

**CONSUMER ATTITUDE, SUBJECTIVE NORMS, PERCEIVED  
BEHAVIOURAL CONTROLS AND ADOPTION OF ONLINE SHOPPING IN  
KAMPALA CITY, UGANDA**

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES IN  
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE  
DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF MAKERERE  
UNIVERSITY**

**PLAN A**

**OCTOBER 2018**

## DECLARATION

I, Paul Mbabazi, do hereby declare that this dissertation is entirely my own composition and has not been submitted for any other research study for a degree or award in any other university before. All references made to works of other persons have been duly acknowledged.


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## APPROVAL


This dissertation has been submitted for examination with our approval as supervisors.

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## **ACKNOWLEDGEMENT**

First, I would like to express my heartfelt gratitude to my supervisors- Assoc. Prof. Joseph K. Ssewanyana and Dr. Samali V. Mlay, for their priceless guidance during the entire research process.

I also want to thank all my friends for their constant support and help in the data collection process

Finally, I would like to express my appreciation to my parents, my brothers, sisters and my wife who are always there to give me the inspiration to achieve more.

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## **LIST OF ABBREVIATIONS**

ICT	Information Communications Technology
PBC	Perceived Behavioural control
PEU	Perceived ease of use
PU	Perceived usefulness
SPSS	Statistical package for Social Scientists
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UCC	Uganda Communications Commission
UNCTAD	United Nations Conference on Trade and Development

## **ABSTRACT**

The purpose of this study was to investigate consumer adoption of online shopping in Uganda. The study adopted the Theory of Planned Behaviour to investigate the relationship between attitude, subjective norms, perceived behavioural controls and behavioural intention on consumer adoption of online shopping. To fulfil this purpose and test the various relationships, five research questions were developed based on the research model

The study followed a quantitative cross-sectional approach, and the data collection was made possible through a survey questionnaire targeting internet users in Kampala city, Uganda. A sample of 420 respondents was used of which 395 usable questionnaires were returned. Furthermore, the analysis of the data was done using SPSS 16 and Sobel's test. Descriptive analysis, Correlation, Linear Regression and Factor Analysis were run to describe the sample and answer the research questions.

The study found a strong positive and significant relationship between attitude and behavioural intention to shop online. A moderately positive relationship was also found between Perceived Behavioural Controls and intention to shop online. The relationship between Subjective norms and behavioural intention to shop online was also found to be significant. It was also found that a positively significant relationship exists between behavioural intention and consumer adoption of online shopping.

The paper adds to the existing literature by detangling the relationships between attitude, subjective norms, perceived behavioural controls and behavioural intention on consumer adoption of online shopping in Uganda. From the above findings, it was concluded that attitude is the most significant predictor of behavioural intention to adopt online shopping in Uganda, followed by perceived behavioural controls and Subjective norms; and intention has reasonable influence on the consumers' final decision to adopt online shopping.

## **Chapter 1: INTRODUCTION**

### **1.1 Background**

Across the world, the past years brought a continuation of the impressive growth of online purchases for consumer goods and services. Global sales increased more than 20% in 2014 to almost \$840 billion, as online retailers continued expanding and physical retailers entered new markets through making online sales (Hana, Mike & Parvaneh, 2015). There is no doubt that a significant global population is choosing to purchase various products online today. This has been attributed to positive trends in the supporting technology such as increasing smart phones and Internet penetration rates. However, this market is largely dominated by developed countries with less electronic trade happening in developing countries (UNCTAD, 2015).

In Uganda, traditional informal marketplaces and town shopping malls (known as brick and mortar market places) are still the preferred places for very many consumers wanting to make their purchases (“The future of e-business...”, 2015). According to NITA-U (2018) national IT survey report, only 1.7% of all individuals surveyed had ever made an online purchase. This is rather dismal compared to the United Kingdom where more than 60% of the total population has made an online purchase (UNCTAD, 2015).

Online shopping offers a consumer numerous benefits. These include access to a wider online market, convenient 24/7 shopping or listing of products for sale, easier search for goods and services using filter search box provided on shopping sites, and elimination of long queues common with brick and mortar establishments (Turban, King & Lang, 2012). Online retailers also achieve lower operating costs, customer responsiveness and a global

presence. However, these benefits of online shopping cannot be achieved unless consumers adopt the technology and begin using electronic means to make purchases.

The theory of reasoned action (Fishbein, 1967; Fishbein & Ajzen, 1975) is one of the most significant models in predicting human behaviour and behavioural dispositions. The theory proposed that a consumers' behaviour is influenced by behavioural intentions which, in turn, are affected by attitude towards the act and by subjective norms (Torben, Marie & Christina, 2012). The first component; attitude towards the act, is a function of the perceived consequences people associate with the behaviour. The second component, subjective norm, is a function of beliefs about the expectations of important referents, and one's motivation of complying with these referents. These referents may be superiors (e.g., parents, authority figures or teachers) or peers (e.g., friends or classmates) (Bhati, 2015; Taylor and Todd, 1995).

The model received a lot of support in early empirical studies of consumer behaviour and social psychology related literature (Sheppard, Hartwick, & Warshaw, 1988; Ajzen, 1991). It, however, has limitations in predicting behavioural intentions and behaviour when consumers do not have volitional control over their behaviour. The theory of planned behaviour was proposed to remedy these limitations. (Ajzen, 1991; Taylor & Todd, 1995).

The theory of planned behaviour proposes that in addition to attitude towards an act and subjective norms, perceived behavioural control (PBC) of the focal person in a decision-making situation may affect his/her behavioural intentions. Perceived behavioural control is more important in influencing a person's behavioural intention especially when the behaviour is not wholly under volitional control. For example, when purchasing a product online, consumers may need not only more resources (time, information, etc.), but also more self-confidence in making a proper decision. As a result, perceived behavioural control

becomes a salient factor in predicting a person's behavioural intention under this purchasing situation. This work has been widely tested in the developed world and supported to a large extent by various empirical studies such as Lin (2007), Grandón et al. (2011), Javadi et al (2012) and Bhatti (2015)

## **1.2 Statement of the Problem**

Although online shopping activity has been rapidly growing globally, consumer adoption of online shopping in Uganda has been observed to be low (Walugembe, Sebunya & Mubiru, 2015); even amongst the urban dwellers who have increased access to smartphones and internet services. This is observed in the Uganda national IT survey of 2017, where out of the 19.5% of urban dwellers who had access to the internet, only 2.9% had ever made an online purchase (NITA-U, 2018); showing a deficiency in the adoption of online shopping.

This could be attributed to poor consumer attitudes, perceived behavioural controls and no subjective norms. These are critical factors in the formation of one's intention to perform a given behaviour. However, these factors have not yet been tested in the online shopping situation of Uganda. Most studies related to online shopping have been carried out mainly in the developed countries, with little written in countries such as Uganda. This leaves a big knowledge gap. Coupled with growing global interest in online shopping, as well as Swinyard and Smith (2011) who argue that academic literature about online shopping has not yet reached mature development; justify a gap in the online shopping literature.



## **1.1 General Objective**

The main objective of this study was to investigate consumer adoption of online shopping in Uganda. Adopting the Theory of Planned Behaviour, the study investigated the relationship between attitude, subjective norms, perceived behavioural controls and behavioural intention on consumer adoption of online shopping Uganda.

## **1.2 Specific Objectives**

- i. To evaluate the relationship between attitude and behavioural intention to adopt online shopping in Uganda.
- ii. To examine the relationship between subjective norms and behavioural intention to adopt online shopping in Uganda.
- iii. To investigate the relationship between perceived behavioural controls and behavioural intention to adopt online shopping in Uganda.
- iv. To evaluate the relationship between behavioural intention and consumer adoption of online shopping in Uganda.
- v. To examine the mediating effect of behavioural intention on the relationship between attitude, subjective norm, perceived behavioural controls and consumer adoption of online shopping in Uganda

## **1.3 Specific questions**

- i. What is the relationship between attitude and behavioural intention to adopt online shopping in Uganda?
- ii. What is the relationship between subjective norms and behavioural intention to adopt online shopping in Uganda?
- iii. What is the relationship between perceived behavioural controls and behavioural intention to adopt online shopping in Uganda?

- iv. What is the relationship between behavioural intention and consumer adoption of online shopping in Uganda?
- v. What is the mediating effect of behavioural intention on the relationship between attitude, subjective norm, perceived behavioural controls and consumer adoption of online shopping in Uganda?

#### 1.4 Conceptual framework

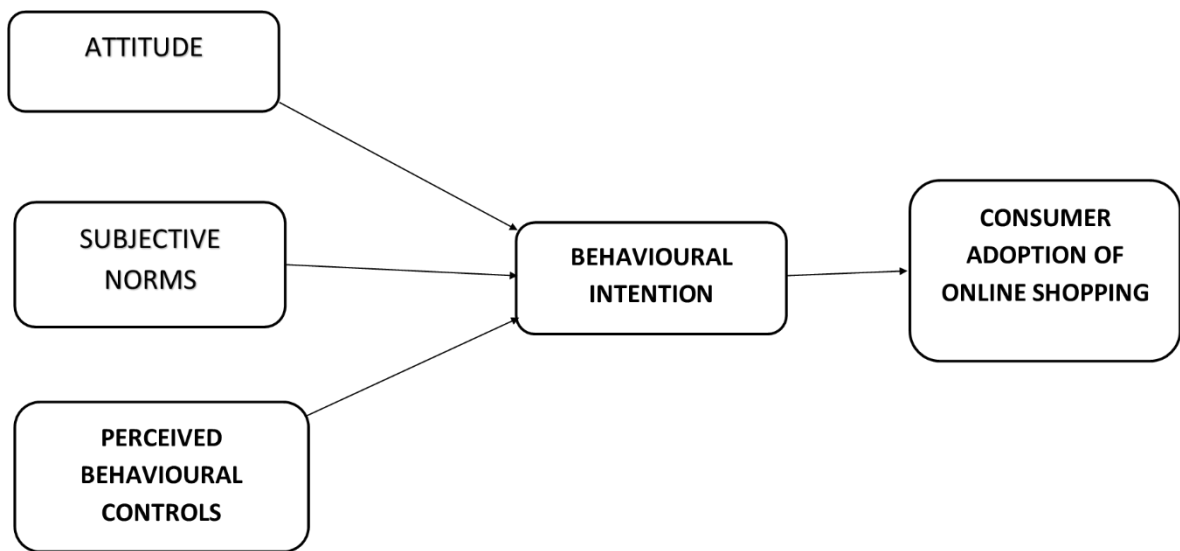


Figure 1: Adopted from Theory of Planned Behaviour (Ajzen, 2006)

Consumer attitude, Subjective norms and Perceived behavioural controls are the independent variables.

Behavioural intention is the mediating variable and Consumer adoption of online shopping is the Dependent variable.

Positive consumer attitude, strong subjective norms and greater perceived behavioural controls lead to behavioural intention to adopt online shopping. Behavioural intention leads to actual adoption of online shopping.

### **1.5 Scope of the study**

The study focused on examining the relationship between consumer attitude, subjective norms, perceived behavioural controls and adoption of online shopping for purchase of common consumer goods. The study also targeted competent Internet users in Kampala city, Uganda, before 2018.

### **1.6 Significance of the study**

This study aims to inform marketers, salespersons and business decision makers on the behavioural factors influencing consumer adoption of online shopping. It also provides valuable insights on the relationship between attitude, subjective norms, perceived behavioural controls and consumer adoption behaviour of online shopping.

The government will benefit from this study by getting insights into the behavioural factors influencing consumer decisions regarding online shopping, which ultimately impacts trade and tax revenue. This also helps in formulating laws and policies to regulate online shopping; maximize benefits to society and safeguard the interests of consumers.

For scholars and academic researchers, this study forms a basis upon which future research on online shopping may be established. The findings may be resourceful in providing viable information to academicians, researchers and consumers on the behavioural factors related to online shopping in Uganda.

### **1.7 Rationale of the study**

Globally e-commerce has emerged as the modern way of doing business which seeks to enhance both the traders' and consumers' ways of doing business. With lots of people and businesses getting online around the world, each of them represents a possible customer or

supplier of goods and services (Hana, 2014; Tang et al. 2012). E-commerce has enormous potential.

In Uganda, several international players (such as Jumia, OLX, Kaymu, Cheki) have opened shop and many local businesses are quickly joining in (“The future of e-business...”, 2015). The biggest challenge is how to position themselves in the market and motivate more people to embrace online shopping. These players need to come up with business models and strategies that are unique and customised to the Ugandan population.

Limited literature and statistics about online shopping in Uganda offer further motivation for this study. It is very important that for any business seeking to open shop or venture in new markets to have good information about the customer’s needs, nature and factors influencing their consumption decision. This necessitates the study on the various relationships between the factors influencing consumer adoption of online shopping services in Uganda.

## **Chapter 2: LITERATURE REVIEW**

### **2.1 Introduction**

Online shopping in Uganda is a nascent industry, but one with plenty of room for growth. Some Ugandans especially in the urban centres are increasingly engaging in online shopping activities (“The future of e-business...”, 2015). However, Walugembe, Sebunya & Mubiru (2015) postulate that though growing in number, not many Ugandan consumers have adopted online shopping compared to their counterparts in the developed world.

### **2.2 Review of Existing Theories**

Various theories and models have been advanced to explain consumer behaviour such as adoption of online shopping. These include the Theory of Reasoned Action (TRA) (Ajzen, 1975), the Theory of Planned Behaviour (TPB) (Ajzen, 1991), and Technology Acceptance Model (TAM) (Davis, 1989)

The Theory of Reasoned Action (TRA) first introduced by Ajzen and Fishbein in 1967, suggests that a person’s behaviour is determined by their own intention to perform such behaviour and that this intention is a function of their attitude towards the behaviour and their subjective norms (social influence). According to Ajzen, (1975), the theory assumes that most human social behaviour is under own volition and can be predicted from intentions. This theory assumes that the individual takes into consideration the consequences of their behaviour before they do it. As a result, the intention is the most important factor in determining the change of behaviour, which will evolve according to the individual expectations about a positive or negative impression of society. Therefore, the intentions of someone take a form commensurate with the community, and this is essential in the implementation of such behaviour or any changes later.

The Theory of Planned Behaviour (TPB) developed by Ajzen, (1985; 1991) is an extension of the TRA. According to this theory, human behaviour is guided by three kinds of considerations: beliefs about the likely outcomes of the behaviour and the evaluations of these outcomes (behavioural beliefs), beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), beliefs about the presence of factors that may facilitate or impede performance of the behaviour and the perceived power of these factors (control beliefs). In their respective aggregates, behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour; normative beliefs result in perceived social pressure or subjective norms; and control beliefs give rise to perceived behavioural control. In combination, one's attitude toward the behaviour, the subjective norm, and the perception of behavioural control lead to the formation of a behavioural intention.

It is worth noting that, according to Ajzen (1991), the more favourable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person's intention to perform the behaviour in question. Ultimately, given enough degree of actual control over the behaviour, people are expected to carry out their intentions when the opportunity arises. Intention is thus assumed to be the immediate antecedent of behaviour. However, because much behaviour poses difficulties of execution that may limit volitional control, it is useful to consider perceived behavioural control in addition to intention. To the extent that perceived behavioural control complies with reality, it can serve as a proxy for actual control and contribute to the prediction of the behaviour in question (Ajzen, 2006).

The main difference between TRA and TPB is the addition of a third factor determining behavioural intention, perceived behavioural control. Perceived behavioural control is determined by two factors: control beliefs and perceived power. Perceived behavioural control indicates that a person's motivation is influenced by how difficult the behaviours are

perceived to be, as well as the perception of how successfully the individual can, or cannot, perform the activity. If a person holds strong control beliefs about the existence of factors that will facilitate behaviour, then the individual will have high perceived control over their behaviour. Conversely, the person will have a low perception of control if they hold strong control beliefs that impede their behaviour. This perception can reflect past experiences, the anticipation of upcoming circumstances and the attitude of the influential norms that surround the individual

The Technology Acceptance Model (TAM) (Davis, 1989) is also an adaptation of TRA, specifically tailored for modelling user acceptance of Information System. The goal of TAM is to provide a general explanation of the determinants of technology acceptance. Like TRA, TAM postulates that technology usage is determined by behavioural intention and posits that two beliefs; perceived usefulness (PU) and perceived ease of use (PEU), are of primary relevance for computer-acceptance behaviour. Perceived usefulness is defined as the prospective user's subjective probability that using a specific application system will increase their job performance. Perceived ease of use refers to the degree to which a prospective user expects the target system to be free from effort (Davis, 1989)

Two other constructs in TAM are attitude towards use and behavioural intention towards use. The attitude towards use is the user's evaluation of the desirability of employing a particular Information System application. Behavioural intention is a measure of the likelihood a person will employ the application (Ajzen, 1980)

A limitation of TAM is that it assumes usage is volitional, that is, there are no barriers that would prevent an individual from using an Information System if he or she chose to do so. However, there are many factors preventing a person from using an application such as perceived user resources and perceived behaviour control (Ajzen, 2002)

From the above discussion, the TPB which suggest the relationship between attitude, subjective norms, perceived behavioural controls and consumer behaviour was selected as the focal theory for this study. This is because of its improved predictive power and its good empirical background (Herrero Crespo & Rodriguez del Bosque, 2010).

### **2.3 The relationship between attitude and behavioural intention to adopt online shopping**

Various researchers have used both a positive or negative evaluation of performing a given behaviour to define and assess attitude towards that behaviour (Al-azzam, 2014). Similarly; Lee, Cheung, Lim (2011) defined attitude as a person's positive or negative evaluations, feelings, and action tendencies towards some object or idea over a period of time. Regarding this study's focal behaviour, attitude toward adopting online shopping is defined as the consumer's evaluation of the desirability of using electronic means to get information and purchase products from an online vendor (Maditinos, Sarigiannidis, Dimitriadis, 2009.)

Attitude has been proposed to influence behavioural intentions in multiple theories, such as the TPB (Ajzen, 1991) and the TRA (Fishbein and Ajzen, 1975). These theories are appropriate for predicting adoption behaviour as well as actual behaviour. This relationship has further received substantial empirical support (Pavlov, 2006). Previous research has revealed attitude towards online shopping is a significant predictor of intention to make online purchases and actual purchasing behaviour (Javadi et al, 2012; Yang et al., 2007). For example, Flink (2009) indicated that attitude towards internet shopping was positively related to internet purchasing intention. The positive attitude towards internet purchasing considerably increased intention to use the internet for shopping. Furthermore, Nasri and Charfedding (2012) also found a positive relationship between attitude toward online purchase intention and actual online purchasing behaviour.



To understand the relationship between attitude and intention to perform or actual performance of a given behaviour, several studies have examined approaches to decomposing attitudinal beliefs (Lin, 2007). Taylor & Todd (1995) proposed decomposing attitudinal beliefs into three constructs of relative advantage, complexity and compatibility. Lin (2007) considers relative advantage to be similar to “perceived usefulness” and complexity similar (although in an opposite direction) to “perceived ease of use” in TAM. However, Ajzen & Fishbein (1991) propose the use of evaluative adjectives (e.g. *good – bad*) to measure one’s attitude towards a given behaviour. They also suggest the use of instrumental items (whether the behaviour achieves something e.g. *useful–worthless*) and experiential items (how it feels to perform the behaviour e.g. *pleasant – unpleasant*)

Accordingly, in the context of adoption of online shopping, this study equally adopts the use of evaluative adjectives, instrumental items and experiential items to evaluate relationship between attitude and behavioural intention to adopt online shopping

#### **2.4 The relationship between subjective norms and behavioural intention to adopt online shopping**

A consumer’s subjective norm is determined by his or her perception that salient social referents think he/she should or should not perform a particular behaviour (Ajzen and Fishbein, 1980.) It captures the consumers’ perceptions of the influence of significant others (Javadi et al, 2012). The referents may be superiors (e.g., parents, authority figures or teachers) or peers (e.g., friends or classmates) (Bhati, 2015: Taylor and Todd, 1995). They further suggest that a person is motivated to comply with the referents even if he/she does not personally favour the behaviour.

According to Javadi et al (2012) people often act based on their perception of what others think they should be doing. On the other hand, Bhati (2015) suggests that an individual tends

to conform to the expectations of others to strengthen relationships with group members or to avoid a punishment. However, both researchers agree that Subjective norms tend to be more influential for potential users who intend to do something for the first time - with no prior experience; since they are more likely to rely on the reactions of others in forming their intentions.

Although some research literature shows support for the role of subjective norm on consumer's behaviour intention, some studies such as Lin (2007) have found this relationship to be insignificant. Lin (2007) found the influence of subjective norms on behavioural intentions to be insignificant; and attributed it to the fact that all sample respondents had online shopping experience, thus reducing the reliance of potential customers on their friends, family, or colleagues for information regarding online shopping. Similarly, Pavlov *et al* (2006) also found the relationship insignificant but instead related it to not including external influences in their study.

Previous studies have suggested the decomposition of subjective norm into two dimensions: interpersonal influence (social influence) and external influence (societal norm) (Hsu and Chiu, 2004; Lin, 2007). Interpersonal influence refers to word-of-mouth influence by friends, family, colleagues, while external influence is related to mass media reports, experts' opinions and other important referents. As such, this study shall also adopt evaluating the influence of subjective norms on consumer adoption of online shopping by also studying its two dimensions of interpersonal influence (social influence) and external influence (societal norm).

## **2.5 The relationship between perceived behavioural controls and behavioural intention to adopt online shopping**

According to the theory of planned behaviour, perceived behavioural control is defined as individual perceptions of how easy or difficult it is to perform a specific behaviour (Bhati, 2015; Pavlov 2007). It is the people's perceptions of their ability to perform a given behaviour (Ajzen, 2006). It reflects perceptions of internal constraints as well as external constraints on consumer behaviour (Javadi et al, 2012).

A significant body of research in psychology and consumer behaviour has highlighted the importance of perceived behavioural controls on consumer intention to adopt online shopping (Bhati, 2015). For example, Mahammed et al., 2012 found that the Planned Behavioural Control (PBC) directly affects online shopping intention and has a strong relationship with actual Internet purchasing. Previous work further indicates that PBC influences behavioural intention in a virtual environment (Lin, 2006), influences intention to purchase in an online environment (Lee & Chen 2010), and positively affects one's intention to use online banking (Yaghoubi & Bahmani, 2010).

Ajzen (1991) decomposed the PBC component into two dimensions: self-efficacy and facilitating conditions. According to Pavlov (2006), Self-efficacy is defined as a person's judgment of her own capabilities to successfully undertake behaviour; in the context of online shopping adoption it refers to consumer's self-assessment of his or her capabilities to get product information and purchase products online. The second dimension, facilitating conditions (Controllability), is concerned with external resource constrains that may influence on engaging a particular behaviour, such as time, money and technology. In the context of online shopping adoption, the issue of technology constrains is related to the availability of supporting internet equipment and resources (Ajzen 2002; Pavlov, 2006).

Therefore, this study shall also adopt evaluating the influence of perceived behavioural controls on consumer adoption of online shopping by also studying its two dimensions of self-efficacy and facilitating conditions.

## **2.6 The relationship between behavioural intention and consumer adoption of online shopping**

Ajzen (1991) suggested that intentions are presumed to be an indicator of the extent to which people are willing to approach certain behaviour and how many attempts they are trying to perform that behaviour (Yi Jin Lim *et al* ,2016). According to He et al. (2008), lack of intention to purchase online is the main obstacle in the development of electronic commerce. Fishbein and Ajzen (1975) further emphasise that behavioural intention is the best predictor of one's actual behaviour. However, if the behaviour is to be understood, the factors behind the intentions to perform are of great essence. Based on Theory of Planned Behaviour the underlying factors behind any behavioural intention are attitude, subjective norms and perceived behavioural control.

According to Ajzen (2002) intentions are perceived as being correlated to the immediate behaviour of interest. A consumer often intends to perform a behaviour if the beliefs about the action are evaluated positively and if people in their surroundings thinks that the action should be done. This indicates that positive attitude and strong subjective norms have a positive influence on consumer intention of performing a behaviour (Ajzen & Fishbein, 1980)

The theory of planned behaviour (TPB) applied on Thai consumers found out that the intention to shop online was most influenced by perceived behavioural control, subjective norm and the sum of the attitude from the people surrounding them (Orapin, 2009). The study further found that Consumers' purchase intention strongly predicted actual online

shopping behaviour. Similarly, favourable behavioural intention had a positive impact on the actual usage of e-shopping (e.g., Chen et al. 2002; and Limayem et al., 2000). Favourable intention to use the internet for information gathering was also found to positively influence consumers' online shopping intention (Shim et al., 2001).

Although intention has been determined as a salient predictor of actual behaviour to shop online (He et al., 2008; Orapin, 2009; Pavlou & Fygenson, 2006; Roca et al., 2009), other studies suggest otherwise. For example, Kim & Jones (2009) acknowledge that purchase intention does not always translate into purchase action. Based on Technology Acceptance Model (TAM), perceived ease of use and perceived usefulness determined the online shoppers' decision after online behavioural intention sink in (Hu et al., 2009); and as such influence the actual consumer adoption of online shopping.

## **Chapter 3: METHODOLOGY**

### **3.1 Introduction**

This chapter presents the methodology that was used in execution of the research. This chapter contains the research design, research scope (study population, sample size and selection), sampling techniques and procedure, data collection methods, instruments, analysis and measurement tools for the study.

### **3.2 Research design and method**

The research used a cross-sectional quantitative survey research design to examine the relationship between attitude, subjective norms and perceived behavioural controls, behavioural intention and consumer adoption of online shopping in Uganda. Cross-sectional studies are those in which data is gathered once, during a period of days, weeks or months. It is also designed to look at how things are at a particular time, without much focus on whether there is a history or trend.

Quantitative research involves the use of mathematical and statistical techniques to describe facts and relationships. Since the purpose of this study is to describe phenomena, there is need to use large representative samples, and ensure results can be generalised to the larger population within known limits of error. It is also clear that the nature of the data is numerical and need to be analysed by statistical analysis techniques, hence the quantitative approach.

### **3.3 Study area and Population**

The study was conducted within the geographical boundaries of Uganda. The central administrative area of Kampala City was considered because it has the largest resident

population with access to internet and developed information communication technology (ICT) infrastructure in Uganda.

Uganda had 13,023,114 (31.3% of the population) internet users as of March 2017 (UCC, as cited by Internet World Stats, 2017). It is however difficult to establish the exact number of Internet users in Kampala city. Most of the Internet users in Uganda are based in Kampala city due to the availability of facilitating conditions such as electricity, free wireless connectivity in some places among others. According to the Uganda Bureau of Statistics' national census report of 2014, Kampala had a daytime population of about two million people. From the above statistics, the study population was estimated by calculation at about 626,000 internet users; which is 31.3% of the Kampala city population.

### **3.4 Sample size**

In getting the sample size for consideration, the researcher was guided by the Krejcie and Morgan (1970) sample size table. Basing on the above study population of 626,000 people using the internet in Kampala; targeting a confidence level of 95% and Confidence interval of 5; a sample size of 420 respondents was used. The sampling unit was an individual internet user in Kampala.

### **3.5 Sampling technique**

The study used a non-probability sampling technique called Convenience sampling- where subjects were selected because of their convenient accessibility and proximity to the researcher. This approach was used because it was fast, easy and inexpensive as the subjects were readily available. The technique was also good as it allows the researcher to obtain basic data regarding the study without the complications of using a randomized sample. It is also worth noting that there was no available list of online consumers in Kampala which would make it possible to use probability sampling techniques.

### **3.6 Data Sources**

The sources of data were mainly primary. Primary data includes findings from the field survey explaining the views from the selected respondents. The primary source of data was appropriate because it would help to measure the relationship between the variables and the secondary sources will help the researcher to have a better understanding of the study. No secondary data was used in this study.

### **3.7 Data collection instrument**

A structured and standardized questionnaire distributed to several respondents was the main instrument used for collecting primary data. The research instrument was developed from questionnaires adapted from the works of Ajzen (2006); Lin (2007); Taylor & Todd (1995); Grandón et al. (2011); Javadi et al (2012) and Bhatti (2015). The instrument was designed with 21 items assessed by a five-point Likert scale and demographic variable with five items. The five-point Likert scale, which varied from ‘strongly agree’ (5) and ‘strongly disagree’ (1), was employed to evaluate the 21 items. The unit of analysis was an individual internet user in Kampala.

A pre-test was conducted with convenient sampling from the population to evaluate the respondents’ understanding of the questionnaire. The result of the pre-test showed the respondent’s comprehension of the questionnaires. This study was carried out using a survey approach, with a total of 420 questionnaires distributed to the respondents and 410 (97.6%) collected. This instrument was preferred because of its low cost since the population was large. It would also enable the researcher to collect data free from the bias of the researcher (Adams et al., 2007).



### 3.8 Factor Analysis

Factor analysis is a statistical data reduction and analysis technique that seeks to explain correlations or variability among multiple observed outcomes as the result of one unobserved variable or factor. In this study, factor analysis was used to refine the measurement scales by establishing that the items used in the questionnaire, very well tapped into the study variables. It was also important in confirming how the various items could be grouped together under a single study variable.

#### 3.8.1 KMO and Bartlett's Test

The KMO test was carried out to measure how the study data was suitable for factor analysis and the results are displayed in Table 1 below. The KMO Measure of Sampling Adequacy produced a measure of 0.800 [ $>0.5$ ], which shows that the sample taken from the total population under study is adequate. The Bartlett's test of Sphericity produced a Chi-Square ( $\chi^2$ ) of 3848.052 [ $>>500$ ] with a significance level of .000 [ $<<0.05$ ], which further confirms the adequacy of the sample. The results obtained from the Bartlett's test and KMO test also indicate the suitability of the application of factor analysis.

*Table 1: A table showing the KMO and Bartlett's Test results*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	3848.052
	Df	210
	Sig.	.000

#### 3.8.2 Common method bias test

Recent studies have stressed the potential problem of common method bias, which describes the measurement error that is compounded by the sociability of respondents who want to provide positive answers (Chang & Eden, 2010). Since all the variables were collected from

the same source, Harman's single-factor test was used to check for any common method bias (Harman, 1967).

*Table 2: A table showing the Total Variance Explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.785	27.547	27.547	5.785	27.547	27.547	3.984	18.972	18.972
2	2.846	13.553	41.100	2.846	13.553	41.100	3.162	15.058	34.030
3	1.908	9.087	50.187	1.908	9.087	50.187	2.463	11.728	45.757
4	1.561	7.432	57.619	1.561	7.432	57.619	2.219	10.565	56.322
5	1.472	7.007	64.626	1.472	7.007	64.626	1.744	8.304	64.626
6	.916	4.360	68.986						
7	.792	3.769	72.755						
8	.705	3.358	76.113						
9	.656	3.126	79.239						
10	.594	2.830	82.069						
11	.535	2.545	84.615						
12	.520	2.476	87.091						
13	.476	2.268	89.358						
14	.469	2.231	91.589						
15	.352	1.679	93.268						
16	.317	1.509	94.777						
17	.276	1.312	96.089						
18	.246	1.170	97.259						
19	.216	1.030	98.289						
20	.187	.890	99.179						
21	.172	.821	100.000						

Extraction Method: Principal Component Analysis.

All variables were entered into SPSS together. The test assumes that if all variables load on one factor accounting for all the variance or one factor accounts for a majority (more than 50 percent) of the variance, there is a high level of common method bias present.

Table 2 above shows the results of the Principal Component Analysis, showing the Total Variance Explained by the factors. Using factor analysis, five factors were found with Eigenvalues greater than 1.0. The variance explained by each individual component ranged between 7 percent and 28 percent of the total. These results provide evidence that common method variance is not a concern.

### 3.8.3 Factor Loadings

The results of the factor analysis are shown in the Table 3 below, which shows the rotated component matrix with the loadings that are extracted and considered relevant to the corresponding constructs. The cut-off for loadings was 0.5. The factor analysis shows that twenty-one variables loaded on five distinct factors, accounting for a total of 64.626% of the variance in the data. The Cronbach's alpha coefficients for the factors indicate good reliability values.

*Table 3: A table showing the Factor Loading- Rotated Component Matrix*

ITEMS	Component				
	1	2	3	4	5
AU1- I have previously shopped online					.892
AU2 - I often shop online					.895
BI1- I expect to shop online for consumer goods and services		.818			
BI2 - I intend to shop online for consumer goods and services		.878			
BI3 - I will shop online for consumer goods and services		.843			
BI4 - I want to shop online for consumer goods and services		.809			
AT1 - I feel using online shopping is a good idea.			.598		
AT2 - I feel using online shopping is a wise idea			.780		
AT3 - I feel using online shopping is a pleasant idea			.761		
AT4 - I feel using online shopping is a great idea			.806		
SN1 - I feel under social pressure to shop online				.637	
SN2 - Most people who are important to me think that I should shop online				.699	
SN3 - my family members opinion matters a lot to me in shopping online				.815	

SN4 - my friend's opinion is important to me while shopping online				.701	
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PBC1 - I am confident that I could be able to shop online if I wanted to	.597				
PBC2 - I can control my use of online shopping	.610				
PBC3 - I have the skills necessary for me to shop online.	.714				
PBC4 - I can get information about a product on the internet without anybody helping me	.842				
PBC5 - I am confident of shopping online even if no one is there to show me how to do it	.794				
PBC6 - I have the time to shop online	.715				
PBC7 - I have access to an internet enabled computer/ electronic device to use while shopping online	.748				
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.					

### 3.9 Quality assurance: Validity & Reliability of instrument

#### 3.9.1 Validity of data collection instrument

Validity tests help the researcher to establish whether the right indicators are being measured (Kimberlin & Winetrstein, 2008.) In this study, the researcher conducted both content and construct validity of the data collection instruments to determine the goodness of the measure. Construct validity was conducted to determine whether the instrument tapped the concepts as theorized. This was determined using correlation analysis and factor analysis done in SPSS to test whether the instrument would produce discriminate or convergent results. Content validity was tested by pre-testing questionnaires with a knowledgeable group of five experts in the electronic commerce field. Using averaging calculation method, a scale-level content validity index (S-CVI) of .9 was obtained

### 3.9.2 Reliability of data collection Instrument

To ensure reliability of the data collection instruments, stability and consistence tests were carried out. Stability test was done by administering the same set of questionnaires to a group of ten e-commerce experts before it was administered to the selected sample of respondents. Pre-testing the questionnaires was done with the targeted respondents. Consistence was tested using the inter-item consistence reliability test. Each of the constructs well exceeded the recommended Cronbach's alpha coefficient threshold of 0.70 as discussed below and the results shown in Table 1Table 4 to Table 8.

#### 3.9.2.1 Consumer Attitude Factor Analysis

All the Consumer attitude construct items loaded on one factor. Cronbach's alpha coefficient was 0.799. The percent variation explained was 62.817 percent. Table 7 below provides the results of the factor analysis for the Consumer attitude construct. A Consumer attitude variable was also calculated for each subject as the average of the items.

Table 4: A table showing results of the Consumer attitude construct factor analysis

Consumer attitude items	Loading
AT1 - I feel using online shopping is a good idea.	.772
AT2 - I feel using online shopping is a wise idea	.822
AT3 - I feel using online shopping is a pleasant idea	.729
AT4 - I feel using online shopping is a great idea	.843
Cronbach's Alpha Coefficient	.799
Eigenvalue	2.512
Variance Explained	62.817 %

#### 3.9.2.2 Subjective Norms construct factor analysis

All the Subjective Norms construct items loaded on one factor. Cronbach's alpha coefficient was 0.706. The percent variation explained was 53.171 percent. Table below provides the results of the factor analysis for the Subjective Norms construct. A Subjective Norms variable was calculated for each subject as the average of these items.

*Table 5: A table showing results of the Subjective Norms construct factor analysis*

Items	Loading
SN1 - I feel under social pressure to shop online	.631
SN2 - Most people who are important to me think that I should shop online	.737
SN3 - my family members opinion matters a lot to me in shopping online	.818
SN4 - my friend's opinion is important to me while shopping online	.719
Cronbach's Alpha Coefficient	.706
Eigenvalue	2.127
Variance Explained	53.171

### **3.9.2.3 Perceived Behavioural Control construct factor analysis**

All the Perceived Behavioural Control construct items loaded on one factor. Cronbach's alpha coefficient was 0.862. The percent variation explained was 54.896 percent. Table below provides the results of the factor analysis for the Perceived Behavioural Control construct. A Perceived Behavioural Control variable was calculated for each subject as the average of these items.

*Table 6: A table showing results of the Perceived Behavioural Control construct analysis*

Items	Loading
PBC1 - I am confident that I could be able to shop online if I wanted to	.651
PBC2 - I can control my use of online shopping	.633
PBC3 - I have the skills necessary for me to shop online.	.743
PBC4 - I can get information about a product on the internet without anybody helping me	.855
PBC5 - I am confident of shopping online even if no one is there to show me how to do it	.811
PBC6 - I have the time to shop online	.703
PBC7 - I have access to an internet enabled computer/ electronic device to use while shopping online	.763
Cronbach's alpha coefficient	.862
Eigenvalue	3.843
Variance Explained	54.896

### 3.9.2.4 Behavioural Intention construct factor analysis

All the Behavioural Intention construct items loaded on one factor. Cronbach's alpha coefficient was 0.890. The variation explained was 75.469percent. Table below provides the results of the factor analysis for the Behavioural Intention construct. A Behavioural Intention variable was calculated for each subject as the average of these items.

Table 7: A table showing results of the Behavioural Intention construct factor analysis

Items	Loading
BI1- I expect to shop online for consumer goods and services	.807
BI2 - I intend to shop online for consumer goods and services	.921
BI3 - I will shop online for consumer goods and services	.874
BI4 - I want to shop online for consumer goods and services	.868
Cronbach's alpha coefficient	.890
Eigenvalue	3.019
Variance Explained	75.469

### 3.9.2.5 Adoption of online Shopping construct factor analysis

All the Adoption of online shopping construct items loaded on one factor. Cronbach's alpha coefficient was 0.830. The variation explained was 85.834 percent. The Table below provides the results of the factor analysis for the Adoption of online Shopping construct. An Adoption of online Shopping variable was calculated for each subject as the average of these items.

Table 8: A table showing results of Adoption of online Shopping construct factor analysis

Item	Loading
AU1- I have previously shopped online	.926
AU2 - I often shop online	.926
Cronbach's alpha coefficient	.830
Eigenvalue	1.717
Variance Explained	85.834

### **3.10 Data analysis**

In this study, data analysis was done using quantitative methods and this took the form of tabulation and summarization of the data. Due to the nature of the study, quantitative data was analysed using computer package SPSS 16. Descriptive statistics were used to describe the data while, Correlation was used to measure and describe the strength and direction of the relationship between two variables. Regression analysis was also used to determine the degree and significance of the relationship between the variables.

### **3.11 Ethical issues**

- i. The researcher sought permission from relevant university authorities such as the Graduate research centre before conducting the research.
- ii. The research tool was coded to ensure confidentiality. The researcher ensured that the biography of the respondents was used for study purposes only. The researcher also stated in the preamble of the questionnaire that all information from the research would be highly protected from any misuse.
- iii. The researcher also sought voluntary participation for all respondents in the study. Steps were taken to ensure that no harm (whether physical or psychological) was caused to the respondents as a result of taking part in this study.



## **Chapter 4: PRESENTATION AND INTERPRETATION OF RESULTS**

### **4.1 Introduction**

The data processing started with extracting data from the questionnaire into an excel sheet before being imported to SPSS. This was done so that the data is easily screened for its purpose. The data processing and analysing program used for this research was SPSS 16, which is a well-known program used to compile, process and analyse data collected for research (IBM SPSS Statistics, 2015).

In order to analyse the demographic attributes of the respondents, a frequency analysis was conducted within SPSS. This computed the mean, median, mode and standard deviation of all responses, which enabled the researcher to obtain information such as the average age, income and the percentage of the respondents that were male or female.

To answer the research questions, several analytical steps were conducted. A frequency count, factor analysis and descriptive analysis were conducted. These were later followed by a correlation analysis and regression analysis to provide statistical proof of the relationships between variables.

### **4.2 Sample Characteristics**

The study was conducted in the divisions of Kampala, Uganda's capital City. It was conducted among people either found at their workplaces or public places using computers and those in possession of internet capable smart phones. The respondents were asked if they knew how to use the internet; and only those who answered to the affirmative were given the questionnaire.

A total of 410 responses were collected from the 420 questionnaires distributed using the convenience sampling method. Of the returned responses, only 395 were completed and

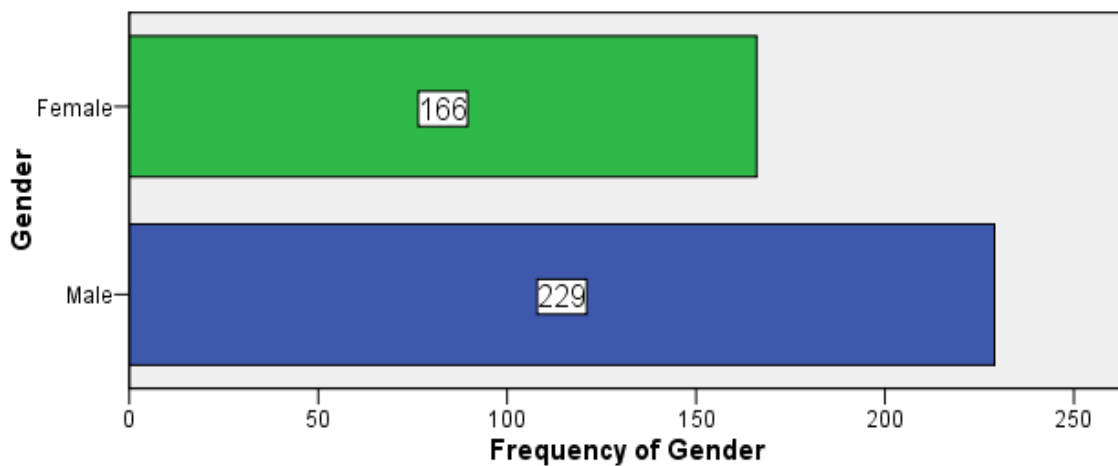
usable in the study, after eliminating 15 non-usable responses due to significant missing data. This resulted in a 94.04% useable response rate. The usable questionnaires were above the minimum sample size of 384, discussed in Chapter three. Therefore, the sample size was deemed acceptable for this study.

### 4.3 Demographics

#### 4.3.1 Gender

In this study, a higher distribution of gender is male representing 229 respondents (making 58%), while females answered 166 (making 42%). This suggests that there are more males who have internet access in Kampala city. The results are consistent with the findings of the Uganda national IT survey where by gender, more male individuals (15.8%) had used the Internet compared to female individuals (9.5%) (NITA-U, 2018)

Figure 2: A bar graph showing the number of respondents by gender



### 4.3.2 Age

The figures below show the findings about the respondents according to their age groups used in the study.

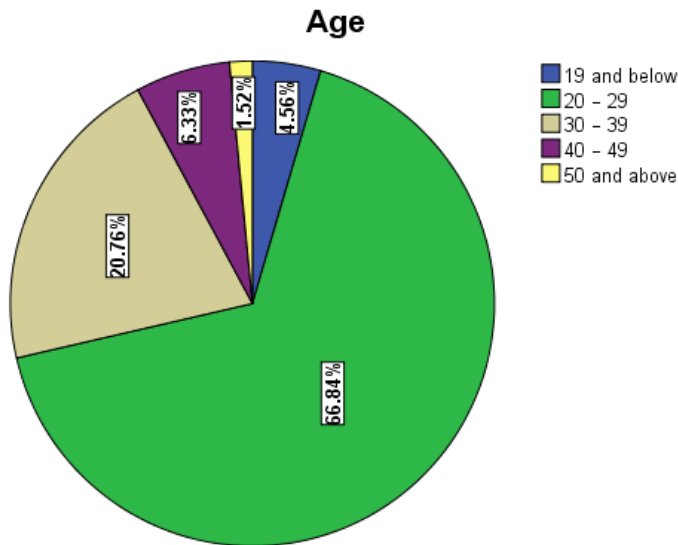


Figure 3: A Pie chart showing the frequency of age groups of the respondents

The findings show that most of the respondents were between the ages of 20-29 years (66.84%), while 20.76 % of the respondents are aged between 30-39 years. 6.33% percent of the respondents were of the age group 40-49 years, 1.52% for 50 and above, and 4.56% for 19 and below.

### 4.3.3 Marital status

The research also asked to the respondents to indicate the marital status.

Table 9: A table showing the frequency of the marital status of the respondents

	Frequency	Percent	Cumulative Percent
Single	269	68.1	68.1
Married	113	28.6	96.7
Divorced/Separated	6	1.5	98.2
Widowed	7	1.8	100.0
Total	395	100.0	

The results in the table above show that 68.1% of the respondents were singles while 28.6% were married. The rest are comprised of 1.8% for the widowed and 1.5% for the divorced / separated.

#### 4.3.4 Level of Education

The research tool requested the respondents to indicate their level of education and the results are shown below in the graph. Most of respondents have had an education at bachelor’s degree level responding 277 (70.1%) of the total sample; secondly by masters with 54 responses (13.7%) then diploma with 7.3 % or 29 respondents only.

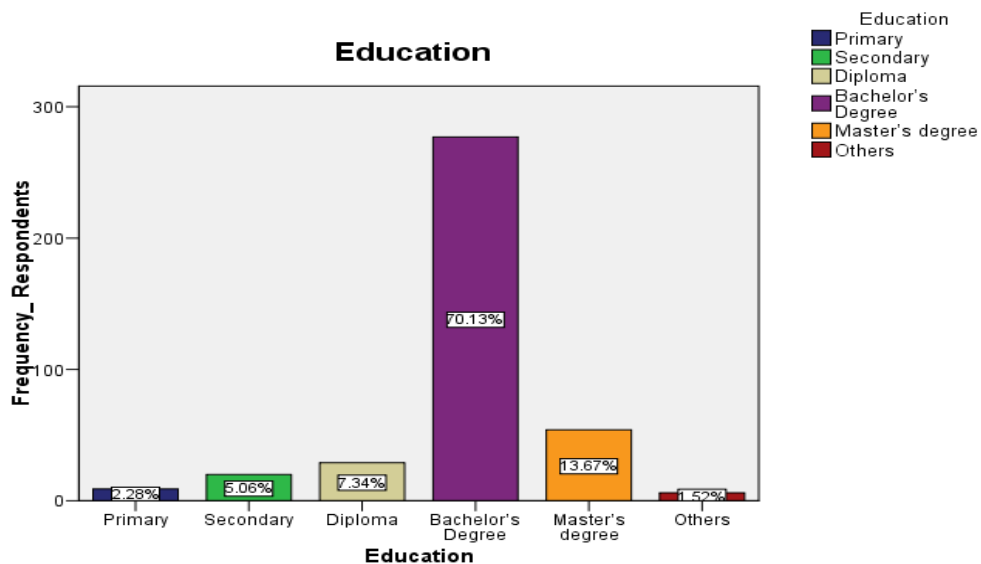


Figure 4: A bar graph showing the respondents education level

#### 4.3.5 Level of Net Monthly income

Results obtained for the level of monthly income show that 26.8 percent earn above UGX 1,600,000 while 22.8 percent earn between 400,000 and 800,000. Twenty two percent earn below 400,000 and the remaining 10.4 percent earn between 1,200,000 and 1,600,000

Table 10: A table showing the Level of Net Monthly income

		Frequency	Percent	Cumulative Percent
Valid	Below 400,000	87	22.0	22.0
	400,000-800,000	90	22.8	44.8
	800,001-1,200,000	71	18.0	62.8
	1,200,000 - 1,600,000	41	10.4	73.2
	Above 1,600,000	106	26.8	100.0
	Total	395	100.0	

#### 4.4 Descriptive Statistics

The results presented in Table 11 below are based on the statements tested within the factor analysis, which are based on the Theory of Planned Behaviour. The results are also based on the Likert Scale approach computed means from the empirical findings. If the mean value is close to 1 it indicates that most of the respondents have not agreed to the statement. If the mean is closer to a value of 3 it means that many of the respondents neither agree nor disagree and if the mean value is higher and closer to 5 it indicates that the respondents have agreed to the statement presented to them. All the statements are formulated in a positive way.

Table 11: A table showing the results of the Descriptive Statistics analysis

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Behavioural Intention	395	4	1	5	3.54	.980	.961
Behavioural Attitude	395	4	1	5	3.86	.934	.872
Subjective Norms	395	4	1	5	2.40	.899	.808
Perceived Behavioural Control	395	4	1	5	4.05	.832	.692
Adoption of online Shopping	395	4	1	5	3.06	1.367	1.869
Valid N (listwise)	395						

The respondents show that they generally have high intentions to shop online (mean = 3.54). The general attitude towards online shopping among respondents is fairly high (mean = 3.86). The respondents show that generally they do not agree to social pressure, family members and important referents influencing their decision to shop online. (Mean = 2.40) The respondents strongly agree that Perceived Behavioural Control generally are not limiting their ability to engage in online shopping (mean = 4.05).

#### 4.5 Correlation analysis

The Pearson's correlation was examined for investigating the relationship between the different study constructs and the results presented in Table 12 below. Although correlation does not imply causal relationship, it does identify statistical dependence and provides an initial test on how well the hypotheses are supported.

*Table 12: A table showing the correlation matrix for the various constructs*

	Consumer Attitude	Subjective Norms	Perceived Behavioural Control	Behavioural Intention
Subjective Norms	-.076	1		
	.130			
Perceived Behavioural Control	.366**	-.207**	1	
	.000	.000		
Behavioural Intention	.441**	.035	.284**	1
	.000	.494	.000	
Adoption of online Shopping	.261**	-.078	.249**	.231**
	.000	.122	.000	.000

Consumer Attitude is positively correlated to Behavioural intention, with a moderate coefficient of  $r = .441$ , which is significant at  $p < .01$ . Therefore, positive change in consumer attitude leads to a positive change in behavioural intention.

Subjective Norms is not significantly correlated to Behavioural intention. It has a correlation coefficient of  $r = .035$ ,  $P=.494$  which is not significant at  $p > .01$ . Therefore, change in subjective norms may have no effect in behavioural intention.

Perceived Behavioural Control is positively correlated to Behavioural intention, with a correlation coefficient of  $r = .284$ ,  $p=000$  which is significant at  $p < .01$ .

Behavioural intention is positively correlated to adoption of online shopping behaviour, with a coefficient of  $r = .231$ ,  $p=000$  which is significant at  $p < .01$ . Therefore, positive change in behavioural intention leads to a positive change in adoption of online Shopping.

#### 4.6 Model Testing / Regression analysis

##### 4.6.1 Regression analysis of Behavioural Intention

Multiple linear regression analysis was performed to test the relationships between Consumer attitude, Subjective norms, perceived behavioural variables and intention to shop online. The results of the multiple linear regression analysis are presented in the Table 13 below showing the R Square of 0.221 and a standard error of 0.868. This means that in this model 22.1% of the variance in intention to adopt online shopping is explained by the independent variables collectively.

*Table 13: A table showing results of the Model Summary for regression analysis on Behavioural Intention*

Mo del	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.471 <sup>a</sup>	.221	.215	.868	.221	37.059	3	391	.000

a. Predictors: (Constant), Perceived Behavioural Control, Subjective Norms, Consumer Attitude

b. Dependent Variable: Behavioural Intention

A further ANOVA test was carried out on the regression results in order to determine whether the association between the Behavioural Intention and the independent variables is statistically significant. An F value of 37.059 and a significance of 0.000 were generated from the ANOVA test. Thus, implying that there is a significant relationship between the independent variables and behavioural intention.

*Table 14: A table showing results for the ANOVA test for regression analysis on Behavioural Intention*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	83.800	3	27.933	37.059	.000a
	Residual	294.717	391	.754		
	Total	378.517	394			

a. Predictors: (Constant), Perceived Behavioural Control, Subjective Norms, Consumer Attitude

b. Dependent Variable: Behavioural Intention

Analysis was also done for the Regression Coefficients of the test results presented in Table 15.

*Table 15: A table showing the results of the regression analysis of Behavioural Intention*

Dependent Variable: Behavioural Intention								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.932	.294		3.170	.002		
	Consumer Attitude	.409	.050	.390	8.122	.000	.866	1.155
	Subjective Norms	.107	.050	.098	2.143	.033	.957	1.045
	Perceived Behavioural Control	.191	.058	.162	3.313	.001	.834	1.200

The t-values indicate that Consumer Attitude, subjective norms and perceived behavioural controls have statistically significant predictive capability; which implies that they exert a significant influence on the consumer's behavioural intention to adopt online shopping [t



$\geq 2$ ]. The regression coefficients also show that Consumer Attitude factor exerts the highest significant influence ( $B=.409$ ,  $t=8.122$ ,  $p=.000$ ) followed by perceived behavioural controls factor ( $B= .191$ ,  $t= 3.313$ ,  $p=.001$ ) and then subjective norms factor ( $B=.107$ ,  $t=2.143$ ,  $p=.033$ ). It should be noted that all variables have a significance value below 0.05.

For every increase in Consumer Attitude, behavioural intention increases by 40.9%; which is significant at  $p<.05$  (significance is .000).

For every increase in Subjective Norms, behavioural intention increases by 10.7%; which is significant at  $p<.05$  (significance is .033).

For every increase in Perceived Behavioural Control, behavioural intention increases by 19.1%; which is significant at  $p<.05$  (significance is .001).

Variance inflation factors (VIF) were examined for each of the independent variables in the model. All values were small ( $<4$ ) suggesting there is no problem with multicollinearity in the data.

#### **4.6.2 Regression analysis of Consumer adoption of online shopping**

##### **a. Regression analysis of Adoption of online Shopping on Behavioural intention**

Regression analysis was also performed to test the relationship between Behavioural intention and Adoption of online Shopping.

The results of the linear regression analysis are presented in the Table 16 below showing the R Square of 0.051 and a standard error of 1.332. This means that in this model, 5.3% of variances in adoption of online Shopping are explained by the behavioural intention to adopt online shopping.

Table 16: A table showing results of the Model Summary for regression analysis of Consumer adoption of online shopping

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.231 <sup>a</sup>	.053	.051	1.332	.053	22.152	1	393	.000

a. Predictors: (Constant), Behavioural Intention

b. Dependent Variable: Adoption

Table 17: A table showing results for the ANOVA test for regression analysis on consumer adoption of Online shopping

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.292	1	39.292	22.152	.000 <sup>a</sup>
	Residual	697.060	393	1.774		
	Total	736.352	394			

a. Predictors: (Constant), Behavioural Intention

b. Dependent Variable: Adoption

Table 18: A table showing the results of the regression analysis on consumer adoption of Online shopping

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.919	.251		7.635	.000					
	Behavioural Intention	.322	.068	.231	4.707	.000	.231	.231	.231	1.000	1.000

a. Dependent Variable: Adoption

The t-values indicate that behavioural intention ( $t=8.122$ ,  $p=.000$ ) has statistically significant predictive capability; which implies that it exerts a significant influence on the consumer's ability and decision to adopt online shopping [ $|t| \geq 2$ ]. The regression coefficient (beta) also shows that behavioural intention factor exerts a high significant influence. It should be noted that the significance value is below 0.05 and the VIF below 4; which are

acceptable values. For every increase in behavioural intention, adoption of online shopping increases by 32.2%; which is significant at  $p < .05$  (significance is .000).

**b. Hierarchical linear regression on Adoption of online Shopping with the Demographic variable in Block 1, Independent Variables in Block 2, and the mediator in Block 3.**

*Table 19: Model Summary for the hierarchical linear regression on Adoption of online Shopping with the Demographic variable in Block 1, Independent Variables in Block 2, and the mediator in Block 3.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.445 <sup>a</sup>	.198	.188	1.232	.198	19.254	5	389	.000
2	.480 <sup>b</sup>	.231	.215	1.212	.032	5.370	3	386	.001
3	.494 <sup>c</sup>	.244	.226	1.202	.014	6.887	1	385	.009

a. Predictors: (Constant), Income, Gender, Marital status, Education, Age

b. Predictors: (Constant), Income, Gender, Marital status, Education, Age, Subjective Norms, Behavioural Attitude, Perceived Behavioural Control

c. Predictors: (Constant), Income, Gender, Marital status, Education, Age, Subjective Norms, Behavioural Attitude, Perceived Behavioural Control, Behavioural Intention

*Table 20: A table showing the ANOVA for the hierarchical linear regression on Adoption of online Shopping with the Demographic variable in Block 1, Independent Variables in Block 2, and the mediator in Block 3*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.081	5	29.216	19.254	.000 <sup>a</sup>
	Residual	590.271	389	1.517		
	Total	736.352	394			
2	Regression	169.731	8	21.216	14.453	.000 <sup>b</sup>
	Residual	566.621	386	1.468		
	Total	736.352	394			
3	Regression	179.689	9	19.965	13.809	.000 <sup>c</sup>
	Residual	556.663	385	1.446		
	Total	736.352	394			

a. Predictors: (Constant), Income, Gender, Marital status, Education, Age

b. Predictors: (Constant), Income, Gender, Marital status, Education, Age, Subjective Norms, Behavioural Attitude, Perceived Behavioural Control

c. Predictors: (Constant), Income, Gender, Marital status, Education, Age, Subjective Norms, Behavioural Attitude, Perceived Behavioural Control, Behavioural Intention

d. Dependent Variable: Adoption of online Shopping

Table 21: A table showing the Coefficients for the hierarchical multiple regression of Adoption of online Shopping with the Demographic variable in Block 1, Independent Variables in Block 2, and the mediator in Block 3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.802	.387		7.250	.000
	Age	-.128	.107	-.068	-1.201	.230
	Gender	.078	.127	.028	.616	.538
	Marital status	-.077	.124	-.034	-.624	.533
	Education	-.203	.084	-.129	-2.403	.017
	Income	.455	.047	.503	9.592	.000
2	(Constant)	1.348	.564		2.390	.017
	Age	-.033	.108	-.018	-.307	.759
	Gender	.133	.126	.048	1.058	.291
	Marital status	-.122	.124	-.054	-.989	.323
	Education	-.200	.083	-.127	-2.405	.017
	Income	.388	.050	.430	7.774	.000
	Behavioural Attitude	.205	.072	.140	2.844	.005
	Subjective Norms	.000	.071	.000	.003	.997
	Perceived Behavioural Control	.151	.083	.092	1.821	.069
	3	(Constant)	1.112	.567		1.961
Age		-.029	.107	-.015	-.271	.786
Gender		.137	.125	.050	1.094	.274
Marital status		-.115	.123	-.051	-.939	.348
Education		-.189	.083	-.120	-2.281	.023
Income		.388	.050	.430	7.834	.000
Behavioural Attitude		.129	.077	.088	1.673	.095
Subjective Norms		-.020	.071	-.013	-.290	.772
Perceived Behavioural Control		.116	.083	.070	1.385	.167
Behavioural Intention		.184	.070	.132	2.624	.009

a. Dependent Variable: Adoption of online Shopping

From the results shown in Model 1 of *Table 19, Table 210 and Table 21* above; the demographic variables collectively accounted for significant variance in the Dependent Variable with an R Square of .198 and statistically significant F value of 19.254. This means that the demographic variables collectively explained 19.8 % of the variance in adoption of online shopping behaviour.

In Model 2, the Independent variables were introduced. The result was an R Square of .231 and a statistically significant F value of 14.453 . Compared to Model 1, there was a positive change in R Square of .032 implying that the Independent variables explain an additional 3.2% of the variance in adoption of online shopping and it is significant.

In Model 3, The Mediating variable was introduced. The result was an R square of .244 , F value of 13.809 with an R Square change of .014. This implies that the demographic variables, Independent variables and mediating variable collectively explain 24.2% of the variance in adoption behaviour of online shopping. The result further shows that the compared to Model 2, the Mediating variable explains an additional 1.4% of the variance in adoption of online shopping behaviour and it is significant.

It is also worth noting that after introducing the mediator in Model 3, the Standardized Regression Coefficient for the mediator variable (Behavioural Intention) was significant (beta= .132, p=.009). The coefficients for the Independent Variables - Consumer Attitude (beta=.147), Perceived Behavioural Control (beta=.151) and Subjective norms (beta= -.040) were reduced in value compared to the results obtained in Model 2. These results revealed that the influence of the independent variables on the dependent variable was mediated by behavioural intention. However, this mediation was partial since the values of the regression coefficients in block 3 did not reduce to zero.

### 4.6.3 Testing for mediation effect of Behavioral Intention

In this study, the mediating effect of Behavioural intention was evaluated using the procedure described by Jose (2013). This was done to test whether Behavioral Intention carries the influence of the independent variables (Consumer Attitude, Subjective Norms and Perceived Behavioral Control) to the dependent variable (Adoption of online Shopping). The test was achieved through three steps illustrated below;

#### Step 1: Predicting the mediator variable (MV)

The values for this purpose were extracted from the simple regression results of each Independent variable separately predicting Behavioural Intention. This gave the values of  $a$  and  $s_a$  where;

$a$  is the raw (unstandardized) regression coefficient for the association between IV and mediator.

$s_a$  is the standard error of  $a$

*Table 22 A table showing the summary of values for the regression analysis with the Independent Variables separately predicting the mediator variable*

Mediator Variable (MV)	Independent Variable (IV) - Predictor	Unstandardized Coefficients		Standardized Coefficients	Sig.	Part Correlation
		B ( $a$ )	Std. Error( $s_a$ )	Beta		
Behavioural Intention	Consumer Attitude	.463	.047	.441	.000	.441
Behavioural Intention	Subjective Norms	.038	.055	.035	.494	.035
Behavioural Intention	Perceived Behavioural Control	.335	.057	.284	.000	.284

#### Step 2: Predicting the Dependent variable

Regression was also done for each independent variable together with the mediator variable predicting Adoption of online Shopping. The results were summarised in table 23 below. The values of  $b$  and  $s_b$  also were extracted where;

$b$  is the raw coefficient for the association between the mediator and the DV (when each IV is also a predictor of the DV).

$s_b$  is the standard error of  $b$ .

*Table 23: A table showing the summary of values for the regression analysis of each Independent Variable together with the mediator variable predicting the dependent variable*

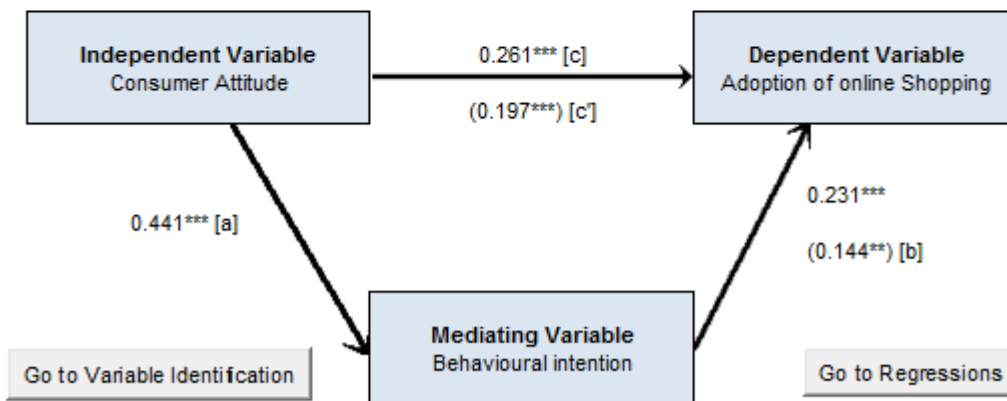
Dependent Variable	Predictor Variable(s)	Unstandardized Coefficients		Standardized Coefficients	Sig.	Part Correlation
		B ( $b$ )	Std. Error( $s_b$ )	Beta		
Adoption of online Shopping	Behavioural Intention	.201	.075	.144	.008	.129
	Consumer Attitude	.289	.079	.197	.000	.177
Adoption of online Shopping	Behavioural Intention	.326	.068	.234	.000	.234
	Subjective Norms	-.131	.074	-.086	.080	-.086
Adoption of online Shopping	Behavioural Intention	.243	.070	.174	.001	.167
	Perceived Behavioural Control	.327	.083	.199	.000	.191

### Step 3: Testing the Significance of the mediation effect

Testing for the significance of mediation was done by Sobel's test using MedGraph online computation programme. This was because the test is suitable for data of a large sample size (>200). To carry out the test, the values obtained above were entered into the MedGraph programme available at <https://psychology.victoria.ac.nz/medgraph>. The programme computes information concerning the significance of the mediation (Sobel's z-score and confidence interval), the effect size (both standardized and R2 estimates), and it displays the mediational triangle in graphical form. The results are shown below;

(i) *The effect of Consumer Attitude on Adoption of online Shopping through Behavioural intention*

Type of mediation	Significant	
Sobel z-value	2.58601	$p = 0.009709$
95% Symmetrical Confidence interval		
Lower	0.02253	
Higher	0.1636	
Unstandardized indirect effect		
a*b	0.09306	
se	0.03599	
Effective Size measures		
Standardised Coefficients		R <sup>2</sup> Measures (Variance)
Total:	0.261	0.067
Direct:	0.197	0.031
Indirect:	0.063	0.036
Indirect to Total ratio	0.243	0.538



**Note: The numerical values in parentheses are beta weights taken from the second regression and the other values are zero order correlations.**

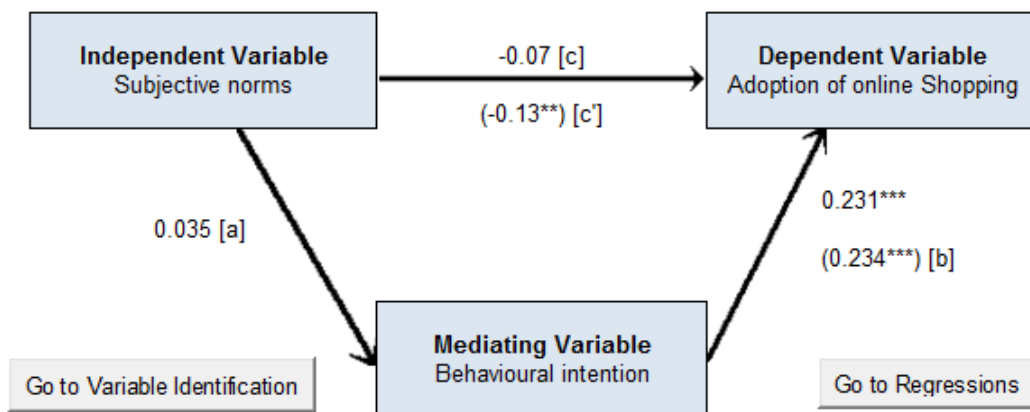
*Figure 5: A figure showing the MedGraph test results for the effect of Consumer Attitude on the Adoption of online Shopping through Behavioural intention*

The test for Consumer Attitude yielded a test statistic of 2.586 significant at  $p < .05$  ( $p = .009$ ). This indicates that the association between Consumer Attitude (IV) and Adoption of online shopping (the DV) is reduced significantly by the inclusion of Behavioural intention (the mediator) in the model; in other words, there is statistical evidence of mediation.



(ii) *Testing the effect of Subjective norms on Adoption of online Shopping through Behavioural intention*

Type of mediation	Null	
Sobel z-value	0.683844	$p = 0.494074$
<b>95% Symmetrical Confidence interval</b>		
Lower	-0.02312	
Higher	0.04789	
<b>Unstandardized indirect effect</b>		
a*b	0.01239	
se	0.01812	
<b>Effective Size measures</b>		
<u>Standardised Coefficients</u>		
Total:	-0.07	R <sup>2</sup> measures
Direct:	-0.13	
Indirect:	0.008	
Indirect to Total ratio	-0.1	



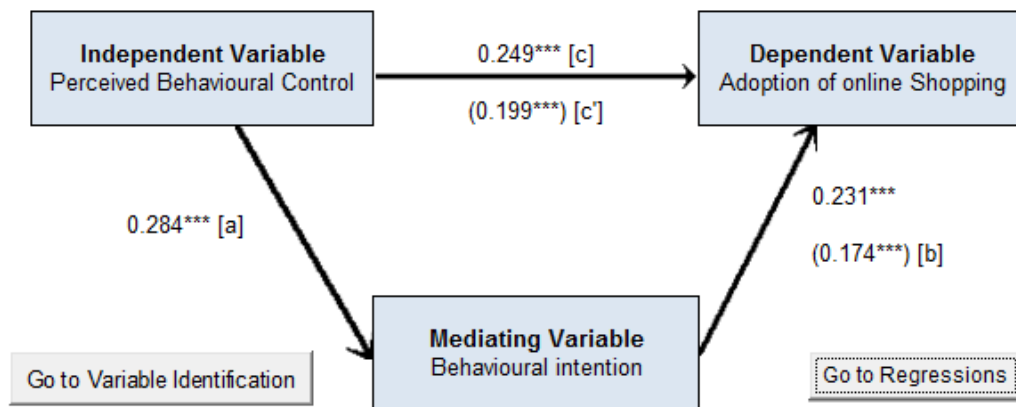
**Note: The numerical values in parentheses are beta weights taken from the second regression and the other values are zero order correlations.**

*Figure 6: A figure showing the test results for the indirect effect of Subjective norms on the Adoption of online Shopping through Behavioural intention*

The test statistic for the Sobel test was .683, with an associated p-value of .494. The fact that the observed p-value did not fall below the established alpha level of .05 indicates that the association between the Subjective norms (IV) and Adoption of online Shopping (DV) is not reduced significantly by the inclusion of Behavioural intention (the mediator) in the model. As such there is no statistically significant mediation observed.

(iii) *Testing the effect of Perceived Behavioural controls on Adoption of online Shopping through Behavioural intention*

<b>Type of mediation</b>	Significant	
<b>Sobel z-value</b>	2.98897	$p = 0.002799$
<b>95% Symmetrical Confidence interval</b>		
Lower	0.02802	
Higher	0.13479	
<b>Unstandardized indirect effect</b>		
a*b	0.08141	
se	0.02724	
<b>Effective Size measures</b>		
<u>Standardised Coefficients</u>		<u>R<sup>2</sup> Measures (Variance)</u>
Total:	0.249	0.061
Direct:	0.199	0.036
Indirect:	0.049	0.025
Indirect to Total ratio	0.198	0.408



**Note: The numerical values in parentheses are beta weights taken from the second regression and the other values are zero order correlations.**

*Figure 7: A figure showing the MedGraph test results for the effect of Perceived behavioural control on the Adoption of online Shopping through Behavioural intention*

The results of the test show a test statistic of 2.989, with an associated p-value of .002. The fact that the observed p-value falls below the established alpha level of .05 indicates that the association between the of Perceived behavioural control (IV) and Adoption of online Shopping (DV) is reduced significantly by the inclusion of Behavioural intention (the mediator) in the model. As such, there is statistical evidence of mediation.

## **Chapter 5: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Discussion of results**

#### **5.1.1 Introduction to discussion of results**

Online Shopping is one of the most rapidly growing modes of shopping capturing a double-digit share of the retail trade in recent years (Nielsen, 2017). Reasons for such growth seem to arise from its advantages such as convenience, the ability to be seen as a leisure activity, savings of time and effort, and its 24 hours a day and 7 days a week access. Although Internet buying has shown rapid growth, it has also been hampered by the real or perceived perceptions of consumers that it lacks privacy and security while also suffering from issues in product delivery and other behavioural factors.

This study was intended to examine the relationship between attitude, subjective norms, perceived behavioural controls and behavioural intention on consumer adoption of online shopping in Uganda. It was to test the applicability of the Theory of Planned Behaviour (TPB) to predict the intention to adopt online shopping among Ugandan consumers. The TPB has been extensively studied in the developed world, but relatively little research examines its propositions in a cultural setting of a developing country especially in Africa.

Uganda was chosen as the setting for this study due to its potential and noticeable growing consumer interest in adoption of online trading. In addition, the lack of research that centres on online shopping adoption in developing countries triggers the need to conduct research in this under-studied domain.

The proposed research questions were examined with a sample of 395 internet users in Kampala city. Through a series of regression and correlation analysis, various similarities

are found between the results of this study and previous research testing the TPB in the developed countries. However, also distinct differences emerge.

### **5.1.2 The relationship between Consumer attitude and Behavioural intention to adopt online shopping in Uganda**

The Theory of Planned Behaviour (TPB) suggests that a positive attitude towards online shopping positively influences intentions to shop online (Ajzen & Fishbein, 1980). Using direct measures of the TPB, the mean of the attitude statements is found to be positive (mean = 3.86), implying that the attitude of purchasing online within the respondents are positive.

The correlation matrix shows the value of  $r=0.441$  and  $p<0.01$ . This means that there is a significant, moderately strong positive correlation between Consumer Attitude and behavioural intention to shop online. The result implies that the respondents who intend to purchase items online have more positive attitude.

According to the multi linear regression analysis, the beta value for consumer attitude is .390; which is the highest beta values of all presented variables analysed in the process. This implies that positive attitude has a strong positive influence on intentions within online shopping. This influence is also of high significance in the model since  $p<.05$ . This relationship is in line with the underlying Theory of Planned Behaviour. The results from this analysis provide statistical proof that attitude positively influences online shopping intentions among consumers in Kampala city.

Generally, the consumer attitude construct was found to significantly relate to the intention to adopt online shopping by consumers in Uganda. Consumers who have a positive attitude towards adoption of online shopping also intend to shop online soon. This indicates that a

favourable assessment of online shopping by the individual would result in that individual intending to use it. These results from Uganda are consistent with previous research that establishes a positive relationship between attitude and the intention to online shopping (Lin, 2007) and to purchase from a Web vendor (Pavlou and Fygenon, 2006).

### **5.1.3 The relationship between subjective norms and Behavioural intention to adopt online shopping in Uganda**

Subjective norms refer to the social pressure that is put on an individual to perform certain behaviour. The TPB suggests that strong subjective norms have a positive influence on behavioural intentions within online shopping. However, the respondents in this study show that generally, to a small extent they agree to social pressure, family members and important referents influencing their decision to shop online.

Results from the correlation analysis show that  $r = .035$  and  $p = .494$ . This shows that there is no statistically significant correlation between subjective norms and behavioural intention to shop online since  $p > 0.01$ . The result implies that the respondents who intend to shop items online do not associate or consider subjective norms to be of significance to their decision.

However, the findings within the multi linear regression analysis indicate a significant positive influence of subjective norms on intentions to shop online ( $B = .107$ ,  $Beta = .098$ ,  $p = .033$ ). The Beta coefficient is  $.098$  indicates that subjective norms contributes 9.8% of the change in behavioural intention. The coefficient,  $B$  of  $0.107$  shows that for every increase in subjective norms, behavioural intention increases by 10.7% keeping other factors constant; which is significant at  $p < .05$ . When compared to others, it was found that

subjective norms had the lowest contribution towards Behavioural Intention at only 9.8%. This result supports the Theory of Planned Behaviour which posits a positive influence of subjective norm on intentions to shop online.

The results are consistent with the findings of David et al. (2012), Järveläinen (2007) and Khalifa and Limayem (2003) who found subjective norm an important factor influencing the online shopping behaviour. This means people in Kampala value opinion of others regarding online shopping. However, the findings are inconsistent with Lin (2007) and Tseng et al. (2011) who found that subjective norms have no significant effect on internet purchase intention. According to Tseng et al. (2011), subjective norms do not play an important role when internet shopping is still in the initial stage of adoption. They argued that, in the early stages, there was lack of enough references from prior adopters such as friends, peers and superiors in an adoption stage; and thus, it was reasonable that subjective norms became an insignificant factor for purchase intention

#### **5.1.4 The relationship between Perceived Behavioural Controls and Behavioural intention to adopt online shopping in Uganda**

The TPB postulates that Perceived behavioural control is positively related to intention to shop online. According to the mean of the perceived behavioural control construct items, the respondents strongly agree that Perceived Behavioural Control generally are not limiting their ability to engage in online shopping (mean = 4.05). This is a positive assessment of Perceived Behavioural Control construct.

The correlation matrix shows that there is a significant positive relationship between Perceived behavioural control and behavioural intention to shop online ( $r = .284, p = .000$ ).

The result implies that the respondents who intend to purchase items online have more positive assessment of Perceived behavioural controls.

Basing on the results from the multi linear regression analysis, there is statistically significant positive influence of perceived behavioural control on intentions to shop online. The significance level of this relationship is .001, which is less than .05 and therefore significant. The Beta coefficient is .162 which indicates that Perceived Behavioural Control contributes 16.2% of the change in behavioural intention and explains 19.1% of the increase in behavioural intention with every increase in Perceived Behavioural Control with other factors remaining constant. This is in line with the Theory of Planned Behaviour.

### **5.1.5 The relationship between Behavioural intention and Consumer adoption of online shopping in Uganda**

The mean of the intention statements is found to be positive (mean = 3.54), signifying that the intentions of purchasing groceries online within the respondents are positive. This would, based on theory, indicate that future behaviour would be positive as well (Fishbein & Ajzen, 1975). However, this assumption is something that cannot be stated with any statistical certainty, since future behaviour is not measured within this research. Instead our study measured past behaviour to evaluate consumer adoption of online shopping, to which a moderately positive mean was obtained (mean = 3.06).

According to the correlation analysis, there is a significant positive relationship between behavioural intention and consumer adoption of online shopping in Uganda ( $r = .258$ ,  $p = .000$ ). The result implies that the respondents who have previously engaged in online shopping have positive intention to shop online.

The regression analysis shows that there is a significant positive influence of behavioural intentions on consumer adoption of online shopping in Kampala. The significance level of this relationship is .000 and the beta coefficient is .231 which indicates that behavioural intentions contributes 23.1% of the change in adoption of online shopping. The results also show that every increase in behavioural intention explains 32.2% of the increase in adoption of online shopping with other factors remaining constant.

In general, the study found that the adoption of online shopping behaviour is in part affected by consumers' online shopping intention. It can be concluded that a higher online shopping intention results in a higher adoption of online shopping behaviour. This is in line with previous studies which found a positive relationship between behavioural intention and



actual adoption behaviour (Al-Jabari et al., 2012; Amoroso & Hunsinger 2009; Li & Huang, 2009; Lin, 2007; Turan, 2012)

### **5.1.6 The mediating effect of Behavioural intention on the relationship between Consumer attitude, Subjective norm, perceived Behavioural controls and Consumer adoption of online shopping in Uganda**

The results of the mediation test show that behavioural intention partially mediates the relationship between Consumer attitude and adoption of online shopping. As shown in Figure 5, this is confirmed by the test result of a large and significant Sobel z-value of 2.586 ( $p=.0097$ ) with a symmetric confidence interval of 95% (lower limit =0.02253, upper limit = 0.1636). The results further show that behavioural intention weakens the direct relationship between Consumer attitude and adoption of online shopping. The unstandardized indirect effect was:  $a*b = 0.09306$ ;  $SE = 0.03599$ . The direct effect was 0.197, the indirect effect was 0.063, and the indirect to total ratio was 0.243; implying that the indirect path from the Consumer attitude through the Behavioural intention to adoption of online shopping accounted for about 24.3% of the total effect.

Behavioural intention also partially mediates the relationship between perceived behavioural controls and consumer adoption of online shopping. As shown in Figure 7, the Sobel z-value is 2.989 ( $p=.0027$ ) which is sufficiently large ( $>2$ ) and significant with a symmetric confidence interval of 95% (lower limit =0.02802, upper limit = 0.13479). The results further show that behavioural intention weakens the direct relationship between Perceived behavioural controls and adoption of online shopping. The unstandardized indirect effect was:  $a*b = 0.08141$ ;  $se = 0.02724$ . The direct effect was 0.199, the indirect effect was 0.049, and the indirect to total ratio was 0.198; implying that the indirect path

from the Perceived behavioural controls through the Behavioural intention to adoption of online shopping accounted for about 19.8% of the total effect.

However, the test results show that there is no statistically significant mediation effect of behavioural intention on Subjective norms and adoption of online shopping. As shown in Figure 6, the Sobel z-value is .683 ( $p=.494$ ) which is insignificant at  $p>.05$ . This is further confirmed by the values of the symmetric confidence interval of 95% partly falling below the zero mark (lower limit = -0.02312, upper limit = 0.01812).

## **5.2 Conclusion of the study**

The retail sector has been truly revolutionised by the advancement in information technology. Pure-play online retailers have emerged and traditional bricks-and mortar shops have to alter their business models to keep pace with the trend. There are still massive opportunities for organisations to seize higher market share through satisfying changing customer behaviours in online shopping. Hence, the need to study how the adoption of online shopping is affected by various behavioural factors.

It was found that Ugandan consumers' adoption of online shopping behaviour was significantly and positively influenced by their online shopping intention. The study also found out that a strong positive relationship exists between online shopping intention and attitude towards online shopping. Perceived behavioural controls have a strong positive relationship with Behavioural intention to shop online while, subjective norms have a moderate one. This would help online retail practitioners develop their business strategy in the competitive playing field.

The study further revealed that behavioural intention partially mediates the relationship between consumer attitude, perceived behavioural controls and consumer adoption of online

shopping in Uganda. However, the study results show that behavioural intention does not mediate the relationship between subjective norms and consumer adoption of online shopping.

There is a myriad of opportunities for consumers to transact online. As the number of people engaging in online transactions increases, more studies need to be done to explain and understand the various behavioural factors influencing consumer behaviour in different community settings.

### **5.3 Recommendations of the study**

Results show that over 22.1% of the variance in the intention to adopt online shopping among consumers in Uganda is explained by the TPB. These research findings contribute to academic research and theory development in several ways.

First, this research enhances our understanding of the specific behavioural factors that may influence a consumer's decision to adopt online shopping in a developing country. In line with previous studies, the study found that consumers' online shopping intention has a positive effect on the adoption online shopping behaviour. Attitude, perceived behavioural controls and subjective norms strongly influence adoption intentions in this sample, suggesting that, to encourage consumers in developing countries to adopt online shopping, one must change the consumers' attitude, perceptions and emphasize the social referents surrounding the adoption decision. This implies that families and friends may have a certain amount of influence on online shopping intention, and business can leverage the potential through social marketing and word of mouth marketing. Marketing strategies that creates incentives to encourage and introduce family and friends or group discounts may promote awareness and increase purchases.

Secondly, these research findings have practical implications to players in the e-commerce field. Since positive attitude towards online shopping is important to the formation of online shopping intention, online marketers should cultivate a good impression on online shopping among the non-Internet shoppers. Online marketers should educate non-shoppers on the important issues such as trustworthiness, risks, security and privacy, convenience, cost savings, product variety, compatibility, and usefulness and ease of use in online shopping. Several studies have found these factors to be associated with favourable attitude toward online shopping and purchasing (George, 2002 and 2004; Lin, 2007).

Thirdly, Consumers are a key factor in any business ecosystem, and as such greatly contribute to the economy of developing countries. This study therefore, should create awareness among managers/owners of businesses and policy makers in Uganda about the beliefs and perceptions that may stimulate the adoption of online shopping. Since Uganda's culture is characteristic of other developing countries in Africa, it is expected that the findings from this study can help business players in other developing countries to explain the influence of consumers' beliefs and perceptions on adopting online shopping. In addition, the present questionnaire can be used in the assessment of online shopping adoption by consumers in other countries or communities that could have cultural similarities with Uganda.

#### **5.4 Limitations of the study**

This study utilised Convenience sampling, considering respondents within a certain area at a certain time. Hence samples may not fully represent the whole Kampala consumer population. Generalisation must be done with caution. To fully evaluate Uganda's consumer adoption of online shopping, a large sample size with random sampling could be more desirable.

This study examined the Theory of Planned Behaviour only. However, it did not consider all possible theories or constructs and did not incorporate all possible constructs from previous studies. The research model that was employed in this study is just a starting point. The findings from this study should be used to further explore influences on the intention / adoption of online shopping.

#### **5.5 Areas for future research**

The sample for this study was drawn from Kampala city, Uganda. The likelihood of shopping online and the profile of consumers may vary if a survey is expanded to other geographic regions of Uganda. Therefore, future studies can collect data from different cities or different countries. This approach would allow for greater generalization of the results. In addition, future researchers can undertake a comparative study between consumers from different countries in the East African region, such as Uganda and Kenya

This study provided a look at the constructs that influence a consumer's intention to/ adoption of online shopping in general. Future studies should look at which drivers affect consumer's intention to use the various types of online shopping venues (such as online auctions, third-party listings). Each venue can have aspects that may attract and/or deter consumers from utilizing it. It would be interesting to see which aspects affect a consumer's decision in each venue.

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## APPENDIX

### 5.6 FINAL QUESTIONNAIRE

Dear Respondent,

I am a student currently collecting data for compilation of my dissertation as partial fulfillment of the requirements for the award of Master of Business Administration degree of Makerere University. I humbly seek your voluntary participation in this study whose main purpose is to obtain information regarding the relationship between attitude, subjective norms, perceived behavioural controls and consumer adoption of online shopping in Uganda.

Please note that the information given shall be used mainly for study purposes and all answers shall be handled with utmost confidentiality. Please note that you do not need to indicate your identity anywhere on the questionnaire. The researcher shall also take steps to ensure that no harm (whether physical or psychological) is caused to you as a result of taking part in this study.

**Kindly complete this questionnaire correctly in the spaces provided if you are an internet users.**

### CONSUMER ATTITUDE, SUBJECTIVE NORMS, PERCEIVED BEHAVIOURAL CONTROLS AND ADOPTION OF ONLINE SHOPPING IN UGANDA

#### SECTION A: BACKGROUND INFORMATION

Please tick the option that you find most suitable:

1. Your age (in years)

19 and below	20 – 29	30 – 39	40 – 49	50 and above

2. Your gender

Male	Female

3. Marital Status:

Single	Married	Divorced/Separated	Widowed

4. Level of formal education

Primary	Secondary	Diploma	Bachelor's Degree	Master's degree	PH D	Others

5. Level of net monthly income (in Uganda Shillings)

Below 400,000	400,000-800,000	800,001-1,200,000	1,200,001-1,600,000	Above 1,600,000

**SECTION-B** (Please indicate the number that best indicates the degree to which you agree or disagree with each of the following statements. 1 means "**Strongly Disagree (SD)**" 2 means "**Disagree (D)**", 3 means "**Not Sure (NS)**", 4 Means "**Agree (A)**" and 5 being "**Strongly Agree (SA)**",

		1 SD	2 D	3 NS	4 A	5 S A
	Actual Online Shopping					
1	I have previously shopped online					
2	I often shop online					
	<b>Behavioural intention</b>					
3	I expect to shop online for consumer goods and services					
4	I intend to shop online for consumer goods and services					
5	I will shop online for consumer goods and services					
6	I want to shop online for consumer goods and services					
	<b>Attitude</b>					
7	I feel using online shopping is a good idea.					
8	I feel using online shopping is a wise idea					
9	I feel using online shopping is a pleasant idea					
10	I feel using online shopping is a great idea					
	<b>Subjective Norms</b>					
11	I feel under social pressure to shop online					
12	Most people who are important to me think that I should shop online					
13	my family members opinion matters a lot to me in shopping online					
14	my friend's opinion is important to me while shopping online					
	<b>Perceived Behavioural Controls</b>					
15	I am confident that I could be able to shop online if I wanted to					
16	I can control my use of online shopping					
17	I have the skills necessary for me to shop online.					
18	I can get information about a product on the internet without anybody helping me					
19	I am confident of shopping online even if no one is there to show me how to do it					
20	I have the time to shop online					
21	I have access to an internet enabled computer/ electronic device to use while shopping online					

*Thank you*