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**ASSESSING THE EFFECTS OF E-COMMERCE ON SECOND HAND
VEHICLE IMPORTATION BUSINESS IN NAIROBI, KENYA**

James Ikua Manyeki

**Dissertation submitted to the faculty of Strathmore Business School in partial
fulfilment of the requirements for the degree of Masters of Business Administration**



June, 2018

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other university. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the thesis itself.

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James Ikua Manyeki
June 2018

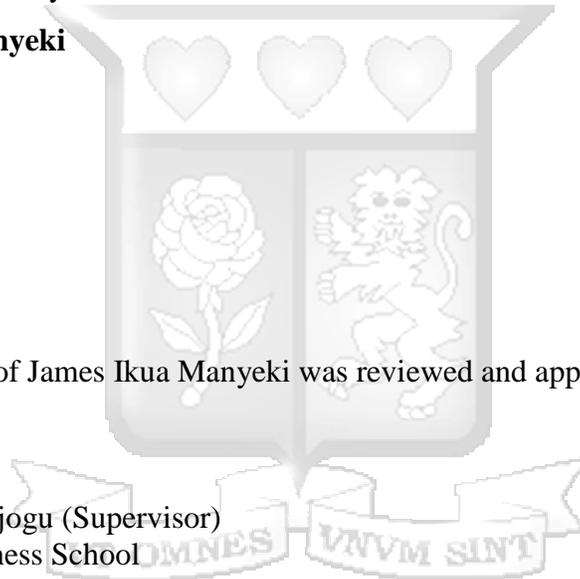
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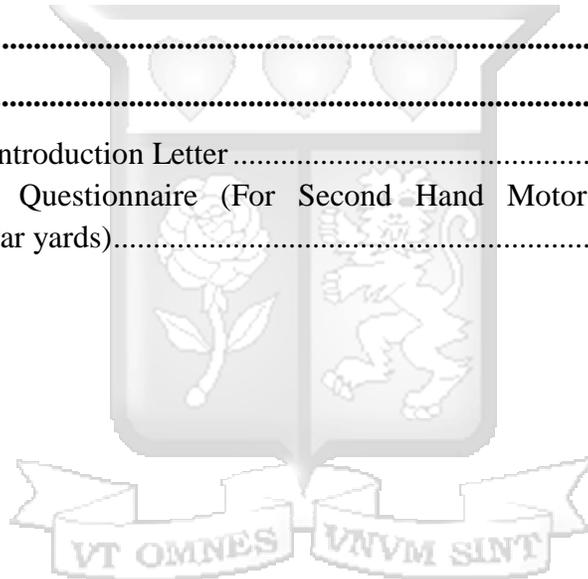
ABSTRACT

Second hand vehicle business is a major sector in Nairobi, Kenya which contributes 8% of total GDP. The sector is dominated by small and medium enterprises. In the recent past, the sector has recorded significant growth and this is particularly due to wide adoption of Ecommerce technologies. Despite the growth, the sector is experiencing several challenges that threaten to reverse the gains made. Through Ecommerce, individuals running small and medium enterprises have direct connections with overseas dealers and hence affecting the sales of the importers. The traditional ways of selling cars have been on a slow trend thus pushing second car dealers with yards out of the market resulting to closing down of their business premises. This study aimed at establishing and assessing the effects of adoption of e-commerce on second hand car business in Nairobi, Kenya with a goal of optimizing the use of e-commerce technology in the sector. This study adopted a quantitative approach because the design is concerned with finding out who, what, where, when and how much the investigated factor is influenced. Empirical evidence showed that there was an influence of e-commerce on second hand vehicle importation business both at international and regionally. Both quantitative and inferential statistics were employed to analyse the collected data. The study found that second hand motor vehicle sellers used online services such as websites as their mode of e-commerce to transact with overseas sellers of second hand cars. The study also found that second hand motor vehicle dealers in Nairobi County use of e-commerce had influenced their operations both buying and selling of their imported second hand cars to a great extent. The study further found that second hand motor vehicle dealers in Nairobi County indicated that their sales before adoption of e-commerce were average and after adoption of e-commerce the sales were high. It was also found that those still using traditional ways of selling cars have been closing their business due to diminishing sales. This study is expected to be beneficial to The Government especially in the Ministry of Industrialization, Kenya and policy makers in making key policy decisions whose overall objective is to increase trade and support the implementation of e-commerce in Kenya. The investors can also use the result of the study to improve on their sales especially in revising their internet marketing relation strategy as addressed by the study. The findings of this study increases the body of knowledge to the scholars interested in the effects of e-commerce on second hand vehicle importation business.

TABLE OF CONTENTS

DECLARATION.....	ii
ABSTRACT.....	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vi
LIST OF TABLES	vii
ABBREVIATIONS AND ACRONYMS.....	viii
DEDICATION.....	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Research Objectives.....	4
1.4 Research Questions.....	4
1.5 Significance of the Study	4
1.6 Scope of the Study	5
1.7 Summary	6
CHAPTER TWO: LITERATURE REVIEW.....	7
2.1 Introduction.....	7
2.2 Theoretical Review	7
2.3 Empirical Review.....	9
2.4 Conceptual Framework.....	20
2.5 Gaps in Research.....	21
CHAPTER THREE: RESERCH METHODOLOGY	22
3.1 Introduction.....	22
3.2 Research Design.....	22
3.3 Population and Sampling	22
3.4 Data Collection Methods	24
3.5 Data Analysis	24
3.6 Research Quality.....	25
3.7 Ethical Considerations	27
CHAPTER FOUR.....	28
ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS.....	28
4.1 Introduction.....	28
4.2 Respondents Background Information	28

4.3 Adoption of E-commerce.....	31
4.4 Extent of E-Commerce Adoption	36
4.5 Assessing Effects of E- commerce on Second Hand Vehicle Importation Business	42
4.6 Inferential Statistics	45
CHAPTER FIVE	48
DISCUSSION, CONCLUSION AND RECOMMENDATIONS	48
5.1 Introduction.....	48
5.2 Discussion of Findings.....	48
5.3 Conclusions.....	51
5.4 Recommendations.....	52
5.5 Areas of Further Study.....	53
REFERENCES.....	55
APPENDICES.....	60
Appendix I: Introduction Letter.....	60
Appendix II: Questionnaire (For Second Hand Motor Vehicles Dealers with Showrooms/Car yards).....	65



LIST OF FIGURES

Figure 2.1: Operationalization of variables.....	20
Figure 4.1 Composition of Respondents by their Gender.....	29
Figure 4.2 Distribution of Respondents by the Size of their Businesses	31
Figure 4.3 Online Services on Purchasing of Second Hand Motor Vehicles	32
Figure 4.4 E-commerce on Marketing Operations.....	37
Figure 4.5 Sales before Adoption of E-commerce.....	42



LIST OF TABLES

Table 3.1: Target Distribution.....	23
Table 3.2: Sample Distribution	24
Table 3.3: Reliability Analysis	26
Table 4.1 Response Rate.....	28
Table 4.2 Distribution of Respondents by their Age	29
Table 4.3 Distribution of Respondents by their Level of Education	30
Table 4.4 Distribution of Respondents by their Businesses Period of Operation.....	30
Table 4.5 Modes of E-Commerce	32
Table 4.6 Online Services on Selling of Second Hand Motor Vehicles	33
Table 4.7 Respondents Most Preferred Online Platform	33
Table 4.8 Factor that determine channel of E-commerce in Importation of Second Hand Motor Vehicles.....	34
Table 4.9 Factors that affect adoption of E-commerce in Second Hand Car Market	35
Table 4.10 Factors that Influence E-commerce Adoption	36
Table 4.11 E-commerce on Buying and Selling of Second Hand Motor Vehicles	37
Table 4.12 Adoption of E-commerce in Importation of Second Hand Motor Vehicles..	38
Table 4.13 Use of E-commerce in Transacting.....	39
Table 4.14 Extent of E-commerce Use in Marketing of Second Hand Motor Vehicles..	40
Table 4.15 Functions on Adoption of E-commerce	41
Table 4.16 Adoption of E-commerce on Functions.....	43
Table 4.17 Challenges in Application of E-commerce	44
Table 4.18 Model Summary	45
Table 4.19 ANOVA (Analysis of Variance).....	45
Table 4.20 Regression coefficients results	47

ABBREVIATIONS AND ACRONYMS

B2B:	Business-to-Business
B2C:	Businesses-to-Consumers
C2C:	Consumer-to-Consumer
CREC:	Centre for Research in Electronic Commerce
E-COMMERCE:	Electronic commerce
EU:	European Union
GDP:	Gross Domestic Product
KABA:	Kenya Auto Bazaar Association
KNBS:	Kenya National Bureau of Statistics
SPSS:	Statistical Package for Social Sciences
USA:	United States of America



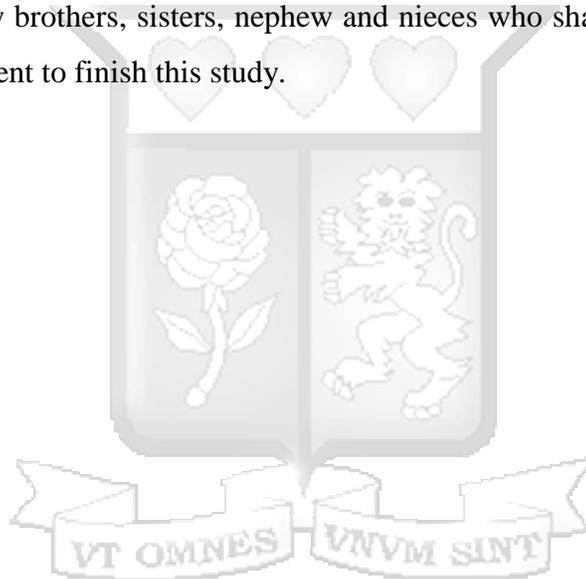
DEDICATION

I dedicate this project to God Almighty my creator, for power of mind, wisdom, knowledge and understanding.

To my dear parents, Gladys Njeri Manyeki and the Late Paul D. Manyeki, who have been my source of inspiration and confidence.

To my wife Anne, my children Alvin and Melvin who have been affected in every way possible by this quest.

And lastly to my brothers, sisters, nephew and nieces who shared their words of advice and encouragement to finish this study.



CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The world is developing rapidly, experiencing different kinds of changes, changes in how consumers undertake their transactions, high competition has led to and new technologies there has been an increase in the need for faster movement and mobility from one place to the other in the shortest time possible (OECD, 2017). This thus increased the rate at which motor vehicles are manufactured, exported and imported according to the high demand. In many sub-Saharan countries as well cars have been considered luxuries (UNDP-WSP, 2016). In most of the developing countries the purchasing of second hand motor vehicles is found to be more embraced compared to the purchasing of brand new cars due to cost and trying to embrace more products in the markets. This has resulted in the demand for second hand car importation as they are cheaper than brand new cars manufactured overseas or assembled locally (Rettie, 2016).

The advent of the e-commerce has seen entrepreneurs all over the world capture ideas and infuse technological innovations to create business models as well as new products and services. It has been observed that the concept of e-commerce is being much embraced and accepted in the business world today (Tracer, 2015). Most of the businesses are now being able to create their own websites where they display their products to the customers. It is now easy to shop through the web rather through any other platforms. Second hand vehicle buyers are on the increase as they have adopted e-commerce platform to source cars directly from Japan and other dealers rather than buying their units locally from the yards stocked with imported second hand vehicles. The e-commerce platform has helped buyer to circumvent the commission added above the buying price saving thousands of shillings (Pruss-Ustun, Bos, Gore and Bartram, 2016).

In the midst of controversies and high tariffs and business levies, Kenya is a place where the demand of Japanese used cars is increasing a lot (ICTB, 2017). There are over eight thousand registered car dealership countrywide who deal with second hand vehicle importation business (KNBS, 2017). The used car dealership with yards provides a wide

variety of choices to the buyers at reasonable prices. The sector has also offered many jobs to Kenyan population. The reason that Kenyans look at overseas market with the Japanese market leading is that they provide a wide range of popular vehicles choices with reliability, affordable prices and high quality. The contribution of this industry to Kenya's economy cannot be underestimated as it contributes to 8% of the GDP (World Bank, 2016).

It has been estimated by the Kenya Motor Industry association that about Kshs 500,000 is paid as taxes by new cars and about Kshs 150,000 is paid by the imported cars (Kenya- Data and Statistics, 2017). The Gross Domestic Product (GDP) calculated from the amount each car pays per day as tax as its contribution to the country's economy. In 2017, Kenyans spent Ksh 117.6 billion on imported cars last year as per the Kenya National Bureau of Statistics report (2017). This was an increase of 15.6 per cent from Ksh101.7 billion in 2016. Motor dealers have attributed this jump in car sales to a growing appetite among the expanding middle class for cars ranging between Ksh 600,000 and Ksh1.5 million and this has been attributed by the emergence and use of e-commerce in the importation business.

The e-commerce empowered generation, who expect convenience, personalized service, and competitive fees have left the once lucrative business by second hand car import dealers scrambling with stagnated stock despite the sectors major role in the growth of Kenya GDP and creating employments in enhancing the realisation of Vision 2030 (Okoth, 2015). Despite being a significant part of global trade, the area has received relatively little attention in on ascertaining the effects of e-commerce on the business in Kenya which has impacted on the second hand car importers and dealers.

The traditional second hand car dealers have faced challenges which include influx of individual buyers who import the second hand cars by themselves (ICTB, 2017). This reduces sales that could have ended with the dealers thus reducing the profit margins. The use of e-commerce has also resulted in delays as the websites sometimes do not have auctions which a client may be in need at that particular movement causing delays in the purchasers' side. A number of customers also prefer German or American models

which are few on the websites unlike the Japanese models which control 60% of the Kenyan market in the websites (GoK, 2017). This extended delays in search for the required car brand cost the buyers extended time which results to massive loses.

A report by KNBS (2017) shows the number of cleared vehicles in the port of Mombasa in 2017 was 312,017 where 207,133 of this was cleared by individuals. This shows a decrease in the number of imported second hand cars by dealers which was 304,811 in 2013. This shows a sharp down ward trend of imported second hand cars from dealers and particularly those who have not adopted e-commerce. Therefore, there is need to evaluate the effects of e-commerce on second hand vehicle importation business in Nairobi, Kenya in order to draw recommendations that can spur the business to be a profitable venture for dealers.

1.2 Problem Statement

The adoption of e-commerce by the investors has simplified the business process of importing the cars leading to the growth of the sector in Nairobi. However, several challenges have been reported in the sector and are closely related to the adoption of e-commerce technologies. In the recent past, this sector has witnessed opening up of many showrooms which usually close down and others sold out. Very few showrooms survive the test of time and the numbers are declining over the last five years (GoK, 2017). The traditional ways of selling cars have been on a slow trend thus pushing second hand car dealers with yards out of the market resulting to closing down of their business premises. In addition, the members of the Kenya Auto Bazaar Association (KABA) have raised the red flag on the influx of individual buyers due to e-commerce putting the second hand car sector in downward trend in terms of profits. Besides individuals have suffered losses to the virtual online transactions as compared to those buying second had cars through local dealership (KRA, 2016).

Based on the above challenges experienced in the importation of second hand car business which are also cited by the empirical studies done by Rettie (2016), Tracer (2015) and Ledwith (2015), there are noted cases of the effects of e-commerce on

second hand vehicle importation business. This therefore called for a study to assess the effects of e-commerce on importation of second hand car business in Nairobi, Kenya with an aim of reviving the business and spurring its growth for the benefits of the stakeholders and the economy as well.

1.3 Research Objectives

The main objective of this study was to assess the effects of E-commerce on second hand car importation business in Nairobi, Kenya.

1.3.1 Specific Objectives

- i. To establish factors that determine the adoption of ecommerce technologies by second hand car business in Nairobi.
- ii. To determine the extent to which second hand vehicle business in Nairobi have adopted e-commerce.
- iii. To assess the effects of adoption of e-commerce on second hand car business in Nairobi.

1.4 Research Questions

- i. What are the various factors that determine the adoption of ecommerce technologies by second hand car business in Nairobi?
- ii. To what extent has second hand vehicle business in Nairobi adopted e-commerce?
- iii. What are the effects of adoption of e-commerce on second hand car business in Nairobi?

1.5 Significance of the Study

This study is beneficial to the following stakeholders:

The Government especially in the Ministry of Industrialization, Kenya and policy makers stand to benefit from the findings of this study in making key policy decisions whose overall objective is to increase trade and support the implementation of e-commerce in Kenya. The policy makers have a better understanding of priority areas where new policies and laws or amendment thereof can have immediate impact on e-commerce businesses in the country.

The investors can also use the result of the study to improve on their sales especially in revising their internet marketing relation strategy as addressed by the study. They can benefit from the study results as the study draws out effects of e-commerce and business growth relationship and this would provide more information on pros and cons of e-commerce utilization on business growth.

The study will be beneficial to the public and business people who have interest in second hand car importation. They will understand the cons and pros that come with e-commerce and decide whether to adopt it or opt for the traditional way of doing business.

To scholars and academicians, the findings of this study increases the body of knowledge to the scholars interested in the effects of e-commerce on second hand vehicle importation business. It provides a basis for further research to future scholars and academicians on identified gaps.

1.6 Scope of the Study

The study covered an assessment of effects of e-commerce on second hand vehicle importation business in Nairobi, Kenya. Specific interests on various e-commerce technology adopted as well as the extent and further the effects of adoption of e-commerce on the growth of second hand car businesses. The focus was the second hand car businesses with yards. The geographical scope was Nairobi county because of proximity of the researcher who was in the second hand car importation business thus, understood the area well which benefited the study during data collection.

1.7 Summary

Chapter one is a review of effects of e-commerce on second hand vehicle importation business in Kenya. The review contains the introduction, problem statement and the objectives which this study is based on. Research questions, scope and significance of the study have also been aligned in this section. The next chapter will review literature as done by other scholars on the same area of study so as to compare findings with the collected and analysed data.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews studies done by other scholars in the same area of study both internationally and locally. The chapter commences with theories anchoring the study and a review of e-commerce follows. Gaps that have been identified after a review of the objective literature are drawn and the chapter concludes with a conceptual framework linking the independent variables to the dependent variable.

2.2 Theoretical Review

The proposed study is anchored on two theories which are Systems Theory and Diffusion of Innovation Theory as presented below: -

2.2.1 Systems Theory

The concept of systems was made popular by scholars from different disciplinary backgrounds. Kwangtae (2013) argued that, systems management was one of the greatest inventions coming out of World War II. Bertalanffy (1968) was one of the first persons who was preoccupied with the concept of a general theory of systems. The main argument was that the concept of systems could be used in any arrangement of elements or combination of elements, such as cells, atoms, galaxies and human beings.

The human structure, for instance, according to Bertalanffy (1968), is a complex organism made-up of a skeletal system, a circulatory system and a nervous system. Jianan (2015) argues that the main components that connect fragments are information and communication. This then resulted to Jianan developing a system that made people understand the communication that happens between human beings and electronic devices which are the electronic computers. Rust and Varki (2015) developed the concept of a system through the identification of levels of system in organisation, which range from the simplest and most static to the self-directed and dynamic. Wilson and

Abel (2014) also used the concept of system in the study of organisations by seeing them as systems that make decision and process information.

Van Riel, Liljander and Jurriens (2015) argued that the social world can be regarded as a total social system, which comprised of four and only four functional sub-systems. The four sub-systems of society according to Lina (2015), the economic, political, integrative and pattern-maintenance sub-systems. Maclaranand Catterall (2012) suggest that an organization is viewed by the systems theory as one that is balanced in all its functions that help in its achievement of its goals. It is therefore viewed that if one of the employees is dissatisfied, then the whole organization is affected in different ways and thus such issues should be solved effectively to avoid the performance of the organization being affected.

In this study, the users of e-commerce in purchasing and importing of second hand vehicle(s) was viewed as a system comprising interconnected and mutually dependent sub-systems with the seller(s) (Rowley, 2014). These sub-systems can have their own sub-subsystems linked by e-commerce system. Systems Theory combines all aspects involved in selling and buying of products and connects organization functions to the aspects in that if one aspect is affected, then the whole system is affected. In a simple explanation is that if a change occurs, in one area, it may affect all other areas and a bigger change may affect other areas in a smaller way. It is in this case then that we view that environment interacts with e-commerce in its functions. As buyers and sellers try to adjust to the environment, then a balance is created between the two. This thus results to the adoption of e-commerce technologies in handling business transactions.

2.2.2 Diffusion of Innovation Theory

The diffusion innovation theory was introduced and developed in the year 1949 by Lazars Feld. Diffusion as defined by Nohria and Gulati (2015) as the communication of innovation factors to specific channels in a period of time to the people involved in the social systems. Innovation on the other hand is a new discovery realised and adopted by the society and businesses. The process of transmitting information from one party to

another is termed as communication. The social systems are then the process of joining together of different units to solve a specific problem.

According to Grinblatt and Titman (2014), diffusion innovation theory seeks to describe the patterns of adoption to technology, expound on the mechanism of adoption and predicting the success rate beforehand. Additionally, Palihawadana (2015) argues that the stage of innovation basically has five steps. First is the influence stage where user(s) form a favourable attitude to the technology or innovation. Second is the knowledge stage where innovation-decision process is evaluated. Third is the resolution stage where user(s) choose to adopt or reject the innovation. According to Gebrehiwot (2014), adoption is the full use of innovation as the most favourable course of action available while rejection is not using the innovation. Forth is the execution stage where the innovation is tested or utilized. Last is the confirmation stage, where fortification is pegged on positive outcomes from the innovation and the user(s) look for support for their decision.

Members of the social system are the main receivers of the information that is communicated to them through innovation as showed by this theory. The theory relates to the car buyer who wishes to own or purchase a unit and results to use e-commerce to reach the seller. By accepting to use the e-commerce herein the innovation to transact on the unit the diffusion is consumed at this point and thereafter the use of innovation takes precedence until the unit is received or otherwise thus results to adoption of e-commerce technology in business operations.

2.3 Empirical Review

The section below contains a review of transport review, adoption of e-commerce, extent of e-commerce use and effects of e-commerce adoption as done by other scholars.

2.3.1 Transport Sector

Wilson and Abel (2014) defines a transport system as the system that helps in the movement of people and goods from a specified place to another effectively and

efficiently. The field can be divided into infrastructure, vehicles and operations. The role of transportation is significant as it connects individuals involved in the processing of resources from one point to the other to reach the consumers' desire (Jianan, 2015). This whole process of movement basically involves a system that is meant to save on costs and at the same time meet the customers' needs which is termed as a concept of logistics (Rust and Varki, 2015).

The main purpose of transportation is to ensure that people and goods are moved from a specified place to a specific destination which helps in boosting the economy (Jianan, 2015). In urban areas, the means of travel available are mainly land based and include private and public transportation. Some of these are highway based, while others are not. Without negatively affecting the environment, the process of urban transport increases efficiency in the labour and commercial markets, and also ensures that access to amenities is made easier (KIPPRA, 2017). Transportation has resulted to car ownership worldwide. This has resulted to car necessity by companies, families, individuals and other categories according to the need.

Up to the early 90s, Kenya ran a large vehicle assembly industry that supplied vehicles across the country and all over the African region (Kenya - Data and Statistics, 2017). A large number of Kenyans were involved in the industry which led to flowing of skills and supplies. Later on, liberalization of motor vehicles and the importing of second hand motor vehicles took over immensely and killed the assembling industry. In every passing year, there is growth and increase of importation of second hand motor vehicles through the Port of Mombasa to East Africa (Okoth, 2015). Rwanda and Burundi are main importers through Mombasa Port. This has been made possible and easy by the use of a common tariff across East Africa. According to a report made in 2004, an increase of 12.9 was made in terms of tons that were handled at the port in comparison to 2003 where 11.9 tons were collected. That was an 8.3% increase.

In 2003, 143,474 vehicles were handled and in 154,854 were handled the following year showing a 100,000 increase. 2012, reported 39,093, 2011 reported 36,026 and 2011 had reported only 26,358 (KNBS, 2017). Kenya has recorded a total of 18,000 to 20,000

importation of second hand motor vehicles in the last five years. The immense importation of cars in Kenya has led to congestion in the big cities but according to the Kenya Auto Bazaar Association officials Kenya still needs more cars and they blamed poor infrastructure for the congestion (GoK, 2017).

In Kenya the importation of cars has risen immensely due to the fact that it is now easier for individuals to access loans and that the economy is performance well. This is a cause for worry to the registrar of motor vehicles since the office is not able to cope with the number of cars imported. Kwangtae (2013) noted that there was an increase of about 46% on registration of new motor cars between January and April of 2017. This was a total number of 23,417 new cars registered in the period of the four months. The Kenya Revenue Authority (KRA) reported that it was now registering over 500 cars a day during this period compared to 200 registered each day in the previous months (Leo 2014).

A 2016 report by Deloitte suggested that there is plenty of room for growth in local vehicle sales (Ngujiri, 2014). Currently, the country of 44 million has a total vehicle fleet of just over 1.3 million, putting the ownership rate at around 28-29 vehicles per 1000 people. By the year 2030, it is estimated to record an increase of about 5 million registrations of which is about 300,000 cars especially the light duty vehicles (LDVs). Car Registrations in Kenya however decreased to 18889 in October from 21137 in September of 2017 (GoK, 2017).

2.3.2 Adoption of E-commerce in Second Hand Car Importation Business

Ledwith (2015) posits that there seems to be no consensus on the exact definition of e-commerce with a number of different definitions being used in different contexts. It is believed that the first business transaction conducted across the internet occurred in 1994 in USA. This paved way for the extensive use of the internet for exchanging goods, services and information across the globe. The internet has played the most pivotal role in the rapid growth of ecommerce. Indeed, the debate of what really constitutes e-commerce is likely to go on into the future. Some researchers argue that the definition

offered by the University of Texas, Centre for Research in Electronic Commerce gives a more precise definition of what really constitutes e-commerce (Kiel and Elliott, 2016).

Generally, e-commerce should be made up of 3 and 4 layers that are involved in the functions and network commercial transactions, narrower definitions referring to only the latter transactions (Moon and Byeong-Joon, 2016). They are two types of e-commerce firm's pure plays (click-only) and hybrids (click and mortar). The first one do not have a physical presence. Various business models of e-commerce exist and their common underlying theme is that they attempt to leverage information technology to overcome the limitation of traditional business models and improve the efficiency of business processes (Leo, 2014). There are various ways of classifying e-commerce business model, however, the most common is according to the parties involved in the business, and other classifications are based on the different strategies through which organizations can monetize (Zeithaml, 2013).

According to Aras and Crowther (2016) the first classification is more accurate since an e-commerce business can employ various monetization strategies to achieve its goals. Focusing on the different parties involved they are different models of e-commerce some of the most common are discussed here. The main form of commerce are the transactions that occur between two organizations and all the activities that take place in the transactions which is known as Business-to-Business (B2B e-commerce). Businesses-to-Consumers (B2C e-commerce) are the business transactions through e-commerce that occur between an organization and an individual/s. Consumer-to-Consumer (C2C e-commerce) is the buying of products from a website without bidding any amount to the seller until the goods are delivered or are received by the seller where they make payments (Xing and Venkatesh, 2013).

A contrasting study by Richard (2012) shows that traditional way of importation is more prefer than e-commerce among demographic categories. The study show that those between the age of 21 to 35 preferred e-commerce unlike their counterparts who were aged 36 years and above in second hand business. Those aged above 36 indicated that the traditional way of purchasing second hand cars was safer than the use of e-

commerce. Those who adopted e-commerce were male as shown by 77% as compared to 23% female. Those who had degree certificates preferred e-commerce as compared to those who had basic education.

According to a report by KIPPRA (2017) there a number of sites used by individual while importing second hand vehicles in Kenya which include; SBT Co. Ltd, Autocom Japan, UK Car exporters, AA Japan cars, Delorean Motor Company, Be Forward, Qualitex Trading, Autorec and AI in Japan.

2.3.3 Extent of E-commerce Use in Second Hand Car Importation

E-commerce involves a business that is conducted in a paperless form where an electronic device, which is the computer, is able to recognise, reproduce and store information. It is therefore a transaction through the web where the buyer and the seller do not have to meet that is now called online shopping. According to Williams and Moffitt (2015) there has been a noticeable change in an increase in online transactions as time passes by. This is as a result of increase in sales of second hand car transactions and traffic increase by users of e-commerce.

It is recognised to be the form many young and educated people acquire information (Natwell, 2016). This has resulted to e-commerce being the fastest media to be adopted in the transactions of second hand business globally. E-commerce environments allow imported second hand car vendors to create retail interfaces with highly interactive features. The aspect of ensuring that online shoppers transact effectively and are able to receive their goods at the right time and according to their desire is interactivity Laskey (2016). This is generally the art of ensuring that consumers are satisfied and their needs are met. Here the consumer has the same powers with the provider. Online shopping has become much easier and fast and has also been able to deal with insecurity issues making it the most popular way of shopping (Natwell, 2016). E-commerce has now been well embraced and therefore all users should ensure that they create features and functions that are easy for the consumers to use to meet their needs and in return enhance the sellers' performance.

According to Rowley (2015), speed of access to the e-commerce appears to be a major concern to many users, therefore sellers of imported second hand vehicles must ensure that their websites are fast and easy to load so as to create interactivity with their consumers. Customer satisfaction could be increased if an organization ensures that its products are displayed clearly in the website and that they offer and display their discounted products in the platform. This will then give the customers room to compare the products before making a decision. Jahng, Jain and Ramamurthy (2013) established that usage is a key variable in explaining the performance impact of information technology. This is especially so if the system use is voluntary as in e-commerce websites where the users are customers. Both the reason for use and the amount of money used in the transaction are both important indicators of effective adoption of e-commerce and can be used by policy makers to make decisions on improving the quality of a website. The number of customers and repeat users are one of the top traffic measures that can be used to measure the extent of e-commerce use.

According to Hulbert (2014) the benefits of e-commerce have been classified as tangible and intangible (customer loyalty, competitive advantage, enhancing well-being and education of customers and convenient shopping). Damanpour (2014) posits that from an owner's perspective the non-financial or the intangible benefits of a website can also be used as measurements of performance. In the view of the owner, the ability of the website to drive traffic, communicate features that enhance users experience and generate trust can inspire the feelings of satisfaction. Search engine ranking can be a good indicative measure of how well an e-commerce website is being utilized by the target consumers and communicate its competitive position in the importation of second hand car market.

Some studies have been carried out in the motor vehicle industry. A study by Njeru (2016) focused on trade and industry conditions for motor vehicles for the period between year 2011 and 2016. It also summarizes factors that influence sale of cars as personal income growth, unemployment levels, consumer confidence and value of used cars. Another study by Ngujiri (2014) under the guidance of Institute of Economic Affairs focused on seeking solutions to the myriad of problems bedeviling the motor

industry. Among the key issues recommended was the adoption of technology in the business operations. Notably both studies only highlight the rise in the increase of imports and market share but did not focus on the effects of e-commerce on the growth of second hand vehicle importation business. Based on this information problem, this study aims to carry a research to evaluate the effects of e-commerce on the growth of second hand vehicle importation business in Kenya.

Johnston and Ellis-Chadwick (2015) assert that the second hand vehicle business is a collection of firms that offer similar products and services. According to Pierson (2016) the second hand vehicle business has seen many businesses mushrooming as a result of e-commerce adoption over the years. He further notes that the success of the motor vehicle industry has been associated with great rivalry against the dealers and high levels of competition. This has resulted to most of the companies trying their best to offer great products and also offer discounts to try and level up with the competition rate.

Okun et al. (2000) noted that websites are being used by many brokers and national dealers who transact directly through the internet. This has created knowledge among customers and therefore are aware of the prices and brands even before beginning their transactions. A study by Swatman (2011) shows that the creation of a successful company is challenging at best and the unique characteristics of the Internet make it particularly difficult. Perhaps one of the most pertinent issue remains to be trust which is a key unlocking the success of e-commerce. Consumers must have confidence about the product information and reliability of the trading partner .

A research by Nohria and Gulati (2015) shows conflicting findings in that many consumers across the world are reluctant to shop online because of risk both perceived and real associated with such transactions. These security risks are especially high due to the open nature of the internet coupled with increasing technical knowledge of modern day sophisticated criminals. Security is key in achieving to ecommerce success, the parties involved need have a high degree of assurance that their data is protected against any kind of harm. An European commission survey (2012) reported that whilst most consumers were potentially interested to shop online they abstained not due to lack of

skills or internet access; it was for reasons that involve fraud cases common in the online business transactions.

A study by De Figueiredo (2016) shows that potential businesses and consumers of the imported second hand vehicles also have to confront additional issues associated with poor and/or limited internet accessibility and high costs. The growth of e-commerce is also posing challenges to governments especially tax authorities as they begin to institute mechanisms to collect taxes on these transactions. Additionally, the complexity and lack of global harmonization of legal framework governing cross-border e-commerce transactions is also a major hurdle that prevents some traders and consumers from engaging in e-commerce (Ireland, 2016).

Duggan and Devenery (2015) survey on impact of internet on second hand car importation marketing and sales found out that potential consumers have high expectations on the benefits of using e-commerce to make their transactions. The main benefit attached to e-commerce is the aspect of cost reduction where most organizations believe that the use of e-commerce leads to costs reduction and thus more profitability. According to survey done, it was found that 73% of the businesses targeted indicated that they believed in the cost reduction base of e-commerce. Another benefit is that most organizations believe that e-commerce helps in the effectiveness of management of information due to effective communication in the organizations. Despite the benefits that comes with this aspect of management of information, it may be crucial to the organization as that information has to be recognised by the practitioners. This varies from one business function to another. The survey also found that 86% of the respondents agreed that e-commerce assisted in the transmission of effective communication in the organization. It was also found that e-commerce helped in communication integration between suppliers and other supply chain participants.

Study finding by Jianan (2015) in a study done in Bosnia shows a negative and insignificant relationship between e-commerce technological skills by business owners and growth of second hand vehicle importation business in Panama. Some of the factors that were found to hinder growth include the level of adoption by users and the type of

technology adopted. The study found that 25% of the new users were advantaged by availability of gadgets like mobile phone and portable laptops.

A study by Jianan (2015) indicates that the e-commerce use is slow compared to the projections by The World Bank. According to the study the inception of online business expected to receive over 80% globally but this has been hampered by poor infrastructure, basic understanding of ICT among users, cybercrime, receiving of substandard items and government regulation of e-commerce business.

Up to the early 90s, Kenya ran a large vehicle assembly industry that supplied vehicles across the country and all over the African region (Kenya - Data and Statistics, 2017). A large number of Kenyans were involved in the industry which led to flowing of skills and supplies. Later on, liberalization of motor vehicles and the importing of second hand motor vehicles took over immensely and killed the assembling industry. In every passing year, there is growth and increase of importation of second hand motor vehicles through the Port of Mombasa to East Africa (Okoth, 2015). Rwanda and Burundi are main importers through Mombasa Port. This has been made possible and easy by the use of a common tariff across East Africa. According to a report made in 2004, an increase of 12.9 was made in terms of tons that were handled at the port in comparison to 2003 where 11.9 tons were collected. That was an 8.3% increase.

In 2003, 143,474 vehicles were handled and in 154,854 were handled the following year showing a 100,000 increase. 2012, reported 39,093, 2011 reported 36,026 and 2011 had reported only 26,358 (KNBS, 2017). Kenya has recorded a total of 18,000 to 20,000 importation of second hand motor vehicles in the last five years. The immense importation of cars in Kenya has led to congestion in the big cities but according to the Kenya Auto Bazaar Association officials Kenya still needs more cars and they blamed poor infrastructure for the congestion (GoK, 2017).

In Kenya the importation of cars has risen immensely due to the fact that it is now easier for individuals to access loans and that the economy is performance well. This is a cause for worry to the registrar of motor vehicles since the office is not able to cope with the

number of cars imported. Kwangtae (2013) noted that there was an increase of about 46% on registration of new motor cars between January and April of 2017. This was a total number of 23,417 new cars registered in the period of the four months. The Kenya Revenue Authority (KRA) reported that it was now registering over 500 cars a day during this period compared to 200 registered each day in the previous months (Leo 2014).

A 2016 report by Deloitte suggested that there is plenty of room for growth in local vehicle sales (Ngujiri, 2014). Currently, the country of 44 million has a total vehicle fleet of just over 1.3 million, putting the ownership rate at around 28-29 vehicles per 1000 people. By the year 2030, it is estimated to record an increase of about 5 million registrations of which is about 300,000 cars especially the light duty vehicles (LDVs). Car Registrations in Kenya however decreased to 18889 in October from 21137 in September of 2017 (GoK, 2017).

2.3.4 Effects of E-commerce Adoption in Second Hand Car Importation Business

According to Rettie (2016), the great facilities availed by the e-commerce has greatly propelled the growth of importation of second hand car businesses therefore increasing the magnitude of benefits. These include: access to global markets at low costs, operational efficiency, cost reduction, mass customization, reduction of inventories, efficiency in business transactions, easy accessibility, low and efficient communication, increase in markets and more profits.

A study by Pruss-Ustun et al., (2016) shows that consumers on the other hand benefit from; more choices, 24 hours' access, new markets and price comparisons, better prices due to competitive environments, convenience, time saving, access to extensive information. To the society the benefits are; improved living standards since some merchandise can be sold at lower prices, flexible working conditions, enhanced social connections and facilities delivery of public services which reduces cost and increases quality of the offered services. By breaking down the barrier of time and space e-

commerce increases competitiveness in the business environment and levels the playground which allows small businesses and individuals compete with big businesses.

According to the Tracer (2015), the top reasons why imported second hand car consumers shop online for frequent e-commerce use include; better prices, perceived savings in time, easier price comparisons, flexibility due to 24 hours access and a wider selection. Businesses seek this information to guide their business strategies, in addition they can also automatically package and distribute information to specific target groups. Kiel and Elliott (2016) found out that there seemed a disconcerting lack of planning, evaluation and proactive management of benefits with respect by most individual importers of second hand vehicles in regards to their e-commerce initiatives.

A study by Rettie (2016) shows e-commerce has affected ecommerce negatively in Botswana by reducing the profit margins of yard owners from 25% to 14% in the 2016/17 financial year. The implications of the effects were closure of yards from 23,373 to 17,822 yards within the same year. This has made the second hand car importation business to face a challenge as new entrants shy off from investing in the sector.

A study by Moon and Byeong-Joon (2016) in reviewing the use of e-commerce on revenue found that just over half of the second hand car importers who responded to the survey were in agreement that e-commerce contributed to the increase in revenues and the rest indicated that they were in agreement that the revenues would increase in future due to e-commerce businesses that are also increasing with time. Despite this findings, a number of the respondents disagreed that the rate of revenues would rise due to e-commerce. Despite the fact that most of the respondents had hope that the second hand motor vehicle importation would increase due to e-commerce and ensure that the revenues rise in due time, a number of them still disagreed and had no hope that the second hand car business would rely fully on e-commerce in all its transactions in future. Thus there would be no much increase in the total revenues.

Figure 2.1: Operationalization of variables

2.5 Gaps in Research

To summarize, from the literature review it is evident that the e-commerce has an influence on the importation of second hand motor vehicles. Those with yards are the most affected as buyers have resulted to transact with overseas traders online without involving them and this has proved to be a challenge to the developing countries. In addition to this, while some studies see the use of e-commerce as necessary, others view it as an obstacle that hampers importation of second hand motor vehicles business to those who take the car importation as a business. There is therefore need to carry out a study to validate either e-commerce indeed influences the growth of second hand car importation business in Nairobi, Kenya.

Besides, there is a considerable number of studies that have been carried out to analyze varying aspects of e-commerce in developing countries including Nairobi. There is an emerging gap in the studies that have been conducted in the past. Most of them have focused on factors influencing the adoption of e-commerce in various sectors with the SMEs sector being the mostly researched area (Leo, 2014; Zeithaml, 2013; Aras and Crowther, 2016) and obstacles / barriers facing e-commerce businesses (Xing and Venkatesh, 2013). Other researchers have focused on the impact of e-commerce in commercial banks (Richard 2012; Williams and Moffitt, 2015; Laskey, 2016). This study will contribute new insights on the effects of e-commerce on the growth of second hand vehicle importation business in Nairobi, Kenya.

CHAPTER THREE: RESERCH METHODOLOGY

3.1 Introduction

This chapter covers the methodology that was adopted to actualise the study findings. It contains the research design, population and how a manageable sample was arrived at. Data collection tools, how data was analysed and research quality checks are presented. The chapter concludes with ethical considerations that were upheld in conducting this study.

3.2 Research Design

Research design is the structure and plan of investigation so conceived as to obtain answers to research questions. This study adopted a quantitative approach as it is concerned with finding out who, what, where, when and how e-commerce effect on the growth of second hand vehicle importation business in Nairobi, Kenya. Quantitative research is the investigation in which quantitative data was collected and analysed in order to describe the specific phenomenon in its current events, current trends, and linkages between different factors at the current time. Quantitative research design was chosen because it enabled the researcher to generalise the findings to a larger population. Schindler and Cooper (2003) posit that a quantitative study describes the existing conditions and attitudes through observation and interpretation techniques.

3.3 Population and Sampling

The population of this study were second hand motor vehicles dealers with car yards in Nairobi. The choice for this category was motivated by the fact that they underrated the market dynamics as a result of e-commerce use of the second hand business unlike the suppliers and users of the vehicles. Nairobi County was selected as the geographical scope as it houses 54% of the second hand car yards. This involved all the car yard located along the major highways including but not limited to Ngong road, Mombasa road, Thika road, Langata road and Uhuru highway. According to KNBS Economic

survey (2017) there are 357 dealers that have registered and are operating along the five major highways as presented in Table 3.1

Table 3.1: Target distribution

Cadre	Population of yards	Percentage
Ngong road	93	26
Mombasa road	51	14
Thika road	64	18
Langata road	77	22
Uhuru highway	72	20
Total	357	100

Source: Kenya National Bureau of Statistics (2017)

Bridget and Lewin (2005) formula was used to work out the sample where a 95% confidence level and P = 0.05 was chosen.

$$n = \frac{N}{1 + N(e)^2}$$

Where n = Sample size, N = Population and e = Level of significance

$$\frac{357}{1 + 357(0.05)^2} = 189$$

To attain a manageable sample both stratified and systematic sampling were used. Where the population embraced a number of distinct categories, the frame was organized by these categories into separate strata which was based on the car yard location. A sample was then selected from each stratum separately, producing a stratified sample. The main reasons for using a stratified sampling design was; to ensure that particular groups within the population were adequately represented in the sample

and to further improve efficiency by gaining greater control on the composition of the sample. The distribution is shown in Table 3.2:

Table 3.2: Sample distribution

Cadre	Sample of yards	Percentage
Ngong road	49	26
Mombasa road	27	14
Thika road	34	18
Langata road	41	22
Uhuru highway	38	20
Total	189	100

3.4 Data Collection Methods

A semi structured questionnaire was used to collect primary data. This was the most preferred as it engaged a wider range of participants and collected general perspectives. The questionnaire was administered to the motor vehicles dealer managing directors/managers who were vast with the effects of e-commerce on the second hand vehicle importation business. The sample questionnaire is attached in Appendix II.

3.5 Data Analysis

Once the data was collected, coded and entered, data cleaning was undertaken in order to enhance accuracy. The study was quantitative in nature, hence, both quantitative and inferential statistics were employed. This was made possible with the aid of the Statistical Package for Social Sciences (SPSS) package. Quantitative statistics generated such as percentages, and mean were presented in tables, pie charts and figures.

According to Mugenda and Mugenda (2009) quantitative statistics are used to describe the basic features of the data in a study. Linear regression was utilized to bring a linear relationship between adoption of e-commerce, extent of e-commerce use and effects of e-commerce adoption (independent variables) and the growth of second hand vehicle importation business (dependent variable).

The model used in the study took the form below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where;

Y= the dependent variable (Growth of second hand vehicle importation business)

α - Is a constant; the concept explaining the level of growth achieved when all the predictor values (X_1, X_2, X_3) are zero

$\beta_1, \beta_2, \beta_3, \beta_4$ – Are regression coefficients representing the condition of the independent variables to the dependent variable.

X_1 – Technology

X_2 – Customers

X_3 – Business owners

ϵ - (Extraneous) Error term

3.6 Research Quality

The following three fundamental criteria was undertaken in order to enhance this research quality and include validity, reliability and objectivity. Validity is concerned with the accuracy of the measurement; reliability refers to the extent of consistency of the measurement procedure, and objectivity the extent to which the measurement procedure remains unbiased. These was by pilot testing of the questionnaire to ensure consistency, standardization of the ratings, application of a clear conceptualization of the

research, use of precise measurement scales and substantial sample population for questionnaires.

A pilot study was carried out to gauge the effectiveness of the questionnaire in terms of the responses given, so that any enhancements were made. Pilot participants were selected from 10 second hand motor vehicles dealer with car yard in Jogoo Road - Nairobi who were picked randomly and they were not part of the main study.

According to Nachmias and Nachmias (1996) questions are considered reliable if they yield a reliability coefficient of \leq 0.7, which is the acceptable limit. A pre-test was conducted on 7th of April to 9th of the same month. The pre-test findings were not included in the analysis of the main study. 8 out of the 10 issued questionnaires were returned which were used to conduct the reliability test as presented in Table 3.3;-

Table 3.3: Reliability Analysis

Dimension	Cronbach's Alpha Reliability Coefficients	Verdict
Adoption of e-commerce	0.721	Acceptable
Extent of e-commerce use	0.882	Acceptable
Effects of e-commerce adoption	0.735	Acceptable
Growth of second hand vehicle importation business	0.802	Acceptable
Overall reliability	0.785	Acceptable

According to Table 3.3 the overall reliability was 0.785 which is generally acceptable. The score for each objective is as presented: adoption of e-commerce scored 0.721, extent of e-commerce use had the highest scores of 0.882 and effects of e-commerce adoption scored 0.735. Growth of second hand vehicle importation business had a reliability score of 0.802. The tabulation shows that the three factors of effects of e-commerce in regards to second hand vehicle importation business in Nairobi have a high internal consistency.

3.7 Ethical Considerations

Ethics of the study were ensured by protecting the rights of the participants that was anonymity and confidentiality. This was through informing them in advance the importance of the study and participation was on willing basis. Participants were free to pull out from the study any time they felt they were not comfortable in participating in the survey. Their personal particulars like name and address were not disclosed. The data collected in data analysis stage did not as well revealed the identity of the participants. The findings of this study were presented in a way that would not disclose the participant's details.



CHAPTER FOUR

ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the findings of the study, as set out in the research methodology. It outlines the study findings in line with the research objectives using quantitative statistics and the association between the study variables using regression. The results are presented on the effects of e-commerce on the growth of second hand vehicle importation businesses in Nairobi, Kenya.

4.1.1 Response Rate

The response rate for the second hand motor vehicle dealers with car yards in Nairobi is presented in Table 4.1.

Table 4.1 Response Rate

Response	Number	Percentage
Responded	170	90
Not Responded	19	10
Total	189	100

Findings show that 170 out of the targeted 189 motor vehicle dealers responded to the questionnaires representing an overall response rate of 90%. This response rate was sufficient and representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate while a response rate of 70% and over is excellent for analysis and reporting.

4.2 Respondents Background Information

This section presents the demographics of the respondents' and background information of their businesses.

4.2.1 Gender of Respondents

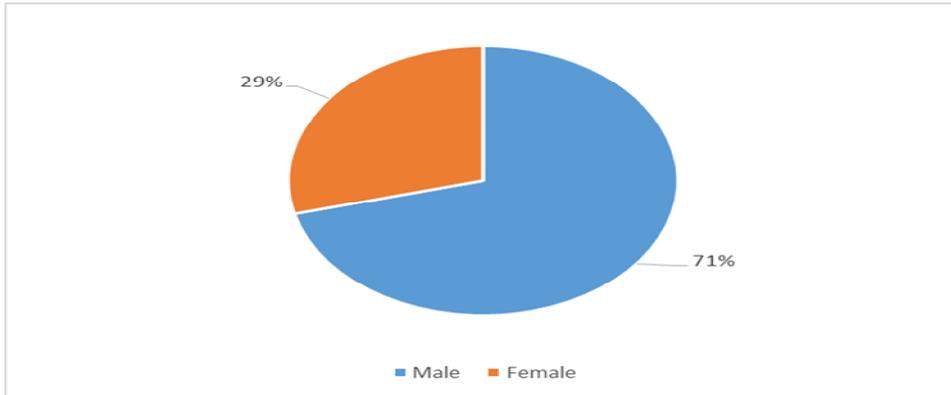


Figure 4.1 Composition of Respondents by their Gender

According to Figure 4.1, 71% of the second hand motor vehicle dealers with scar yards in Nairobi who were the majority were male while 29% were female. This thus shows that the car dealing business especially in Nairobi County is male dominated.

4.2.1 Age of Respondents

Age of the respondents was evaluated and presented in Table 4.2;

Table 4.2 Distribution of Respondents by their Age

Age	Frequency	Percent
18-28 years	22	12.9
29-39 years	57	33.5
40-50 years	75	44.1
Above 50 years	16	9.4
Total	170	100.0

Findings in Table 4.2 show that majority (44%) of the second hand motor vehicle dealers in Nairobi County were between 40 and 50 years, 34% were between 29 and 39 years, 13% were between 18 and 28 years while 9% were above 50 years. This depicts that the respondents had experience in the car dealing business for a number of years and so were equipped to respond to the study questions.

4.2.3 Respondents Level of Education

Respondents' level of education is presented in Table 4.3;

Table 4.3 Distribution of Respondents by their Level of Education

Level of Education	Frequency	Percent
Secondary	16	9.4
Diploma	71	41.8
Degree	79	46.5
Certificate	4	2.4
Total	170	100.0

The tabulations show that; majority of the second hand motor vehicle dealers in Nairobi County as presented by 47% possessed a degree, 42% possessed a diploma, 9% had a secondary certificate and 2% had a college certificate besides being the minority. This finding shows that the respondents were literate and understood the car dealing business and thus could effectively respond to the questionnaire.

4.2.4 Business Period of Operation

Table 4.4 presents the respondents' businesses period of existence in terms of years.

Table 4.4 Distribution of Respondents by their Businesses Period of Operation

No. of Years	Frequency	Percent
Less than 10 years	46	27.1
Between 11 and 20 years	92	54.1
More than 20 years	32	18.8
Total	170	100.0

As per the response, 54% of the second hand motor vehicle dealers in Nairobi County who were the most indicated that they had operated their businesses for a period between 11 and 20 years, 27% indicated that they had operated their businesses for a period of less than 10 years whereas 19% indicated that they had operated their businesses for a period of more than 20 years. The study shows that majority of the second hand car dealers in Nairobi County had vast knowledge and experience in the

business and thus fully understood the effects of e-commerce on the growth of second hand vehicle importation businesses in Nairobi, Kenya.

4.2.5 Size of Businesses on Annual Sales (Ksh)

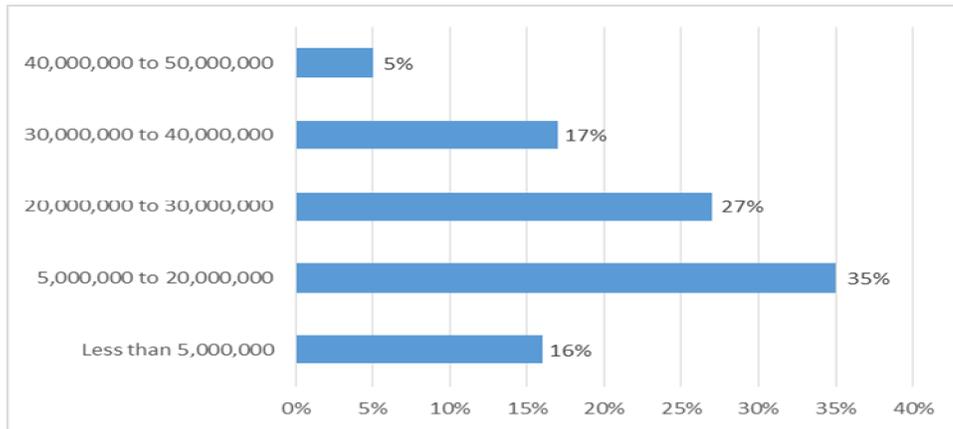


Figure 4.2 Distribution of the Size of Businesses in Ksh

Figure 4.2 illustrates that majority of the second hand motor vehicle dealers in Nairobi County (35%) indicated that their businesses annual sales volume in the past one year was 5,000,000 to 20,000,000, 27% indicated that businesses annual sales in the past one year was 20,000,000 to 30,000,000, 17% indicated that businesses annual sales in the past one year was 30,000,000 to 40,000,000, 16% indicated that businesses annual sales in the past one year was less than 5,000,000 while 5% indicated that businesses annual sales in the past one year was 40,000,000 to 50,000,000. This shows that the car yards in Nairobi County made great profits in the sale of second hand motor vehicles annually.

4.3 Adoption of E-commerce

This section presents findings on the various E-commerce technologies adopted in the second hand car business.

4.3.1 Modes of E-Commerce

Table 4.5 shows the mode of e-commerce respondents used while transacting with overseas sellers of second hand cars.

Table 4.5 Modes of E-Commerce

	Frequency	Percent
Website	151	88.8
App	19	11.2
Total	170	100.0

Findings show that majority of the second hand motor vehicle dealers in Nairobi County represented by 89% used websites such as Cheki Kenya.com as their mode of e-commerce to transact with overseas sellers of second hand cars while 11% preferred use of Apps from the google store such as Facebook to transact with overseas sellers of second hand cars. This depicts that most of the second hand dealers in Nairobi County prefer the use of websites compared to Apps as their mode of transaction with overseas sellers. Use of website was most preferred as it was more user friendly whereby one could just visit a cyber café for assistance unlike apps which needed to be installed and are not widely known.

4.3.2 Online Services on Purchasing of Second Hand Motor Vehicles

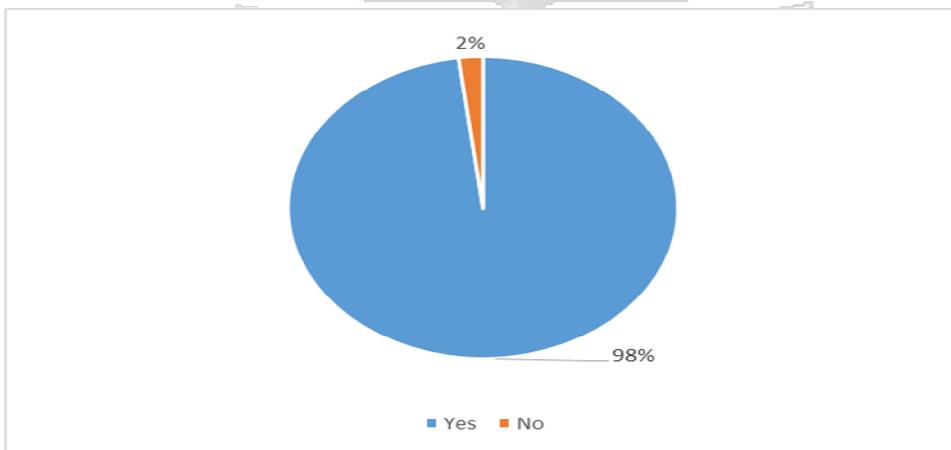


Figure 4.3 Online Services on Purchasing of Second Hand Motor Vehicles

Figure 4.3 shows that 98% of the second hand motor vehicle dealers in Nairobi County who were the majority indicated that they used online services in purchasing of second

hand motor vehicles. This shows that e-commerce is widely used in the purchasing of second hand motor vehicles especially in Nairobi County.

4.3.3 Online Services on Selling of Second Hand Motor Vehicles

Table 4.6 shows the respondents use of online services in the selling of second hand motor vehicles.

Table 4.6 Online Services on Selling of Second Hand Motor Vehicles

	Frequency	Percent
Yes	170	170
No	-	-
Total	170	100.0

The tabulations show that all the second hand motor vehicle dealers in Nairobi County (100%) who responded to the questionnaire used online services in the selling of second hand motor vehicles. This shows that e-commerce is widely used in the selling of second hand motor vehicles especially in Nairobi County.

4.3.4 Respondents Most Preferred Online Platform

Respondent's most preferred online platform was evaluated and presented as in Table 4.7;

Table 4.7 Respondents Most Preferred Online Platform

	Frequency	Percent
SBT Co.Ltd	56	32.9
Be Forward	41	24.1
Qualitex Trading	19	11.2
Autorec	5	2.9
Al Ain Japan	36	21.2
Delights	3	1.8
ICM Japan	3	1.8
Cheki Kenya	7	4.1
Total	170	100.0

According to the findings in Table 4.7, majority (33%) of the second hand motor vehicle dealers preferred SBT Co. Ltd as their online platform in the importation of second hand motor vehicles, 24% preferred Be Forward, 21% preferred Al Ain Japan, 11% preferred Qualitex Trading, 4% preferred Cheki Kenya, 3% preferred Autorec while 2% preferred Delights and ICM Kenya as their online platform in the importation of second hand motor vehicles besides being the minority.

4.3.5 Factors that determine channel of E-commerce in Importation of Second Hand Motor Vehicles

The study aimed to analyse how the following factors dictated the channel of e-commerce used in the importation of second hand motor vehicles.

Table 4.8 Factor that determine channel of E-commerce in Importation of Second Hand Motor Vehicles

	Mean	Std. Deviation
Accessibility	4.07	.903
Cost of operation	3.78	.968
Devices to use	3.90	1.184
Preferred online channel by other imported second hand motor vehicles dealers	3.74	1.055
Efficient communication in terms of availing information and feedback	3.92	1.117
User friendly	4.04	.987
Total	23.45	6.214
Average	3.90	1.035

A scale of 1 to 5 was used where 1 was to no extent, 2 was to moderate to a low extent, 3 was moderate, 4 was to a great extent while 5 was to a very great extent. For the analysis 1 to 2.5 represents low extent, 2.6 to 3.5 signifies moderate extent and 3.6 to 5 represent great extent. Table 4.8 illustrates that the factors that dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by an average score of 3.90 in that; accessibility dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by a mean score of 4.07, user friendly dictated the channel of e-commerce used in

the importation of second hand motor vehicles to a great extent as shown by a mean score of 4.04.

Efficient communication in terms of availing information and feedback dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.92, devices used dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.90, cost of operation dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.78 and preferred online channel by other imported second hand motor vehicles dealers dictated the channel of e-commerce used in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.74.

4.3.6 Factors that affect adoption of E-commerce in Second Hand Car Market

The study sought to investigate the rate the following factors affected the adoption of e-commerce in second hand car market.

Table 4.9 Factors that affect adoption of E-commerce in Second Hand Car Market

	Mean	Std. Deviation
Customer experience	3.81	.776
Customer education	3.37	.849
Customer age	3.68	1.011
Customer level of IT skills	3.87	.874
Total	14.73	3.510
Average	3.68	0.877

A scale of 1 to 5 was used where tabulations in Table 4.9 show that the factors affected the adoption of e-commerce in second hand car market to a great extent as shown by an average score of 3.68. Customer level of IT skills affected the adoption of e-commerce in second hand car market to a great extent as shown by a mean score of 3.87, customer experience affected the adoption of e-commerce in second hand car market to a great extent as shown by a mean score of 3.81, customer age affected the adoption of e-commerce in second hand car market to a great extent as shown by a mean score of 3.68

and customer education affected the adoption of e-commerce in second hand car market to a moderate extent as shown by a mean score of 3.37.

4.3.7 Factors that Influence E-commerce Adoption

Table 4.10 show findings on the factors that influence e-commerce adoption on second hand car business.

Table 4.10 Factors that Influence E-commerce Adoption

	Mean	Std. Deviation
Customers preference have increased	4.02	.919
Increased the level of technology skills	3.77	1.053
Technology has made customers/buyers has increased sales	3.81	1.086
Customer expectations are met	3.93	1.044
Resulted to car yards establishment	3.72	1.235
Resulted to car yards closer	3.20	1.191
Resulted to car yards merger	3.13	1.345
Total	25.58	7.873
Average	3.65	1.124

A scale of 1 to 5 was used and as per the findings, factors assessed that influence e-commerce adoption were to a great extent as shown by an average score of 3.65. Customer preferences had increased to a great extent as shown by a mean score of 4.02, customer expectations were met to a great extent as shown by a mean score of 3.93, technology had made customers/buyers to increase their sales to a great extent as shown by a mean score of 3.81, e-commerce had increased the level of technology skills to a great extent as shown by a mean score of 3.77, e-commerce had resulted to car yards establishment to a great extent as shown by a mean score of 3.72, e-commerce had resulted to car yards being closer to the customers to a moderate extent as shown by a mean score of 3.20 and e-commerce had resulted to car yards being merged to a moderate extent as shown by a mean score of 3.13.

4.4 Extent of E-Commerce Adoption

This section presents findings on the extent E-commerce had been adopted in the second hand car business.

4.4.1 E-commerce on Marketing Operations

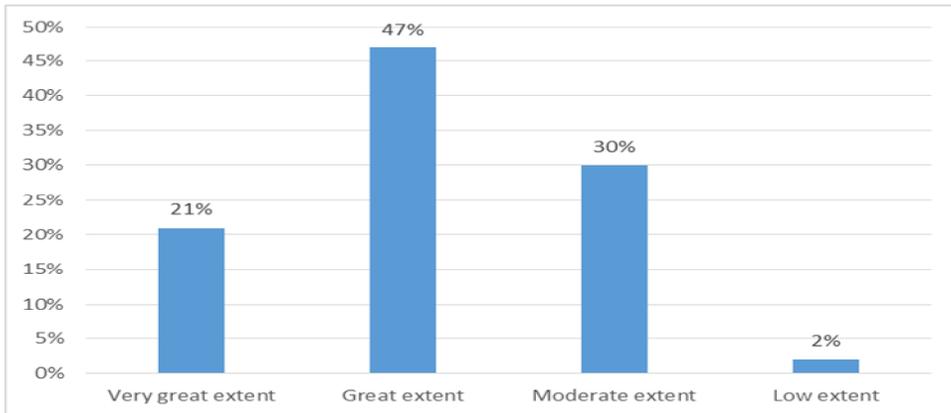


Figure 4.4 E-commerce on Marketing Operations

Figure 4.4 illustrates that majority of the second hand motor vehicle dealers in Nairobi County (47%) indicated that e-commerce had influenced their operations in marketing their imported second hand cars to a great extent, 30% indicated that e-commerce had influenced their operations in marketing their imported second hand cars to a moderate extent, 21% indicated that e-commerce had influenced their operations in marketing their imported second hand cars to a very great extent whereas 2% indicated that e-commerce had influenced their operations in marketing their imported second hand cars to a low extent. This shows that e-commerce greatly affects the marketing of imported second hand motor vehicles especially in Nairobi County.

4.4.2 E-commerce on Buying and Selling of Second Hand Motor Vehicles

Table 4.11 shows findings on the rate e-commerce technologies had influenced the operations in buying and selling of second hand motor vehicles.

Table 4.11 E-commerce on Buying and Selling of Second Hand Motor Vehicles

	Frequency	Percent
Very great extent	21	12.4
Great extent	91	53.5
Moderate extent	58	34.1
Total	170	100.0

According to the findings, 54% of the second hand motor vehicle dealers in Nairobi County indicated that e-commerce technologies had influenced their operations in buying and selling of second hand motor vehicles to a great extent, 34% indicated that e-commerce technologies had influenced their operations in buying and selling of second hand motor vehicles to a moderate extent while 12% indicated that e-commerce technologies had influenced their operations in buying and selling of second hand motor vehicles to a very great extent. This shows that the adoption of e-commerce greatly affected the selling and buying of second hand motor vehicles.

4.4.3 Level of E-Commerce Use

The study assessed the level of e-commerce use by yard owners in the importation of second hand motor vehicles.

Table 4.12 Adoption of E-commerce in Importation of Second Hand Motor Vehicles

	Frequency	Percent
Very great extent	21	12.4
Great extent	91	53.5
Moderate extent	58	34.1
Total	170	100.0

Findings in Table 4.12 show that most of the second hand motor vehicle dealers represented by 54% had adopted e-commerce in the importation of second hand motor vehicles to a great extent, 34% had adopted e-commerce in the importation of second hand motor vehicles to a moderate extent while 12% had adopted e-commerce in the importation of second hand motor vehicles to a very great extent. This thus depicts that e-commerce had been adopted greatly by second hand motor vehicle dealers in Nairobi County.

4.4.4 Use of E-commerce in Transacting

The second hand motor vehicle dealers were asked how often they used e-commerce in transacting (both buying and selling) in their second hand vehicle business. Findings are as shown in Table 4.13;

Table 4.13 Use of E-commerce in Transacting

	Frequency	Percent
Always (In every transaction)	116	68.2
Regularly (Maybe like quarterly)	32	18.8
Average (Twice a year)	7	4.1
Sometimes (once in a year)	10	5.9
Not at all (other modes preferred)	5	2.9
Total	170	100.0

Table 4.13 illustrates that majority of the second hand motor vehicle dealers (68%) always (in every transaction) used e-commerce in transacting (both buying and selling) in their second hand vehicle business, 19% regularly (maybe like quarterly) used e-commerce in transacting (both buying and selling) in their second hand vehicle business, 6% sometimes (once in a year) used e-commerce in transacting (both buying and selling) in their second hand vehicle business, 4% averagely (twice a year) used e-commerce in transacting (both buying and selling) in their second hand vehicle business while 3% did not use e-commerce in transacting (both buying and selling) in their second hand vehicle business. This shows that most of the second hand motor vehicle car yards in Nairobi County always (in every transaction) use e-commerce in transacting (both buying and selling).

4.4.5 Extent of E-commerce Use in Marketing of Second Hand Motor Vehicles

The study aimed to analyse the extent of e-commerce use marketing of second hand motor vehicles.

Table 4.14 Extent of E-commerce Use in Marketing of Second Hand Motor Vehicles

	Mean	Std. Deviation
Adoption of e-commerce has resulted to an increase of individuals importing vehicles by themselves	3.89	1.109
The number of car yards have been closed as a result of e-commerce adoption	3.12	1.387
Individuals are importing cars and selling them an instance that has affected the second hand business	3.69	1.093
The increase of individuals who import second hand cars has not affected the business as the demand is still high due to population increase	3.60	1.143
Total	14.3	4.732
Average	3.575	1.183

A scale of 1 to 5 was used where Table 4.14 shows that extent of e-commerce use marketing of second hand motor vehicles was to a great extent as shown by an average score of 3.57. Adoption of e-commerce had resulted to an increase of individuals importing vehicles by themselves to a great extent as shown by a mean score of 3.89, individuals were importing cars and selling them an instance that had affected the second hand business to a great extent as shown by a mean score of 3.69, the increase of individuals who imported second hand cars had not affected the business as the demand was still high due to population increase to a great extent as shown by a mean score of 3.60 and the number of car yards had been closed as a result of e-commerce adoption to a moderate extent as shown by a mean score of 3.12.

4.4.6 Functions on Adoption of E-commerce

Table 4.15 demonstrates the level functions influence the extent second hand motor vehicle dealers have adopted e-commerce in the importation of second hand motor vehicles using a scale of 1 to 5.

Table 4.15 Functions on Adoption of E-commerce

	Mean	Std. Deviation
Help me track when an item was saved or not saved in the purchase list	3.91	.889
Returning to different parts of the site after adding an item to the purchase list	3.51	1.187
Easy scanning and selecting items in a list	4.05	1.086
Effective categorical organization of vehicles	3.68	1.168
Simple navigation from home page to information and order links for specific products	3.93	1.032
Obvious shopping links or buttons	3.69	1.161
Minimal and effective security notifications or messages	3.82	1.039
Consistent layout of product information	3.56	1.225
Total	30.15	8.787
Average	3.76	1.098

As per the findings, functions had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by an average score of 3.76 in that; easy scanning and selecting items in a list had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 4.05, simple navigation from home page to information and order links for specific products had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.93.

Helping respondents track when an item was saved or not saved in the purchase list had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.91, minimal and effective security notifications or messages had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.82, obvious shopping links or buttons had influenced the level second hand motor vehicle dealers

had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.69.

Effective categorical organization of vehicles had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.68, consistent layout of product information had influenced the level second hand motor vehicle dealers had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.56 and returning to different parts of the site after adding an item to the purchase list had adopted e-commerce in the importation of second hand motor vehicles to a great extent as shown by a mean score of 3.51.

4.5 Assessing Effects of E-commerce on Second Hand Vehicle Importation Business

This section evaluates the effects of e-commerce on second hand vehicle importation business.

4.5.1 Sales before Adoption of E-commerce

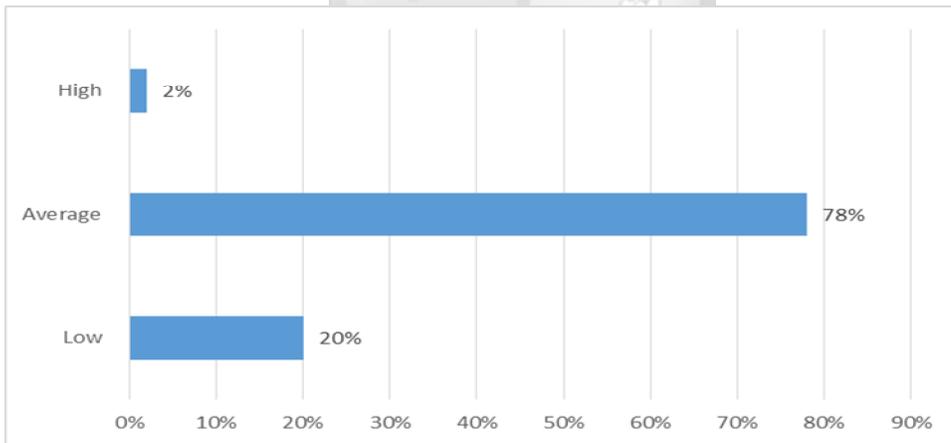


Figure 4.5 Sales before Adoption of E-commerce

Figure 4.5 shows that most of the second hand motor vehicle dealers in Nairobi County 78%, indicated that their sales before adoption of e-commerce were average, 20% indicated that their sales before adoption of e-commerce were low while 2% indicated that their sales before adoption of e-commerce were high besides being the minority.

This shows that before the adoption of e-commerce second hand business was performing averagely.

4.5.2 Sales after Adoption of E-commerce

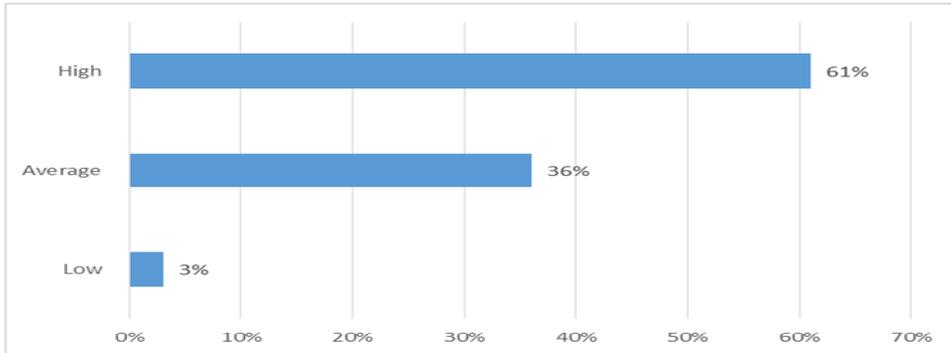


Figure 4.6 Sales after Adoption of E-commerce

According to Figure 4.6, most of the second hand motor vehicle dealers in Nairobi County 61%, indicated that their sales after adoption of e-commerce were high, 36% indicated that their sales after adoption of e-commerce were average while 3% indicated that their sales after adoption of e-commerce were low. This shows that the adoption of e-commerce in the second hand business played a significant role in the raising of their sales.

4.5.3 Adoption of E-commerce on Functions

Table 4.16 shows findings on the extent e-commerce impacted functions on the importation and selling of second hand vehicle business using a scale of 1 to 5.

Table 4.16 Adoption of E-commerce on Functions

	Mean	Std. Deviation
Improved customer's experiences/preference	3.81	1.043
Increase in number of yards	3.32	1.097
Attracted increase in number of customers	3.84	1.028
Improved government regulations	3.71	1.105
Increased sales of second hand cars	3.91	1.108
Total	18.59	5.381
Average	3.71	1.076

Tabulations illustrate that e-commerce impacted functions on the importation and selling of second hand vehicle business to a great extent as shown by an average score of 3.71. E-commerce impacted the increase in sales of second hand cars to a great extent as shown by a mean score of 3.91, e-commerce impacted in the increase in number of customers to a great extent as shown by a mean score of 3.84, e-commerce impacted improvement in customer's experiences/preferences to a great extent as shown by a mean score of 3.81, e-commerce impacted the improvement of government regulations to a great extent as shown by a mean score of 3.71 and-commerce impacted increase in number of yards to a moderate extent as shown by a mean score of 3.32.

4.5.4 Challenges in Application of E-commerce

The second hand motor vehicle dealers were asked the extent challenges affected their business operations in application of e-commerce.

Table 4.17 Challenges in Application of E-commerce

	Mean	Std. Deviation
Lack of adequate regulations	3.40	1.005
High cost of technology	3.49	.968
Disrupted internet connection	3.42	1.170
Increased cases of online fraud	3.60	1.356
Total	13.91	4.499
Average	3.47	1.124

A scale of 1 to 5 was used and as per the findings in Table 4.17, challenges affected the second hand motor vehicle dealers' in application of e-commerce to a moderate extent as shown by an average score of 3.47. Increased cases of online fraud affected the second hand motor vehicle dealers' in application of e-commerce to a great extent as shown by a mean score of 3.60, high cost of technology affected the second hand motor vehicle dealers' in application of e-commerce to a moderate extent as shown by a mean score of 3.49, disrupted internet connections affected the second hand motor vehicle dealers' in application of e-commerce to a moderate extent as shown by a mean score of 3.42 and lack of adequate regulations affected the second hand motor vehicle dealers' in application of e-commerce to a moderate extent as shown by a mean score of 3.40.

4.6 Inferential Statistics

Inferential statistics are mathematical methods that employ probability theory for deducing (inferring) the properties of a population from the analysis of the properties of a data sample drawn from it. In this study, regression analysis was used to determine the effect of each of the independent variables on the dependent variable. The regression analysis findings are as described below.

4.6.1 Model Summary

Table 4.18 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 ^a	0.734	0.729	.6128

Predictors: (Constant), technology, customers and business owners

According to Table 4.18, R square is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables. The value of R square is 0.734 which means that 73.4% variation in the growth of second hand vehicle importation businesses in Nairobi was due to variations in technology, customers and business owners. Hence, 26.6% of variation in the growth of second hand vehicle importation businesses in Nairobi was explained by other factors not in the model or not focused on in the current study.

4.6.2 Analysis of Variance (ANOVA)

Table 4.19 ANOVA (Analysis of Variance)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174.148	3	58.0493	152.759	.0000 ^a
	Residual	63.081	166	.3800		

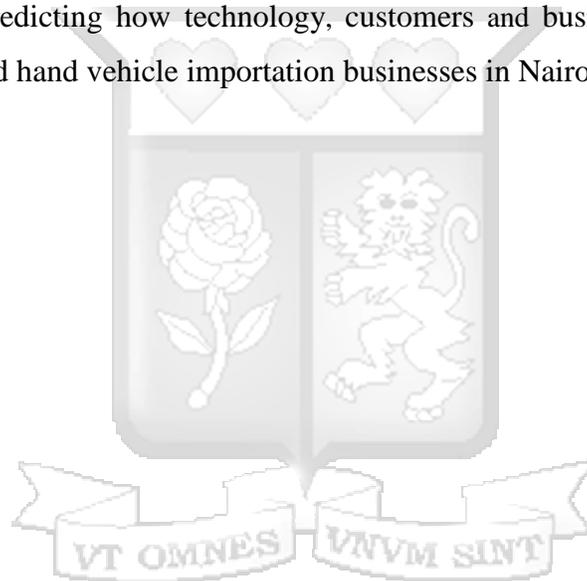
Total 237.229 169

a. Predictors: (Constant), technology, customers and business owners

b. Dependent Variable: growth of second hand vehicle importation businesses

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and forms a basis for tests of significance.

The "F" column provides a statistic for testing the hypothesis that all $\beta \neq 0$ against the null hypothesis that $\beta = 0$ (Weisberg, 2005). According to the findings in Table 4.19, the significance value is .0000 which is less than 0.05 thus the model was statistically significant in predicting how technology, customers and business owners affected the growth of second hand vehicle importation businesses in Nairobi.



4.6.3 Regression Coefficients Results

Table 4.20 Regression coefficients results

	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	5.742	.748		7.676	.0000
Technology [X ₁]	0.749	.169	.718	4.432	.0000
Customers [X ₂]	0.715	.173	.642	4.133	.0001
Business owners [X ₃]	0.631	.274	.661	2.303	.0225

a. Dependent Variable: Growth of second hand vehicle importation businesses

Based on the regression results shown in Table 4.20, the regression model became;

$$Y = 5.742 + 0.749 X_1 + 0.715 X_2 + 0.631 X_3$$

From the regression equation above, taking all factors (technology, customers and business owners) constant at zero, the growth of second hand vehicle importation businesses in Nairobi would be 5.742. The results further indicate that a unit increase in technology would lead to a 0.749 increase in the growth of second hand vehicle importation businesses in Nairobi; a unit increase in customers would lead to a 0.715 increase in the growth of second hand vehicle importation businesses in Nairobi while a unit increase in business owners would lead to a 0.631 increase in the growth of second hand vehicle importation businesses in Nairobi. At 5% significance level [or 95% level of confidence], the three independent variables were significant ($p < 0.05$) with the most significant factor affecting the growth of second hand vehicle importation businesses in Nairobi being technology followed by customers and the business owners, respectively.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The objectives of the study were to establish i.establish factors that determine the adoption of ecommerce technologies by second hand car business in Nairobi, to determine the extent to which second hand vehicle business in Nairobi have adopted e-commerce and to assess the effects of adoption of e-commerce on second hand car business in Nairobi. Here, discussions of the findings are shown as well as the comparison of the findings presented in chapter four with the literature studied in chapter two.

5.2 Discussion of Findings

5.2.1 Adoption of E-commerce

The study found that adoption of e-commerce cut across all the demographics studied mainly gender, age and level of education. This finding supported Richard (2012) study that shows that traditional way of importation is more preferred than e-commerce among demographic categories. The study shows that those between the age of 21 to 35 preferred e-commerce unlike their counterparts who were aged 36 years and above in second hand business. Those aged above 36 indicated that the traditional way of purchasing second hand cars was safer than the use of e-commerce. Those who adopted e-commerce were male as shown by 77% as compared to 23% female. Those who had degree certificates preferred e-commerce as compared to those who had basic education.

The study found that second hand motor vehicle sellers used online services such as websites as their mode of e-commerce to transact (that is in both selling and buying) with overseas sellers of second hand cars and their customers. Most of the second hand

motor vehicle dealers preferred SBT Co. Ltd as their online platform in the importation of second hand motor vehicles and that the effects of e-commerce were to a great extent. These findings are in line with Richard (2012) who found that in second hand importation market environment where the buyer request for a tangible product then there is need for a platform that will be efficient for a transaction process between a buyer and seller. Thus e-commerce involves a business that is conducted in a paperless form where an electronic device, which is the computer, is able to recognise, reproduce and store information. This means that electronic marketing is an application of business-to-consumer electronic commerce which can be further broken down into online shopping and online purchasing or buying. According to a report by KIPPRA (2017) there a number of sites used by individual while importing second hand vehicles in Kenya which include; SBT Co. Ltd, Autocom Japan, UK Car exporters, AA Japan cars, Delorean Motor Company, Be Forward, Qualitex Trading, Autorec and AI in Japan.

5.2.2 Extent of E-Commerce Adoption

The study also found that second hand motor vehicle dealers in Nairobi County adoption of e-commerce had influenced their operations in marketing both buying and selling of their imported second hand cars to a great extent. Specific second hand motor vehicle dealers also indicated that they always (in every transaction) used e-commerce in transacting (both buying and selling) in their second hand vehicle business and that e-commerce had affected the level of marketing of second hand motor vehicles to a great extent. Number of calls from potential buyers was on increase but the sales has stagnated.

This is supported by Laskey (2016), the aspect of ensuring that online shoppers transact effectively and are able to receive their goods at the right time and according to their desire is interactivity. This is generally the art of ensuring that consumers are satisfied and their needs are met. Here the consumer has the same powers with the provider. Online shopping has become much easier and fast and has also been able to deal with insecurity issues making it the most popular way of shopping. E-commerce has now

been well embraced and therefore all users should ensure that they create features and functions that are easy for the consumers to use to meet their needs and in return enhance the sellers' performance (Natwell, 2016).

Findings show that majority of the dealers in showrooms adopted e-commerce to a great extent which contradicts Nohria and Gulati (2015) who indicates many consumers across the world are reluctant to shop online because of risk both perceived and real associated with such transactions. These security risks are especially high due to the open nature of the internet coupled with increasing technical knowledge of modern day sophisticated criminals. Security is key in achieving to ecommerce success, the parties involved need have a high degree of assurance that their data is protected against any kind of harm.

5.2.3 Effects of E-commerce on Second Hand Vehicle Importation Business

The study further found that second hand motor vehicle dealers in Nairobi County sales before adoption of e-commerce were average and after adoption of e-commerce the sales were high. They also indicated that they had faced challenges in application of e-commerce to a moderate extent. The regression model results showed that there existed a significant positive relationship between technology, customers as well as business owners and the growth of second hand vehicle importation businesses in Nairobi with beta values of 0.749, 0.715 and 0.631, respectively. These findings correspond with Rettie (2016) who contends that the great facilities availed by the e-commerce has greatly propelled the growth of importation of second hand car businesses therefore increasing the magnitude of benefits. These include: access to global markets at low costs, operational efficiency, cost reduction, mass customization, inventories reduction, business efficiency, 24 hours accessibility, lower communication costs, increases sales and profitability (to organizations).

In addition, Pruss-Ustun et al., (2016) stresses that consumers on the other hand benefit from; more choices, 24 hours access, new markets and price comparisons, better prices due to competitive environments, convenience, time saving, access to extensive

information. To the society the benefits are; improved living standards since some merchandise can be sold at lower prices, flexible working conditions, enhanced social connections and facilities delivery of public services which reduces cost and increases quality of the offered services. By breaking down the barrier of time and space e-commerce increases competitiveness in the business environment and levels the playground which allows small businesses and individuals compete with big businesses.

The study findings show that e-commerce has affected those with second hand car business and favours the individual importers who purchase vehicles for their personal use which shows similar results with Moon and Byeong-Joon (2016) study in that the use of e-commerce on revenue found that just over half of the second hand car importers who responded to the survey were in agreement that e-commerce contributed to the increase in revenues and the rest indicated that they were in agreement that the revenues would increase in future due to e-commerce businesses that are also increasing with time. Despite this findings, a number of the respondents disagreed that the rate of revenues would rise due to e-commerce.

5.3 Conclusions

The study concludes that the level of e-commerce adopted by importers is high. The types of e-commerce were mostly used in personal computers and mobile phones for their purchase and importation of second hand vehicle. The website that were mostly used include SBT Japan, Be Forward and Autorec. The study also concludes that the type of customers that used e-commerce were yard owners, brokers and those who intended through window shopping in buying second hand vehicle in future. The preferences of customers were mostly centred on cost, quality and comfort that comes with the units. Technology skills of the users was average and mostly they got assistance from cyber cafés.

The study further concludes that extent of e-commerce use was as a result of users age which influenced the growth of second hand vehicle importation business. Majority of the respondents were in the middle age (between 35- 50 years). This was seen through

increase in the sales of second hand vehicles, opening of other yards as branches and increase in the number of customer base. Besides majority of the e-commerce users level of education was found to be above diploma level.

The study finally concludes that second hand motor vehicle dealers in Nairobi County indicated that their sales before adoption of e-commerce were average and after adoption of e-commerce the sales were high. The study found high cost of technology, disrupted internet connections and increased cases of online fraud were the main challenges that the second hand motor vehicle dealers faced when applying e-commerce in their business. As security is key in achieving e-commerce success, the parties involved need have a high degree of assurance that information shared is protected against accidental or intentional disclosure to unauthorized persons, or unauthorized modifications or destruction.

5.4 Recommendations

The study findings show that the current used websites are confusing and tedious as users have to create accounts and one has to remember his/her password whenever they want to access the account again. This makes the process not to be user friendly and reduces the rate of e-commerce adoption. The study therefore recommends that there is need to have second hand vehicle importation applications that are easy to use and have easy access. The apps will just need to be installed, which gives users freedom of access and is guaranteed for 24-hour accessibility at the convenient of the user through his/her smart phone. Managers of the yards need also to create awareness to their employees on how best to utilise the available e-commerce option to grow their business. This can be enhanced through ICT training courses and networking with firms that are making profits in the current challenging business environment.

The study also recommends that sellers of imported second hand vehicles need to adopt websites which are fast to load and eliminate too much graphics or interactivity on their website as speed of access to the e-commerce is a major concern to many users. Information especially that involves discounted offers should be well displayed by the

second hand motor vehicle sellers in their websites so as to increase customer satisfaction, second hand motor vehicle sellers should also embrace the systems of use as it has been found to have an impact on the organisation and can be used to make decisions on improving the quality of a website, second hand motor vehicle sellers should also improve the non-financial or the intangible benefits of a website as they are found to be measurements of performance and second hand motor vehicle sellers should ensure that they improve the search engine in their websites as it is an indicative measure of how well an e-commerce website is being utilized by the target consumers and communicate its competitive position in the importation of second hand car market.

Currently there are inadequate security measures against information manipulation and privacy infringement. The study also recommends that there is need to have policies that regulate the e-commerce platform. The government should therefore provide e-documents the same legal force as written documents. The formulation should aim at improving the viability of e-commerce, protect consumers, and to help implement government policies for promoting electronic commerce in the country. The Electronic Signature Act should ensure the identity of the other party in remote communications in non-face-to-face situations and to guarantee the integrity and authenticity of electronically signed documents. This will enhance security of the users and benefit the government through foreign exchange as part of the tax paid by the importers.

5.5 Areas of Further Study

Since the study was confined to car yard owners as the target, future research should consider extending the focus to individual users in order to get their perspective on e-commerce and how they perceive its benefits in second hand vehicle importation. Future research could explore other effects of e-commerce variables not addressed in the current study.

There is need to conduct a comparative study by analysing those who have not adopted e-commerce in their business and those who have in order to compare their findings. This will give a clear perspective of the benefits or limitations of e-commerce use in business. There is also need to conduct another study to evaluate the effects of e-

commerce in other sectors besides the second hand vehicle importation businesses in Nairobi, Kenya



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APPENDICES

Appendix I: Introduction Letter

Dear respondent,

I am a student at Strathmore University conducting a study on the effects of e-commerce on the growth of second hand vehicle importation business in Kenya. This study will enlighten the business community, policy makers and the general public about the above area of study. In order to accomplish this study, I request you to complete this questionnaire.

The information obtained will be used purely for academic purposes and will therefore be treated with utmost confidentiality. Thank you for participating and making this study a success.

Please note that the information you provide will be treated as confidential and will only be used to complete the academic project course. Thank you in advance

Yours sincerely

.....
James Ikua Manyeki
MBA Degree Student

.....
Dr. Humphrey Njogu
Lecturer - Strathmore University

PARTICIPANT INFORMATION AND CONSENT FORM

ASSESSING THE EFFECTS OF E-COMMERCE ON THE GROWTH OF SECOND HAND VEHICLE IMPORTATION BUSINESSES IN KENYA

SECTION 1: INFORMATION SHEET

Investigator: James Ikua Manyeki

Institutional affiliation: Strathmore Business School (SBS)

SECTION 2: INFORMATION SHEET–THE STUDY

2.1: Why is this study being carried out?

To assess how adoption of technology by e-commerce use influence growth of second hand vehicle importation businesses in Kenya

2.2: Do I have to take part?

No. Taking part in this study is entirely optional and the decision rests only with you. If you decide to take part, you will be asked to complete a questionnaire to get information on **THE EFFECTS OF E-COMMERCE ON THE GROWTH OF SECOND HAND VEHICLE IMPORTATION BUSINESSES IN KENYA**. If you are not able to answer all the questions successfully the first time, you may be asked to sit through another informational session after which you may be asked to answer the questions a second time.

You are free to decline to take part in the study from this study at any time without giving any reasons.

2.3: Who is eligible to take part in this study?

- Managers of yards

2.4: Who is not eligible to take part in this study?

- Those not in the managerial position

2.5: What will taking part in this study involve for me?

You will be approached and requested to take part in the study. If you are satisfied that you fully understand the goals behind this study, you will be asked to sign the informed consent form (this form) and then taken through a questionnaire to complete.

2.6: Are there any risks or dangers in taking part in this study?

There are no risks in taking part in this study. All the information you provide will be treated as confidential and will not be used in any way without your express permission.

2.7: Are there any benefits of taking part in this study?

The information will be used to improve second hand vehicle importation businesses in Kenya.

2.8: What will happen to me if I refuse to take part in this study?

Participation in this study is entirely voluntary. Even if you decide to take part at first but later change your mind, you are free to withdraw at any time without explanation.

2.9: Who will have access to my information during this research?

All research records will be stored in securely locked cabinets. That information may be transcribed into our database but this will be sufficiently encrypted and password protected. Only the people who are closely concerned with this study will have access to your information. All your information will be kept confidential.

2.10: Who can I contact in case I have further questions?

You can contact me, **James Ikua Manyeki**, at SBS, or by e-mail (kuamanyeki@gmail.com), or by phone (0722262163). You can also contact my supervisor, **Dr. Humphrey Njogu**, at the Strathmore Business School, Nairobi, or by e-mail (HNjogu@strathmore.edu) or by phone (0723961967)

If you want to ask someone independent anything about this research please contact:

The Secretary–Strathmore University Institutional Ethics Review Board, P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375

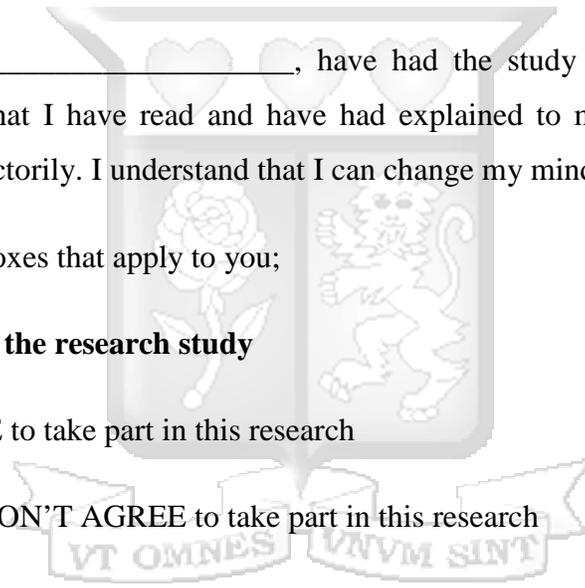
I, _____, have had the study explained to me. I have understood all that I have read and have had explained to me and had my questions answered satisfactorily. I understand that I can change my mind at any stage.

Please tick the boxes that apply to you;

Participation in the research study

I AGREE to take part in this research

I DO NOT AGREE to take part in this research



Storage of information on the completed questionnaire

[] I AGREE to have my completed questionnaire stored for future data analysis

[] I DO NOT AGREE to have my completed questionnaire stored for future data analysis

Participant's Signature: _____ Date: ____/____/____
DD / MM / YEAR

Participant's Name: _____ Time: ____ / ____ HR / MN

I, _____ (Name of person taking consent) certify that I have followed the SOP for this study and have explained the study information to the study participant named above, and that s/he has understood the nature and the purpose of the study and consents to the participation in the study.

S/he has been given opportunity to ask questions which have been answered satisfactorily.

Investigator's Signature: _____ Date: ____/____/____ DD / MM / YEAR

Investigator's Name: _____ Time: ____ / ____ HR / MN

Appendix II: Questionnaire (For Second Hand Motor Vehicles Dealers with Showrooms/Car yards)

Please supply the required data by filling in the blanks where space is provided or by ticking [√] against the most appropriate answer.

Section A: Respondent background information

1. Gender

Female [] Male []

2. How old are you?

18 – 28 years [] 29 – 39 years []

40 - 50 years [] above 50 years []

3. What is the highest level of education attained?

Primary [] Secondary []

Diploma [] Degree []

Others (Specify).....

4. For how long have you been operating this business?

Less than 10 years []

Between 11 and 20 years []

More than 20years []

5. What is the size of your business as regards to annual sales volume in the last one year in Ksh?

Less than 5,000,000 [] 5,000,000 to 20,000,000 []

20,000,000 to 30,000,000 [] 30,000,000 to 40,000,000 []

40,000,000 to 50,000,000 [] other specify?

.....

Section B: Adoption of E-commerce

6. As a dealer, which mode of e-commerce do you use while transacting with overseas sellers of second hand cars?

Website specify

App specify

Any other specify

7. Does your firm use online services in purchasing of second hand motor vehicles?

Yes

No

8. Does your firm use online services in selling of second hand motor vehicles?

Yes

No

9. If yes which are/is your most preferred online platform in the importation of second hand motor vehicles?

SBT Co. Ltd.

Be Forward

Qualitex Trading

Autorec

Al Ain Japan

Any other specify

10. To what extent do the following factors dictate the channel of e-commerce to use in the importation of second hand motor vehicles? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Accessibility					
Cost of operation					
Devices to use					
Preferred online channel by other imported second hand motor vehicles dealers					
Efficient communication in terms of availing information and feedback					
User friendly					

11. Rate how the following factors affect the adoption of e-commerce in second hand car market? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Customer experience					
Customer education					
Customer age					
Customer level of IT skills					

12. To what extent has e-commerce resulted to the following? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Customers preference have increased					
Increased the level of technology skills					
Technology has made customers/buyers has increased sales					
Customer expectations are met					
Resulted to showrooms establishment					
Resulted to showrooms closer					
Resulted to showrooms merger					

Section C: Extent of E-Commerce Adoption

13. Rate how the ecommerce technologies as influenced your operations in marketing your imported second hand car business?

Very great extent [] Great extent []
 Moderate extent [] Low extent []
 No extent []

14. Rate how the ecommerce technologies has influenced your operations in buying and selling your imported second hand car business?

Very great extent [] Great extent []

Moderate extent [] Low extent []
 No extent []

15. To what extent have you adopted e-commerce in the the importation of second hand motor vehicles?

Very great extent [] Great extent []
 Moderate extent [] Low extent []
 No extent []

16. How often do you use e-commerce in transacting (both buying and selling) in second hand vehicle as a business?

Always (In every transaction) []
 Regularly (Maybe like quartely) []
 Average (Twice a year) []
 Sometimes (once in a year) []
 Not at all (other modes preferred) []

17. As a business person who is involved in importation of second hand vehicles briefly indicate your level of agreement with the following statements? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Adoption of e-commerce has resulted to an increase of individuals importing vehicles by themselves					
The number of showrooms have been closed as a result of e-commerce adoption					
Individuals are importing cars and selling them an instance that has affected the second hand business					
The increase of individuals who import second hand cars has not affected the business as the demand is still high due to population increase					

18. To what level do the following functions influence the extent have you adopted e-commerce in the the importation of second hand motor vehicles? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Help me track when an item was saved or not saved in the purchase list					
Returning to different parts of the site after adding an item to the purchase list					
Easy scanning and selecting items in a list					
Effective categorical organization of vehicles					
Simple navigation from home page to information and order links for specific products					
Obvious shopping links or buttons					
Minimal and effective security notifications or messages					
Consistent layout of product information					

Section D: Growth of Second Hand Vehicle Importation Business

19. How are the sales before adoption of ecommerce?

Low [] Average []

High []

20. How are the sales after adoption of ecommerce?

Low [] Average []

High []

21. To what extent has e-commerce impacted on the importation and selling of second hand vehicle as a business in the given functions? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Improved customer's experiences/preference					
Increase in number of yards					
Attracted increase in number of customers					
Improved government regulations					
Increased sales of second hand cars					

22. To what extent do the following challenges influence your business operations when applying e-commerce? Use a scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Low extent and 1 No extent

	1	2	3	4	5
Lack of adequate regulations					
High cost of technology					
Disrupted internet connection					
Increased cases of online fraud					

*****THE END*****