8.8, the solid line arrow paths represent the hypothesised relationships that were supported, and the dashed arrow line paths represent the hypothesised relationships that were not supported.

In addition, Table 8.12 outlines the results of direct relationships presented in Figure 8.8 with the corresponding standardised regression estimates (S.Estimate), Critical Ratio (C.R.), and the outcome of the P-value for each of the direct relationships.

Table 8. 12 An outline of all the direct hypothesised relationships

Hypothesis	Relationship			S.Estimate	C.R.	P	Result
H1a	PU	→	SBAUE	.267	6.521	***	Positive Significance
H1b	PU	→	CIUBA	.122	2.718	.007	Positive Significance
H2a	PEOU	→	SBAUE	.224	7.334	***	Positive Significance
H2b	PEOU	→	CIUBA	-.012	-.345	.730	Insignificant
H3a	COMP	→	SBAUE	.062	1.700	.089	Insignificant
H3b	COMP	→	CIUBA	.122	3.082	.002	Positive Significance
H4a	PERS	→	SBAUE	.195	4.649	***	Positive Significance
H4b	PERS	→	CUIBA	.026	.546	.585	Insignificant
H5a	ENJOY	→	SBAUE	.294	6.669	***	Positive Significance
H5b	ENJOY	→	CIUBA	.124	2.547	.011	Positive Significance
H6a	ESCA	→	SBAUE	-.091	-2.652	.008	Negative Significant
H6b	ESCA	→	CIUBA	-.123	-3.225	.001	Negative Significant
H7	SI	→	CIUBA	.018	.594	.552	Insignificant
H8a	SBAUE	→	LBR	.558	17.098	***	Positive Significant
H8b	SBAUE	→	BLI	.193	6.048	***	Positive Significant
H8c	SBAUE	→	CIUBA	.464	9.339	***	Positive Significant
H9	LBR	→	CUIBA	-.036	-.942	.346	Insignificant
H10	BLI	→	CIUBA	.163	4.270	***	Positive Significant
Added Path	LBR	→	BLI	.642	15.499	***	Positive Significant

Notes: LBR = Long-term Brand Reputation, BLI = Brand Loyalty Intention, PEOU = Perceived Ease Of Use, PU = Perceived Usefulness, SI = Social Influence, ESCA = Escapism, CIUBA= Continuous Intention to Use the Branded App, COMP = Compatibility, PERS = Personalisation, ENJOY = Enjoyment. SBAUE = Satisfaction with the Branded App Experience.

After evaluating the results of the direct relationships, the next step is to evaluate the effect of the mediated hypothesised relationships for further investigation to assess the mediation results for hypotheses H1a, H2a, H3a, H4a, H5a, H6a, H8a, H8b, and the added path from LBR to BLI and its effects on continuous intention to use the app. The results of indirect mediated hypothesised structural relationships are presented in Table 8.13.

Table 8. 13 Results of indirect mediated hypothesised structural relationships

Hypothesis		Relationship		Estimate	P	Result
H1a	Usefulness	→	SBAUE → CIUBA	.111	***	Pos.Significance
H2a	Ease of Use	→	SBAUE → CIUBA	.116	***	Pos.Significance
H3a	Compatibility	→	SBAUE → CIUBA	.027	.153	Insignificant
H4a	Personalisation	→	SBAUE → CIUBA	.071	***	Pos.Significance
H5a	Enjoyment	→	SBAUE → CIUBA	.127	***	Pos.Significance
H6a	Escapism	→	SBAUE → CIUBA	-.028	.019	Neg.Significance
H8a	SBAUE	→	LBR → CIUBA	-.020	.414	Insignificant
H8b	SBAUE	→	BLI → CIUBA	.031	***	Pos.Significance
Added Path	LBR	→	BLI → CIUBA	.133	***	Pos.Significance

Notes: SBAUE: Satisfaction with the Branded App User Experience, LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention, CIUBA: Continuous Intention to Use the Branded App. Pos.Significance: Positive Significance, Neg.Significance: Negative Significance.

As seen in Tables 8.12 and 8.13, it is concluded that eight hypothesised relationships were not supported. Furthermore, it is important to note that two out of the eight unsupported relationships demonstrate interesting counter significance evidence for H6a which is the hypothesised relationship of escapism influencing the consumer's satisfaction with the app user experience and H6b which is the relationship of escapism influencing the continuous intention to use the branded app. The results of the hypothesised relationships are discussed in the next section.

8.9.1 Hypothesis Results

The hypothesis results are presented in this section for each construct and its influence on the consumers' continuous intention to use branded apps are discussed individually. In this regard, this section will start by discussing the results for the perceived usefulness followed by discussing the rest of the hypotheses in the structural model.

8.9.1.1 Perceived Usefulness

Hypothesis H1a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of Perceived Usefulness (PU) to the Continuous Intention to Use the Branded App (CIUBA). The PU shows a significant positive relationship towards SBAUE with a standardised regression weight estimate of .267 and a p-value >.001, demonstrating that the consumer's perceived usefulness of the branded app increases the consumer's satisfaction with the branded app experience. Furthermore, the results show that SBAUE partially mediates the relationship of PU to CIUBA, with a standardised regression weight value of .111 and P-value of <.001. Therefore, it is concluded that H1a is supported. In this regard, this finding illustrates that a consumer's perceived usefulness of the branded app

increases their satisfaction with the branded app experience, resulting in an increase in the consumer's continuous intention to use the branded app in the future.

H2b theorises that PU will have a direct positive influence on CIUBA. The PU results show a significant positive effect on CIUBA, with a regression weight value of .122 and a p-value of .007 reflecting that when the apps are perceived by consumers to be useful and productive for their shopping activities, they are more likely to continue using the branded app in the future. In this regard H2b is supported.

In conclusion, as H2a and H2b for perceived usefulness are both supported, it illustrates that perceived usefulness influence consumers' continuous intention to use branded apps directly and indirectly through the consumer's satisfaction with the branded app user experience. Therefore, this finding illustrates that consumers who perceive a branded app to be useful may still have the intention to continue to use the branded app in the future even if they are not satisfied with the branded app user experience.

8.9.1.2 Perceived Ease of Use

Hypothesis H2a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of Perceived Ease Of Use (PEOU) to the Continuous Intention to Use the Branded App (CIUBA). The PEOU shows a significant positive relationship toward the SBAUE with a standardised regression weight estimate of .224 and significant p-value that is $<.001$. This reflects that the consumer's perceived ease of use of the branded app increases the consumer's satisfaction with the branded app user experience. Furthermore, the results show that SBAUE mediates the relationship of PEOU to CIUBA, with a standardised regression weight value of .116 and p-value of $<.001$. Therefore, it is concluded that H1a is supported. In this regard, this finding illustrates that a consumer's perceived ease of use of the branded app increases their satisfaction with the branded app user experience, resulting in an increase in the consumer's continuous intention to use the branded app in the future.

The second hypothesis H2b represents that PEOU will influence the intention to retain the app directly. However, the consumer's PEOU of the app shows a non-significant effect toward the CIUBA with a regression weight value of $-.012$ and a p-value of $.730$. This reflects that the consumer's perception of the branded app's ease of use does not influence the consumer's intention to continue to use the app in the future. In this regard, H2b is not supported.

Furthermore, this result demonstrates that SBAUE fully mediates the relationship of PEOU to CIUBA. In conclusion, this means that PEOU only influences consumers' intention to continue to use in the future, through the consumer's satisfaction with the branded app user experience.

8.9.1.3 Compatibility

Hypothesis H3a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of Compatibility (COMP) to the Continuous Intention to Use the Branded App (CIUBA). COMP shows a non-significant relationship towards the SBAUE with a regression weight estimate of .062 and a p-value of .089, reflecting that a consumer's satisfaction with the branded app user experience is not influenced by the app being compatible with the consumer's lifestyle (e.g. the way they live and work). Furthermore, the results also show that SBAUE does not mediate the relationship of COMP to CIUBA, as the mediation results show a standardised regression weight value of .027 and p-value of .153. In this regard, H3a is not supported, which illustrates that a consumer's perception of whether the branded app is compatible with his/her lifestyle does not influence the intention to continue to use the branded app indirectly through satisfaction with the branded app experience.

H3b theorises that when consumers perceive a branded app to be compatible with their lifestyle they will have a positive intention to continue to use the branded app. In this regard, compatibility has a significant effect toward the intention to retain the branded app, with a regression weight value of .122 and a p-value of $<.01$, reflecting that when consumers perceive the app to be compatible with their lifestyle, they are more likely to continue to use the branded app. In this regard H3b is supported.

In conclusion, a consumer's satisfaction with the branded app user experience does not mediate the relationship of compatibility to intention to continue to use the branded app. However, there is a significant direct effect from compatibility to the intention to continue to use the branded app, which illustrates that when consumers perceive the app to be compatible with their lifestyle, they are more likely to hold a positive intention to continue to use the branded app, even if they are not satisfied with the branded app user experience.

8.9.1.4 Personalisation

Hypothesis H4a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of perceived personalisation (PERS) to the Continuous Intention to Use the Branded App (CIUBA). The perceived PERS shows a significant positive

relationship towards the SBAUE with a standardised regression weight estimate of .195 and significant p-value that is $<.001$. This reflects that the consumer's perceived personalisation of the branded app increases the consumer's satisfaction with the branded app user experience. Furthermore, the results show that SBAUE mediates the relationship of perceived PERS to CIUBA, with a standardised regression weight value of .071 and p-value of $<.001$. Therefore, it is concluded that H4a is supported. In this regard, this finding illustrates that a consumer's perceived personalisation of the branded app increases their satisfaction with the branded app user experience, resulting in an increase in the consumer's continuous intention to use the branded app in the future. In this regard H4a is supported.

Regarding H4b, the perceived PERS is hypothesised to directly influence the CIUBA. The results for this hypothesis show a non-significant effect of PERS on CIUBA, with a regression weight value of .026 and a p-value of .585 reflecting that a consumer's perceived personalised experience of the branded app does not positively influence a consumer's intention to continue to use the branded app in the future directly. In this regard H4a is not supported.

This indicates that a consumer's perceived personalised experience of the branded app is fully mediated by the consumer's satisfaction with the branded app user experience toward the intention to continue to use the branded app. In other words, a personalised user experience will cause an increase in satisfaction with the branded app user experience leading to an increase in consumers' continuous intention to use the branded app in the future.

8.9.1.5 Perceived Enjoyment

Hypothesis H5a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of perceived Enjoyment (Enjoy) to the Continuous Intention to Use the Branded App (CIUBA). The perceived ENJOY shows a significant positive relationship toward the SAE with a standardised regression weight estimate of .294 and significant p-value that is $<.001$. This reflects that the consumer's perceived enjoyment of the branded app increases the consumer's satisfaction with the branded app user experience. Furthermore, the results show that SBAUE mediates the relationship of ENJOY to CIUBA, with a standardised regression weight value of .127 and p-value of $<.001$. Therefore, it is concluded that H5a is supported. In this regard, this finding illustrates that a consumers' perceived enjoyment of the branded app increases their satisfaction with the branded app user experience, resulting in an increase in the consumer's continuous intention to use the branded app in the future. Therefore, H5a is supported.

With regard to hypothesis H5b which states that a consumers' perceived enjoyment of the branded app will influence their intention to continue to use the branded app positively, the finding was significant with a regression weight value of .124 and a p-value of .011 reflecting that a consumers' perceived enjoyment of the branded app influences consumers' intention to continue to use the branded app directly. In this regard H5b is supported.

In conclusion, as H5a and H5b for perceived usefulness are both supported, it illustrates that perceived enjoyment influences consumers' continuous intention to use branded apps directly and indirectly through the consumer's satisfaction with the branded app user experience. Therefore, this finding illustrates that consumers who perceive a branded app to be enjoyable and fun to use may still have the intention to continue to use the branded app in the future even if they are not satisfied with the branded app user experience.

8.9.1.6 Escapism

Hypothesis H6a represents that the Satisfaction with the Branded App User Experience (SBAUE) mediates the relationship of Escapism (ESCA) to the Continuous Intention to Use the Branded App (CIUBA). ESCA shows a significant negative relationship toward the SBAUE with a standardised regression weight estimate of -.091 and significant p-value that is $<.01$. This reflects that ESCA causes a decrease in SBAUE. Furthermore, the assessment of mediating effect of SBAUE of ESCA to CIUBA also shows negative significance as the indirect effect of the regression weight estimate is -.028 with a p-value $<.05$, demonstrating that escapism causes a decrease in consumers' SBAUE which in turn, leads to a decrease in consumers' CIUBA. In this regard H6a is not supported.

Regarding hypothesis H6b which states that ESCA positively influences CIUBA directly, it was also found that ESCA also has a significant negative effect on CIUBA, as the relationship has a standardised regression weight estimate of -.123 and P value $<.01$ demonstrating that escapism will cause consumers to have negative intention to continue to use the branded app in the future. In this regard, H6b is not supported.

In conclusion, the findings with regard to H6a and H6b demonstrate counter evidence to what was originally hypothesised for both relationships in terms of satisfaction with the branded app user experience. Furthermore, this finding shows escapism negatively influences consumers' continuous intention to use branded apps directly and indirectly through the consumer's satisfaction with the branded app user experience. Furthermore, this finding may reflect that

consumers do not want to spend a long time using branded apps that traditional retailers offer consumers when completing shopping activities. In other words, the findings illustrate that although escapism is known to be an important feature of the smartphone, consumers do not use traditional retail branded apps to pass time and divert themselves from a current reality in order to seek an alternative reality that is hedonic in nature.

8.9.1.7 Social Influence

Hypothesis H7 states that Social Influence (SI) of the branded app positively influences the Continuous Intention to Use the Branded App (CIUBA); the findings show it is insignificant with a standardised regression weight value of .018 and a p-value $>.05$ reflecting that social influence does not influence consumers' intention to continue to use the branded app. In this regard H7 is not supported.

8.9.1.8 Satisfaction with the Branded App User Experience

Hypothesis H8a represents that the Long-term Brand Reputation (LBR) mediates the relationship of Satisfaction with the Branded App User Experience (SBAUE) to Continuous Intention to Use the Branded App (CIUBA). In other words, the SBAUE indirectly influences CIUBA through LBR. The SBAUE shows a significant positive relationship towards the LBR with a standardised regression weight estimate of .558 and significant p-value that is $<.001$. This reflects that SBAUE significantly increases LBR. However, the results interestingly show that LBR does not mediate the relationship of perceived SBAUE to CIUBA, as the standardised regression weight value is $-.020$ with a p-value of $>.05$. Therefore, it is concluded that H8a is not supported. Interestingly, this finding illustrates that consumers' SBAUE positively increases consumers' LBR; however, the SBAUE does not have an indirect influence on CIUBA through LBR. In this regard, H8a is not supported.

Hypothesis H8b states that Brand Loyalty Intention (BLI) mediates the relationship of Satisfaction with the Branded App User Experience (SBAUE) to the Continuous Intention to Use the Branded App (CIUBA). In other words, the SBAUE indirectly influences CIUBA through BLI. The results show a positive significant outcome for SBAUE to the BLI as the standardised regression weight is .193 with a p-value of $<.001$, reflecting that when consumers are satisfied with the app experience, their loyalty toward the brand will also increase positively. Furthermore, the results show that BLI mediates the relationship of SBAUE to CIUBA, with a standardised regression weight value of .031 and p-value of $<.001$. In this

regard, this finding illustrates that consumers' satisfaction with the branded app user experience causes an increase in consumers' loyalty intention toward the brand, which in turn, increases consumers' continuous intention to use the branded app in the future. Therefore, H8b is supported.

Hypothesis H8c hypothesises that the Satisfaction with the Branded App User Experience (SBAUE) influences the Continuous Intention to Use the Branded App (CIUBA) positively. The result for this hypothesis is significant as the standardised regression weight value is .464 and a p-value that is $<.001$ illustrating that consumers' satisfaction with the branded app experience plays an important role in driving consumers' positive intention to continue to use the branded app in the future. In this regard H8c is supported.

8.9.1.9 The Long-term Brand Reputation

Hypothesis H9 states that the Long-term Brand Reputation (LBR) has a direct positive influence on CIUBA. The results for this relationship show that LBR's direct relationship with CIUBA is insignificant as the standardised regression weight value is $-.036$ and the p-value is $>.05$, reflecting that LBR does not influence CIUBA. In this regard H9 is not supported.

However, when the model went through the modification process that was suggested by the modification indices earlier in this chapter, which involved connecting a path from the LBR to the Brand Loyalty Intention (BLI), a strong possible relationship from LBR to CIUBA through BLI was indicated. The results of this relationship show that the LBR has a positive influence on BLI, with a regression weight value of $.642$ and a p-value of $<.001$ reflecting that consumers' overall view of brand reputation increases the consumers' BLI. The mediation for this relationship is also confirmed as the indirect standardised regression weight is $.133$ with a p-value of $.001$ illustrating consumers' overall view of reputation of the brand increases consumers' brand loyalty intention, leading to an increase in consumers' intention to continue to use the branded app.

8.9.1.10 Brand Loyalty Intention

Hypothesis H10 hypothesises that a consumer's Brand Loyalty Intention (BLI) has a positive direct influence on CIUBA. This relationship has a positive standardised regression weight value of $.163$ and a P value $<.001$ demonstrating that the when consumers hold a positive loyalty intention toward the brand, they will have a positive intention to continue to use the branded app in the future. In this regard, H10 is supported.

The results of all direct and indirect hypothesised relationships in this research and the added path from LBR to BLI and its effects on continuous intention to use the app are presented in Table 8.14.

Table 8.14: Results of all direct and indirect hypothesised relationships in this research.

Hypothesis	Relationship					S.Estimate	P	Result
H1a	Usefulness	→	SBAUE	→	CIUBA	.111	***	Supported
H1b	Usefulness	→			CIUBA	.122	.007	Supported
H2a	Ease of Use	→	SBAUE	→	CIUBA	.116	***	Supported
H2b	Ease of Use	→			CIUBA	-.012	.730	Not Supported
H3a	Compatibility	→	SBAUE	→	CIUBA	.027	.153	Not Supported
H3b	Compatibility	→			CIUBA	.122	.002	Supported
H4a	Personalisation	→	SBAUE	→	CIUBA	.071	***	Supported
H4b	Personalisation	→			CIUBA	.026	.585	Not Supported
H5a	Enjoyment	→	SBAUE	→	CIUBA	.127	***	Supported
H5b	Enjoyment	→			CIUBA	.124	.011	Supported
H6a	Escapism	→	SBAUE	→	CIUBA	-.028	.019	Counter Evidence
H6b	Escapism	→			CIUBA	-.123	.001	Counter Evidence
H7	Social Influence	→			CIUBA	.018	.552	Not Supported
H8a	SBAUE	→	LBR	→	CIUBA	-.020	.414	Not Supported
H8b	SBAUE	→	BLI	→	CIUBA	.031	***	Supported
H8c	SBAUE	→			CIUBA	.464	***	Supported
H9	LBR	→			CIUBA	-.036	.346	Not Supported
H10	BLI	→			CIUBA	.163	***	Supported
Added Path	LBR	→	BLI	→	CIUBA	.133	***	Supported

8.10 Conclusion

This chapter has discussed a series of preliminary data analysis assessments to verify that a multivariate SEM analysis technique could be applied to the received data in this study. In this regard, the preliminary section discussed the assessment of outliers, the normal distribution of the data, reliability and the validity of the measurement items used in this study.

The chapter also discussed the CFA of the measurement model and the SEM structural analysis of this study. The CFA and the SEM structural analyses showed ideal GOF measures, demonstrating that the sample of this study fits and replicates the measurement model in the CFA and also the structural model in the SEM analysis.

With regard to the structural model testing, the results of the analysis showcased that eight hypotheses in this study were not supported. However, two out of the seven unsupported hypotheses were negatively significant demonstrating interesting counter evidence.

The next chapter discusses the findings of this research.

Chapter 9

Discussion

9.0 Introduction

The purpose of this research is to examine the variables that motivate consumers to continue to use traditional retail smartphone branded apps. This research also takes into consideration that there are variables capable of influencing the continuous usage of smartphone branded apps which are not related to the technological characteristics of the smartphone app, such as long-term brand reputation of the traditional retailer, and loyalty intention toward the traditional retailer's brand. Therefore, this approach emphasises the importance of integrating variables from consumer behaviour literature when investigating the acceptance and continuous use of technological innovations depending on the context of the research. In addition, such an approach should provide an avenue for future research to further examine research questions by combining knowledge from Information Systems (IS) and consumer behaviour.

This chapter discusses the findings from the in-depth individual interviews and the online questionnaire, while also discussing notions from previous studies in the literature relating to the findings of this research.

9.1 Utilitarian Characteristics of the Smartphone Branded App

This research examines four utilitarian variables that play a role in motivating consumers to continue using traditional retailer smartphone branded apps. The four utilitarian variables are perceived usefulness, ease of use, compatibility and personalisation. The research found that these four utilitarian variables play a role toward motivating consumers to continue to use traditional smartphone branded apps. Furthermore, the results also highlight that only perceived usefulness is capable of influencing the continuous intention to use the traditional retail branded app directly and also indirectly through consumers' satisfaction with the branded app user experience.

9.1.1 Perceived Usefulness

The quantitative findings of this research show that perceived usefulness positively influences consumers' intention to continue to use a branded app indirectly through the mediation of consumers' satisfaction with the branded app user experience, while also positively influencing the continuous intention to use the smartphone branded app directly. Thus, although perceived usefulness influences consumers' satisfaction with the branded app user experience leading to an increase in consumers' continuous intention to use the branded app, perceived usefulness is also capable of predicting consumers' continuous intention even if consumers are not fully satisfied with the branded app user experience.

It is worth noting that the finding of perceived usefulness in the context of this research is in line with the notion that perceived usefulness plays an important role in motivating people to accept and continue to use technological innovations which has been highlighted in various theoretical establishments in the IS literature. For example, the original Technology Acceptance Model (TAM) (Davis et al., 1989), and further developed versions of the TAM such as the TAM2 (Venkatesh and Davis, 2000) and TAM3 (Venkatesh and Bala, 2008) are models that highlight the importance of perceived usefulness in influencing technology acceptance. Furthermore, perceived usefulness is an established construct in the Decomposed Theory of Planned Behaviour (DTPB) (Taylor and Todd, 1995b), Diffusion of Innovation Theory (DIT) (Rogers, 1995), the Unified Theory of acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003a) and UTAUT2 (Venkatesh et al., 2012), and the Expectation Confirmation Model of Information Technology (ECM-IT) (Bhattacharjee, 2001b). It is worth noting that the mentioned theoretical establishments may vary in terms of the theoretical notion regarding how perceived usefulness influences peoples' intention to accept or continue to use a technology. For example, the TAM (i.e. modified TAM model without attitude) (Davis and Venkatesh, 1996), TAM2 (Venkatesh and Davis, 2000), TAM3 (Venkatesh and Bala, 2008), UTAUT (Venkatesh et al., 2003a), and the UTAUT2 (Venkatesh et al., 2012) support the idea that perceived usefulness positively influences intention toward the behaviour directly, without the role of an affect (e.g. attitude) mediating the relationship of perceived usefulness to behavioural intention. In other words, the cognitive perceptions of an individual influence the behavioural intention only through a direct influence, ignoring the fact that the individual's favourable or non-favourable attitude or satisfaction may play a role in influencing the intention towards a behaviour. On the other hand, the DTPB takes a different theoretical approach by theorising that cognitive perceptions relating to the characteristics of a

technology influence the intention towards the behaviour through the full mediations of attitude (e.g. affect).

It is important to highlight the findings of this research in relation to the previous theoretical establishments within the IS research domain. This research finds that perceived usefulness can influence continuous intention directly, while highlighting the role of perceived usefulness in influencing consumers' continuous intention through satisfaction in the context of investigating traditional retail smartphone branded shopping apps. Therefore, the findings of this research are consistent with the original TAM that accounted for the role of affect when investigating technology acceptance (Davis et al., 1989), and the ECM-IT which borrowed theoretical notions from the original TAM to investigate consumers' continuous intention to use technological innovations (Bhattacharjee, 2001b). In addition, the findings of this study regarding the influence of perceived usefulness on satisfaction and continuous intention are in line with Yuan et al.'s (2016) study in the context of mobile banking. Therefore, although there is a general notion in the literature, that perceived usefulness is an important variable that leads consumers to accept and continue to use technological innovations, this research highlights how it influences satisfaction and continuous intention in the context of traditional retail shopping apps.

The qualitative in-depth interviews also highlighted that consumers value the usefulness of traditional retail smartphone branded apps reflecting that consumers value the productivity and speed associated with shopping activities using the app. This is demonstrated in the following comment:

"Functionality. Quickness of using the app... So, speed is important. You know, usability."
[Respondent 6]

Consumers are less likely to tolerate continuing to use apps that do not allow them to effectively complete shopping tasks. It is worth mentioning that Parasuraman and Zinkhan (2002) argued that technological advancements result in evolving human behaviour to expect a faster service, which is a notion that is indicated in the qualitative in-depth interviews. For example, whilst the following comment from the in-depth interviews emphasises the importance of the usefulness of the app, it expresses that the consumer behaviour towards using branded apps is developing, whereby consumers expect to complete tasks through the branded app instantly and are less likely to tolerate continuing to use a branded app that does not enable instantaneous task completion. In addition, the comment also highlights that there is no point in having an

easy to use app if it does not deliver what it is meant to, which is a notion consistent with Davis et al. (1989) in the context of technology acceptance and usage that explains that perceived usefulness and ease of use are both important; however, perceived usefulness is vital in playing a role to motivate people to use technologies, while perceived ease of use is of secondary importance:

“Usefulness. There is no point having an easy to use app if when you get in, it doesn’t do what you want it to do... I think nowadays we are so programmed into getting things instantly. You click a button and it comes up; I don’t mind putting some details in but having to actually put in username and password it’s... Five years ago it wouldn’t have been a big thing, it would have been great – we’re in – but nowadays everything is so quick, quick quick.” [Respondent 1]

Interestingly, consumers also compare the performance of traditional retail branded apps to other retailers that purely utilise and deliver online retail services that are perceived as useful by consumers. For example, the following comment from the in-depth interviews illustrates that some traditional retail smartphone branded apps were not as useful as smartphone branded apps that are available from online retailers such as Amazon and eBay, and therefore the consumer decided to discontinue use of the app and its retention. This notion is important, as it shows that traditional retailers should develop their apps to the highest standards in order to match the performance of apps from retail competitors that operate purely online. The following comment from the in-depth interviews illustrates this view:

“There are a number of different ones that I’ve used. I’ve used the Amazon app and I’ve ordered a few different things through the app. It’s very handy; as soon as you are logged in you can just click buy and that is things ordered, without even having to put your card details in. It’s so easy. Same goes for eBay. You can buy and sell very quickly through their app. I also had another couple of retail store apps where they weren’t as good. I felt as though they were buggy, they used to crash a lot. It was Topman and River Island. I didn’t like them so I got rid of them. You know poor functionality, they weren’t easy to use. The websites were a lot better. That’s why I got rid of them... An app that just doesn’t work, an app that isn’t easy to use, it crashes and it is buggy. I can do what it needs to do on the website and do it better on the website. Where it’s just not useful to me... If the app isn’t useful for me there is no point of me having it... If it doesn’t work well I wouldn’t have it on my phone. [Respondent 3]

It is worth explaining additional notions that extend our understanding of why consumers value the usefulness of the app in enabling them to complete shopping tasks quickly. There are shopping situations where the consumer is looking for something specific, where the consumer will go straight to a shopping section to get a specific product, and the branded app should creatively reflect consistency with the shopping experience of the traditional retail store in enabling consumers to complete shopping tasks quickly. It is worth noting that Blázquez (2014) explains that it is important for multichannel fashion retailers that the retailer's online shopping experience is consistent with the shopping experience in the retailer's physical store. Similarly, this notion is illustrated in the following comment from the individual in-depth interviews in the context of traditional retail smartphone branded apps:

"I think it's how quickly I can get to what I'm looking for. I don't go on to browse; I just want to get to the place, which is the same as if I'm in the physical store. I'm not much of a browser; I would go in specifically for something; I would go straight into the section... it's more of a need, I think. I'd be thinking I need a new jacket, or a new pair of shoes, and I'll look at what the different stores have got so I know I won't need to spend as much time on the high street."

[Respondent 15]

Another interesting notion from the in-depth interviews expresses that branded shopping apps need to be connected to the internet to enable consumers to use the app to complete shopping tasks. In some situations, the internet connection may be slow, and therefore the branded app should not be developed in such a way that it includes graphical elements that make the operation of the app slow in completing shopping tasks. The following comment from the in-depth interviews reflects this view:

"It's very simple to use. My Internet is not fast; the app loads quickly, it's not graphic intensive. The pictures and items load quickly. It's a speed thing for me. It's very simple and intuitive."

[Respondent 12]

Additionally, it is important to note that the in-depth interviews highlight that consumers dislike when a branded app is developed in the form of a mobile website (e.g. a mobile website that is loading through the app). Also, this notion highlights that consumers prefer a branded app that utilises the hardware of the smartphone to perform efficiently. The following comment from the in-depth interviews illustrates this view:

“...I think ones that are useful and easy to use. Ones that have a purpose, they are not just the website created into an app because I don’t think that serves a purpose really.” [Respondent 3]

In addition, additional comments from the in-depth interviews enforce the idea that branded apps are more useful and superior to mobile websites:

“...if you are able to quickly flick... within one minute rather than having to wait for the mobile website to load. It’s a lot more efficient than the mobile website and that is important to me.” [Respondent 11]

“A lot of them are quicker than the website to be honest.” [Respondent 20]

It is worth noting that mobile apps enable retailers to combine online and traditional shopping activities to offer consumers additional shopping options when shopping on the move, such as enabling the consumer to make the purchase from the mobile app and then collect the item in the retailer’s physical store (e.g. click and collect) (Piotrowicz and Cuthbertson, 2014). The individual in-depth interviews highlight that consumers perceive this to be useful:

“I think there is a sense of satisfaction that you’ve done something that is quicker and easier and it’s a bit different. Me and my friends sometimes have a joke that you order something online, you walk there to pick it up straight away. You’re saving all the hassle and bypassing people queuing. You do think, oh you should have got it online, should have done this. It is quite satisfying.” [Respondent 14]

Additionally, consumers who choose to purchase products through a click and collect service may feel that the shopping experience on the app extends to picking up the product from the traditional retail store. For example, the in-depth interviews highlight that the shopping experience can be less satisfactory because although shopping through the app was useful, the location of the click and collect section at the retail store to pick up products purchased online an inconvenient. Therefore, as retailers promote services through branded apps such as the click and collect service which requires the customer to make a visit to the store to pick up products, the retailer should aim to maintain a useful shopping experience process from the moment the customer starts the journey to place the purchase online to the moment the product is picked up by the customer at the retail store. This view is expressed in the in-depth interviews in the following comment:

“...one of the things that I do is the click to collect option. I’ve not used it with Zara but I’ve used it for Marks and Spencer’s and House of Frasers. The only thing I will say is that the click and collect seems to be the back and beyond of the stores and that affected my experience. I think these things do add to the experiences but I think because I know you are ordering from an online store.” [Respondent 18]

The in-depth interviews also express that to make retail smartphone apps more productive and provide a satisfactory user experience, it is important for retail apps to be able to enable the consumer to complete a last shopping session. For example, in the case that the branded app shuts down suddenly during the consumer’s shopping session, it is useful for the consumer after restarting the app to be able to complete the shopping journey. The following comment from the in-depth interviews illustrates this view:

“John Lewis on the app... the app closes and I have to open it up again. It’s quite frustrating; its closed when I’ve been looking at shoes, when I’ve been on page 4 of 500, its closed and when I’ve re-opened it’s gone right back to the beginning, so that can be quite frustrating.” [Respondent 14]

In conclusion, the quantitative and qualitative findings highlight the importance of enabling the consumer to complete shopping tasks quickly through traditional retail branded apps, which increases the consumer’s satisfaction with the branded app user experience and the consumer’s intention to continue to use the app. In addition, the qualitative in-depth interviews helped to understand the significance of the relationship between perceived usefulness, satisfaction and the intention to continue to use the app in the context of this research.

9.1.2 Perceived Ease of Use

The quantitative findings of this research show that the role of affect (e.g. satisfaction in this research) fully mediates perceived ease of use to consumers' continuous intention to use traditional retail smartphone branded shopping apps. It is worth noting that the finding of relating to the perceived ease of use variable playing a positive role in terms of continuous intention in the context of this study is interesting. This finding is interesting because Bhattacharjee (2001b) argued that the reason for not including the perceived ease of use variable in the establishment of the ECM-IT model is related to the theoretical notion in IS research based on the TAM, that the effect of perceived ease of use decreases as the user becomes more experienced with using the technology. Therefore, in a continuous usage context, the perceived ease of use is likely not to play a role in motivating consumers' continuous intention to use technology. In addition, it is worth noting that Bhattacharjee (2001b) mentions that this notion was also confirmed by testing perceived ease of use informally when establishing the ECM-IT, and the results showed that perceived ease of use did not influence satisfaction with using the technology in a continuous usage context. However, in the context of this research, the findings show that as the consumer's perception of ease of use increases, the consumer's satisfaction with the branded app user experience increases, which in turn, causes an increase in the consumer's continuous intention to use the traditional retail branded shopping app.

Furthermore, the findings in the quantitative phase of this research are in line with technology acceptance theories such as the Theory of Planned Behaviour (DTPB) (Taylor and Todd, 1995b) and the original TAM (Davis et al., 1989) in the sense that an affect (e.g. attitude) fully mediates the perceived ease of use to behavioural intention. It is worth noting that although this finding is similar to the DTPB and the TAM, it does not support the idea that the effect of perceived ease of use on satisfaction and its indirect effect on continuous intention to use a technology decreases over time, as this research is applied to consumers who are experienced with using the app for a long period of time in a continuous usage context. Thus, the perceived ease of use variable remains important for consumers who have the intention to continue to use traditional retail smartphone branded apps, even if consumers are experienced with using the traditional retail smartphone branded app.

It is worth noting that in some theories, perceived ease of use is theorised to influence behavioural intention to technology directly without the visible mediating role of an affect (e.g. attitude), such as the modified TAM (i.e. TAM after omitting attitude) (Davis and Venkatesh,

1996), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003a), UTAUT2 (Venkatesh et al., 2012), and Tam et al.'s (2018) research on mobile apps which utilised the theoretical lens of Bhattacharjee's (2001b) ECM-IT and Venkatesh et al.'s (2012) UTAUT2. In addition, it is worth noting that, Yuan et al.'s (2016) research in the context of mobile banking which utilised the theoretical lens of Bhattacharjee's (2001b) ECM-IT did not find a significant direct relationship between perceived ease of use and continuous intention and the relationship between ease of use and satisfaction was not hypothesised in their study. However, this research finds that perceived ease of use is fully mediated by satisfaction (e.g. affect) in influencing continuous intention to use a traditional retail smartphone branded app, with no support for the idea that perceived ease of use influences continuous intention directly.

The qualitative in-depth interviews highlight interesting notions about why consumers value branded apps that are easy to use in a continued use context. The perceived ease of use is an important driver that plays a role in motivating consumers to shop online (Dennis et al., 2010b). Furthermore, previous studies have been conducted in the context of continuous technology usage, also highlight the importance of ease of use in positively influencing satisfaction in playing a role in influencing consumers to continue to use technology (Thong et al., 2006; Hong et al., 2006). It is worth noting that one of the features that the ease of use variable reflects is that the interaction with the technology is clear and understandable (Davis et al., 1989), which is a notion that is reflected in the in-depth interviews. For example, branded apps should include a clear layout, where sub sections are displayed in a way to enhance the easy to use shopping experience. Furthermore, a sub section that display products based on gender complements an easy to use shopping experience. In addition, a search bar that can be easily located on the app provides consumers with the option to easily search and find specific products. The following comment from the in-depth interviews reflects this view:

“A clear layout. A sub section- divided into men’s and women’s sections, so if I’m looking for something particular, I don’t need to scroll through the whole stock to find it. A search bar that you can put product codes into. [Respondent 20]

The retailer’s smartphone branded app should display the descriptions of products and information properly and clearly and should be interesting to the consumer. This view is highlighted from the in-depth interviews in the following comment:

“clarity. Information and interesting details and things. So, if I’m looking at John Lewis and things, I want to see a proper description of the product... yes but I would probably put that under clarity.” [Respondent 16]

In addition, it is highlighted in the in-depth interviews that some traditional retail branded apps have a good and clear layout that is consistent with the shopping experience in the physical retail store. This notion is consistent with Blázquez (2014) in the sense that the retailer’s online shopping experience should be consistent with the physical shopping experience in store. This view is expressed in the following comment from the in-depth interviews:

“...it just seems very clear to me. It’s almost like in the store its clear how it’s laid out so in the app it’s the same... I think that John Lewis is good at having simple information on the screen. Some apps are quite complex, but I think for a screen of this size it has to be quite simple...The easier I can do it, the better for me.” [Respondent 15]

Li and Yeh (2010) highlight the importance of design aesthetics in mobile commerce. Building on this, it is important that retail apps do not include graphical content that negatively impacts how clearly content and information are displayed in the app. In addition, when a consumer launches a retail branded app to perform a shopping activity, the content displayed on the app’s main page should be appealing, welcoming and clear, and the consumer should be able to navigate the app to shop easily. The following comments from the in-depth interviews highlight this view:

“I don’t like it as much as the John Lewis one; it’s a little bit more in your face. The design and layout with the John Lewis one – I like the way you have the drop downs at the top and you can get right into what you’re looking for. With this it is a bit more complicated and there is a lot of photography on it – which is okay on a website but with an app it’s a bit more complicated.” [Respondent 15]

The qualitative in-depth interviews indicate that it is important for traditional retailers to maintain an easy to use user experience when improving the smartphone branded app through updates to fix performance issues with the app or add new features that aim to improve the user experience. In addition, consumers may not like it when retailers update their smartphone branded apps and go through many updates in a short amount of time. Therefore, the retailer should ensure that when making changes to the app with the aim to develop the app further, it is important that the app remains easy to use. This following comment from the in-depth interviews reflects this view:

“It’s just if I’m on there, I’m looking to browse the app to buy something. If I wanted to sign up for a newsletter, I would do it. It’s important that it’s easy and quick and you don’t need to update all the time. I think it should be straightforward; you shouldn’t have to update all the time. That’s about it though, as long as it’s easy to use.” [Respondent 14]

It is worth stressing how consumer behaviour is impacted by retailers that make dramatic changes to their branded app through an update. As retailers aim to develop their apps further to offer new services and enhance the customer experience, retailers must be fully aware that making further improvements to current services may alter or restructure the customer experience of using the app. In some scenarios, consumers may perceive that the dramatic changes that are done to the app by the retailer result in the app not being easy to use. In such a case, the consumer’s satisfaction with the branded app user experience is negatively influenced, which can lead the consumer to not have the intention to continue to use the smartphone branded app, and the app is likely to be removed from the consumer’s smartphone. Respondent 6 illustrates this view while highlighting another critical point. The respondent explains that before the update it was possible to browse for products before signing into the app; however, after the update the respondent was not able to browse products without signing into the app by entering the login details. Therefore, it is important for retailers not to force consumers to sign into the app if they do not want to, and to give consumers the choice to shop without signing into the app. Also, it is worth noting that adding additional steps to use the branded app, such as forcing the consumer to sign into the app to be able to browse products and shop, adds an extra step to using the app that can lead the consumer to perceive that the branded app is not easy to use. Respondent 6 illustrates this view in the following comment:

“I just want them there for ease; I want to press buttons and know where they are and get on with my day. Asda had a big change to their app quite recently and I think it was between my switch between iPhone and android. I went on and didn’t have a clue where to find my shopping and it took me ages looking that I have to go from this to go to that. Whereas before I could sign on and do my shopping and get on with it. Whereas it doesn’t let you browse before you sign in. Now I’ve got to spend time signing in and going between things. To be honest I’ve always used the app. I like their products. They always deliver fairly quickly. They offer good deals, once a week anyway! I have tried other ones... There were a lot more options that could have been given to make it a bit easier. It just annoyed me so I deleted it.” [Respondent 6]

Furthermore, it is important not to push content that would suddenly appear, such as push notifications or pop-up ads without the consumer's consent, which may include subscribing to shopping services from the retailer or deals on products, as it can irritate consumers, negatively impact the ease of use of the app, and the user satisfaction with the branded app experience. The following comment from the in-depth interviews expresses this view:

“Easy, simple to use. I don't particularly like anything that pops up that you have to opt in or opt out of. I don't mind it once but it irritates me if it's all the time. I think if they make the experience really easy for me, I find it more pleasant.” [Respondent 14]

It is important for retailers to maintain a consistent easy to use experience on their branded apps across smartphone platforms. For example, a consumer may switch from an iPhone which uses the iOS operating system to a smartphone that uses the Android operating system, and therefore it is important that the retailer ensures that the app developer makes the app's user experience similar across smartphone operating system platforms. Interestingly, the qualitative in-depth interviews highlight that even a retailer that only operates online can make the mistake of not making the branded app user experience easy to use and consistent between Apple's iOS and Google's Android smartphone operating system. The following comment from the in-depth interviews expresses this view:

“I think that's more annoying; I'd like it on the page. For ages I didn't know how to get the options up. On Groupon I have to click that button to access my Groupon page, to see my old purchases and things. For ages I was sitting saying why can't I find this button? I could do it on the iPhone so easily. So, there are slight differences between the phones more so than the app, but when you are using the app you notice the difference.” [Respondent 6]

In addition, the following comment from the in-depth interviews enforces this view regarding a traditional retailer's smartphone branded app:

“I think it's just easy, I'm not technically minded at all and it's about finding something easy to work. My husband will talk me through using the Samsung but I find it easier on this. My husband finds it's a lot easier but I don't. Yes, it's got to be easy for me... if I find it difficult to work there is no point of having it on my phone... I have been using things and I've thought you could do this easier.” [Respondent 5]

Retailers may add features to their smartphone branded apps that assist consumers to make purchases through the app while they are shopping in the physical store. For example, some

traditional retail smartphone branded apps include a feature that enables the consumer to scan the tag of a product in the physical store, where the consumer can order the product through the app. Furthermore, this feature can be used when consumers do not find specific products they are shopping for in the physical store, where they can check if it is available in the online store through the app by scanning the tag of the product and making the purchase. It is important that features that traditional retailers add to their smartphone branded apps to complement the shopping experience in the physical store are easy to use. The following comment from the in-depth interviews demonstrates a consumer's positive shopping experience from scanning the tag of a product that was out of stock in the physical store:

“It’s really easy to use. I tend to go in and take a picture of the tag. I’m not sure if it’s this one but I think you can take a picture of the tag and then it will load it up. Let me check that it is Zara and I’m not making that up. (CHECKS PHONE.) It was Zara. I literally bought a playsuit last week in a bigger size than they had in store.” [Respondent 18]

The in-depth qualitative interviews highlight that a consumer who continues to use a retailer's branded app finds the branded app to be easier to use than the retailer's mobile website. This notion highlights that it is important that retailers make the user experience in their branded apps straightforward and intuitive, and retailers must aim to make the user experience of their branded app easier than the mobile website. An example of this view is expressed by the following comments from the in-depth interviews:

“My gripe with the web is clunky websites, but apps really simplify. They are a simple tool. I don't have any complicated apps. They simplify the web.” [Respondent 12]

“I know there are differences, but in terms of the basic functionality, just to browse through, I would say they were quite clear and straightforward... I hadn't really thought about that but certainly on the website you have the option to view a lot of the one collection on the one page. But as I say, I find it so straightforward and simple that it doesn't bother me... yes it was either Topman or Zara...I find it easier to scroll through on the phone... I find it easier to enter data. Even things like drop down menus and entering any values, I find that a lot easier on the app than on the website.” [Respondent 13]

Moreover, in situations where a consumer perceives a traditional retailer's branded app is complicated to use, where the satisfaction with the branded app is negatively impacted, the consumer will compare the ease of use of the retailer's app to other branded apps that are easy to use, even from other industries. In other words, the consumer's expectation with regard to

the branded app's ease of use is high, because the consumer may use many other apps that offer a fluid easy to use user experience. An example of this view is expressed from the in-depth interviews in the following comment:

"...for me it comes down to about how good the app is, how easy it is to use. The ease of use one is vital. I'm not going to do it on the app if I can do it more easily on the website. I think if you look at the Amazon one as a comparison, it is very easy to use; everything is there for you to see. I would be quite happy to do it there. If you compare the RBS app which is a totally different context, Okay, there isn't a huge amount of information on it, but you can still do your task there; you can do what you want. Whereas even if the River Island one didn't offer you that much to do, it wouldn't fulfil its purpose...There are some at the moment that are very buggy, aren't easy to use and don't give a good user experience but then there are some that are good, that are useful and easy to use... I would say so and I think the more you experience a good app and the more you experience an app that is easy to use and it does have a purpose and easy to navigate, you start to expect that from other apps as well." [Respondent 3]

In conclusion, the quantitative and qualitative results highlight that within the context of investigating retail branded continuous usage, ease of use remains an important variable for consumers who are experienced with using the app as it positively increases consumers' satisfaction with the branded app user experience which, in turn, positively increases the consumers' intention to continue to use the app.

9.1.3 Perceived Compatibility

The quantitative analysis for this research finds that compatibility only influences consumers' continuous intention to use the traditional retail smartphone branded app directly. Therefore, perceived compatibility did not have an indirect influence on continuous intention to use the app through the mediating relationship of satisfaction with the branded app user experience. Thus, when consumers perceive that the traditional retail smartphone branded app is compatible with their lifestyle, they hold a positive intention to continue to use the branded app, without the role of satisfaction playing a mediating role in the process. Therefore, the findings illustrate that compatibility is not a predictor of satisfaction with the branded app user experience in this research. In other words, compatibility is a variable capable of influencing consumers to continue using traditional retail branded apps, without being satisfied with the branded app user experience. One reason that can explain why satisfaction does not mediate

the relationship of compatibility with continuous intention is that satisfaction in this research gauges consumers' feelings regarding the performance of the traditional related app. Building upon this, consumers may not evaluate compatibility to be a factor that is directly related to the technical performance of the traditional smartphone branded app. Therefore, consumers perceive compatibility to be reflecting the compatibility of the branded app with their lifestyle (e.g. the way they live and work) rather than compatibility being associated with the branded app's technical characteristics.

It is important to utilise the qualitative in-depth interviews to explain the role of compatibility in positively influencing consumers' intention to continue to use traditional retail branded apps. The in-depth interviews highlight notions from respondents that illustrate that the compatibility factor is valued by consumers in influencing their continuous intention to use traditional retail branded apps. For example, consumers who continue to use traditional retail smartphone branded apps have busy working hours, meaning it can be difficult for consumers to spend time going into the physical store to shop and make purchases. In addition, it is worth noting, that in some situations, the consumer may make the purchase on the retailer's branded app and collect it from the physical store. An example of this view is expressed in the following comments from the in-depth interviews:

"...my wife works Mon to Wed. I have two days where I look after the baby on my own... I got the app when I got the iPhone, 6 months or so ago. I downloaded the app; I'm not a huge fan of shopping especially with a 7-month-old baby. You can use click and collect on the app; it suits me because of my lifestyle. Apps make my life easier, especially with my 7-month year old. Anything that can simplify life and give you an extra 10 minutes per day... It would be difficult for me to go back to my old way of shopping." [Respondent 12]

Some consumers may find it difficult to visit the physical store to shop with their children. Therefore, consumers who have children may find retail branded apps compatible with their lifestyle, which drives their behavioural intention to continue to use the retailer's branded app. The following comment from the in-depth interviews reflect this view:

"I would personally find that shopping with three children is a complete nightmare. If I am going to do something, I want to know that I'm not going to waste my time." [Respondent 16]

Additionally, a consumer who is taking care of a big family can find that shopping via the traditional retailer's smartphone branded app is compatible with their lifestyle. The following comment from the in-depth interviews reflects this view:

“Probably my life, what I’m doing, for the likes of food or whatever, my mum comes for dinner a lot so I’m feeding 6 people.” [Respondent 5]

The qualitative in-depth interviews also highlight that consumers view traditional retail smartphone branded apps that are compatible with their lifestyles as their lifestyle assistant that assists them in shopping with traditional retailers. The following comments from the in-depth interviews reflects this view:

“I think now it is a lifestyle. If you have to leave your phone in the house you are lost without it when you are out. You do everything on your phone these days. I think it’s important for brands like Marks and John Lewis to get their apps right and make sure that it is easy access and it is as simple and straightforward as possible.” [Respondent 19]

“It’s like a lifestyle assistant. You know that’s exactly what it’s there for. John Lewis is the perfect example. Or Next is the perfect example.” [Respondent 16]

It is interestingly important to point out that it may be possible that consumers who view the branded app as being compatible with their lifestyle may feel guilty because they may feel that their lifestyle has changed because of work and other life commitments, which has caused the way they shop also to change. Building upon this, it can be possible that compatibility was not mediated by satisfaction with the branded app user experience, because consumers feel guilty that because of work and other life commitments they do not have the flexibility to go out and shop in the retailer’s physical store. An example of this view is highlighted in the following comment from the in-depth interviews:

“The Tesco and Asda grocery shops, if I’m stuck in with a toddler, I can put the shopping in and I’ll know I have it the next day.... It has changed the way everyone goes around their daily life. It is sad as well though... I’m guilty of it as well, I and my partner will both sit on our phones in the house... The majority of my apps are for convenience and making my life easier.” [Respondent 6]

Furthermore, the quantitative results in this study present interesting theoretical notions. For example, previous theoretical establishments such as the DTPB conceptualised that attitude (e.g. an affect) towards using the technological innovation fully mediates compatibility with the behavioural intention to accept a technological innovation (Taylor and Todd, 1995b). It is worth noting that Taylor and Todd (1995b) found that the relationship between compatibility and attitude is not significant. Also, Taylor and Todd (1995a) found that the measurement items

of compatibility and relative advantage (e.g. perceived usefulness) loaded on one factor, whereas the measurement items for both factors were merged. However, in this current research that examines consumers' continuous intention of using smartphone branded apps, compatibility only influences consumers' continuous intention to use traditional retail smartphone branded apps through a direct effect, and there were no discriminant validity issues between compatibility and perceived usefulness.

9.1.4 Personalisation

Previous research in the continuous context of e-loyalty hypothesised that customisation (e.g. personalisation) should play a role in increasing e-satisfaction, leading to an increase in e-loyalty (e.g. loyalty towards a website) (Jung-Hwan et al., 2009). In other words, personalisation should play a role in the continuous usage of e-services. Furthermore, Jung-Hwan et al. (2009) surprisingly found that customisation (e.g. personalisation) does not increase e-satisfaction, while e-satisfaction in their research is a central predictor that increases e-loyalty. However, the quantitative findings in this research demonstrate that consumers' satisfaction with the branded app user experience fully mediates the relationship between personalisation and continuous intention. In other words, when a consumer perceives that the retailer's branded app offers a personalised user experience that is tailored to the consumer's needs, the level of consumer satisfaction with the branded app user experience also increases, leading to an increase in the consumer's intention to continue using the smartphone branded app.

The qualitative in-depth interviews suggested that consumers value personalised services that are tailored to their needs and preferences when using smartphone branded apps. Examples from the in-depth interviews highlight that a personalised retail branded app user experience includes allowing consumers to save their login credentials and information, allows consumers to save their billing information, view relevant products and services, allows consumers to save their shopping items in a virtual basket and/or a wish-list, and allows consumers to select preferences that enhances the personalised shopping experience. It is important to further explain why consumers value personalised services when continually using traditional retail branded apps to shop. The qualitative in-depth interviews highlight that consumers who retain and continue to use retail apps prefer being signed into retail branded apps when conducting shopping activities because the shopping experience is personalised. Therefore, consumers believe that personalisation enhances and complements the shopping experience through

traditional retail branded apps. Examples of this view from the in-depth interviews are expressed in the following comments:

“I like some of the apps that remember your log in on your phone.” [Respondent 1]

“I like that they save your details and you don’t need to go through that... I think you can go in and see your past orders so that’s quite good.” [Respondent 7]

“When I’m at home I tend to use my app rather than using my laptop to go on the website because I find they are a bit more tailored for me.” [Respondent 11]

“The things that annoy me having to get through the mobile website and having to put all the details in again. All your details are there and it’s just confirming your method of payment.” [Respondent 18]

In addition, it is worth noting that for branded apps to provide a personalised online shopping experience, it may require the retailer to store personal information about the consumer. In this regard, respondents in the in-depth interviews explain that while some people may say that there could be security or privacy risks involved, providing personal information helps the retail brand to provide a personalised shopping experience to the consumer. The following comment from the in-depth interviews reflect this view:

“I think with the app you get more of a personalised experience because you are already signed into the app on your phone. Some people would say that is a security risk; if your phone was stolen, people could get into the app. However, it does offer you a good experience if you are able to.” [Respondent 3]

It is important to emphasise that respondents in the in-depth interviews also explain that sharing personal information such as addresses and bank details with traditional retail branded apps is not an issue, when the retailer is credible and has a good positive reputation. The following comment from the in-depth interviews reflects this view:

“I have to say that what I hate is having to download new apps and put in information over and over again. I’m quite happy to put in information like address and bank details; I wouldn’t do that with everyone but with them being big companies you know there is a safety, there is credibility with them.” [Respondent 19]

A traditional retail brand can track the consumer’s past purchases, which enables the retail brand to suggest to the consumer products that may be of interest to the consumer. The in-

depth interviews highlight that consumers are aware that when logging into traditional retail smartphone apps, the retailer can offer a personalised shopping experience through the app based on the shopping style and previous purchases of consumers. The following comment from the in-depth interviews reflects this view:

“...as soon as they know who it is, it’s more targeted. So, I get boots, they know I have a thing for boots because they’ve kept track of my purchases.” [Respondent 16]

It is important to stress that personalising the shopping experience of retail smartphone branded apps extends beyond the app’s ability to save the consumer’s address and billing information. For example, consumers also prefer additional features such as a personalised shopping experience based on their preferences which enhances the personalised shopping experience through the app. The following comment from the in-depth interviews reflects this view:

“Both of them have a mad profile function. I don’t use them that regularly but the profile section seems like it’s to store your address, which is good for billing and stuff, but in terms of preferences and stuff it would be a bit better if it was a bit more refined, I guess.” [Respondent 13]

In addition, other examples emerged from the in-depth interviews highlighting that it is essential for the retail branded app to provide options for consumers to shop based on their preferences which enhances the user’s shopping experience of the branded app. For example, enabling consumers to preselect sizes when they are browsing or searching for products is considered a nice personal touch. The following comment from the in-depth interviews reflect this view:

“It’s quite intuitive, most apps are very well designed. You click men, jumpers ... it leads on well. I like to pre-select sizes. You can tell them your size in advance and you only see what is in your size! So, you don't end up disappointed. It’s a nice personal touch.” [Respondent 12]

A consumer who shops repeatedly with a retailer values the ability to save products in their favourites list in the app. Therefore, later, the consumer does not have to browse through huge amounts of similar products on the app to make a purchase for a specific product. The following comment from the in-depth interviews reflects this view:

“I’ve moved from Tesco to Asda; all my favourites are saved. When I go into my app, I just click favourites and my previous shopping list comes up and it’s really easy. Whereas if I was

to go back to Tesco, I would have to type in apples and check 400 different types of apples.”
[Respondent 4]

In addition, a consumer may value saving products to their favourites list in the retailer's branded app and decide on purchasing the products when the products go on sale. The following comment from the in-depth interviews reflects this view:

“The apps tend to be personalised. Well, in my case they are because they are logged into my account. I can save things directly onto the app and save them and delete them; it's been good for Christmas presents and things. The other things I do are save items then check them on Boxing Day to see if they have gone into the sale.” [Respondent 18]

Moreover, it is beneficial for a traditional retailer who offers a large variety of products to find innovative ways to personalise the shopping experience on the smartphone app, especially when considering the small screen sizes of smartphones. This notion is important because it can frustrate consumers when they feel that they are browsing through a variety of products that are not consistent with their shopping needs and personal style. The following comment from the in-depth interviews expresses this view:

“...it's exhausting. There is so much and it feels like you are just trawling through pages and pages of rubbish.” [Respondent 20]

Furthermore, the qualitative in-depth interviews highlight that there are additional personalisation features that can play a role in increasing satisfaction with using retail smartphone branded apps. For example, the retailer can personalise the shopping experience based on the gender of the consumer. In addition, including innovative features that suggest to the consumer fashion products that match each other. The following comment from the in-depth interviews reflects this view:

“In terms of the apps, in the likes of Zara and stuff, Zara is complicated to compare with Topman, because it's not unisex. As soon as you go into the Zara app, it's women's first then you scroll down for the men's section. I think if I was going into another type of app, like gaming, right away when you open the app, Zara could store whether or not you're male or female... I know I keep coming back to Zara and Topman but it's just because I use them a lot. This might sound stupid, when you go into the shop and you see a shirt and a tie on a mannequin and you think of that goes together because you see it together on a thing, well I was expecting a bit more – if you are buying this, what about this. They do make it simple for you by

categorising the clothes but really when I'm out shopping for an outfit. So, I will try and find a jacket and a jumper and what jeans to wear, so it surprises me that there is not more of that sort of thing... Even in different things, I was messing about looking at the BMW website and you can build the car. It astonishes me that you can't use like an outfit builder or something. I always thought that would be a way to make it. I've seen similar stuff on that Mr Porter that will give you a collection of outfits and stuff." [Respondent 13]

In conclusion, providing a personalised shopping experience in traditional retail branded apps positively increases the consumers' satisfaction with the branded app user experience which, in turn, positively increases the consumers' intention to continue to use an app.

9.2 Hedonic Characteristics of the Smartphone Branded App

This research examined two hedonic variables that may play a role in motivating consumers to continue using traditional retailer smartphone branded apps. The two hedonic variables are perceived enjoyment and escapism. The research found that enjoyment plays a strong positive significant role in motivating consumers to continue using traditional retail smartphone branded apps. Surprisingly, escapism was shown to play a negative significant role in motivating consumers in continuing to use traditional retail smartphone branded apps.

9.2.1 Perceived Enjoyment

The quantitative analysis for this research finds that a consumer's perceived enjoyment when using traditional retail smartphone branded apps has a significant positive influence on the consumer's continuous intention to use the branded app directly, and indirectly through the mediation effect of satisfaction with the branded app user experience. Early research in IS suggested that perceived enjoyment plays a role in motivating consumers to accept a technological innovation (Davis et al., 1992). The perceived enjoyment variable was later included in the theoretical establishment of the TAM3 (Venkatesh and Bala, 2008) and the UTAUT2 (Venkatesh et al., 2012). In the TAM3, perceived enjoyment influences the behavioural intention to use a technological innovation through the mediating relationship of ease of use. Furthermore, the TAM3 is applied in an organisational setting to employees and does not account for the mediating relationship of attitude. On the other hand, the UTAUT2 shows that the hedonic value (i.e. perceived enjoyment in UTAUT2) plays a direct role in behavioural intention. However, this research highlights the importance of the mediating role that satisfaction with the app user experience plays between perceived enjoyment and the

intention to continue to use the app while acknowledging that perceived enjoyment can influence the intention to continue to use the app directly.

Interestingly, perceived enjoyment in this research had the strongest direct and indirect influence on consumers' continuous intention to use the branded app. Thus, the findings suggest that consumers strongly value completing shopping tasks and browsing through branded apps in an enjoyable fashion, when the customer experience of using the app is a pleasurable and fun. It is worth noting that perceived enjoyment has a slightly stronger influence on satisfaction with the branded app user experience and consumers' continuous intention to use the branded app than perceived usefulness, which is known as a strong, stable driver in technology acceptance research (Bhattacharjee, 2001b). Furthermore, Tam et al.'s (2018) research which utilises the theoretical lens of Bhattacharjee's (2001b) ECM-IT and Venkatesh et al.'s (2012) UTAUT2 found that the hedonic motivation's (e.g. enjoyment) role in influencing consumers' intention to continue to use mobile apps is insignificant. However, in this research, enjoyment plays a positive significant role in increasing a consumer's satisfaction with the branded app user experience and the consumer's intention to continue using the app.

It is important to utilise the qualitative in-depth interviews to explain in detail the significant positive role that perceived enjoyment plays in influencing consumers' intention to continue to use retail branded apps. The in-depth interviews explain that consumers are likely to continue to use traditional branded smartphone apps that they find enjoyable. An example of this view was expressed in the in-depth interviews in the following comments:

"For me there's a lot of apps, and I could do some shopping on it.... Well I enjoy using them. It gives you a sense of enjoyment." [Respondent 2]

"But that was a barrier I got through in the end. There was a period maybe two or three years ago when I still shopped through a website or go in store. But when I started making purchases through apps and I enjoyed it." [Respondent 13]

"...you get the enjoyment of the experience. I suppose you do." [Respondent 14]

Some consumers may spend most of their leisure time on the smartphone, and therefore, they value that traditional retail shopping smartphone branded apps provide an enjoyable shopping experience. Therefore, consumers expect that the shopping experience for retail branded apps should be pleasant and enjoyable. In addition, when the retail branded app is perceived by the

consumer to offer an enjoyable experience, the consumer may prefer to use the retail branded app to shop online, even in cases where the physical store is located near the consumer. This view is reflected in the following comment from the in-depth interviews:

“I find more realistically that I spend most of my leisure time on my iPhone. Whenever I have the laptop open, I’m doing work. So, when I’m on my phone, I’m really familiar with it. All these things, I live five minutes away; Debenhams and John Lewis are so close to my office but I still prefer to shop via the app.” [Respondent 13]

In addition, when a consumer does not find the experience of the retail branded app to be enjoyable, it will result in the consumer discontinuing use of the app, and the consumer will remove the app from the smartphone. The following comment from the in-depth interviews reflects this view:

“If I wasn’t enjoying it so much, it would sit on my phone untouched for a few months before I would get rid of it. If it wasn’t easy to use, I would get rid of it – that would be my main thing.” [Respondent 11]

It is worth noting that consumers value traditional retail smartphone apps when they are enjoyable and they are likely to have a favourable behavioural intention to continue to use traditional retail smartphone branded apps, because they can explore a variety of products from the smartphone. The following comments from the in-depth interviews reflect this view:

“I suppose when I’m looking, I have other apps for department stores, I suppose that’s more enjoyable but you go in and have a look at things. If you are looking at clothes and things. I suppose for Christmas presents for the kids on Tesco Direct and that’s another app, and that’s enjoyable.” [Respondent 4]

“...enjoyable, you can just go and have a look and get ideas.” [Respondent 5]

In addition, although it is preferable to feel and touch products in the physical store, the branded app is an enjoyable way to explore new products. The following comment from the in-depth interviews reflects this view:

“I prefer to be in the shop, looking, feeling and seeing the items physically. But it’s nice to see new stuff through the app; it’s fun.” [Respondent 20]

Interestingly, the qualitative in-depth interviews also explain that the enjoyment of using retail branded apps is different from entertainment. For example, respondents associated

entertainment with watching movies, playing football or something that makes a person laugh, whereas using the app to shop is considered a pleasant shopping experience. The following comments from the in-depth interviews reflect this view:

“Not sure about entertaining, but enjoyable yes. The type of thing that I would tend to look at would be shopping apps. The idea of entertaining sounds like something that makes you laugh but definitely enjoyable.” [Respondent 18]

“I enjoy using the app. It’s not the same enjoyment that you get from the movies or playing football.” [Respondent 21]

The in-depth interviews also highlight that consumers view traditional retail smartphone branded apps to be hedonic in nature, and therefore, enjoyment plays a role in positively influencing the satisfaction with the branded app user experience and the continuous intention to continue to use the branded app. The following comment from the in-depth interviews reflects this view:

“...but these are brands that I’m familiar with. The other ones seem a bit more necessary whereas these are a bit more for fun if you like.” [Respondent 15]

To further enforce the view that traditional retail branded smartphone apps are hedonic in nature, respondents in the in-depth interviews gave examples that compared banking apps to traditional retail shopping apps. Furthermore, respondents viewed banking apps to be utilitarian and traditional retail smartphone branded apps to be hedonic, which further enforces that enjoyment is one of the important factors that plays a role in influencing the consumer’s satisfaction with the branded app user experience and the consumer’s intention to continue to use the branded app. The following comments from the in-depth interviews reflect this view:

“I’d probably check my banking apps as functionality rather than an enjoyable experience. It’s a necessity and functionality; it’s a process for transferring or something. It’s used in a different capacity; it’s not something that I do for fun. I do it because you have to check your statements I guess.” [Respondent 18]

“I would say that the bank is something that is more of a necessity whereas the John Lewis, Marks and Spencer’s etc. are a bit more for leisure, a bit more for relaxing. I think that they allow you to see different styles, to see different ideas. I think your bank one is a bit more essential; you’ve checked your accounts of what has come out etc. You could browse with John

Lewis, but you wouldn't sit and browse on your bank. On your bank you go on and come out. Whereas with Next and John Lewis you have a whole range of things to view and it's quite enjoyable." [Respondent 19]

Furthermore, consumers who continue to use traditional smartphone branded apps, find retail apps more enjoyable to use than the retailer's mobile website. For example, consumers who retain and continue to use traditional retail smartphone branded apps, perceive smartphone branded apps provide a functional, enjoyable and satisfactory shopping experience more than the retailers' mobile website. The following comment from the in-depth interviews reflects this view:

"I find it much more enjoyable to use than the mobile website; the desktop website is fine but the mobile website I found it would crash more than the apps... If the app isn't great – anger and frustration. I think efficiency and being able to get stuff done and then it's enjoyable."
[Respondent 11]

It is worth noting that this research finds that consumers may not want to 'escape' while using a retailer's mobile application, suggesting that consumers may not want to spend more time using the app than is perceived necessary. Therefore, although consumers may prefer to spend a shorter time on the branded app when they do not seek the hedonic aspect of escapism, consumers perceive that a branded app should be fun to use.

9.2.2 Escapism

In this research, escapism was hypothesised to play a positive role in influencing the consumer's satisfaction with the branded app user experience and the intention to continue to use the traditional retailer's smartphone branded app. However, interestingly, the results of the quantitative analysis for this research find that escapism has a direct negative significant influence on continuous intention to use the branded app and an indirect negative significant influence on continuous intention to use the branded app through the mediating effect of satisfaction with the branded app user experience. In other words, escapism causes consumers to have the behavioural intention to not continue using the traditional retail branded app. In addition, this finding demonstrates that escapism causes consumers to become dissatisfied with the branded app user experience leading consumers to also consider not continuing to use the app. This finding was not expected, as this research hypothesises that traditional retail

smartphone branded apps should enable consumers to escape from current daily life realities when conducting shopping activities to explore products and services or to make purchases. Previous literature supports that escapism is a feature of smartphones, in addition to literature from the e-services research area. In other words, this counter evidence finding on escapism in the context of traditional retail smartphone branded apps contradicts findings from the e-commerce environment (Lin et al., 2005; Hoffman and Novak, 2009; Rose et al., 2012; Chaouali, 2016; Dennis et al., 2016).

The findings illustrate that the strength of the direct significant negative relationship between escapism and continuous intention, and the indirect significant negative relationship between escapism and continuous intention through mediation of satisfaction is also low. There are several ways to explain the adverse reaction that is caused by escapism in the context of this research. First, it could be possible that although consumers may experience escapism when using a retailer's smartphone branded app, they might not like doing so, causing an adverse reaction in terms of satisfaction and continuous intention. Therefore, spending more time than is necessary while conducting shopping activities on the app and experiencing escapism may result in consumers experiencing a slight feeling of guilt, causing a negative relationship with satisfaction and continuous intention. For example, the qualitative in-depth interviews illustrate that although consumers may experience escapism, seeking escapism can reflect the act of wasting hours by using traditional smartphone retail apps. An example of this view is reflected in the following comment:

“you are not always going onto these apps with the intention of buying anything; it's more like, I've got my phone in front of me and I'm going to waste hours and hours looking at anything.”
[Respondent 17]

Experiencing escapism may lead the consumer to be frustrated, and the consumer may also realise that it was a waste of time. In addition, a consumer may feel that the amount of time spent on the app could have been utilised better in other activities. An example of this view is illustrated in the following comment:

“I will pass time on any old app. In a waiting room at the dentist or doctors – any situation that you are passing time. I try not to do it at home so much because I just get so frustrated... I don't know. For a long time, I found myself flicking through these apps and wasting time. I thought if I just read, or watch a movie, you will feel so much more fulfilled afterwards. You

feel that you have done something in your leisure time rather than wasting 7 hours every evening.” [Respondent 17]

Moreover, some respondents expressed that escapism can be dangerous. An example of this is reflected in the following comments:

“...suddenly you are like god an hour has passed; I think it’s quite dangerous.” [Respondent 7]

“...it is dangerous that way. If you are wasting time, it’s easy to go on and have a look at things. And, for example, ASOS always have offers on. I have a registered account so it’s so easy for me to go on and order something and it will come the next day. It’s so convenient and easy. John Lewis is the same; it’s easy too.” [Respondent 14]

Additionally, it was expressed in the qualitative in-depth interview that escapism is not necessarily a good thing, and a consumer may even blame him/her self. An example of this view is expressed in the following comment:

“Before I know it will be half ten and I think I’ll need to go to bed. I’m quite bad for that, I’m constantly on my phone.” [Respondent 6]

Second, it is also worth noting that the consumers who participated in the quantitative study have been shopping with brands for a long period of time. Building upon this, in some research contexts it is suggested that the effect of some variables may decrease over time, such as ease of use (Karahanna et al., 1999) and subjective norm (Venkatesh et al., 2003a). Thus, it could be possible that the effect of escapism keeps decreasing over time until it begins to cause an adverse reaction.

Third, recent previous research suggests that consumers use branded apps on the go due to utilitarian goal-directed behaviour (Wang et al., 2015). Furthermore, consumers who spend more time than necessary on traditional branded shopping apps feel they have a negative customer experience (McLean et al., 2018). Also, consumers’ purchase intention increases when time is saved during a shopping activity (Anderson et al., 2014). Consumers are conscious of time when searching for information on a company’s website in a utilitarian manner (McLean and Wilson, 2016). In addition, Konuş et al. (2008) provided a discussion suggesting that consumers value shopping online because they are time conscious, and online shopping enables them to complete tasks quickly. Furthermore, research has shown that the utilitarian and

hedonic values are important in motivating consumers to shop online; however, the utilitarian values are stronger than the hedonic values when shopping online (Blázquez, 2014). Moreover, since mobile devices are ubiquitous and can be used by consumers on the go, anytime anywhere, consumers may prefer to complete tasks quickly in an enjoyable fashion rather than seeking escapism (McLean et al., 2018).

It is important to note that a consumer may not want to seek to experience escapism when using a traditional retail smartphone branded app, as the consumer may use the app for shopping productively. An example of this view is reflected in the following comment:

“...because I want them there. Also, the day dreaming that we were speaking about before, it will help at some point. For example, if you want to buy boots and need to – I will look way before I buy them so it helps achieve the planning... They are available for escapism or functionality... I suppose there is an aspect of that when you are browsing. You can look at a ball gown that you are never going to wear and think that would be nice, or some hideously expensive champagne in Waitrose... again there is that fact of convenience aspect of it as well. You can do whatever it is you need to do, whether it is putting through purchases or whatever. Not necessarily escapism but you know.” [Respondent 16]

Building upon the notions from the aforementioned literature, consumers may not value escaping from current reality to seek a better one when shopping through smartphone branded apps. In conclusion, the findings indicate that although consumers may experience escapism when using traditional retail smartphone branded apps, they may not like doing so, as it causes them to spend more time than necessary escaping through branded apps.

9.3 The Subjective Norm of the Smartphone Branded App

Previous technology use literature has demonstrated that individuals could be socially influenced to accept and use technological innovations (Venkatesh and Davis, 2000; Venkatesh et al., 2003a), and the subjective norm variable is known to influence behavioural intention directly (Ajzen, 1988; Ajzen, 1991; Taylor and Todd, 1995b; Venkatesh and Davis, 2000; Venkatesh et al., 2003a; Venkatesh et al., 2012). Venkatesh et al. (2003a) found that the social influence construct is capable of influencing the consumers’ behavioural intention to continue to use a technology. However, it is suggested that it is more likely that the effect size of the social influence on behavioural intention decreases over time (Venkatesh et al., 2003a).

The quantitative analysis for this research finds that the social influence construct does not have a direct influence on consumers' continuous intention to use a traditional retail smartphone branded app. There are three explanations for the insignificant effect of social influence on the intention to continue to use traditional retail smartphone branded apps in this research. First, since this study used experienced consumers who had used the branded app for a long period of time, it is highly possible that the finding in this study is in line with Venkatesh et al.'s (2003a) UTAUT notion that the effect of social influence on behavioural intention decreases over time (Venkatesh et al., 2003a). In other words, Venkatesh et al.'s (2003a) notion illustrates that the effect of social influence decreases over time as the user gains more experience using a technology system, which indicates that social influence is more important in the adoption of technology stage than the continued usage stage. Therefore, it could be possible that the effect size of social influence in this research decreased over time until it became non-significant. To support this notion further, although the qualitative in-depth interviews in this research indicate that social influence plays a role in motivating consumers to hold a positive intention to continue to use a technology, some respondents may have been recalling scenarios that reflect the adoption stage of the traditional retailers' branded app rather than the current continued usage stage. Building upon this, subjective norm influences behavioural intention in the context of technology acceptance, but may not influence consumers' continuous intention to use the branded app when consumers are experienced with using the branded app. For example, the following comments from respondents in the qualitative in-depth interviews may have been referring to past scenarios that reflect that social influence played a role in motivating them to download and use the traditional retail smartphone branded app, which reflects the adoption stage. Examples of this view are reflected in the following comments:

"Yes, it was an old colleague. I don't work with her anymore. She was quite into technology and into IT." [Respondent 8]

"House of Fraser one; they said they had used it and enjoyed being able to use it; I'm that easy a sell it's ridiculous, and then I downloaded it." [Respondent 16]

"The last few months, I'm a bit of a latecomer. My wife teaches IT. Coming up to the holidays etc. I can see her adopting shopping online a bit more and for that reason I've been looking at more apps and messing about with them." [Respondent 21]

Second, the finding in this study with regard to the insignificant social influence effect on consumers' intention to continue to use traditional retail smartphone branded apps, is similar to previous studies within the e-shopping context (Shim et al., 2001; Dennis et al., 2010a). For example, Shim et al. (2001) found that the relationship of subjective norm on consumers' intention to use the internet to search for information in the context of e-shopping is insignificant. Furthermore, Shim et al. (2001, p.413) explained this finding by stating that "As search, either by bricks-and-mortar store or Internet, can be a somewhat private behavior, others may be inconsequential in the choice of the search channel format. If future research on this issue confirms this theoretical tenet, Internet retailers may want to reconsider monies and efforts invested in strategies that utilize reference group pressure as a motivator for encouraging Internet shopping." Furthermore, Dennis et al. (2010a) did not find that subjective norm plays a role in consumers' internet shopping intentions. In addition, it is also possible that the finding in this research regarding the insignificance effect of the social influence and the relationship with consumers' intention to continue to use traditional retail smartphone branded apps, is similar to Shim et al.'s (2001) conclusion in the context of Internet shopping. For example, the conclusion in Shim et al.'s (2001, p.413) study indicates that consumer behaviour towards the offline and the online channel can be a personal choice, and therefore it is "somewhat private behavior". Furthermore, the view that social influence may not play a role in motivating a consumer's intention to continue to use a traditional smartphone branded app from fashion retailers is present in the in-depth qualitative interviews. An example of this view is reflected in the following comment:

"Yeah, I have some friends that got me into Waitrose and subsequently John Lewis. I looked up to them and they were shopping there. In terms of clothes shopping, I am my own person; my wife or brother might suggest something, but only 3 or 4 people would recommend something that I would trust they would know what I want." [Respondent 12]

Furthermore, the following comments somewhat enforce this view by reflecting that traditional smartphone branded apps that respondents continue to use are the ones that they are really interested in. Examples of this view are illustrated in the following comments:

"No, because they were three that I really wanted." [Respondent 7]

"No, I think I just went into them myself. I've probably recommended it to other people rather than it being recommended to me." [Respondent 5]

“I think if he had recommended it to me and then I hadn’t got it I might feel a bit guilty about not getting it. I don’t know if that would be enough to get it but I don’t know. I would say that if someone definitely recommends an app to me, I would definitely consider it. Especially family.” [Respondent 11]

Third, Taherdoost (2018) concluded that the subjective norm construct is most likely to play a role in technology use when the user is required to use the technology (e.g. work setting). On the other hand, when the user is entirely free to choose to use the technology or not, the subjective norm construct is not likely to play a role in technology use (Taherdoost, 2018).

9.4 Satisfaction with the App User Experience

The quantitative findings of this study show that satisfaction is the strongest variable influencing consumers’ continuous usage of traditional retail smartphone branded apps. Furthermore, this research finds that satisfaction with a branded app user experience influences the consumers’ continuous intention to use the traditional smartphone branded app in two ways. First, satisfaction strongly and directly influences continuous intention, demonstrating that when consumers are satisfied with the branded app user experience, they are more willing to continue using the branded app. In addition, this finding is in line with Bhattacharjee’s (2001b) argument that satisfaction is the strongest predictor of consumers’ intentions to continue to use technological innovations.

Second, satisfaction influences continuous intention through the mediating effect of a consumer’s loyalty intention towards the traditional retailer. Therefore, the consumer’s satisfaction with the retailer’s branded app is important as it increases a consumer’s willingness to be loyal to the traditional retailer, which in turn, influences a consumer to continue to use the traditional retail smartphone branded app. This finding is important, because it illustrates that when consumers are satisfied with use of the branded app, they are more willing to purchase from the brand in the future, in addition to spreading positive word of mouth about the traditional retailers to other people, which is highly beneficial to the retailer. Furthermore, this finding reveals that satisfaction influences two types of interrelated behavioural intentions in the multi-channel retail environment, namely continuous intention related to the technological innovation, and loyalty intention towards the traditional retailer.

It is important to demonstrate through examples from the qualitative in-depth interviews the effect of satisfaction on branded app user experience in positively influencing the consumer’s

intention to continue to use the retailer's smartphone branded app indirectly through increasing the consumer's loyalty towards the retail brand. The qualitative in-depth interviews explain that a satisfactory experience when shopping with a traditional retailer is highly important, in terms of motivating the consumer to continue to shop with the retailer. Additionally, it is worth noting, that the in-depth interviews also show that in the multi-channel retail context, a consumer who regularly shops with a traditional retail brand and is satisfied with the shopping experiences in the physical store, expects a satisfactory user experience when shopping through the retailer's branded app. An example of this notion is expressed in the following comments:

"I'm not someone who would put apps on my phone for brands that I wouldn't use regularly; I would rather have the three brands that I use consistently. The experience I've had in store has been good and then you expect the experience in the app to be the same. I've never had any bad experiences with them. Previously if I've ever ordered anything from John Lewis, it's always been first class." [Respondent 19]

"I think with John Lewis and M&S I was drawn to the apps because I regularly shop there (in both shops); it's definitely drawing me to the apps. As I was saying earlier on, if an online presence is bad, it reflects the store. It's all about the experience of shopping in store; it's an experience of shopping online or on the app." [Respondent 21]

Furthermore, the qualitative in-depth interviews reflect that a satisfactory user experience with the branded app enforces the consumer's loyalty towards the retail brand. An example of this notion is expressed in the following comment:

I see myself as a loyal customer and having the app enhances that." [Respondent 12]

In addition, a satisfactory service is very likely to lead the consumer to hold a positive intention to continue to use the retailer's smartphone branded app. An example of this notion is expressed in the following comment:

"For me if you get good service, I will probably come back. Maybe the app is an extension of that, if the app is good; there is that kind of yeah." [Respondent 21]

The findings also illustrate that a consumer who is satisfied with the quality of the experience provided in the retailer's smartphone branded app, is likely to hold a positive intention to continue to use the retailer's smartphone branded app, and to continue to shop in the retailer's physical store. An example of this view is reflected in the following comment:

“I personally love it; it’s a shop that I would always go to. I would always scroll through the app and look at things to keep myself occupied, the way that you do sometimes with Facebook. But Zara is one of my favourite shops anyway. It’s also not a shop that tends to be, some brands that you can get via ASOS, Frasers, etc., but it’s one that isn’t available anywhere else. It’s independent in that sense and I like the quality of the things they get. The app is quality and easy to use and I do use it regularly.” [Respondent 18]

This research also finds that satisfaction with the branded app user experience increases and/or maintains the overall reputation of the brand. The qualitative in-depth interviews highlight that the positive relationship between the consumer’s satisfaction with the branded app user experience to the consumer’s long-term reputation of traditional retail brand represents an expectation that is met. Examples of this view are expressed in the following comments:

“John Lewis – I really like what they have got, the products, the store, and general vibe. It’s a premium brand; their app really met my expectation. It didn’t really add my feelings or ‘Wow’ me; it enhanced my shopping experience, but it was more of an expectation met.” [Respondent 12]

“I’m always going to like M&S food because it’s always nice... That is the expectation. I’m pleased with it but I’m not surprised but it doesn’t alter much.” [Respondent 17]

“I think if you have a picture of your experience of where you are shopping you automatically assume that it will be the same on the app.” [Respondent 19]

The in-depth interviews also reflect that the consumer’s perception of the long-term reputation of the brand and the consumer’s satisfaction with the branded app user experience positive relationship represents a confirmation of what the consumer thinks about the traditional retail brand in terms of its long-term reputation. Examples of this view are expressed in the following comments:

“My thoughts of the brand were already pretty high so it was just confirming what I thought.” [Respondent 15]

“Certainly complements them and confirms it.” [Respondent 21]

However, satisfaction does not indirectly influence the continuous intention to use the branded app through the consumers’ long-term brand reputation of the traditional retailer as originally hypothesised. Also, it is worth noting that in this chapter in Section 9.5.1, it is discussed that

the consumer's long-term perception of the reputation of the traditional retailer did not influence the consumer's intention to continue to use the smartphone branded app directly as originally hypothesised. Both findings indicate that the consumer's long-term perception of the reputation of the traditional retailer is highly associated with the consumer's brand loyalty intention toward the traditional retailer in terms of influencing the consumer's intention to continue to the retailer's smartphone branded app in the context of this study.

Furthermore, it is important to note, that in the results of the theoretical model, there is a significant positive influence from SBAUE to LBR, LBR to BLI, and BLI to CIUBA. This may indicate that SBAUE may influence CIUBA through a multiple mediation of LBR and BLI to CIUBA. However, this relationship was not hypothesised and therefore it was not tested.

In conclusion, based on the findings in this research, a satisfactory user experience with a branded app in a multi-channel retail context will lead to the following:

- It motivates the consumer's intention to continue to use the retailer's branded app.
- It positively enforces the consumer's loyalty intention toward the retailer, which in turn, positively enforces the consumer's intention to continue to use the retailer's smartphone branded app.
- Satisfaction with the branded app user experience positively enforces and maintains the long-term reputation of the brand.

9.5 Brand Related Variables Influencing Continuous Usage of Traditional Retail Smartphone Branded Apps

This research has integrated two variables from consumer behaviour research into investigating consumers' continuous usage of technological innovations. This research finds that the long-term brand reputation and loyalty intention toward the traditional retailer is capable of influencing consumers to continue using traditional retail branded apps. This finding is important, as it shows that variables from consumer behaviour research which are not related to the technical performance characteristics of a branded app are capable of influencing consumers to continue using traditional smartphone branded apps.

9.5.1 Long-term Brand Reputation

The quantitative analysis for this research finds that a consumer's long-term perception of reputation of the brand plays a role in influencing the continuous usage of traditional retail

branded apps. It is worth noting that long-term reputation of the brand does not influence continuous intention directly as originally hypothesised in this research. However, the research still finds evidence that the long-term brand reputation plays a role in influencing consumers' intention to continue to use the branded app. For example, this research finds that long-term brand reputation influences the consumer's continuous intention to use the traditional branded app through increasing the consumers' loyalty intention towards the traditional retailer. Thus, consumers who continue to use traditional retail smartphone branded apps do hold a positive long-term view of the reputation of the traditional retailer, that is formed from their previous encounters with services and products that the traditional retailers provide to consumers. Furthermore, the long-term brand reputation increases consumers' loyalty intention towards the traditional retail brand, leading to an increase in consumers' intention to continue to use the traditional retail smartphone branded app.

It is important to explain the reason why the consumer's long-term perception of reputation of the traditional retailer influences the consumer's intention to continue to use the retailer's smartphone branded app through the mediation of the consumer's brand loyalty intention towards the retailer, and does not influence the consumer's intention to continue to use the retailer's smartphone branded app directly in this research. In this regard, in the qualitative in-depth interviews, there is an indication that even if a retail brand may be reputable but the consumer does not hold the intention to shop repeatedly with the retailer in the future, the consumer is likely not to be interested in continuing to use the retailer's smartphone branded app. An example, of this view is illustrated in the following comment:

“John Lewis is my favourite brand; I have the app. I shop there from time to time... I really like them, spot on with customer care; price match guarantee, aftercare and customer service is second to none. Electrical products will be replaced up to 5 years, no questions asked. Store is always open when you need it, well-lit and knowledgeable staff.” [Respondent 12]

“Just because I'm not regularly using it. I deleted Superdry just last week. I had Superdry at one point because I really liked the brand and I bought a couple of items. Since then, although I like what I did purchase, I think a lot of their stuff is very generic and I don't want to purchase anymore at the moment... I wouldn't use the Nike shop app or Sports Direct because I would only go in there once in a blue moon, in which case I would just shop on the website. I have a tablet and my smartphone and that is what I tend to use so that is what is suitable for me. If it wasn't a shop that I would go to often I would go on the mobile website.” [Respondent 18]

It is worth noting that the finding with regard to the consumers' long-term perception of the reputation of the traditional retail brand also illustrates that consumers perceive the traditional retailer as an established business that is able to sustain its place in the market, in addition to maintaining its established reputation among its consumers. Thus, consumers' loyalty intention towards the brand also increases positively, leading to an increase in consumers' willingness to continue to use the smartphone branded app in the future. In addition, this finding illustrates that retailers who operate in a multi-channel market environment should understand that maintaining the long-term reputation of the brand is critical, as it influences consumers to continue to use technological innovations that are released by the brand to allow consumers to consume products and services from the traditional retailer.

9.5.2 Brand Loyalty Intention towards the Traditional Retailer

The quantitative analysis for this research confirms that brand loyalty intention towards the traditional retailer influences the consumer's continuous intention to use the traditional retail smartphone branded app positively. It is important to explain the positive association between the consumer's loyalty intention towards a traditional retail brand in positively influencing the consumer's intention to continue to use the traditional retailer's smartphone app. Based on the qualitative in-depth interviews, it is highlighted that when the consumer shops with the traditional retailer frequently and holds the intention to purchase from the brand in the future, the consumer holds a positive intention to continue to use the traditional retail smartphone branded app in the future. An example of this view is expressed in the following comments:

“Mostly clothes. Would buy clothes more often. I have bought electronics. I bought my camera from John Lewis, a nice Nikon one. I bought speakers with my dad from John Lewis as well. But it would be more frequently clothes. And gifts. Now it's Christmas just random bits. Also, homeware. Actually, most departments, fragrance as well... Topman I would use quite a lot. That would be the main one. I buy a lot from them. H&M for clothes.” [Respondent 17]

“Zara and H&M are ones that I will always go to. Next is where I go when I can't find something and broaden out a bit more.” [Respondent 18]

Additionally, a consumer who shops repeatedly with a traditional retail brand, continues to use the branded app to explore and view, and later, the consumer visits the traditional retailer's physical store to try the items viewed in the branded app for a potential purchase. An example of this view from the qualitative in-depth interviews is illustrated in the following comment:

“John Lewis is the type of place I buy a lot of clothes from. A lot of the time I’d like to try things on, so I’d pick things out beforehand and then go in and try them on.” [Respondent 15]

Furthermore, a consumer can hold a positive intention to continue to use the traditional retail smartphone branded app, because the consumer repeatedly purchase products within a specific product category from the traditional retailer. Therefore, the consumer holds the intention to make future purchases from the traditional retailer. An example of this view is illustrated in the following comment:

“I always get my shorts from Next” [Respondent 12]

It is worth mentioning that a consumer may hold loyalty towards competing traditional retail brands, and therefore, the branded apps related to these brands are likely to be retained on the smartphone. An example of this view is illustrated in the following comment:

“Tesco. Asda. That’s where I shop the most... I feel that I don’t then delete my Tesco one because sometimes I like to switch between them and look at both. I feel a bit of loyalty to them both because I have them both on my phone and I feel like I should use them both.” [Respondent 4]

It is worth noting that the brand loyalty intention variable also captures consumers’ positive word of mouth towards the brand. Furthermore, the finding of the positive association between the consumer’s brand loyalty intention towards the traditional retailer and the consumer’s intention to continue to use the retailer’s app also reflects that consumers who spread positive word of mouth to current and potential new customers, and are willing to re-consume and repurchase from the traditional retailer in the future, are more likely to continue using the smartphone branded app. Examples of this notion are reflected in the qualitative in-depth interviews in the following comments:

“I certainly talk to my friends about the John Lewis app. My dad and my mum, they are late adopters to technology.” [Respondent 21]

“A regular thing that we do, we have this girls’ WhatsApp group, we do exchange screen shots and different pictures. The Zara one is because we both really like Zara and purchase from it a lot.” [Respondent 18]

In conclusion, the finding of a positive association between the consumer’s loyalty intention towards the traditional retailer and the consumer’s intention to continue to use a retailer’s

smartphone branded app is interesting. It is an interesting finding as it demonstrates that a variable that represents loyalty intention toward the traditional retailer brand, which is not related to technical characteristics of the smartphone branded app, can influence consumers' continuous intention to use the branded app. It is worth noting that the finding also demonstrates that two different variables representing consumers' intentions, where one is related to the technical characteristics of the smartphone branded app and one is not, are interrelated within an IS theoretical framework.

9.6 The Theoretical Framework's Variance Explained

The theoretical model investigated in this research demonstrates good explanatory power in predicting the variables motivating consumers to continue to use traditional retail smartphone branded apps. The theoretical model was able to explain 71% of the variance in satisfaction with branded app user experience and 63% of the variance in consumers' continuous intention to use the branded app. Building upon this, the modified ECM-IT, which this research applied, explained higher variance in satisfaction and continuous intention than the original ECM-IT. The original ECM-IT explained 50% of the variance in satisfaction and 32% of the variance in continuous intention (Bhattacharjee, 2001b). Furthermore, the ECM-IT only examined the utilitarian dimension of perceived usefulness (Bhattacharjee, 2001b). It is worth noting that Bhattacharjee (2001b) encouraged researchers to further explore additional variables that can predict the continuous intention to technological innovations using the ECM-IT theoretical lens. Thus, while this research borrows from the ECM-IT theoretical lens, it also answers Bhattacharjee's (2001b) call to examine additional variables capable of predicting consumers' continuous intention to use technological innovations. In addition, recent theoretical establishments such as the UTAUT2, which investigated services acceptance and use of mobile internet services, show high predictive power in explaining intention (Venkatesh et al., 2012). The UTAUT2 explains 72% of the variance in intention (Venkatesh et al., 2012). However, it is worth noting that such high variance in the UTAUT2 is only achieved through the inclusion of the moderators (Van Raaij and Schepers, 2008). Without the moderators, the UTAUT2 only explains 40% of the variance in behavioural intention (Venkatesh et al., 2012).

9.7 Conclusion

This chapter has discussed the findings of this research. The discussion of the findings shows that the utilitarian variable of perceived usefulness and the hedonic variable of perceived enjoyment influence continuous intention directly and indirectly through satisfaction. Furthermore, perceived usefulness, compatibility and enjoyment are capable of influencing consumers to continue using the app even if they are not satisfied with the branded app user experience. Furthermore, the utilitarian dimensions of perceived ease of use and personalisation indirectly influence continuous intention through the full mediation of satisfaction. Therefore, perceived ease of use and personalisation play an important role in increasing consumers' satisfaction causing an increase in their intention to continue using the branded app.

The research also discussed the unexpected finding regarding escapism. Escapism is found to negatively influence continuous intention to use the branded app directly and indirectly, reflecting that consumers do not use traditional retail branded apps for escapism. Furthermore, the research finds no association between subjective norm and continuous intention.

The chapter has also discussed the role of brand-related variables that are unrelated to the technical characteristics of the branded app. Thus, long-term brand reputation and loyalty intention toward the traditional retailer are important in motivating consumers to continue using branded apps.

Chapter 10

Conclusions

10.0 Introduction

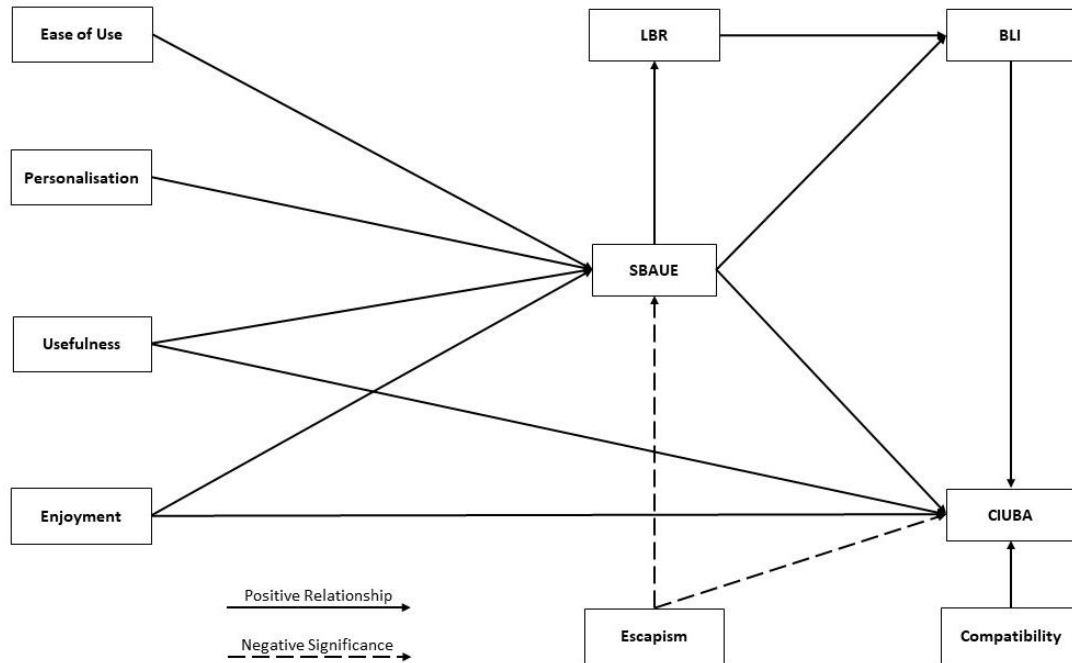
This chapter provides a summary concluding the work of this thesis. The chapter begins by revisiting the objectives of this research to discuss and clarify how the findings relate to meeting the objectives of this thesis. Following the discussion of the research objectives, this chapter discusses the methodological implications, theoretical contribution and implications, managerial implications, research limitations and the direction for future research.

10.1 Research Objectives

There are four research objectives in this research that aim to enhance our understanding of the variables that play a role in influencing consumers' satisfaction with the smartphone branded app user experience and continuous intention to use smartphone branded apps which are provided by traditional retailers who operate in a multi-channel retail environment.

The results of the final structural model which reflect the objectives of this research are shown in Figure 10.1. It is worth noting that Figure 10.1 only presents the structural model based on the hypothesised relationships that are supported, in addition to the two hypothesised relationships of H6a and H6b that are not supported but demonstrate a negative significant counter-evidence finding. In this regard, Figure 10.1 showcases the significant relationships based on the results from the SEM analysis. It is worth noting that the solid arrows represent the positive relationships between constructs and the dashed arrows represent the negative relationships between constructs.

Figure 10. 1 A representation of the structural model results with the significant findings



Note: SBAUE: Satisfaction with the Branded App User Experience, LBR: Long-term Brand Reputation, BLI: Brand Loyalty Intention, CIUBA: Continuous Intention to Use the Branded App.

10.1.1 Conclusion of Research Objective One

The first objective for this research is to establish the utilitarian and hedonic variables that influence the consumers’ continuous intention to use traditional retail smartphone branded apps, and to examine the role of consumers’ satisfaction with the branded app user experience in mediating the utilitarian and hedonic variables toward consumers’ continuous intention to use traditional retail smartphone branded apps.

This research concludes that the utilitarian variables of perceived ease of use, usefulness, compatibility, and personalisation, and the hedonic variable of perceived enjoyment play an essential role in positively influencing consumers’ intention to continue to use traditional smartphone branded apps. It is important to note that this research finds that the hedonic variable of escapism plays a significant negative role in influencing consumers’ satisfaction with the branded app user experience and their intention to continue to use the smartphone branded app.

With regard to perceived usefulness, this research highlights that consumers value branded apps that enable them to accomplish shopping tasks quickly and productively, which positively increases consumers' intention to continue to use the traditional retail smartphone branded app directly and indirectly through a positive increase in consumers' satisfaction with the branded app user experience.

With regard to the perceived ease of use, this research highlights that current consumers who shop with a traditional retailer and are experienced with using the retailer's app, value an app which is flexible, clear and understandable. This research did not find that perceived ease of use influences consumers' intention to continue to use branded apps directly. However, this research finds perceived ease of use positively influences consumers' intention to continue to use traditional retail smartphone branded apps indirectly through the mediation of consumers' satisfaction with the user experience of the branded app. Therefore, in the traditional retail context, perceived ease of use is important as it positively increases consumers' satisfaction with the user experience, leading to an increase in consumers' intention to continue to use the smartphone branded app.

With regard to compatibility, this research highlights that consumers value when the smartphone branded apps from the traditional retailers which are compatible with their lifestyle (e.g. the way they live and work). This research finds that compatibility influences consumers' continuous intention to use the traditional retail smartphone branded app only directly.

With regard to perceived personalisation, this research highlights that consumers value when smartphone branded apps from traditional retailers that provide them with a tailored experience that meets their shopping needs. Previous research which investigated consumers' continued use of e-services, found that perceived personalisation did not play a role toward consumers' satisfaction and e-loyalty (Jung-Hwan et al., 2009). However, this research finds that perceived personalisation influences consumers' continuous intention to use the traditional retail smartphone branded app indirectly through positively increasing consumers' satisfaction with the branded app user experience. Therefore, perceived personalisation increases consumers' satisfaction with the branded app user experience, leading to an increase in consumers' intention to continue to use the smartphone branded app.

With regard to, perceived enjoyment this research highlights that consumers value smartphone branded apps that are fun to use. This research finds that perceived enjoyment influences consumers' intention to continue to use the traditional retail smartphone branded app directly

and indirectly through the mediation of consumers' satisfaction with the branded app user experience.

With regard to escapism, interestingly this research highlights that escapism decreases consumers' intention to continue to use traditional retail smartphone branded apps directly and indirectly through the mediation of consumers' satisfaction with the branded app user experience. This finding contradicts previous studies from the e-commerce research area (Hoffman and Novak, 2009; Rose et al., 2012; Chaouali, 2016; Dennis et al., 2016). However, recent research provides indirect support for the finding of escapism in this research. For example, Mclean et al.'s (2018) recent study suggests that negative customer experience can occur when consumers spend more time than necessary using branded apps. Also, when consumers perceive that they are saving time during a shopping activity their intention to purchase increases. (Anderson et al., 2014).

It is worth noting that this research also highlights that perceived usefulness, compatibility, and enjoyment positively influence consumers' intention to continue to use traditional retail smartphone branded apps even if consumers are not satisfied with the user experience.

10.1.2 Conclusion of Research Objective Two

The second objective for this research is to investigate the role of social influence in influencing a consumer's continuous intention to use traditional retail branded apps. The quantitative findings show that social influence effect on consumers' continuous intention to use the retail branded app is not significant. As such social influence does not play a role in influencing experienced consumers to use the branded app or have a positive intention to continue to use the branded app.

It is worth noting that previous research suggests that the social influence effect on behavioural intention decreases overtime (Venkatesh et al., 2003a). Therefore, it can be possible that the effect of social influence on consumers' intention to continue to use the smartphone branded app in this research may initially have been positively significant, however, it may have decreased over time as consumers became more and more experienced with using the branded app until it became non-significant. In addition, it is also likely that the social influence construct did not play a role in the context of this study because the behaviour of shopping can be considered a private behaviour, where the choices a consumer makes are considered personal (Shim et al., 2001).

10.1.3 Conclusion of Research Objective Three

The third objective for this research is to investigate the role of variables that are related to the traditional retail brand in influencing consumers' continuous intention to use the retailer's branded app. This research finds that the consumer's perceived reputation of the traditional retail brand and the consumer's brand loyalty intention toward the traditional retailer play an important role in motivating the consumer's intention to continue to use the branded app. These findings demonstrate that integrating variables from consumer behaviour research that are not specifically related to the technical performance characteristics of the branded app are capable of influencing consumers' intention to continue to use the branded app.

With regard to the reputation of the retail brand, this research finds that it influences a consumer's intention to continue to use the traditional smartphone branded app through increasing the consumer's brand loyalty intention. Therefore, when consumers perceive the traditional retailer as trustworthy, and the image of the brand is positive and long lasting, the consumer's loyalty intention toward the retail brand also increases, leading to an increase in the consumer's loyalty towards the branded app. In other words, reputation influences consumers to intend to shop with the retailer in the future and talk positively to others about the brand, which in turn increases consumers' intention to continue to use branded apps. Therefore, traditional retailers who operate in a multi-channel market environment should work toward improving and maintaining a positive long-term brand reputation, as it plays a role in increasing customers loyalty toward the traditional retail brand and consumers intention to continue to use smartphone branded apps to perform their shopping activities.

In addition, it is essential for a traditional retailer who operate in a multi-channel retailer environment to aim to improve and maintain positive customer's loyalty intention toward the traditional retailer, as the retailer will benefit from consumers who continue to use and utilise the technological innovation (e.g. smartphone branded apps), which will enable the retailer to retain consumers.

10.1.4 Conclusion of Research Objective Four

The fourth objective for this research is to examine the role of consumers' satisfaction with the branded app user experience in influencing consumers' intention to continue to use the branded apps, consumers' long-term reputation of the retailer, and consumers' loyalty intention toward the retailer. The research highlights three important findings.

First, the research finds that a consumer's satisfaction with the branded app user experience is the strongest predictor of a consumer's intention to continue to use a branded app. Therefore, traditional retailers need to develop, improve and maintain, the branded app user experience, as it is essential in motivating consumers to hold positive intention to continue to use the traditional retailer's branded app for shopping activities.

Second, the research finds that consumers' long-term reputation of the retailer does not mediate the relationship between consumers' satisfaction with the app user experience and consumers' intention to continue to use the app. This finding shows that satisfaction with the branded app user experience has a positive relationship with a consumer's perception of the reputation of the retailer, but does not influence a consumer's intention to continue to use an app. Therefore, it is concluded that a satisfactory user experience with a retailer's smartphone branded app confirms the consumer's perception of the reputation of the retailer.

Third, the research finds that consumers satisfaction with the branded app user experience influences consumers' intention to continue to use the branded app indirectly through consumers' likely loyalty toward the traditional retailer. Therefore, when a consumer's experience with using the branded app is satisfactory, they are more likely to purchase from the brand in the future and spread positive word of mouth about the retailers to others. Therefore, this research highlights the interrelation of the users' satisfaction with the smartphone branded app and their likely loyalty toward the retailer who operates in a multi-channel retail environment in influencing consumers' continued use of the branded apps.

10.2 Theoretical Contribution and Implications

The research has taken theoretical notions from the literature to examine the continuous usage of smartphone branded apps in the context of traditional retailing. This research highlights several theoretical notions based on what is learned from the literature and the findings resulting from testing the theoretical model for this research.

The research aimed to combine multiple dimensions that are applied to examine the drivers that motivate consumers to continue using and retaining traditional retail smartphone branded apps. The four dimensions are incorporated through the utilisation and modification of the Expectation Confirmation Model of Information Technology (ECM-IT). The four dimensions in this research are the utilitarian and hedonic characteristics relating to use of the technology,

the social influence (e.g. subjective norm), and brand-related factors which are represented by long-term brand reputation and loyalty intention towards the traditional retailer.

The first theoretical contribution of this study is the integration of brand-related factors (e.g. long-term brand reputation and loyalty intention towards the traditional retailer brand), which are not related to technical characteristics of the branded app in use, into the theoretical model for this study which was inspired by the ECM-IT from the IS research domain. Therefore, the theoretical model accounts for two types of loyalty in a multi-channel retail context. Previous research suggests that most research within the e-commerce domain focuses on e-loyalty (e.g. continuous use of the e-commerce or mobile channel), without capturing the interrelation of e-loyalty in a multi-channel context (Klaus and Nguyen, 2013). The research has contributed to our further understanding by showing that consumers' loyalty towards the traditional retailer relates to consumers' continuous intention to use technologies. Furthermore, the research also demonstrated how consumers' long-term brand reputation influences continuous intention to use the app, by discovering that long-term brand reputation is mediated by consumers' loyalty intention towards the traditional retailer, and does not influence continuous intention directly. Such a finding is interesting, because it helps understand how brand-related factors influence the intention to continue to use the app.

The second contribution of this study enhances our understanding with regard to the constructs that are fully or partially mediated by satisfaction towards the intention to continue to use the app in the context of this research. This research highlights that satisfaction fully mediates perceived usefulness and enjoyment positively, and escapism negatively in terms of consumers' intention to use the app. Furthermore, this research highlights that satisfaction partially mediates perceived ease of use and personalisation in terms of consumers' intention to use the app. In addition, satisfaction did not fully or partially mediate compatibility towards the intention to continue to use the app, where compatibility influences the intention to use the app directly. In addition, utilising the pragmatic philosophical stance which involved conducting a qualitative exploratory study helped in improving the theoretical model that is tested in this study, in addition to explaining the quantitatively tested relationships in the theoretical model in-depth.

The third contribution of this study is finding that escapism negatively influences consumers' satisfaction with the branded app user experience, and consumers' intention to continue to use the branded app directly and indirectly in the context of multi-channel retailing. This finding

is important because it surprisingly indicates that although escapism is a factor that is hedonic in nature, it causes consumers to become dissatisfied with the branded app user experience and to hold a negative intention to not continue using the branded app in the future. In addition, this finding opens avenues for future research to further investigate the influence of escapism, and to investigate the effects of escapism on consumers' reputation and loyalty toward brands in the context of consumers' continued technology usage.

The fourth contribution of this study highlights that the social influence construct is not associated with consumers' intention to continue to use traditional retail smartphone branded apps. Thus, this finding is similar to some previous studies which found that social influence does not have a significant effect on behavioural intention (Shim et al., 2001; Dennis et al., 2010a).

The fifth theoretical contribution of this study is that the theoretical framework tested in this research helped to explain 71% of the variance in satisfaction and 63% of the variance in continuous intention. Therefore, the theoretical framework achieved good explanatory power to explain consumers' satisfaction and continuous intention. Also, the modified theoretical model tested, which was inspired by the ECM-IT, achieved good explanatory power without the inclusion of the confirmation factor, as there is support from the literature that it is not needed when conducting research on consumers who are experienced with using the service.

The sixth contribution of this research is responding to academics who have encouraged researchers to examine "how various constructs might be in play (or not) depending upon the prior shopping, site familiarity and/or site purchasing experience of consumers" (Dennis et al., 2009, p.1132). Building upon this notion, this study examined the influence of various constructs on satisfaction and continuous intention by utilising a sample that represents consumers that had previous shopping experience with the traditional retailers of this study, and were familiar with using the retailers' smartphone branded apps. Therefore, this research has taken further steps to test the theoretical notions presented in this research in a practical setting.

10.3 Managerial Implications

This study presents several implications for managers. It highlights to managers that utilitarian factors, the hedonic factor of enjoyment, and the brand-related factors which are unrelated to the technical characteristics of the smartphone branded app, play an important role in motivating consumers to continue to use traditional retail smartphone branded apps.

Enhancing the usefulness of mobile applications

The results of this research inform managers that consumers value a retail branded app that enables them to complete shopping activities instantly in a productive and efficient manner. It is worth noting that consumers may also use the branded app to shop for specific products, and therefore, the retailer's app should enable consumers to select the desired products they want to purchase and be able to complete the checkout process quickly. Therefore, giving consumers innovative features to quickly check out such as the "Amazon's 1-click ordering" feature to complete a purchase can make using the app more productive especially when consumers are on the move and their time to shop is limited.

The results also reveal to managers that a consumer who shops regularly with a traditional retailer values the experience when the branded app reflects the shopping experience of the physical store. This notion is consistent with previous literature on online shopping with multichannel fashion retailers (see Blázquez, 2014). For example, the qualitative results of this research reveal to managers that not all consumers are interested in using the app to spend time browsing for products; instead, a consumer may want to use the smartphone app to quickly navigate to a section of the app to buy a product with speed and efficiency, in the same way that the consumer may have gone into the physical store to buy a product quickly. Therefore, offering a shopping experience on a smartphone app that enables and reflects the shopping experience of the physical store can enhance the consumer's perception of the usefulness of the retailer's branded app.

Furthermore, Blázquez (2014) explains that smartphones are reshaping the physical shopping experience in store. Some traditional retailers offer a click and collect service where the consumer can choose to make a purchase from the retailer's smartphone app and collect the item purchased from the retailer's physical store. In this regard, an interesting notion emerged from the qualitative in-depth interviews that illustrates that the consumer's perception of the usefulness of the retailer's smartphone app and the consumer's satisfaction with the branded app's user experience can extend to the physical store. For example, a respondent was annoyed

that after the purchase was made from the retailer's smartphone app, the dedicated section for collecting items purchased online is located at the end of the physical store in a location that is not perceived to be convenient. This example is important for marketing managers as the consumer perceives the smartphone branded app to be useful and is satisfied with the branded app user experience; however, the experience of collecting items purchased from the app in the retailer's physical store did not meet the consumer's expectations, and subsequently the consumer may question features that are promoted to enhance the usefulness of the retailer's app. Therefore, managers should take into consideration that any services that are offered in the app that require the consumer to physically visit the retail store should reflect the overall productive shopping experience.

This research informs managers that smartphone retail apps should be developed to load content quickly. For example, information and graphical content should be compressed and optimised for speedy loading, and should not hinder the efficiency of the smartphone app. It's important to note that consumers may encounter situations where they do not have access to a quick internet connection; therefore, it is essential for managers to consider developing retail apps that run as efficiently as possible, while aiming to deliver a satisfactory user experience.

Interestingly, based on the interpretation and discussion of results, consumers perceive retail smartphone apps as superior and more productive than mobile websites. Building on this notion, consumers who continue to use retail apps seem to perceive retail websites that are made into smartphone apps to be not as useful. Therefore, retailers should also ensure that their smartphone apps are developed thoughtfully and specifically for the smartphone retail shopping experience and that they meet the consumer's expectations in terms of productivity.

It is important for managers to pay close attention to reviews and requests made by consumers to improve the usefulness of the app. This research highlights that some consumers may not be fully satisfied with a retailer's branded app because they feel that there are missing features that could enhance the shopping experience during their interactions with the app, for example, providing an option that enables the consumer to continue the previous shopping journey. In addition, marketing practitioners should find innovative ways to utilise the unique features of the smartphone in the app to enhance the shopping experience, such as the smartphone's camera (e.g. to scan the tag of an item if it was out of stock in store), GPS location (e.g. to locate the nearest store or to locate the nearest pickup or delivery location that is convenient to the consumer), push notifications (e.g. to get useful information on the delivery status of a

purchased product) to enhance the shopping experience. It is worth noting, that managers should always make sure that the consumers are in control with the way they want to shop; for example, with regard to push notifications, consumers should be able to choose whether to receive push notifications or not, as it is important to communicate with consumers through mobile devices in a non-intrusive manner (Winer, 2009; Ajax and Irfan, 2012).

Furthermore, it is important for retailers to differentiate the mobile branded app from other channels to increase the value of the app in terms of its usefulness in enabling consumers to perform shopping activities ubiquitously, which encourages consumers to retain and continue to use the app as an additional shopping channel. In addition, it is essential for managers to make sure that the content in the app, such as graphics that represent the retailer's branding, products and services, loads quickly as consumers engage with the brand through a smartphone app on the go and may be looking for specific items quickly. In addition, considering the ubiquitous nature of branded apps, retailers should keep developing and maintaining the app to enable consumers to continue to use it quickly and productively. Perceived usefulness influences consumers' intention to continue to use the branded app directly and indirectly through consumers' satisfaction with the branded app user experience. This finding informs managers that consumers may still intend to continue to use the app because of its usefulness even if they are not completely satisfied with the app user experience.

Enhancing the ease of use of mobile applications

Retailers can improve and maintain their branded app to reflect an easy to use experience for consumers on the go through the clarity of the app's content (e.g. information, graphics, and layout). For example, it is important that the information on the products displayed in the app is clear and easy to understand; also, it should be easy for consumers to locate the appropriate sections within the app, for example the men's, women's and/or kid's sections. Furthermore, it is important that the content in the main page of the app (e.g. homepage) is clear, welcoming and well organised. Furthermore, considering the smartphone small form factor, managers should avoid using large images that may hinder the ease of use of the app. Additionally, it is important that features, sections and sub-sections should be laid out in a clear organised manner, and consumers can effortlessly locate the search for product features and categorise and filter products. Furthermore, this research also highlights that the shopping experience should be easy, pleasant and consistent across the retailer's multiple channels.

Managers should avoid making dramatic large-scale changes to their app as it may alter the consumers' perception of the app's ease of use. Therefore, managers should aim to maintain an easy to use user experience that is familiar to consumers when updating retail branded apps to add new features through gradual release of new functionality and features. It is worth noting that this study reveals to managers that consumers dislike it when retail branded apps go through many updates in a short period of time, because consumers perceive that the updates could impact the ease of use of the retail app negatively or introduce performance issues.

The branded app should not force consumers to sign in before they are able to browse products in the app. Forcing consumers to sign in to be able to browse is received negatively by consumers and introduces an additional step to operating the app, which hinders the ease of the user experience. Therefore, managers should always put the consumer in control of their decision making. In addition, managers should avoid pushing content through the app such as push notifications or pop-up ads which may include promotional content or subscribing to a shopping service with the retailer without the consumer's permission, as it can irritate consumers and can result in the consumer's satisfaction with the branded app user experience being negatively impacted. As mentioned earlier, managers should focus on putting the consumers' in control of what content they want to have pushed to them when developing retail apps.

This research also informs managers that it is important to maintain a consistent easy to use user experience across smartphone operating systems. For example, in the case that a consumer decides to switch from an iPhone iOS operating system and move to an Android operating system or vice versa, the experience of using the app should be similar. Moreover, if the retail app's functional experience across phone operating systems is not familiar to the consumer, it will result in the consumer perceiving the app to be not easy to use and the consumer's satisfaction with the app user experience and the intention to continue using the app will be negatively impacted.

Furthermore, any features that retailers implement in the branded app in order to enhance the shopping experience should be simple to operate. For example, adding features that complement the physical shopping experience in the app, such as enabling the consumer to scan a product's tag in store to retrieve the product's information, where the consumer is able to order the product through the retailer's smartphone's app if the product is out of stock in the physical store, should be easy to use and intuitive.

Moreover, consumers who hold positive intention to continue to use the retailer's smartphone app in the future perceive the app to offer an easy to use user experience that is straight forward and intuitive, beyond their perception of the retailer's mobile website. Additionally, this research reveals to managers that consumers who hold a positive intention to continue to use a retailer's app may also retain apps from other retailers, and consumers do compare between apps on their smartphones in terms of ease of use and the app's operation. Therefore, managers should conduct regular testing of the app against competitors' apps and seek the opinions of customers on their own and competitors' apps.

The compatibility with the way the consumer lives and works

This research highlights to managers several notions on the role of compatibility in positively increasing the consumers' intention to continue to use smartphone retail branded apps. For example, considering that consumers can have busy lifestyles, consumers value the perception that the branded app fits their lifestyles as it enables them to conveniently complete shopping tasks from traditional retailers that they like ubiquitously. A busy lifestyle may include busy working hours, where the consumer is not able to go to the retailer's physical store to purchase products. In addition, consumers who are taking care of a big family and/or taking care of young children may find it inconvenient to regularly go to the physical stores to shop. Moreover, traditional retail smartphone branded apps are also viewed as a lifestyle assistant, especially when consumers have busy lifestyles as it enables consumers to stay connected with the retail brand.

It is worth noting that this research also reveals to managers that some consumers may wish to be able to shop physically with retail brands more freely; however, they are not able to shop physically as much because of the commitments and changes that happen to the way they live and work. Therefore, consumers value traditional smartphone branded apps that are compatible with the way they live and work, because it is a convenient way to stay connected and shop with traditional retailers that they like to shop with.

A tailored personalised experience

This research informs managers that personalising the shopping experience for the consumer includes making the app feel like the consumer's personal space, for example, giving the consumer options to utilise the retail app's ability to remember the consumer's login credentials, storing the consumer's delivery addresses, payment information, retrieving relevant information (e.g. viewing previous orders), and additional options that aim to provide

a tailored shopping experience such as enabling the consumer to pre-select gender and product sizes and features to complement the shopping experience. It is worth noting that consumers dislike it when they must enter the same information repeatedly.

Furthermore, enabling consumers to store shopping items in wish-lists and/or virtual shopping carts for potential future purchases would personalise the experience further as consumers, in the future, would not be required to repeatedly search for products that they are interested in purchasing. In addition, consumers may save items to their wish-lists and/or virtual shopping carts to make future purchases for special occasions or when the items have price reductions. In this regard, managers can also provide consumers with the option to be notified when items that consumers have saved in their wish-lists and/or virtual shopping carts have reductions in price applied.

It is worth mentioning that a personalised shopping experience is important and valued by consumers when shopping through smartphone retail apps, because retailers may offer a huge number of various products in the small form factor of the smartphone. In this regard, managers should find innovative ways to provide tailored shopping experiences in their retail smartphone branded apps, because it can be exhausting and frustrating for a consumer to browse through a huge number of products that do not fit the consumer's shopping needs or personal style.

Also, it is worth noting that, the qualitative in-depth interviews reveal to managers that consumers who retain and continue to use traditional retail smartphone branded apps feel safer about providing personal information in the smartphone branded app, because they perceive the retailer to be trusted. Furthermore, managers can offer the consumer a targeted shopping experience in the smartphone retail app by suggesting relevant products to the consumer; however, managers should also put the consumer in control to turn on or turn off the targeted shopping experience.

The enjoyable experience

It is important for managers to ensure that browsing through the app and the shopping experience is pleasant from the moment a consumer starts using the app to the moment the shopping task is complete. In addition, consumers find the app to be fun to use because it enables them to browse and get shopping ideas for future purchases. It is worth noting that although a consumer may prefer to shop physically in store because they may prefer to see and feel products, the consumer still perceives exploring new products in the app to be fun because shopping through the app enhances the overall shopping experience.

Managers should develop their app with the mindset that any features included in it should be pleasant to use. In addition, managers should monitor feedback from consumers to improve features in their app to make the app more enjoyable to use.

Escapism is not necessarily a good thing

This study informs managers that consumers who use retail smart branded apps for escapism purposes may spend more time than necessary on the app, and they can lose track of time while using the app. Interestingly, the qualitative in-depth interviews indicate that consumers may have feelings of guilt because they come to realise that they had the option to utilise the unnecessarily wasted time in the app more usefully in something else. Therefore, it is possible that consumers, for the most part, are not interested in escaping from a current reality to seek a better one.

Managers should not be too worried if consumers are spending less time on the app in comparison to the other channels that are offered by the retailer such as the retailer's website. Interestingly, this finding reveals that it is important that the app provides consumers with an enjoyable experience reflecting that the app is fun to use; however, when consumers spend more time than they like, their satisfaction with the branded app user experience and their continuous intention to use the app in the future are negatively influenced. Therefore, managers should develop and market their retail branded apps to reflect on the consumer's ability to complete shopping tasks productively in an enjoyable manner.

The importance of the retailers' long-term reputation

Considering that this study was conducted in a multi-channel retailing context, the consumers' view of the long-term reputation of the brand is established through the past shopping experiences they have encountered across the retailer's multiple shopping channels (e.g. physical store, website, and mobile branded apps). Therefore, retailers should aim to develop customer shopping experiences that help to increase and/or maintain a positive long-term brand reputation that is established in the consumer's mind, as it increases and/or maintains positive consumer loyalty intention towards the retailer, motivating consumers to hold a positive intention to continue to use the branded app. Therefore, consumers who have a positive view of the long-term reputation of the brand will be more likely to purchase from the traditional retail brand in the future, spread positive word of mouth about the brand (e.g. to family, friends, social network posts) which may motivate other potential customers to shop with the brand, and result in the positive intention to continue to use the branded app.

This research highlights to managers the importance of recognising the role of long-term brand reputation in motivating consumers' intention to continue to use the app; therefore, managers should not just focus on the factors that are related to the technical characteristics of the app. Furthermore, managers should pay close attention to customer feedback in addition to conducting market research to gauge the consumers' perception of the reputation of the retail brand as it plays an important positive role in consumers' loyalty intention toward the retail brand and their intention to continue to use the app.

The importance of brand loyalty intention

This finding informs managers that consumers who are satisfied with branded app user experiences will be motivated to perform repeat purchases from the traditional retailer's brand in the future which is an indication of potential future brand sales. Furthermore, consumers will be more interested in spreading positive word of mouth about the brand (e.g. to family, friends, social network posts), which is beneficial to retailers, as they may attract new customers to shop with the brand based on current customers. In addition, consumers who are interested in repeat purchasing from the brand in the future, while also spreading positive word of mouth to other people, will have a positive intention to continue to use the traditional retail smartphone branded app in the future. Thus, this finding also shows that a mobile branded app is capable of being part of the brand's long-term marketing strategy in that it maintains customer loyalty and establishes potential relationships with new customers. In addition, managers can utilise mobile apps in increasing and/or maintaining customers' loyalty toward traditional retail brands, without necessarily needing to invest in loyalty programs, which may result in the retailer benefiting from financial savings.

Furthermore, this research informs managers that consumers' loyalty intention toward the retail brand which is a factor that is unrelated to the technical characteristics of technology in use (e.g. branded apps) is capable of motivating consumers to hold positive intentions to continue to use various platforms offered by retailers. It is worth noting that in a multi-channel retail context, loyalty intention towards the traditional retailer is established through consumers' shopping experiences from multiple channels such as the physical store, website, and mobile apps. Thus, it is important for retailers who operate through multiple channels to aim to establish a sustainable shopping experience that is consistent through all shopping channels that retailers provide for consumers (Blázquez, 2014). Moreover, retailers should aim to develop a dynamic marketing strategy that should aim to maintain customer loyalty via the

brand's multiple channels, as consumers that are loyal are more interested in continuing to use services that brands offer to them through shopping channels that are available to consumers through technological platforms. Therefore, as mentioned earlier, managers should recognise the role of brand-related factors and not just focus on the factors that are related to the technical characteristics of the apps.

Finally, it is worth noting that retailers should take the feedback from customers seriously, because it can help to improve the productivity of the app. As such, they should pay attention to the consumers' comments and reviews in Apple's Appstore, the Google Play Store and also comments that are made directly to customer support, to collect information and feedback to help improve the branded app.

10.4 Research Limitations and Future Research

Recommendations

This research has several limitations. This research utilised a cross-sectional self-reported online questionnaire to collect the quantitative data. Although Rindfleisch et al. (2008) explain that a well-designed cross-sectional questionnaire can be a good alternative to longitudinal surveys, it would be interesting to examine the relationships in this study through a longitudinal study. A longitudinal study can help understand how the relationships that are presented in this study behave over time in the continuous usage context of multi-channel retail branded apps. Furthermore, examining the model presented in this research to compare between consumers who have newly downloaded the app, consumers who have retained the branded app for a short period of time and consumers who have retained the branded app for a long period time could provide interesting insights in the research area that could further enhance our understanding of consumer behaviour and mobile shopping apps.

This research focused on highlighting the factors that play a role in consumers' intention to continue to use traditional retail smartphone branded apps; however, future research can benefit from integrating into research theoretical model factors that reflect the actual usage behaviour as an outcome of the behavioural intention. For example, integrating factors that reflect the outcomes of consumers' behavioural intention to use smartphone retail branded apps such as usage frequency and purchase frequency can extend our understanding of consumers' retail mobile app usage, as the ECM-IT does account for actual behaviour (see Bhattacharjee, 2001b).

Furthermore, to further our theoretical understanding of consumers' usage of retail smartphone branded apps in an omni-channel retail environment, factors that lead to a satisfactory customer experience in situations where the customer chooses to complete a purchase by interacting with the retailer's online shopping environment and the physical store to complete a purchase, such as the click and collect feature or ordering online while the customer is shopping in the physical store, should be investigated. Additionally, it is worth noting that the qualitative study presents several examples and scenarios that reflect consumers' perceptions of the utilitarian, hedonic, and the brand-related factors (e.g. the consumer's long-term reputation and loyalty intention towards the traditional retail brand). Building on this, future research can provide a deeper understanding within the research context of continued usage of branded apps, by exploring and testing antecedents related to the utilitarian, hedonic and brand-related factors presented in this study.

The research finds that escapism has a negative effect on consumer satisfaction in terms of branded app user experience and continuous intention to use the branded app, which can be viewed as a finding that contradicts the e-commerce research area. Therefore, replicating or integrating escapism when investigating the acceptance and/or continuous usage of branded mobile apps could help understand the role of escapism and its effects on consumer behaviour for services within the m-commerce research domain. Furthermore, as this research finds escapism negatively influences the consumer's satisfaction with branded app user experience and continuous intention to use the branded app, investigating whether the negative effects of escapism extend to the consumer's perception of reputation and loyalty towards the retailer in the continuous usage context of smartphone branded apps would be interesting for future research. Also, this research captures the role of escapism in the continued usage context of retail smartphone branded apps in a general sense; however, investigating if the role of escapism is positive or negative in a situational context could be interesting for future research. In addition, future research can investigate a comparison of the effects of escapism between the adoption and the continued usage context of smartphone retail branded apps.

This research was conducted on consumers who retain and continue to use traditional retail smartphone branded apps within the United Kingdom; therefore, generalisation of the findings in this research may be limited, as the findings may not be generalisable to other geographical locations. Therefore, replicating this research through cross-cultural research would help to understand how the relationships in this study apply across different cultural contexts. Also, understanding consumers' behaviour in terms of retail branded apps in a contextual setting

could be an interesting topic for future research. For example, understanding the contextual usage of retail branded apps such as investigating consumers' continuous usage of branded apps while making a comparison between usage at home, work and on the go may be an area of interest.

This research was conducted on traditional retailers who engage with consumers through multiple shopping channels (e.g. physical stores, websites and branded mobile apps). Therefore, investigating whether the findings of this research extend to retailers who only operate through e-commerce shopping channels (e.g. websites and branded mobile apps) could help in understanding the nature of consumer behaviour within m-commerce with regard to retailers who only provide online shopping channels and traditional retailers who provide online and offline shopping channels.

10.5 Conclusion

This research proposes a theoretical framework to enhance our understanding of consumers' continued usage of mobile applications and m-commerce, as the literature and industry research highlight the importance of understanding the low retention rates among consumers of branded mobile apps. The research aimed to understand the key variables motivating consumers to continue using branded apps in the multi-channel retail context through utilising theoretical knowledge by drawing upon the ECM-IT. It is worth noting that the ECM-IT initially integrated theoretical knowledge from the IS and the consumer behaviour research discipline. Inspired by the ECM-IT, the current research enhances our theoretical understanding by also utilising knowledge from IS and consumer behaviour research.

The research shows that consumers' continuous usage of traditional smartphone branded apps is influenced by utilitarian variables and the hedonic variable of enjoyment, in addition to brand related variables that are unrelated to the technical characteristics of the branded app performance. The research also enhances our understanding by demonstrating how the utilitarian and hedonic variables influence consumers' satisfaction with branded app user experience and consumers' intention to continue to use traditional retail smartphone branded apps. Furthermore, the research has showcased that in a multi-channel retail environment, the consumer's view of the long-term brand reputation and the consumer's loyalty intention toward the traditional retailer are important in motivating the consumer to continue to use and retain branded apps. Therefore, the research enhances our understanding of the role of consumers'

long-term brand reputation in influencing consumers' intention to continue to use retail branded apps. The research also demonstrates the effects of consumers' satisfaction with branded app user experience, on consumers' loyalty intention toward the traditional retailer, which in turn, motivates consumers to continue using branded mobile apps. Therefore, this research encourages future research to integrate variables from consumer behaviour research that are not necessarily related to the technical characteristics of technology. In summary, the research has provided a theoretical framework integrating knowledge from the IS literature with knowledge from the consumer behaviour literature to enhance our understanding of consumers' continuous usage of branded mobile apps, in the context of retailing.

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Appendices

Appendix I Sample In-Depth Interview Participant Information Sheet

Research Title

Mobile Devices in Enhancing Service Delivery

Invitation

You are being invited to take part in a research study investigating consumers' thoughts, expectations and experiences of brick-and-mortar retail brands, and the relation of these thoughts, expectations and experiences on the adoption, use and retention/non-retention of promotional branded smartphone mobile applications regarding these brands.

Khalid AL-Nabhani who is a Ph.D. Student at the University of Strathclyde, will be conducting this research.

Research procedure

In this study, you are invited to participate in one-on-one in-depth interview with the researcher. During the interview, you will be voluntarily asked by the researcher to discuss and express your thoughts, expectation and experiences with regard to brick-and-mortar brands from the retail industry that you consume, and your thoughts, expectations and feelings before and after using smartphone mobile applications from these brands.

The interview will also discuss your experiences with promotional branded smartphone mobile applications that you have adopted, retained or no longer retained from the brick-and-mortar retail industry. In addition, the interview will discuss the functionality (e.g. ease of use and usefulness), feelings (e.g. enjoyment) and social influence (e.g. if you were influenced by members you value in your social group to use such apps) with regard to the brick-and-mortar promotional branded mobile applications from the retail industry that are used by you.

Time Commitment and Location

The study will be in the form of one-on-one in-depth interview, and shall not exceed 60 minutes time duration.

The primary location of the interview will be Strathclyde University during business hours. If the interview could not be conducted at the university, the researcher will organise a meeting room at Taylor and McKenzie Marketing Research LTD facility to conduct the interviews.

Participants' Rights

The participation in this research is voluntary. Therefore, participants in this research reserve the right to stop being a part of this research study at any time without explanation. The participants also hold the right to refuse answering any questions.

Participants have the right to ask questions involving the procedure of the research, as long as the questions do not interfere with the research outcome. If you have any questions regarding

the procedure of the research, please ask the researcher and make sure your questions are answered before the research begins.

Benefits and Risks

There are no known benefits or risks for participating in this research study.

Reimbursement

Your participation in this research study is voluntary. In addition, you will receive £30 pounds cash payment for your time and participation in this research study.

Confidentiality

Any data collected do not contain any personal information. The researcher will assign a participant number and a code to each participant in order to ensure that the information given by participants remains confidential and not linked to any names, phone numbers or email addresses.

For Further Information

If you require any further information please contact:

Khalid AL-Nabhani
Ph.D. Student
Marketing Department
University of Strathclyde

Please note: If you want to find out about the final results of this research study once it is completed, please contact Khalid AL-Nabhani at the following email address: khalid.al-nabhani@strath.ac.uk.

Appendix II
Sample In-Depth Interview Participant Consent Form

Researcher	Strathclyde University – Khalid Al-Nabhani
Date	
Time	
Incentive	

Research Topic: Mobile Devices in Enhancing Service Delivery.

This research has been conducted under The Market Research Society Code of Conduct and comments made will not be attributed to any individual.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
3. I understand that signing this form gives all rights to the audio recordings and the smartphone home screenshots to the named researcher, which may be used for the research study above and as a part of any presentation corresponding to the research.
4. I understand that my name will not appear in any reports, articles or presentations.
5. I agree to take part in the above study, and I confirm that I have received the participation (incentive) listed above.

Thank you for your time and participation.

Name	Signature

Appendix III

Sample In-depth Interview Discussion Guide

1) Introduction

- a. Introduce yourself to the interviewee
- b. Explain the purpose of the Interview
- c. Explain the nature and the purpose of the study
- d. Background of the Interviewee

2) Information about the Interviewee's Smartphone

- a. Type of smartphone
- b. Size of the screen
- c. Smartphone storage space (Note: does it prevent the interviewee from downloading more apps or content).
- d. How does the smartphone impact on daily life

3) Nature and usage of branded mobile apps

- a. The nature of other mobile apps that are used in general.
- b. Nature of brick-and-mortar “branded” mobile apps that are used.
- c. Most important brick-and-mortar branded mobile apps that are used.
- d. Organisation of mobile apps on the smartphone.
- e. Frequency of brick-and-mortar branded mobile apps usage.
- f. Reasons for downloading these branded mobile apps?
- g. Branded mobile apps that are downloaded, but not used frequently.
- h. Ask to take a look at the smartphone to explore the differences between retained branded mobile apps and how these apps are organised (e.g. screen location and placement).
- i. Differences between apps that are retained for a long time and the apps that are recently downloaded.

4) Situations of using branded mobile apps

- a. Situational usage of retained branded mobile apps.
- b. When are the branded mobile apps mostly used (e.g. home or outside of home)?
- c. When are branded mobile apps used in situations to pass time?
- d. What are the differences between consuming the service through a personal computer or branded mobile apps on your smartphone?

5) Brand Related Factors (note: there could be more than branded mobile app that the Interviewee uses)

- a. Which brands are most valued by Interviewee
- b. Describe what comes to mind when you think of the brand that is related to the branded mobile apps that you retain?
- c. Feelings that are experienced toward the brand.
- d. Previous experiences of using the brand?
- e. Commitment to the brand.
- f. Functional benefits from using the brand's products and services (e.g. prevent a potential problem, solve conflict, restructure a frustrating situation).
- g. Feelings that are generated from using the brand's products and services.
- h. Recall: before downloading the brand's mobile app, describe your expectations toward using the app?
- i. Describe your overall attitude toward the brand?

6) Technology utilitarian factors that lead to retaining branded mobile apps

- a. Importance of technology functional factors when retaining branded mobile apps for service delivery. Note: you can ask differences between the branded apps in terms of utilitarian factors.
 - i. Usefulness
 - ii. Ease of use
 - iii. Compatibility
 - iv. Other factors
- b. Where does satisfaction come from?

7) Technology hedonic factors that lead to retaining brand mobile apps

- a. Importance of technology hedonic factors when retaining branded mobile apps for service delivery. Note: you can ask differences between the branded apps in terms of hedonic factors.
 - i. Enjoyment
 - ii. Escapism
 - iii. Other factors
- b. Where does satisfaction come from?

8) Social influence in using branded mobile apps

- a. Any sort of influences to retain branded mobile apps because people that are important to the interviewee do?

- b. Direct introduction to any of the branded mobile apps that are retained by the interviewee from people that are important to him or her (e.g. Family members or close friends).
- c. Similarity of branded mobile apps that are retained by the interviewee and people that are important to him or her.
- d. Sharing experiences about branded mobile apps with others.
- e. Interviewee recommendation of any of the branded mobile apps retained to others.

9) Behavioural Intentions, and reasons that branded mobile apps are retained

- a. Reasons that cause the retention and intention to continue to use branded mobile apps.
- b. Reasons that may cause not retaining branded mobile apps.

10) Closing phase

- a. Check if you covered all areas needed
- b. Check if the interview would like to add any more information.
- c. Any questions.
- d. Thank the interviewee for participating.

Appendix IV

Sample Online Questionnaire



Thank you for agreeing to take part in this important survey. This survey measures factors that lead consumers to continue to use high-street branded smartphone apps for shopping (Purchasing from the app, searching for products, planning a purchase, or staying up to date with deals and offers).

Please note: your participation in this on-line survey this survey is anonymous. All data are treated as confidential and used for the purpose of this research only.

This Survey should take 10 to 15 minutes to complete. Be assured that all answers you provide will be kept in the strictest confidentiality. Please click 'Next' to begin.

Which of the following best describes the type of smartphone you use?

- Apple iPhone
- Android smartphone (e.g. Samsung, LG, HTC or similar)
- Windows smartphone
- Other

What is your gender?

- Male
- Female

What is your age?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Which of these best matches your level of education?

- High school or less
- Some further education
- Graduated from further education (College/ Diploma etc.)
- Graduated from further education (University)

Which of the following best describes your current occupation status?

- Working Full-time
- Working Part-time
- Student
- Looking for work
- Carer
- Retired
- Unemployed
- Other



Have you used any of the following branded high-street retail smartphone Apps for at least 6 month? (please select one)...

- John Lewis
- Marks and Spencer
- Next
- H&M
- Zara
- other

- No



How often do you use the John Lewis smartphone App?

- Never Less often Few times a year Once a year Few times a month Once a month Few times a week Once a week Daily
-

How often do you purchase from the John Lewis smartphone App?

- Never Less often Few times a year Once a year Few times a month Once a month Few times a week Once a week Daily
-

>>

Please rate the following statements relating to the John Lewis smartphone App...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Learning to use the app is easy for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it easy to get the app to do what I want it to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My interaction with the app is clear and understandable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the app to be flexible to interact with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to become skilful at using the app.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the app easy to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Using the app enables me to accomplish shopping tasks more quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using the app enhances my shopping performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using the app increases my shopping productivity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using the app enhances my shopping effectiveness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using the app would make it easier to shop.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the app to be useful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please select 'Strongly Disagree' for this option	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please rate the following statements relating to the John Lewis smartphone App...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Using the app is compatible with all aspects of my life and work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that using the app fits well with the way I like to live and work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using the app fits into my work-style.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I find using the app to be enjoyable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The actual process of using the app is pleasant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have fun using the app.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Shopping from the app "takes me away from it all".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping from the app makes me feel like I am in another world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get so involved when I shop from the app that I forget about anything else.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
It feels like the app is talking personally to me as a customer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me that the app feels like my personal area when I use it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The requirement to log into the app makes me feel recognized as a customer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please rate the following statements relating to the John Lewis smartphone App...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
People who influence my behaviour would think that I should use the app.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People who are important to me would think that I should use the app.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People whose opinions that I value would prefer that I use the app.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate your overall satisfaction of your experience with the John Lewis smartphone App...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am satisfied with the experience.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The experience is exactly what I need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The experience has worked out as well as I thought it would.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I plan to continue to use the app in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to continue to use the app in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I predict I would continue to use the app in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please rate the following statements relating the John Lewis brand...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
This brand is trustworthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This brand is reputable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This brand makes honest claims.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This brand has a sustainable image that is long lasting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the past, today and in the future, the values behind this brand are unlikely to change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate the following statements relating the John Lewis brand...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I encourage friends and relatives to shop with the brand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I say positive things about the brand to other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to shop the brand in the next few years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend the brand to someone who seeks my advice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which is your most preferred way to shop with John Lewis?

Going to the store.	Through the website.	through the app via a tablet.	through the app via the smartphone.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What do you mainly use the John Lewis app for?

Shopping.	Browsing.	Keeping up to date with the latest news.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What size of screen your smartphone have?

Large screen (Iphone 6+ or similar)	Midsize screen (Iphone 6 or similar)	Small size screen (Iphone 5 or similar)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please tell us in your own words why you have continued to keep using the smartphone app?

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Thank you for your participation.