

THE INFLUENCE OF TECHNOLOGY ON COMPETITIVE ADVANTAGE OF TAXI

BUSINESS IN KENYA: THE CASE OF UBER KENYA

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**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF MANAGEMENT AND
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DECLARATION

Declaration by the Student

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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Signature.....Date.....

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BML/12/00414/3/2015

Declaration by the Supervisor

This research proposal has been submitted with my approval as The Management University of Africa supervisor.

Signature Date.....

Juster Nyaga

DEDICATION

All the Glory and Honor to God Almighty for His endless blessings and mercies. I dedicate this Research project to my loving Wife and our wonderful children. Their encouragement and support propelled me to achieve my goal.

ACKNOWLEDGEMENT

First and foremost I wish to thank our heavenly father for making it possible for me to see this day and giving me the strength and the wisdom to complete this research proposal.

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ABSTRACT

Competitive advantage has in many years shaped competitors to establish factories and industries which in the case of the taxi industry have enormous impact through the sharing of the rides in technology companies like Uber, Taxify, and Sidecar etc. The now well-developed taxi new services through technology have made the consumers of the services better due to convenience. Taxi companies have been benefitting from a lack of competition in the hire transportation market until recently. The major challenge that the taxi industry is currently facing is the technological innovation of ride-sharing applications. Ridesharing companies, namely Uber and Lyft, operate by using a smartphone app to match consumers requesting rides with drivers that will take them there in a short time. The current taxi technology uses a consumer smart phone app that indicates the taxi driver and the contacts, a pick up place showing the consumer's payment information. This is done by the use of a GPS device tracks to indicate and also the payment is charged automatically and paid through mobile money or cash after the end of the trip. The taxi company takes a percentage of the fare, and the remaining goes to the driver. In Kenya public transport is very slow and inconveniencing and more especially some areas that are not well connected hence it becomes very challenging for commuters to operate from such areas. The research study is among the very few that have been done on the influence of technology on the competitive advantage of taxi but it will be the first to provide data for Nairobi hence the need to conduct the study. The study answers the research questions derived from the identified objectives as follows; time efficiency, quality service, pricing and challenges facing technology based taxi business in Uber industry in Kenya. The study was done at Uber Kenya located on Chiromo lane on Westland in Nairobi targeting staff, drivers and consumers of the services. The study used descriptive design method which adopted the questionnaire as the research instruments and then data collected will be analyzed using the Statistical Package for Social Sciences. The findings on demographic information included age, gender, academic qualifications, duration of service and the position a participant holds at the time of the study. Then the results were obtained on time efficiency based on pick-up time effectiveness and maintenance. On quality service it based on clean and quality cars, rating of customer service and competent and expert drivers. On pricing it based on offering lower prices than traditional taxi services and surge valuation time pricing. Then on automation it based on use of automated payment services and automation on car location. The study concluded that there were more female than men within 25-35 years of age majority being degree holders. Pick up time for Uber taxi services efficient. The cars are of quality and clean but the customer service not effective, the drivers are competent and experts. They offer low prices than other service providers though exaggerate during surge hours. Automated payment services rarely used, the automation is effective in the identification of car location for pick-up. To explore more on factors affecting time maintenance upon request, why customer service is not effective and management of pricing exaggeration during surge hours.

TABLE OF CONTENT

DECLARATION.....	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
ABSTRACT.....	V
TABLE OF CONTENT	VI
ACRONYMS AND ABBREVIATION	X
CHAPTER ONE	1
INTRODUCTION.....	1
1.0 INTRODUCTION.....	1
1.1 BACKGROUND OF THE STUDY.....	1
1.2 STATEMENT OF THE PROBLEM.....	5
1.3 OBJECTIVES OF THE STUDY.....	7
1.4 RESEARCH QUESTIONS.....	7
1.5 SIGNIFICANCE OF THE STUDY.....	7
1.6 SCOPE OF THE STUDY	8
1.7 LIMITATION OF THE STUDY.....	8
1.8 CHAPTER SUMMARY	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.0 INTRODUCTION.....	9
2.1 THEORETICAL LITERATURE FRAMEWORK	9
2.3 EMPIRICAL LITERATURE REVIEW.....	10
2.3 RESEARCH GAPS	20
2.4 CONCEPTUAL FRAMEWORK.....	21

2.5 OPERATIONALIZATION OF VARIABLES.....	21
2.6 CHAPTER SUMMARY	22
CHAPTER THREE	23
RESEARCH DESIGN AND METHODOLOGY	23
3.0 INTRODUCTION.....	23
3.1 RESEARCH DESIGN.....	23
3.2 TARGET POPULATION	23
3.3 SAMPLE AND SAMPLING TECHNIQUE	24
3.4 DATA COLLECTION INSTRUMENTS.....	24
3.5 PILOT STUDY.....	25
3.6 DATA COLLECTION METHODS AND PROCEDURE	26
3.7 DATA ANALYSIS AND PRESENTATION.....	26
3.8 ETHICAL CONSIDERATIONS.....	27
3.9 CHAPTER SUMMARY	27
CHAPTER FOUR.....	28
RESEARCH FINDINGS AND DISCUSSION.....	28
4.0 INTRODUCTION.....	28
4.1 PRESENTATION OF RESEARCH FINDINGS	28
4.2 SUMMARY OF DATA ANALYSIS.....	42
CHAPTER FIVE.....	43
SUMMARY, CONCLUSION AND RECOMMENDATION.....	43
5.0 INTRODUCTION.....	43
5.1 SUMMARY.....	43
5.2 CONCLUSION	44
5.3 RECOMMENDATIONS	45
REFERENCES.....	46

APPENDIX I: QUESTIONNAIRE	50
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TABLE OF FIGURES

Table 4 1: Age of the respondents	28
Table 4 2: Gender of the Respondents	29
Table 4 3: Academic Qualification.....	30
Table 4 4: Duration of Service	31
Table 4 5: Current position	32
Table 4 6: Pick up time effectiveness	33
Table 4 7: Pick-up time maintained.....	34
Table 4 8: Clean and Quality cars	35
Table 4 9: Rating Customer Service.....	36
Table 4 10: Competent and expert drivers	37
Table 4 11: Offering lower pricing than other traditional taxi services	38
Table 4 12: Surge valuation time and pricing	39
Table 4 13: Use of Automated payment service	40
Table 4 14: Automation on car location	41

LIST OF FIGURES

Figure 4 1: Age of the Respondents	29
Figure 4 2: Age of the Respondents	30
Figure 4 3: Academic Qualification	31
Figure 4 4: Duration of service	32
Figure 4 5: Current position.....	33
Figure 4 6: Pick-up time effectiveness	34
Figure 4 7: Pick-up time maintained.	35
Figure 4 8: Clean and Quality cars.....	36
Figure 4 9: Rating Customer service	37
Figure 4 10: Competent and expert drivers.....	38
Figure 4 11: Offering lower pricing than other traditional taxi services	39
Figure 4 12: surge valuation time and pricing	40
Figure 4 13: Use of Automated payment service	41
Figure 4 14: Automation on car location	42

ACRONYMS AND ABBREVIATION

CBD	Central Business District
CAV	Fully Automated Vehicle
KEPSA	Kenya Private Sector Alliance
OSC	Open Street Cab
PCC	Private Control Company

OPERATIONAL DEFINITION OF TERMS

Competitive Advantage The competition that is healthy and very crucial in edging competitors in a smart and authentic manner that sets very conducive standards in the sector. The kind of competition ensures great coverage and survival in the market for offering quality and reliable services.

Time Efficiency

The time taken by the automated taxi service in picking up the client and taking them to their destination according to the indicated time on the mobile application. Time efficiency ensures effective delivery of taxi services for their clients.

Quality Service

The services provided by the automated taxi that are satisfactory to the customers. These can be quantified through clean cars, safety of the clients and good customer services to the customer.

Pricing

The price rates for from the automated taxi services should be equal to the services provided and not exaggerated due to rising in demand or any other inconveniences arising from the side of the company and not the client.

Automation

The use of technology by the taxi company to create applications on the mobile phones and computers to make it easy for the clients to access taxi services such as requesting, payment and inquiries easy.

CHAPTER ONE

INTRODUCTION

4.0 Introduction

This chapter comprises of the very crucial sections that the whole study will be premised on the statement of the problem and the objectives that will form variables where the research questions will be derived from. All other chapters are anchored on this section.

1.1 Background of the Study

Uber began its operations as a “black car” ridesharing platform. Uber’s ridesharing business model required that drivers used their own cars and registered as drivers with Uber. At first, it was less taxicab and more “nightclub bottle service for the taxi industry” (Shontell, 2014). Uber began operations with black car service only and basically served as “status-symbol provider” until Uber introduced Uber X in 2012 (Gannes, 2012). Uber X paralleled Uber Black, but instead of a black car service, Uber X allowed drivers to use hybrids and modest sedans at fares that were comparable to or even less than taxis (Gannes, 2012). Uber expanded their service offerings based on the demand for differentiated transportation needs of riders through the convenience their app provided and by 2015 Uber offered six classes of service.

Seemingly for some time, the supposed “competitive advantage or sharing economy” has turned historically underused assets into competitors to established industries. Some believe this business model can loom incumbents across the economy (Beard, 2015). However the widespread sharing economy and remains to be seen, so far it has unquestionably giant effects on the taxi business through ride-sharing services like Uber, Lyft, and Side care. The development of recent services through technology that did not exist nearly by definition create customers comfortable (Brenham, 2007). The advantages to customers, however, are possible to increase on the fare side those that use these new services if incumbents are forced to response to new competition by up service and/or reducing value. The rise of ride-sharing has upended al the taxi

business particularly in America that is historically heavily regulated. Executives' most distinguished reactions are to lobby regulators to slow the expansion of ride-sharing (Choi, 2012). They might, however, additionally attempt to retain customers by competitor for them within the market. However, laws limit officials' set of potential competitive responses. Costs are regulated and alter sometimes whereas taxi drivers cannot, on their own, scale back costs or provide the resistance payment systems ride-sharing services use. Even so, drivers would possibly respond by attempting to supply higher quality rides than they accustomed offer. Improved quality would possibly take the shape of, as an example, being additional courteous to passengers by turning off the radio, not talking on a mobile phone whereas driving, and so on. the issue of signaling this quality to a possible rider and lack of repeat business reduces this incentive, however with less business taxi drivers could behave higher within the hopes of larger tips or to cut back the possibilities that a rider can complain five .If ride-sharing had not generated this sort of competitive response by taxis then even customers who don't use ride-sharing could profit (Forbes, 2008).

According to Hall (2015), a client with a smartphone app that permits him to point he desires a pickup, and drivers on the opposite aspect of the platform answer the request. The app already has the consumer's payment info and a GPS device tracks the trip distance therefore the rider will enter and exit the automobile whereas payment is charged mechanically to his MasterCard. Neither the rider nor the motive force contends with payments. The ride-share company takes a proportion of the fare, and also the rest goes to the motive force. Lyft, Sidecar, and Uber are the foremost outstanding ride-sharing services, with Uber far and away the biggest of these. Uber was launched in 2009, and by mid-2014 had eight million users and one hundred sixty. Drivers in 250 cities across fifty countries. In December 2014 venture capitalists valued Uber at regarding \$40 billion. One reason for this exceptional success was beyond any doubt the flexibility of technology to interrupt down artificial regulative entry barriers. Most cities, as an example, limit the quantity of taxis allowed to control. As a result, either costs were on top of they might are otherwise or there have been not enough cabs to fulfill demand (Laura, 2015).

In big apple town, the shortage of offer relative to demand caused taxi medallions (permits) to sell for over \$1 million by 2013.¹² By 2015, however, the worth of a medallion had fallen by

regarding twenty five % in response to competition from ride-sharing services. Whereas customers flocked to those new services, ancient taxi firms flocked to their regulators and politicians, hoping to dam these new competitors. several regulators are sympathetic to their claims, and a few cities and countries have even illegal these services, however demand for these services has been therefore robust that they need been able to overcome a lot of this hostility (with exceptions, of course, like France and Las Vegas).

The taxi sector in Kenya isn't well documented. But in line with a study done by Kenya Private Sector Alliance (KEPSA) in 2004 the human population in national capital was four.5million with daily population of three.2million individuals. The daily traveling desires of this population that was met through taxi mode of traveling was solely a pair of. This suggests that this taxi business amounts to ninety five, visits per day and it's expected to grow to a hundred sixty five, 600 visits per day in 2025. Use of the smartphones has created it attainable for the new entrants“ purchasers to induce a taxi from where they're (“Daily Nation,”2016).Public transport may be slow or inconvenient. Additionally, some areas don't seem to be well served by conveyance thence reaching such places might need terribly long walks. In alternative areas, choices for mistreatment personal cars are unrealizable because of insecurity to non-public vehicle homeowners, want for shared rides (for groups), and lack of parking, hold up and poor road networks. Altogether these things, some taxis supply a reliable choice to compliment or substitute alternative out there means that of transport (Rayle et al., 2014). Competition between typical taxis and app-based taxi operators intense in Republic of Kenya following the doorway of Uber, an organization that was comparatively exceptional twelve months past. This semiconductor diode to entrance of native app-based taxi operators like Mondo Ride, Taxify, Dandia, Mara Moja, very little Cabs and last Teke Taxi.

1.1.1 Uber Taxi Technologies Inc.

Uber Technologies INC. (Uber) may be a school startup that gives ride sharing services by facilitating association between freelance contractors (drivers) associate degreed riders with the employment of an app. Uber has opened its operations to fifty eight countries around the world and is valued at around \$41 billion. As a result of its services prices but taking a regular taxi, within the few years' it's been in business. The corporate has experienced booming success

business and it's opened to totally different countries and cities (Cloe, 2012). Uber has been extremely praised for giving freelance contractors a chance to earn cash as long as they need an automobile while providing convenient ways for customers to induce at lower prices. Its "Surge Pricing" technique has been criticized for charging higher fares throughout in style times, however it's turning into a model for alternative corporations like Zappos (Badger, 2015). The most important problems Uber faces embody legal proceeding as a result of drivers aren't authorized, rider and driver safety, protection and security of client and driver data, and a scarcity of adequate amount of money. To achieve success Uber should to deal with these problems in its selling strategy thus it will scale back resistance because it expands into alternative cities (San Francisco, 2015).

In 2009 Travis Kalanick and Garerett Camp developed a smartphone application to attach driver's for-hire with folks needing rides to a destination in their town. This innovative service was originally supported as Uber Cab INC., an in private Control Company. It had been renamed Uber Technologies, Inc. in 2010. Co-founders Kalanick and Camp designed the mobile-app for iPhone and golem smartphones, consistent customers to induce calculable time of arrival from the app on their smartphone with the employment of associate degree integrated GPS system. Like all corporations, Uber should perceive its target market and maintain a robust selling combine to achieve success. Thanks to its technology, Uber doesn't have as several constraints as taxi cabs, though it's encountered regulative obstacles and a few public resistances. The Uber business model takes advantage of the smartphone technology of customers and links them with freelance drivers as their cabs. This provides a lot of doubtless economical and fewer valuable thanks to purchase transportation (Flegenheimer, 2012).

Uber's product are all digital. Customers transfer Uber's app onto their smartphones. Once they need to request a ride, they'll use the app to contact a driver within the close to section. The Uber app permits customers to trace the situation of the automobile and alerts them to once the automobile arrives. Uber offers a couple of totally different services to customers based mostly upon their preferences. Its most used service is Uber X, the inexpensive possibility. Drivers use their own vehicles to move passengers. Uber TAXI is associate degree app that connects authorized taxi drivers to passengers. Uber is additionally making an attempt to expand into alternative services. Uber uses its app to see valuation. Once the traveler completes his or her

ride with associate degree Uber partner–driver, the person’s master card is charged mechanically. Fees charged for speeds over eleven miles per hour are charged by the gap traveled (Gallegos, 2015). Uber operates on a price leadership basis, claiming that it offers lower rates than taxis. However, the app Open Street Cab suggests that Uber could be a lot of efficient only if the fare is quite \$35. Uber uses associate degree rule to estimate fees charged once demand is high. Known as surge valuation, Uber has even applied for a patent for this kind of system. This “peak pricing” strategy isn't too totally different than once utilities or flights charge higher costs once demand is high. Passengers are alerted throughout times wherever the worth is higher. However, the extent of the valuation increase has been questioned as some customers believe Uber uses this high demand to “price gouge” passengers (Huet, 2015).

Uber operates in associate degree business wherever trust between strangers is important. This trust ensures a secure and cozy ride for each traveler and driver. Uber has developed a classification system to assist assure this trust and dependableness between passengers and drivers, known as a ride share ratings system. Ride share rating systems cause a singular challenge for Uber thanks to the approach they're originated and also the level of rider perspicacity. Uber's insistent policy of maintaining a five-star fleet will place drivers at a drawback. Uber rivals have similar policies; as an example, Lyft tells customers that five stares indicate unhappiness with the ride (Sareitha, 2015).

Low driver scores will mean drivers are forced to require remedial categories wherever they study safe driving techniques and driver rule. Those that fail to extend their scores risk suspension or permanent deactivation. As a result of customers have totally different views of what constitutes quality, it are often argued that Uber drivers are placed at the mercy of the consumer’s mood. Drivers have conjointly expressed unhappiness with Uber’s pay. Uber can typically lower fare rates so as to realize a competitive advantage in numerous markets that cuts into driver earnings. In addition, drivers are driving their own cars and defrayment their personal funds on maintenance and insurance (Taylor, 2014).

1.2 Statement of the Problem

Taxis have long confronted imperfect competition from public transportation like buses and subways to care services that select up passengers who request a ride (generally by means of telephone) and so-called “gypsy cabs.” But Uber and other ride-sharing offerings appeared to

compete more immediately with taxis if for no other purpose than their increasing ubiquity as a convenient, on demand, capacity of transportation (Barney, 2008). As opposition increases, consumers have new alternatives and incumbents might also be forced to respond. The sharing economy is unambiguously increasing competition. In the normal taxi world, disenchanted shoppers had few options. They ought to incur extra expenses to avoid taxis in terms of comfort if switching to the bus or subway or in terms of cash if switching to care services or using one's very own care as a substitute of taking cabs. Alternatively, they could complain about the poor carrier to the taxi regulator. Either way, taxi cabs had little incentive to improve carrier (Mbewa, 2010).

In the new world of taxi competition, buyers can swap providers at low cost. As a result, traditional taxis may additionally face a new incentive to compete. Competing on rate in the short run is challenging expenditures are commonly regulated and change infrequently. They might additionally compete on fantastic making positive their motors are clean and features like deposit card readers operable, strolling the air conditioner in the summer, no longer speaking on telephone phones, and so on. Of course, the incentive to enhance satisfactory is blunted by the issues of signaling and lack of repeated interactions. In particular, how is a driver cruising for fares able to show to attainable riders that he presents an exceptional ride? One way to generate that sign would possibly be through more recent cares, so perhaps we might expect to see the average age of taxi fleets drop over time (Malhotra, 2015).

To the exceptional information of the researcher no research has been carried out on the effect of technological knowledge on the competitive advantage of taxi commercial enterprise in Kenya in particular in Nairobi and therefore there exists the need understand and recognize the influences that technology has on competitive benefit by Uber Kenya. This study about consequently seeks to bridge that gap with the aid of imparting the solutions to the research questions identified for the study.

1.3 Objectives of the Study

The general objective of the study established the influence of technology as a competitive advantage of taxi business in Kenya.

1.3.1 Specific Objectives

The specific objectives of the study were:

- i. To find out the effects of timeliness as a competitive advantage in taxi business at Uber Kenya.
- ii. To determine the effects of quality service as a competitive advantage in taxi business at Uber Kenya.
- iii. To examine the effects of pricing as a competitive advantage in taxi business at Uber Kenya.
- iv. To determine effects of automation as a competitive advantage in taxi business at Uber Kenya.

1.4 Research Questions

The research questions include:

- i. What effects timeliness have on the competitive advantage in the taxi business at Uber Kenya?
- ii. How does quality service become a competitive advantage in taxi business at Uber Kenya?
- iii. What effects does pricing have on the competitive advantage in taxi business at Uber Kenya?
- iv. How does automation impact on the competitive advantage in taxi business at Uber Kenya?

1.5 Significance of the Study

1.5.1 Practice

The study will be relevant for the uber taxi Kenya to understand the factors its success factors like internet, applications used, pricing etc. and the challenges accompanied by the factors. These will assist the company better its services to satisfy their clients and enhance profitability. They

will also be able to establish ways of better the skills and remuneration to its employees especially the drivers.

1.5.2 Policy

The government will understand more the sources of conflicts existing between the traditional taxi service providers and the technology based taxi service providers and be able to come out with the necessary measures that will facilitate a healthy competitive advantage in the industry. The government will also come up with the regulations that will ensure the safety and effective delivery of the taxi services to the citizens.

1.5.3 Academia

Since research is aggregate, the other researchers who would want to carry out studies in the taxi industry especially the technology based ones will have the opportunity to identify gaps in this study that will be used as useful premises to their studies.

1.6 Scope of the Study

The study explored the influence of technology as a competitive advantage of taxi business with a specific case study of Uber Kenya that is headquartered at the riverfront on Chiromo lane in Westland in Nairobi. The study targeted 30 staff, 70 drivers and 82 customers using Uber taxi services. The study was carried out from March to May 2018 within Nairobi area.

1.7 Limitation of the Study

The imitations of the study are:

1.7.1 Lack of cooperation

Some of the respondents especially the drivers responded due to fear that the investigation may lead to their job evaluation and monitoring that would lead to victimization. Some of the clients using Uber may not be free to respond to research questions and even demand for payment to do so.

1.8 Chapter Summary

The chapter comprised of the background of the study that presented the basis of the study, the problem statement that identified the problem that the study addresses, the study objectives that forms the research questions and the variables of the study, why the study is important, the scope and finally what made the research study limited.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the literature that is related to the current study. The chapter comprises the review of theoretical studies, literature review, summary and the conceptual framework.

2.1 Theoretical Literature Framework

2.1.1 Porter's theory of competitive advantage

The character of the competition and therefore the sources of competitive advantage are terribly completely different among industries and even among the segments of an equivalent business, and an explicit country will influence the getting of the competitive advantage among an explicit sector of industry; - the globalization of the competition and therefore the look of the trans-national firms don't eliminate the influence of an explicit country for obtaining the competitive advantage ; a rustic can give completely different competitive blessings for an organization, relying if it's institution of origin country or a number countries; - the competitively contains a dynamic character (Schumpeter); the innovations have a task of leading force during this permanent amendment and confirm the businesses to speculate on order to not be eliminated from the market (Negrițoiu Mișu, 1997). Ranging from these premises, Porter identifies a system of determinants that is that the basis for obtaining competitive blessings by the nations.

2. 1. 2 Institutional Theories

The theory is employed to review organization's innovation adoption level. The thought has set stress on the key role contend by organizations environments in influencing its structure and actions (Tornatzky & Fleischer, 1995). Supported previous studies, researchers have celebrated that organizations adopt innovations thanks to environmental forces. They found that's not alone employed by organization to spice up operation potency and effectiveness, and even acceptance at intervals the rivalries markets (Gibbs & Kraemer, 2004, Khalifa & Davison. 2006).

The thought is so addresses pressure from the external environments and within the main from equally connected organizations or establishments. This sort of pressure has been found to guide to the adoption of regarding similar structures by rivalries corporations. Organizations tend to

adopt comparable technique, structures and techniques thanks to 3 kinds of external pressures: mimetic, coercive, and normative (DiMaggio & Powell, 1983)

Similar studies proposes a framework that mixes relative advantage and quality at intervals the technology context whereas at intervals the structure context, drivers' info square measure used supported the framework (William Eng. Yong Keong 2015). Combining, a combine of or more models enabled action of a superior understanding and has provided necessary implication in influencing adoption and diffusion of innovation (Oliveira & Martins, 2009). The idea is utilized to review organization's innovation adoption level. The concept has set stress on the key role compete by organizations environments in influencing its structure and actions (Tornatzky & Fleischer, 1995). Supported previous studies, researchers have acknowledged that organizations adopt IS innovations because of environmental forces. They found that is not only utilised by organization to boost operation efficiency and effectiveness, and even acceptance among the challenger markets (Gibbs & Kraemer, 2004, Khalifa & Davison. 2006).

The concept is therefore addresses pressure from the external environments and primarily from equally connected organizations or institutions. This kind of pressure has been found to guide to the adoption of almost about similar structures by challenger companies. Organizations tend to adopt comparable technique, structures and techniques because of three sorts of external pressures: mimetic, coercive, and normative (DiMaggio & Powell, 1983). Similar studies propose a framework that mixes relative advantage and quality among the technology context whereas among the structure context, drivers' info are used supported the framework (Keong 2015). Combining 2 or further models enabled action of a superior understanding and has provided very important implication in influencing adoption and diffusion of innovation (Oliveira & Maretins, 2009).

2.3 Empirical Literature Review

2.3.1 Timeliness and Competitive Advantage

Time savings is sought strategy in the Uber business and one of the key competitive advantages where vehicle are often at your service among minutes. This can be often faster than a taxi, commuter bus or rail system. Taxis have long faced imperfect competition from public

transportation like buses and subways to automotive services that acquire passengers, an agency request a ride (generally via telephone) and alleged “gypsy cabs.” however Uber and alternative ride-sharing services seem to struggle a lot of directly with other regular taxis if for no alternative reason than their increasing omnipresence as a convenient means of transportation. As competition increases, customers have new choices and occupants are also forced to response. The sharing economy is ambiguously increasing competition (Zervas et al, 2015).

According to Meng, Mambo, and Hiragana (2015), Uber wait times are dramatically shorter than typical taxi dispatch and wait time. Uber wait times are far more consistent than those of regular taxis, whereas taxi waits are more variable by time and day Uber customers may expect a wait of 10 minutes or less despite day or time. The discrepancy in wait times may result from location biases in our sample, since most surveyed Ride sourcing journeys didn't begin reception, whereas the taxi survey asked concerning home location. After running into planning delays victimization alternative transportation solutions, Med Stare Health turned to Uber. Uber driver partnered with the hospitals and responds within minutes. MedStare Health will schedule rides for patients in minutes, thus patients and caregivers get to appointments among the “Iffy Hour.” MedStare Health found that Uber driver useful in responding to emergencies as patients arrive on time which helps to save lives of many patients. Nurse also responded by saying that by the time a patient arrives they have already prepared him / her or be how he /she will be attended . This made MedStare to be the best hospital in responding to emergencies and employee welfare (Celano, MedStare Health, 2016)

According to Uber, jobs are allotted to cars that are near and far, though some drivers questioned this since sometimes aren't being allotted jobs that appeared remote. Whereas drivers will decide whether or not to simply accept a ride, they're solely given a reputation, distance, address, and traveler rating, and that they are punished by Uber if they reject several rides. Once allotted a ride, the driving force has to drive to wherever the traveler is and recognize them. The knowledge provided via the app to each driver and traveler is often ambiguous. (L18, Kenyan Uber driver) Another side of taxi driving that has radically modified is that the importance of navigation information. Though a number of the Uber drivers took pride in knowing ‘their’ town, most of them had not undergone any formal coaching in terms of routes or maps and relied heavily on the utilization of GPS systems. Whereas the Uber application provide an in-built map,

this was typically thought-about a reliable and navigation was conducted instead victimization Google maps thanks to their ability to supply period of time traffic data. Compared to ancient taxis, social interaction plays a lot of central role. Some Uber drivers saw the interaction with their customers as a positive job experience: that the interaction is fabulous it actually get pleasure from it a great deal. Not being from town i buy a great deal of great data concerning things, concerning town, places to eat, places to travel, and various things of that nature. (SF14, SF Uber driver, feminine 2017) to induce back on the road and be able to earn a lot of money. Micro-economists have argued that this dynamic valuation model permits the market to figure a lot of with efficiency (The economic expert, 2014) Time savings is also the most advantage. A vehicle will be at your service at intervals minutes. This can be often faster than a taxi, commuter bus or rail system. Taxis have long -faced imperfect competition from public transportation like buses and subways to automobile services that devour passengers World Health Organization request a ride (generally via telephone) and questionable “gypsy cabs.” however Uber and different ride-sharing services seem to contend additional directly with taxis if for no different reason than their increasing omnipresence as a convenient, on demand, means that of transportation. As competition will increase, customers have new choices and incumbents are also forced to retort. The sharing economy is unambiguously increasing competition (Zervas, 2015)

2.3.2 Quality Service and Competitive Advantage

The increased competition and globalization, has compelled companies to provide quality goods and services as a fundamental key for sustainable competitive advantage. If firms aim to survive and ultimately grow, they are obliged to be fully focused and geared towards achieving strategies aimed at promoting customer satisfaction. Well pleased clients are loyal, more likely to repeat purchase and form a company’s customer base. This has a positive effect on organization, profitability and performance. Studies done by Anderson and Mittal (2010) looked at the relation between different aspect service quality and customer satisfaction. Nearly all the reviews agree that a contented customer is loyal and contributes to profitability.

Quality is a multi-dimensional phenomenon. However, researchers including Zeithaml et al, (2010) have affirmed that service quality is best determined by closely studying the correlation between client’s anticipation and desires and perceived performance of the services. Four types of service quality were identified by researchers. These four services are expected, adequate,

desired and predicted services. The anticipated services by customers are referred to as expected services while the tolerable level of service is referred to as adequate. Predicted services refer to extent of service customers foresee the firm will deliver whereas desired services are those the customers wish to receive.

According to Uber Cab app demo, most of the user functionalities worked as it does nowadays, apart from the feature that makes it potential for users to calculate the fares beforehand (UberCab, 2010). There was additionally less selection offered. Cars and costs were standardized at a comparatively high level. Still, the concept of ordering an automobile with a faucet on an iPhone application was an innovation that had never been before.

Ride sharing platforms will have many economic advantages. These platforms increase the transportation choices offered to customers and businesses and area it so seemingly to considerably increase shopper welfare. Uber offer the patron multiple differing kinds of rides to decide on from. For instance, riders will generally request a standard automobile and ride from a partner driver, carpooling at a less expensive value, a ride in an exceedingly giant automobile, or a luxury automobile. These ride sharing platforms may encourage higher utilization of the present vehicle stock. One study, performed in 5 cities, found that Uber drivers had higher capability utilization rates than taxis, seemingly because of Uber's additional economical ordering and evaluation strategies, its larger scale, still as inefficiencies of taxi regulation (Cramer and Krueger, 2016). Some cities have allotted dedicated parking spots throughout town to such ride sharing beneath the belief that they will generate social advantages (Shaheen, 2010)

Uber's innovative iPhone app was the driving force behind the business' growth. The app permits GPS chase of the driving force and additionally makes the method additional economical as drivers will use GPS to urge the passengers location. The innovative app takes the friction off from ordering a taxi (Uber, 2016a). This was simply the beginning of Uber's innovation, once the network of drivers was in situation; management properly realized they might not be immobile. Uber realized they might leverage the network of drivers to make new innovative services. Uber-Tree offered Christmas trees delivered to your door for as very little as £10 (Moore, 2015). This new service shows Uber area unit perpetually looking for that next new product and might adapt and initiate to cater for client demand and stimulate new client demands that creates worth for the firm.

Forbes (2015) facet of Uber that differs from ancient cab driving is that the utilization of ratings. Driver's area unit rated by passengers, between one and five, and drivers receiving reliably low scores area unit suspended from the Uber service. Acting as a range of investigation and performance review on drivers, these forces them to focus on passengers. The arrangement adds a component of 'emotional labor' (Hoch kid, 2012) to the job: aboard the responsibility of driving safely and efficiently, the propulsion is presently required to attend the social and emotional desires of customers. Further, minority drivers may also be additionally burdened to beat discriminatory preconceptions involving 'identity work' thus on adapt to person expectations Low driver scores can mean drivers area unit forced to require remedial classes wherever they resolve regarding safe driving techniques and driver instruction. (Rogers, 2015).

2.2.4 Pricing and Competitive Advantage

According to Daniels Fund Ethics Initiative (2011), Uber uses its app to see valuation. Once the traveler completes his or her ride with an Uber –driver, the person's MasterCard is charged electronically. Fees charged for speeds over eleven miles per hour are charged by the gap traveled. Uber operates on a price leadership basis, claiming that it offers lower rates than taxis. However, the app Open Street Cab (OSC) suggests that Uber may be a lot of efficient only if the fare is over \$35. Money free transactions are one in all Uber's appeals. It's convenient for riders and far safer for drivers (Feeney, 2015). Once Uber was launched, riders were needed to setup a MasterCard on their account. Indeed, this can be as hassle-free because it can get however as mobile payments system like M-Pesa is beginning to take hold; Uber has been desperate to integrate these solutions yet. In May 2013, Uber created it's doable to pay with Google case for users on humanoid (McMullen, 2013). Later on the same year, Uber partnered up with PayPal to deliver a further upgrade to deliver mobile payment choices for users. Kalanick reasoned that PayPal may facilitate Uber in gaining user adaptation in countries wherever the employment of credit-cards was scarce (Tam, 2013). Still, completely different markets have different desires, and in Republic of India, neither credit cards nor PayPal would serve. In November 2014 Uber teamed up with Paytm to introduce payment through open-end credit, web banking or credit cards employing a Paytm case (Akshay, 2014).

Uber uses a formula to estimate fees charged once demand is high known as surge valuation, Uber has even applied for a patent for this kind of system. This “peak pricing” strategy isn't too completely different than once utilities or flights charge higher costs once demand is high. Passengers are alerted throughout times wherever the value is higher. However, the extent of the valuation increase has been questioned as some shoppers believe Uber uses this high demand to “price gouge” passengers. In some things, Uber’s surge valuation has diode to appreciable criticism. Throughout on New Year’s Eve, valuation surged up to seven times the traditional value. Throughout a prisoner crisis in Sydney, Australia, Uber charged the maximum amount as fourfold the traditional value as an inflow of individuals struggled to evacuate throughout ice and snow storms surge valuation could also be applied.

Uber responded by claiming its value hikes inspired a lot of drivers to select up passengers within the space, however shoppers were angry. At intervals of an hour Uber united to refund users within the space and paid the upper costs. In extreme shortages, costs square measure typically hiked to as high as 6-8 %. On the one hand, it is often argued that surge valuation will increase the quantity of drivers throughout times of high demand. It’s calculable that the quantity of drivers will increase by 70% - 80% because of surge valuation. On the opposite hand, shoppers believe this is often a kind of pricing which Uber capitalizes on emergency things like the Sydney prisoner crisis. Uber should reconcile these completely different things so as to make a valuation strategy thought-about honest by its users.

Uber’s quality has soared since its innovation in 2009. Shoppers have quickly shifted to Uber because of the potential for lower fares, cleaner cars, and a higher-quality transportation expertise. In fact, by Dec 2014, Uber claimed that it absolutely was facilitating around one thousand journeys per day. Even so, from the consumer’s perspective; Uber still has area for improvement, particularly with relation to its name, pricing, and client privacy and safety. (Lauren 2015)

One of the earliest study on Uber’s surge valuation was Hall et al. (2015). The study, that concerned researchers from Uber, primarily centered on explaining the impact of Uber’s surge valuation on reducing the gap between offer and demand. High-frequency information on demand (ride requests and users gap Uber’s app) and provide (number of drivers within the 5 space experiencing surge in demand) from Uber were employed in the study. The study provided

proof on the impact of surge valuation on allocating rides to those that price them a lot of throughout the surge amount. However, the authors were a lot of reluctant to say that surge valuation had a powerful positive impact on the availability| of drivers as a result of the amendment in supply may itself be evoked by drivers' expectation/knowledge of increase in demand therefore leading to double tally or over estimation of the causative effects. the sooner findings on surge valuation by Hall et al. (2015) were somewhat supported by the study by bird genus et al. (2015) that didn't use information from Uber directly.

Chen et al. (2015) found that surge valuation did have a powerful and negative result on traveler demand however a weaker and positive result on care offer. Additionally, despite the fact that there's some regularity within the prevalence of value surge (e.g. throughout rush hours on weekdays), the surge multipliers couldn't be forecasted. The study additionally found that the special dynamics of ride-sharing is advanced - while the spatial concentration of drivers are often foreseen in spherical Central Business District (CBD) and traveller attractions areas , the connection between car density and calculable waiting time isn't undemanding. A newer study that used information from Uber is Castillo (2017). The study argued that surge valuation will facilitate stop a "wild goose chase" - an equilibrium outcome that includes a low range of idle drivers leading to deficient matching and long pickup lines. Within the absence of surge valuation, a high uniform would be required to cut back demand - one that's even a lot of harmful to shoppers than surge valuation. There are varieties of alternative empirical studies on ride-sharing that don't focus directly on surge valuation. One such study is that of Cramer and Krueger (2016) that compared capability utilization by taxi drivers and Uber drivers. The author's found that, on average, UberX drivers has 30% higher capability utilization (measured in time) compared to taxi drivers. This gap is even larger at 50% - if capability utilization is measured in terms of mileage. many explanations were offered to elucidate these findings: (i) more economical driver-passenger matching technology, (ii) higher range of ridesharing drivers than taxi drivers, (iii) inefficient taxi licensing rules that restricts taxi operations geographically, and (iv) versatile labor offer model in ride-sharing services. The authors additionally highlight two further implications of the variations in capability utilization between ride-sharing drivers and taxi drivers: (i) ride-sharing drivers will charge lower fares than taxis and earn an equivalent quantity of revenue, and (ii) ride-sharing will lower holdup and fuel consumption.

Uber is committed to being a low-price leader, and operates with lower costs than the regular taxi trade (Uber 2016f). In line with Uber itself, the value of an Uber ride is reduced with 50% compared to an everyday taxi ride (Carlson 2015). However, a value check conducted in port unconcealed a smaller distinction, although Uber still seems considerably cheaper. Uber showed to be 50% cheaper on middle-length rides, and up to 70% cheaper on short rides (Rammen 2016). This is often because of the employment of a lower minimum fare than in regular taxis.

The combination of Uber's use of surge evaluation and also the drivers' versatile operating schedule raises a motivating question: to what extent will Uber's success influence the service offer, significantly within the short term? The solution is provided by the crucial findings of a positive labor offer snap. If the labor offer snap is negative, and drivers reply to a rise by supply of fewer hours, surge evaluation can have the other of desired impact. This is able to imply that in times of high demand, surge evaluation would decrease offer to boot, and an excellent larger gap between offer and demand would occur. Chen and Sheldon (2015) conclude that Uber's surge evaluation considerably will increase the potency within the market, as a result of offer is excited to fulfill the demand. For taxi drivers, each Uber drivers and regular tax drivers, the extent of financial gain is comparatively low. Thus, the financial gain impact is predicted dominated by the substitution impact for all probably levels of financial gain. This supports the presumption of positive labor offer snap among drivers, which surge evaluation can have the specified effects of skyrocketing offer.

Deep (2015) alludes that, whenever the demand increase, per mile costs are mechanically exaggerated ensuing to surge evaluation. The new fare can depend upon the quantity of drivers and also the number of request created by those that wish to ride Uber. value surge technology was patented by Uber within the U.S. Pullen (2014), Uber's evaluation are often subject to "surge" evaluation additionally to operational on offer and demand that increase the rates reciprocally. Uber uses surge to evaluation to encourage a lot of drivers to urge out and drive throughout busy times. Some critics referred to as it pricing throughout natural calamities and weather condition. However, Uber amended its policy oral communication that it will not charge surge rates throughout natural emergencies.

Toor (2016) postulates that the government of metropolis Republic of India suspend the surge evaluation of Uber and native ride-hailing company writing paper. Chief Minister of metropolis Arevind Kejriwal observed of surge evaluation as “highway robbery” and strict action would be taken against drivers who raise their fares. Maybe the foremost notable example of Uber difficult the orthodox was the introduction of surge pricing’. This new innovation allowed fares to be variable and allowed Uber to manage demand. “The Uber fare rates mechanically increase, once the taxi demand is more than drivers around you. The Uber costs are billowing to confirm responsibility and availableness for those that conform to pay a small amount a lot of.” (Uber, N.D). Surge evaluation conjointly permits Uber to manage offer “When the Uber costs are billowing, it conjointly encourages a lot of drivers.

2.2.5 Automation and Competitive Advantage

Automation increases the capacity of the nation’s transportation system due to improvements in efficiency. First, with well-developed, accurate computing systems, traffic accidents, which account for 25% of traffic congestion, will be greatly reduced as approximately 93% of accidents are due to human error (Fagnant & Kockelman, 2015). This fact increases roadway capacity and potentially save around \$488 billion due to a reduction in injuries and deaths due to collisions (Jonas et al. 2014). Additionally, if strange challenges does not rise, congestion is likely to fall due to the increased efficiency of coordinated vehicle speeds and traffic flows, due to data sharing between cars, synchronization of traffic signals, and fewer crashes. Pinjari. (2013) estimate that connected automation causes a 22% increase in highway capacity at 50% market penetration, 50% capacity increase at 80% market penetration, and 80% increase at 100% market capacity.

Easier travel means greater demand for travel, however. Fully automated vehicles enables children, elderly, and disabled people greater access to meaningful destinations and activities at all times of day. Such vehicles make longer trips seem less burdensome for former drivers. These behavioral changes increases trips and may worsen congestion on many if not all roadways, but the increased efficiency of smaller headways (if mandated) and coordinated movements on highways may outweigh these effects on many roadway types (Pinjari et al.

2013). Driver productivity also rise as a result of the added time that can be used for other tasks, like working during one's trip to the office. Diamandis (2014) estimates that automation could save over 2.7 billion unproductive hours in work commutes, generating an annual savings of \$447.1 billion per year in the U.S. alone (assuming 90% automation penetration). This time savings estimate, combined with \$488 billion from collision costs amounts to total savings of \$1.1 trillion in the U.S., or 8% of the U.S. GDP, and as much as \$5.6 trillion worldwide (Jonas et al. 2014).

Some effects brought on by automation could counteract and limit these gains. Once automation sharing is put into action, although fewer cars are needed, those in use accrue mileage more quickly and require maintenance more often. Additionally, the increased convenience and affordability may encourage more vehicle travel, offsetting the pollution and crash benefits (Litman, 2015). The economic effects of automation extend beyond the simple crash, productivity, and fuel saving into every facet of the American economy.

The extension of digital media into the automation environment opens up the market for even more users and, thereby, more sales. At the point of full automation, commuters who usually spend time vigilantly watching the road (or dangerously multitasking on their smartphones) demand greater integration of digital media features into their automobiles. Content providers like YouTube, Netflix, and social media networks see a large benefit from the increased time and desire for their services on commutes. Additionally, a study by McKinsey & Co. suggests that internet shopping could receive a large bump from this added free time, stating that each additional minute occupants spend on the internet could generate \$5.6 billion annually, totaling \$140 billion if half of the time of the average round-trip commute (25 minutes) is spent surfing or shopping (McKinsey 2015). Even if only 5% of the average commute is spent on digital media, the annual value would total \$14 billion. A possible loss due to this increase in entertainment flexibility for drivers is a decreased demand for radio and recorded music. Drivers no longer be captive to audio-only entertainment, allowing them to forgo their usual radio programs for more stimulating visual ones. The boon for the overall entertainment market, however, could be quite significant, as a report from Morgan Stanley suggests the value of content in the automotive industry could shift from minimal to almost 20% of the value of the car (over \$6,000 for the average cost of a car) (Jonas et al. 2014).

Connected and highly automated or fully autonomous vehicles (CAVs) utilize automated vehicle technology in coordination with other vehicles and infrastructure via communications devices. CAVs have the potential to generate widespread improvements in safety and time savings, but their value extends well beyond these specific factors, into the broader economy. Although CAVs will naturally cause losses in some industries, the overall impact on the U.S. economy should be positive, as Morgan Stanley estimates an overall potential value of \$1.3 trillion annually, or 8% of the entire U.S. GDP (Lewis 2014). An understanding of the trajectories of the specific business sectors affected, both positively and negatively, may be critical in effectively preparing for CAVs' economic impacts. Preparation includes making strategic decisions to best harness this change. Previous papers by companies like KPMG (2015), Morgan Stanley (2014), and McKinsey and Co. (2013), as well as research by Fagnant and Kockelman (2015), have examined different aspects of the transportation system and economy. This paper focuses on the economic effects of fully autonomous vehicles on specific markets by compiling and integrating economic research from top articles and studies. It also expands upon past research by using data to generate estimates of industry-wide shifts as percentages of industry size, total monetary values, and dollars per capita.

2.3 Research Gaps

In a very little over a century, we have come back to witness numerous technological changes that have remodeled the transportation trade. From equine carriages to high speed rail to this day testing of autonomous vehicles, these advances have revolutionized the means folks and merchandise get from purpose A to purpose B. There is very little analysis on however the entry of ridesharing firms affects taxi customers. One notable exception is Wallsten (2015), who examines however Uber's quality in markets affects complaints concerning taxi rides in the big apple town and Chicago. He defines quality because the Google Trend search index for searches for "Uber" in every town. He concludes that Uber's growth, as measured by native search quality, is related to a decline in some shopper complaints to regulators concerning taxis, like those concerning air con and heating, and "broken" MasterCard machines. Wallsten's study doesn't live the impact of the modification in complaints on shopper surplus; nor will it claim that Uber really caused the reduction in complaints, although the author will try and management

for alternative informative variables. Still, it's the primary applied math proof we've seen on the connection between ride sharing and taxi service, thus the rationale behind this study

2.4 Conceptual Framework

The conceptual framework links the independent and dependent variables to postulate how the constructs under study are interconnected.

Independent Variables

Dependent Variable

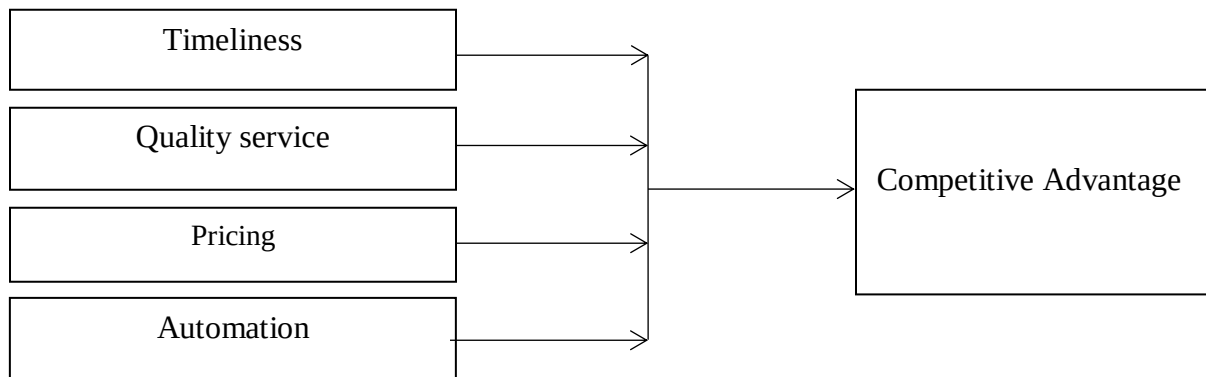


Figure 2. 1: Conceptual Framework

Source: Author 2018

2.5 Operationalization of Variables

Timeliness

Signifies a level of performance that describes a process that uses the lowest amount of inputs to create the greatest amount of outputs. Efficiency relates to the use of all inputs in producing any given output, including personal time and energy. Efficiency is a measurable concept that can be determined by determining the ratio of useful output to total input. It minimizes the waste of resources such as physical materials, energy and time, while successfully achieving the desired productivity

Quality service

Quality service is dealing with clients and customers in a respectful and helpful way.

Pricing

Price is the value that is put to a product or service and is the result of a complex set of calculations, research and understanding and risk taking ability. A pricing strategy takes into account segments, ability to pay, market conditions, competitor actions, trade margins and input costs, amongst others. It is targeted at the defined customers and against competitors.

Automation

Connected and fully automated or autonomous vehicles are becoming increasingly viable as a technology and now dominate the automotive industry. Automation are sufficiently reliable and affordable, they gain greater market penetration, generating significant economic ripple effects throughout many industries.

2.6 Chapter Summary

This chapter reviewed the necessary literature in investigation on the influence of technology as a competitive advantage of taxi business in Kenya. The chapter reviewed four main constructs; time efficiency ;quality services , pricing , and the challenges affecting techno based taxi like uber taxies.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

The chapter focuses on the methodology and procedures that are put in place to obtain data through a well-defined research design, target population, data collection procedures, research instruments and the methods of data analysis.

3.1 Research Design

This refers to the general style and plan on the way to answer the analysis queries of the study. It refers to the general strategy chosen to integrate the various parts of the study in a coherent and systematic manner, thereby, making certain effective address of the analysis problem. The researcher utilized a clearer analysis configuration to finish the investigation. As indicated by Magenta and Mugenda (2003), a distinct research outline is characterized as a procedure of gathering information keeping in mind the end goal to answer questions regarding the flow status of the topic within the investigation. The research design that was adopted for this study was descriptive study that established the influence of technology as a competitive advantage of taxi business in Uber Kenya. This design enabled the researcher to use both quantitative and qualitative research methods in data collection, analysis and interpretation.

3.2 Target Population

As indicated by Gschu (2004), a population is characterized as a set of individuals, administrations, components, and occasions, gathering of things or family units that are being explored. Mugenda and Mugenda (2003) additionally characterize the population as that populace which the specialists need to sum up the aftereffects of the finding.

The population targeted in the study consisted of the staff, drivers and customers for Uber taxi service Kenya. Therefore the participants that targeted were 182 in total and the reason for selecting Uber Kenya is because it was the first taxi company in Kenya to use technology to access and implement its services and it has commanded the taxi market up to date.

Table 3 1: Target Population

Population Category	Target	Percent (%)
Staff	30	16
Drivers	70	38
Customers	82	46
Total	182	100

Source: Author 2018

3.3 Sample and Sampling Technique

A sample is a finite parts of a statistical population whose properties are studied to gain information about the whole (Webster, 1985). According to Gay (1987) sampling is a process of selecting a number of individuals for a study in such a way that the individuals or elements represent a larger group or the population from which they are selected.

The research used Possibility or random sampling since it gives all members of the target population a known chance of being selected for inclusion in the sample and this does not depend upon previous events in the selection process. In other words, the selection of individuals does not affect the chance of anyone else in the population being selected Kumare, (2005). Statistically, in order for generalization to take place, the study used sample 50% of the respondents for reduction of sampling errors (Cooper and Schindler, 2003).

Table 3 2: Sample Size

Population Category	Sample	Percent (%)
Staff	15	16
Drivers	35	38
Customers	41	46
Total	91	100

Source: Author 2018

3.4 Data Collection Instruments

In this study, the main data collection tool that was used by the researcher was a questionnaire. The advantage with this tool is that within a short duration of time it can be administered to a

large group of respondents (Kombo and Tromp, 2006). Questionnaires are also generally preferred for this study because they ensure a wide range of respondent perception. The questionnaire consisted of both open-ended questions and the closed questions. Open-ended questions were for in-depth information while the closed ones were easily be analyzed and understood.

3.5 Pilot Study

A prior test was done on the structured questionnaires to establish the validity and reliability of the study. The questionnaire had specific questions that targeted to acquire specific information from the respondents according to the constructs of the study. The structured questionnaires for piloting was for 15 of them which was administered to 15 personnel of Uber Kenya to be filled and then be returned for evaluation. The participants taking parts in the pretest were not be part of the main study and therefore this piloting tested the validity and reliability of the questionnaires to minimize errors and achieve accuracy.

3.5.1 Validity

Validity refers to a measurement devices ability to vary directly with a measure of the same construct or indirectly with a measure of an opposite construct. It allows showing that the test is valid by comparing it with an already valid test. Content validity is concerned with a tests ability to include or represent all of the content of a particular construct.

According to Frankel and Walled (2000), validity relates to the quality attributed to the degree to which they conform to establish knowledge or truth. It refers to the extent to which an instrument can measure, or, ought to have measured. The validity of the instruments was done by designing the questionnaires and consulting the supervisors of the contents. Adjustments were made according to the advice of the supervisor.

3.5.2 Reliability

Reliability refers to the consistency or rather the steadiness of the scores obtained from tests and assessment procedures. Mugenda and Mugenda (2003) argue that reliability is a measure of the degree to which a researchers' instrument yields consistent results or information after perennial trials. To confirm reliability, Charles (1995), postulates that consistency with that form or check

things area unit answered or people scores stay relatively the same were determined through the test-retest technique at two completely different times.

This method involved administering the questionnaire at an interval of one week as a pilot test to the same group and then comparing the two scores. Comments that were made by the pre-testing respondents were used to adjust and improve the instrument.

3.6 Data Collection Methods and Procedure

Data will be gathered through the administration of questionnaire to a cross-section of respondents drawn from the various categories. The respondents were requested to fill the questionnaire as the researcher waits. This helps to reduce instances of non-responses. The questionnaires were also left behind and picked later helping to increase the proportion of usable responses. Follow-ups was done through telephone calls, e-mails and personal interviews to ensure a viable response rate for the study. The questionnaires were examined to see if there are any errors, whether some information has been omitted if there is any ambiguity, if it is legible and whether it is relevant.

3.7 Data Analysis and Presentation

This is the process of gathering, modeling and transforming raw data with the goal of highlighting useful information, suggesting, conclusion and supporting decision making (Kotharej, 2001). For analysis, the questionnaire data were coded before entry. After coding, the data was be linked to the management and teaching staff (target population as collected) and then entered together with questionnaire data into a spread sheet then transferred to the SPSS 17.0 software for analysis. For the purposes of identification and confidentiality, no names were used.

According to Amin (2005) Descriptive statistics provides us with the techniques of numerically and graphically presenting information that gives an overall picture of the data collected. The researcher used Pearson's correlation co-efficient calculation after data is aggregated to turn categorical data to numerical representation that required numerical methods. From such,

descriptive statistics, frequency tables, graphics, and correlation tables were developed to help describe the data gathered.

3.8 Ethical Considerations

The main aim of ethics is to make sure that there is no harm or negative consequence arising from the process of research. Given the often sensitive relationships between researcher and respondents, reasonable safeguards were built in this study based on ethical considerations and requirements. The following ways addressed how participants were protected;

3.8.1 Informed Consent

The researcher saw to it that the respondents agreed to take parts in the process without any feeling of being pressured and were informed that information was being sought from them.

3.8.2 Confidentiality

There was respecting the privacy of participants by assigning them antique identifier codes to protect their identity and the responses that was given. The study generalized the finding, thus information was not associated to an individual.

3.9 Chapter Summary

The chapter presented the design of the research as both quantitative and qualitative methods of study. The population target sampled as 91 participants from Uber taxi services Kenya. The research instrument in the study is the questionnaire for data collection and data to be analyzed by use of SPSS and finally ways of protecting the respondents through ethical consideration was also included.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

The chapter presents the findings from the field covered in chapter three and therefore consists of demographic information and the variables making up the study as time efficiency, quality service, pricing and automation. The data is presented on tables and charts then each discussed.

4.1 Presentation of Research Findings

In order to achieve the main purpose of this study, the researcher found it useful to find out the general information of the respondents. The general information of the respondents included employee position in the family businesses, level of education, work experience and the department

4.1.1 Demographic Information

This was to ensure proper capturing of the bio data of the participants that was necessary in the determination of the influence of technology on competitive advantage of taxi business in Kenya. This explored the age, gender, academic qualification, duration of service and the current position on holds at Uber taxi services.

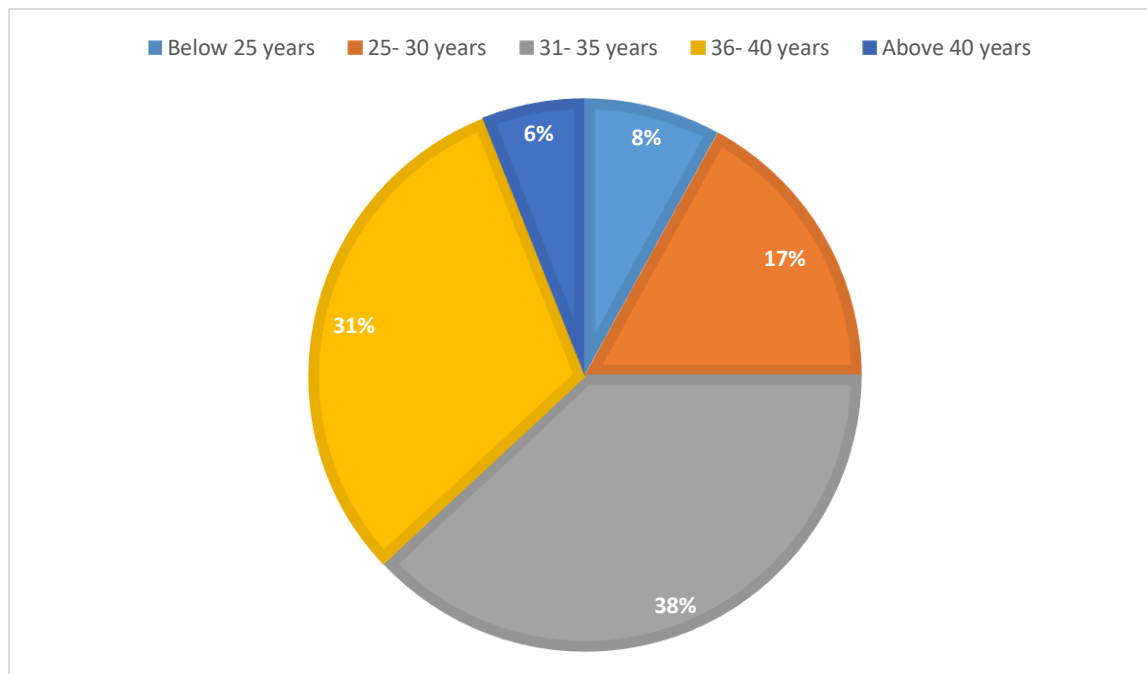
4.1.1.1 Age of the Respondents

The researcher explored the age of the respondents and the following data was obtained from the collected data.

Table 4 1: Age of the respondents

Age	Frequency	Percentage
Below 25 years	7	8
25- 30 years	16	17
31- 35 years	35	38
36 -40 years	28	31
Above 40 years	5	6
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 1: Age of the Respondents

The results indicated that those respondents below 25 years were at 8%, 25- 30 years at 17%, 31- 35 years at 38%, 36- 40 years at 31% and then above 40 years at 6% to show the age range that mostly use Uber taxi services for a better competitive advantage.

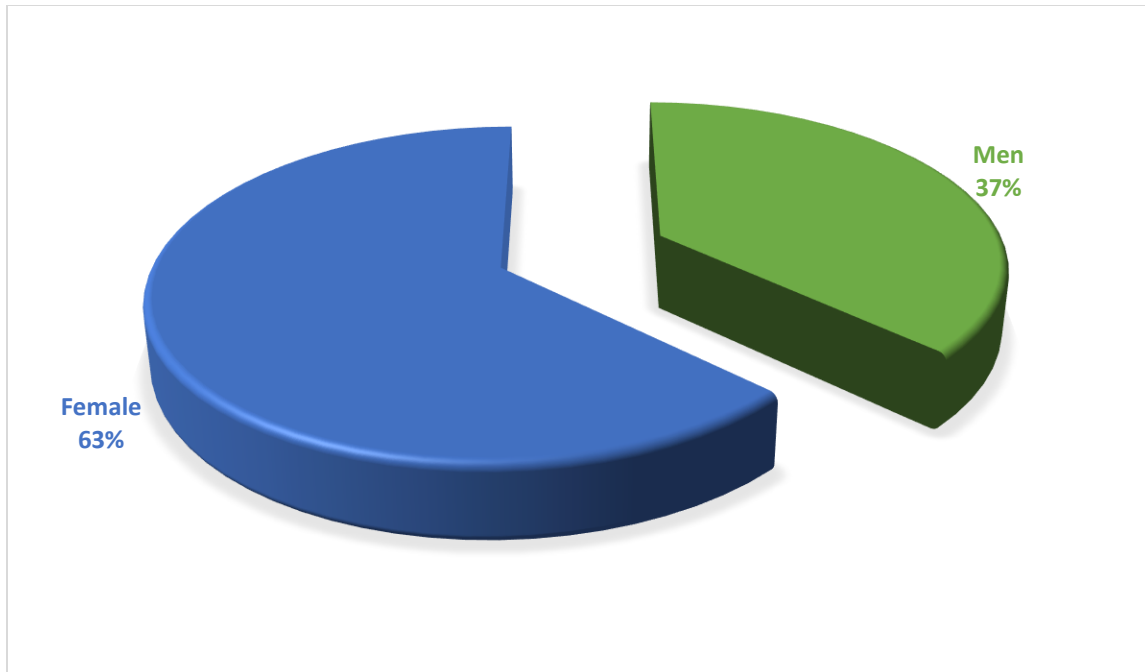
4.1.1.2 Gender of the Respondents

The gender of the respondents was sort to know the dominant gender at Uber taxi services and the collected data presented the following;

Table 4 2: Gender of the Respondents

Gender	Frequency	Percentage
Men	34	37
Women	57	63
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 2: Age of the Respondents

It was noted that who participated in the study were 37% while female were 63. This means that the majority of respondent were female. In order to gain competitive advantage there was need for drivers to target more female customers

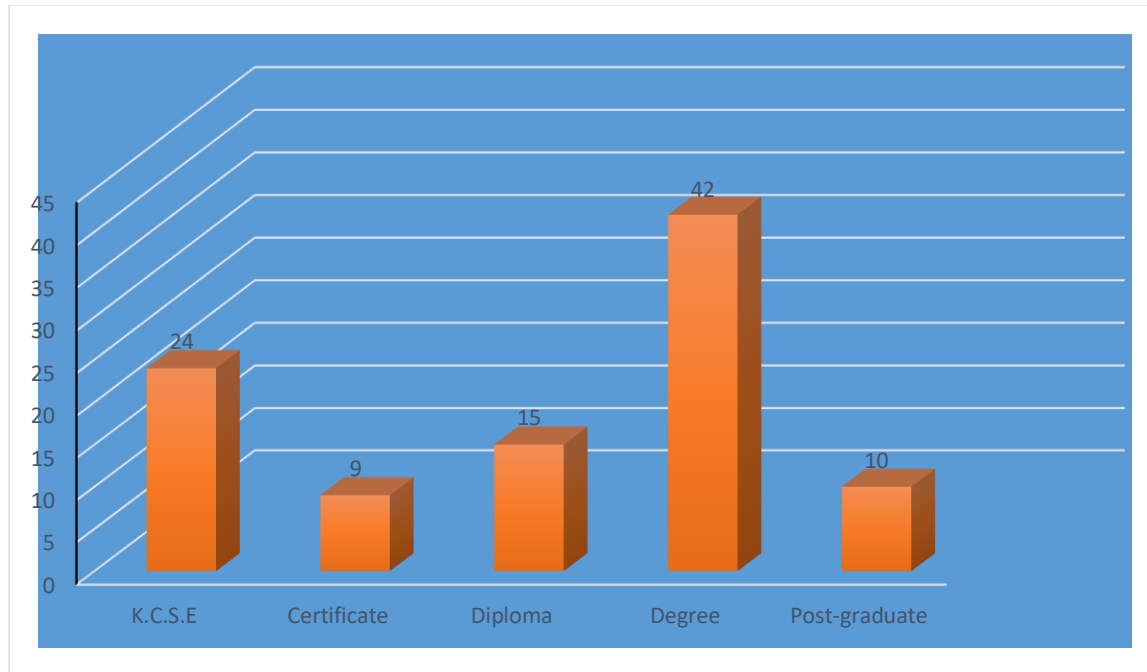
4.1.1.3 Academic Qualification

The aim was to establish the academic levels or qualifications of the respondents to determine the authenticity of the data obtained.

Table 4 3: Academic Qualification

Academic Qualification	Frequency	Percentage
K.C.S.E	22	24
Certificate	8	9
Diploma	14	15
Degree	38	42
Post-graduate	9	10
Total	91	100

Source: Author 2018



Source: Author 2018 label x and y axis of figures

Figure 4 3: Academic Qualification

The results indicated that the academic qualifications of the respondents were K.C.S.E 24%, certificate 9%, diploma 15%, degree 42% and then 10%. From the data most of the respondents had degrees meaning that most consumers of Uber taxi services are elites which is positive for competitive advantage over the local taxis.

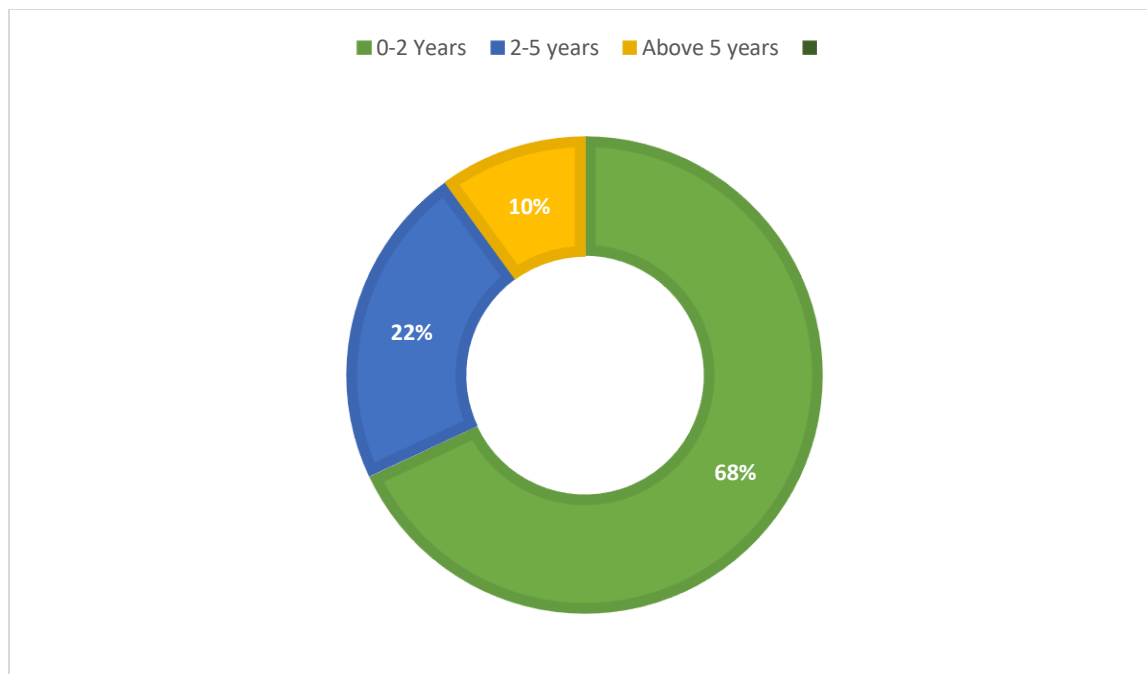
4.1.1.4 Duration of service

The researcher wanted to establish the duration an individual has worked or used the services of Uber taxi services so that the experience can also determine the quality of information gathered.

Table 4 4: Duration of Service

Duration of service	Frequency	Percentage
0-2 years	62	68
2- 5 years	20	22
Above 5 years	9	10
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 4: Duration of service

It was established that those who had worked at Uber taxi services from 0- 2 years were at 68%, 2-5 years at 22% and then those above 5 years at 10%. Most of the respondent had worked between 0-2 years because Uber was introduced to the country recently but this indicates a steady growth showing a clear competitive advantage over local taxi companies.

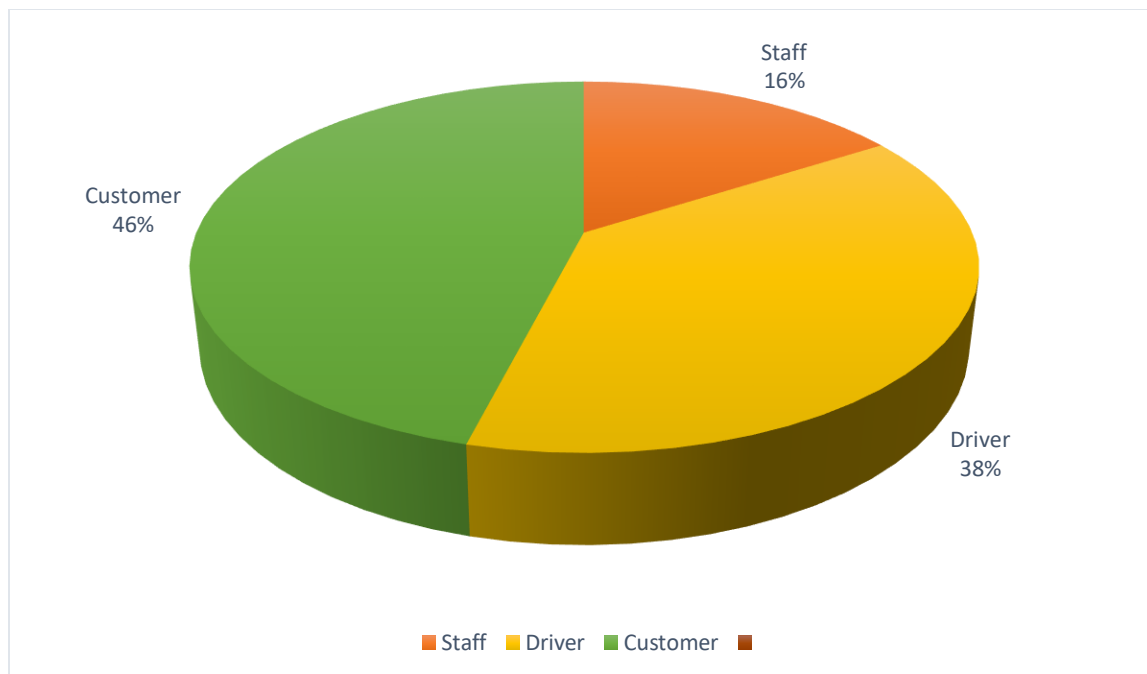
4.1.1.5 Current position

This was to establish the respondents hold currently in the services of Uber taxi services and the results obtained were as below;

Table 4 5: Current position

Current position	Frequency	Percentage
Staff	15	16
Driver	35	38
Customer	41	46
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 5: Current position

On the current position an individual holds in the provision of Uber taxi services Kenya, it was noted from the results that staff made up of 16%, drivers at 38% and Customers at 46%. The drivers in the field and the customers were majority showing a well utilized competitive advantage.

4.1.2 Time Efficiency

4.1.2.1 Pick-up time effectiveness

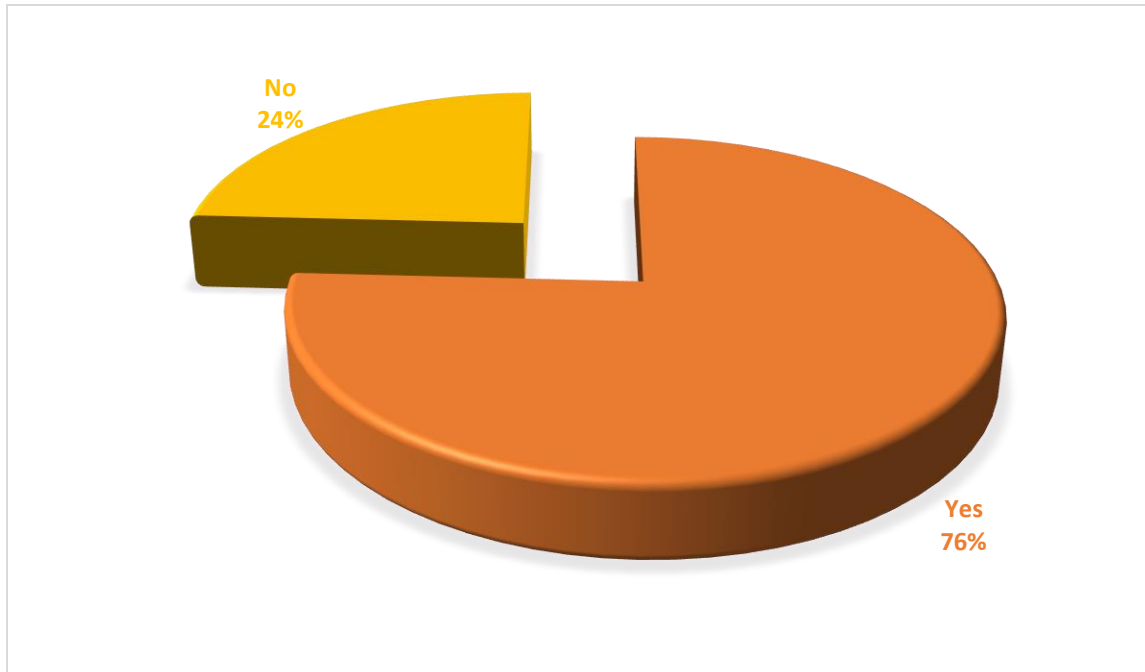
It was important for the researcher to establish the effectiveness of the pick-up time of the Uber taxi services.

Table 4.6: Pick up time effectiveness

Table 4 6: Pick up time effectiveness

Pick-up time effectiveness	Frequency	Percentage
Yes	69	76
No	22	24
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 6: Pick-up time effectiveness

It was confirmed from the study that pick-up time for Uber taxi services is time efficient according to 76% of the respondents while 24% did not affirm. This confirms its effectiveness hence having reliable competitive advantage.

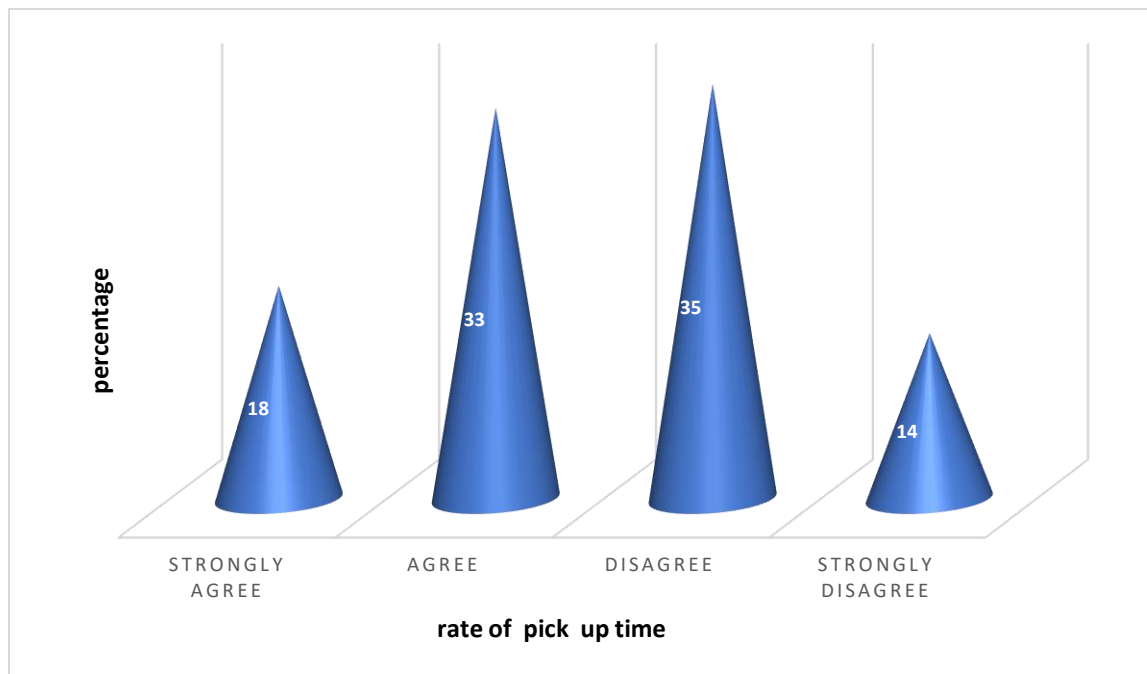
4.1.2.2 Pick-up time maintained

The researcher sort to know if the pick-up time after the request is done and waiting time indicated is maintained.

Table 4 7: Pick-up time maintained.

Pick-up time maintained	Frequency	Percentage
Strongly agree	16	18
Agree	30	33
Disagree	32	35
Strongly disagree	13	14
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 7: Pick-up time maintained.

The findings showed that Uber taxi services maintained pick-up time after request of taxi and waiting time indicated according to 18% who strongly agreed, 33% agreed, 35% disagreed and 14% strongly disagreed. The pick- up time maintenance not effective therefore competitive advantage not effective as well.

4.1.3 Quality Service

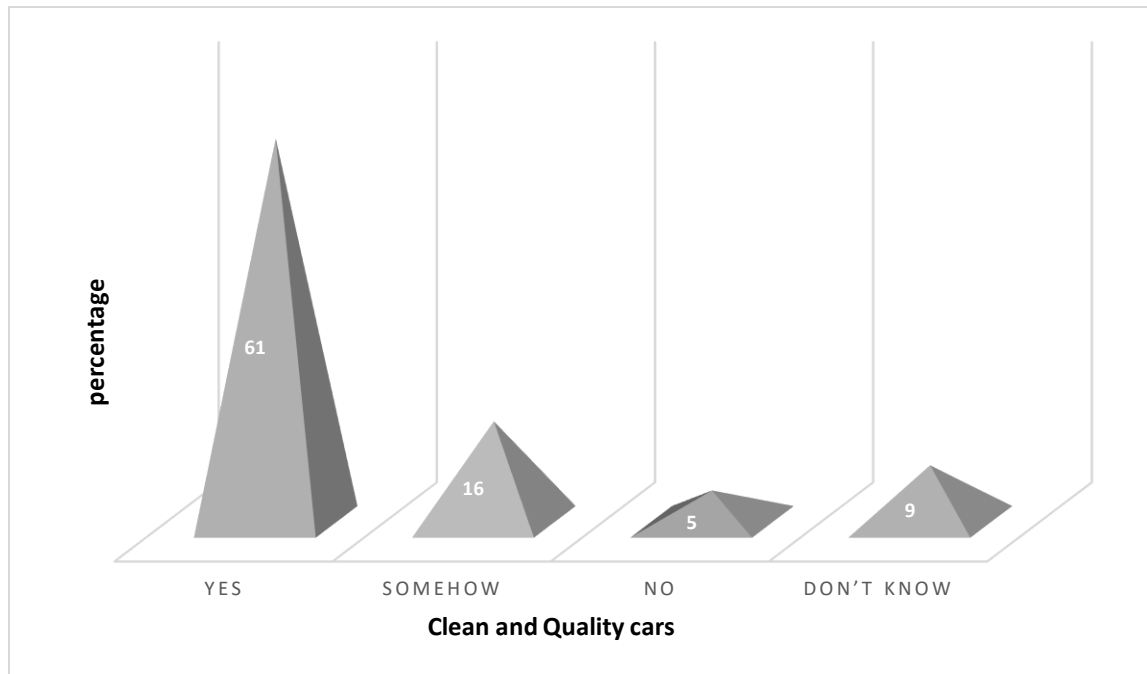
4.1.3.1 Clean and Quality cars

This was to find out if Uber taxi services has clean and quality cars in offering of the services and the results were recorded as below;

Table 4 8: Clean and Quality cars

Clean and Quality cars	Frequency	Percentage
Yes	56	61
Somehow	15	16
No	4	5
Don't know	16	9
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 8: Clean and Quality cars

It was very clear from the respondents that Uber taxi services have clean and quality cars according to 61% of the respondents, somehow clean at 16%, not clean at 5% and don't know at 9%. According to the study clean and quality cars gives Uber competitive advantage.

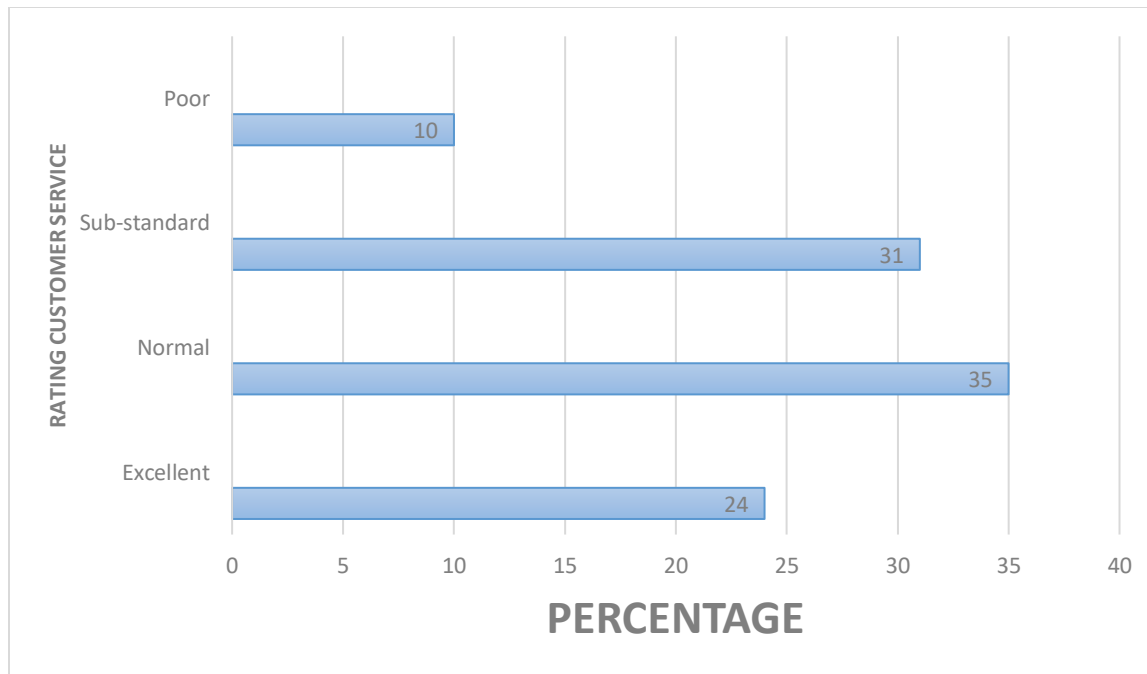
4.1.3.2 Rating Customer service

This was to establish the quality of customer service offered by Uber taxi services and the data obtained were presented as below;

Table 4 9: Rating Customer Service

Rating customer service	Frequency	Percentage
Excellent	22	24
Normal	32	35
Sub-standard	28	31
Poor	9	10
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 9: Rating Customer service

It was noted from that customer service offered at Uber taxi services is excellent according to 24% of the respondents, 35% for normal services, 31% for sub-standard services and 10% for poor services. The customer service of Uber taxi services is average therefore competitive advantage not very effective.

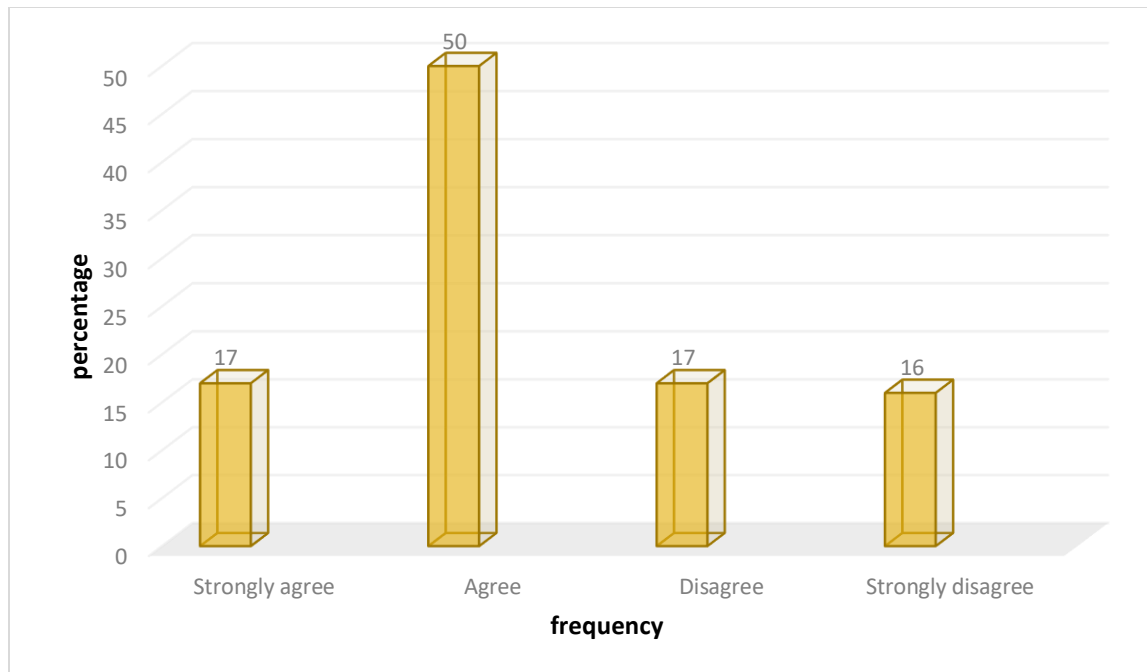
4.1.3.3 Competent and expert drivers

This was to find out if Uber taxi services Kenya has competent and expert drivers in offering of efficient services.

Table 4 10: Competent and expert drivers

Competent drivers	Frequency	Percentage
Strongly agree	16	17
Agree	46	50
Disagree	16	17
Strongly agree	13	16
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 10: Competent and expert drivers

It was evident from the respondents that Uber drivers are competent and expert in driving efficiently at service delivery as attributed by 17% who strongly agreed, 50% who agreed, 17% disagreed and 16% strongly disagreed. The study showed that uber has qualified driver this made it to gain a combative advantage over other taxis.

4.1.4 Pricing

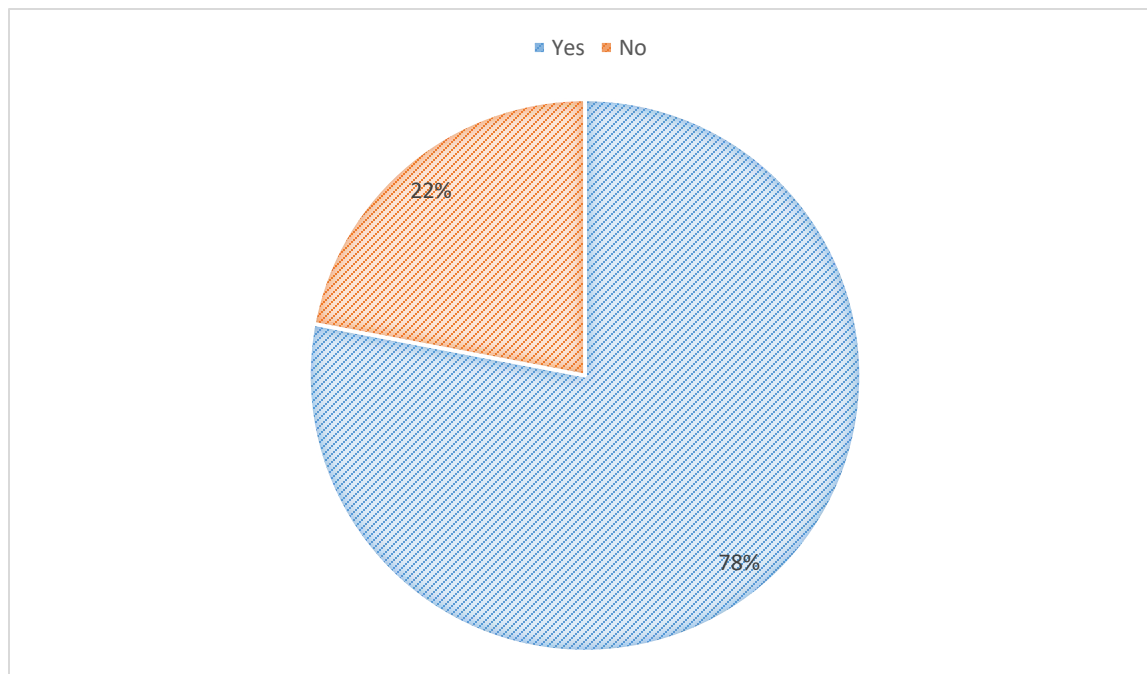
4.1.4.1 Offering lower pricing than other traditional taxi services

The research sort to establish if Uber offers lower pricing than other service providers and the results were tabulated as below;

Table 4 11: Offering lower pricing than other traditional taxi services

Offering lower prices	Frequency	Percentage
Yes	71	78
No	20	22
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 11: Offering lower pricing than other traditional taxi services

The results indicated that Uber taxi services offers low pricing than other traditional taxi services according to 78% of the respondents while 22% did not agree. In order to maintain its competitive advantage it was evident that Uber used low pricing strategy

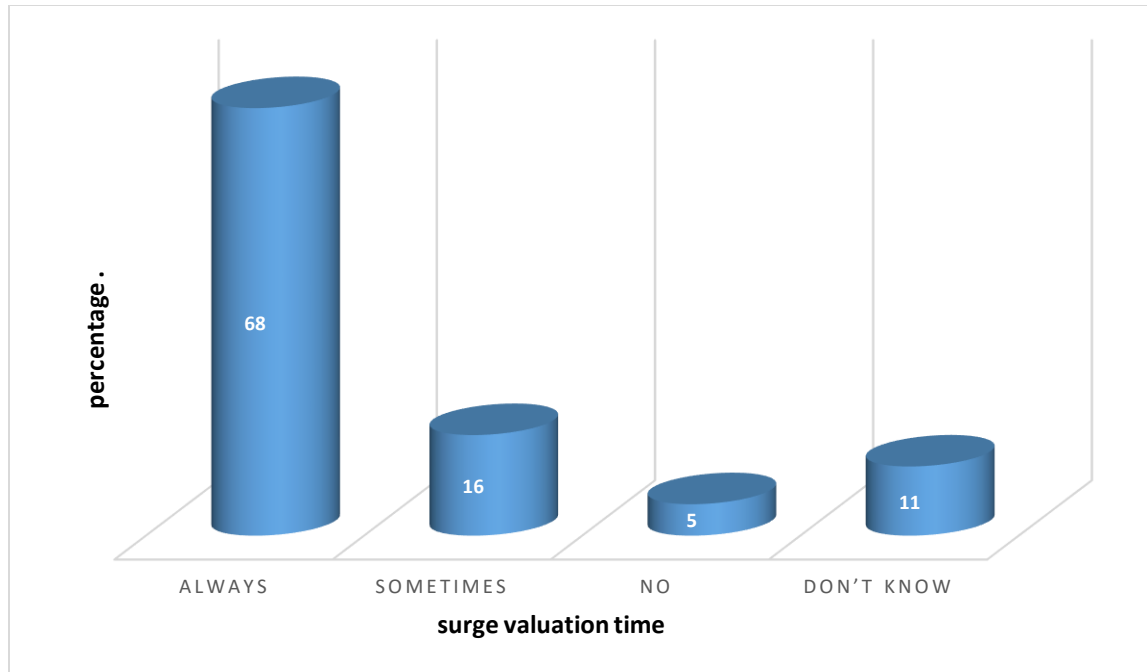
4.1.4.2 Surge valuation time and pricing

This was necessary for the researcher to establish if Uber taxi services exaggerate pricing during surge valuation time.

Table 4 12: Surge valuation time and pricing

Surge valuation time pricing	Frequency	Percentage
Always	62	68
Sometimes	15	16
No	4	5
Don't know	10	11
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 12: surge valuation time and pricing

It was evident from the results that Uber taxi services has surge valuation time where demand for taxi services is higher than the available cars and this makes them to exaggerate their pricing always as of 68% of respondents, sometimes at 16%, no at 5% and don't know for 11%. From the study it was clear that exaggeration of price during surge time affects competitive advantage negatively.

4.1.5 Automation

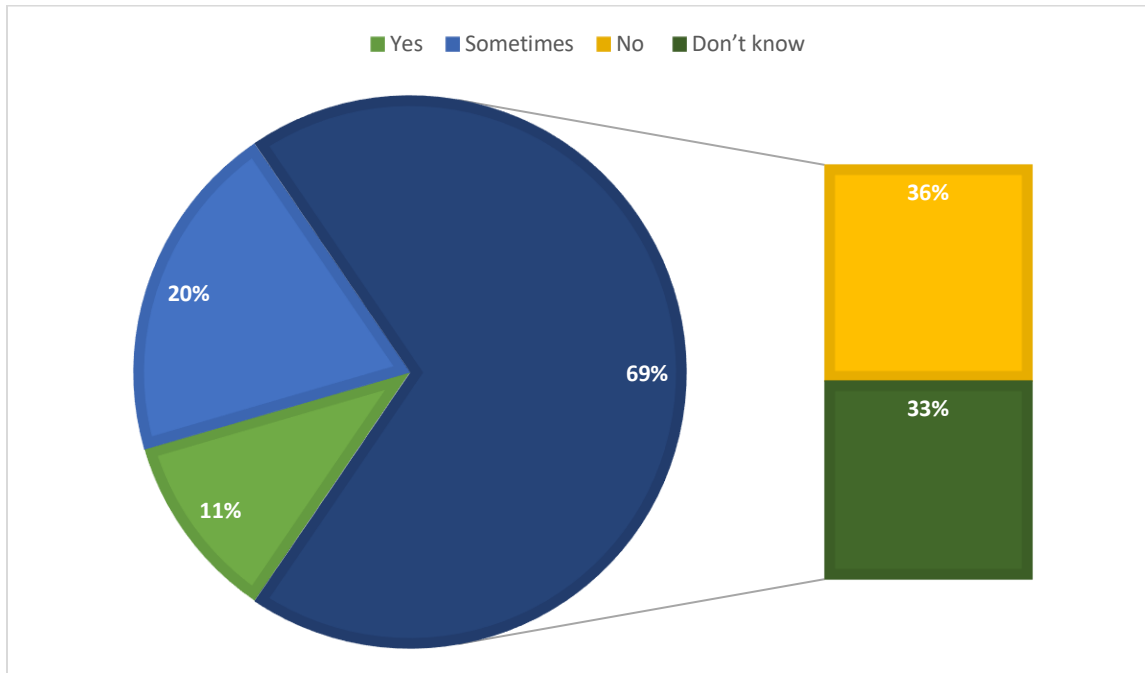
4.1.5.1 Use of Automated payment services

The aim was to explore the availability and use of automated payment services by Uber taxi services.

Table 4 13: Use of Automated payment service

Use of automated payment	Frequency	Percentage
Yes	10	11
Sometimes	18	20
No	33	36
Don't know	30	33
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 13: Use of Automated payment service

On the automated payment services like use of Visa card, it was established that 11% affirmed, 20% used sometimes, 36% not used at all and 33% did not know. The low use of automated lowers its competitive advantage.

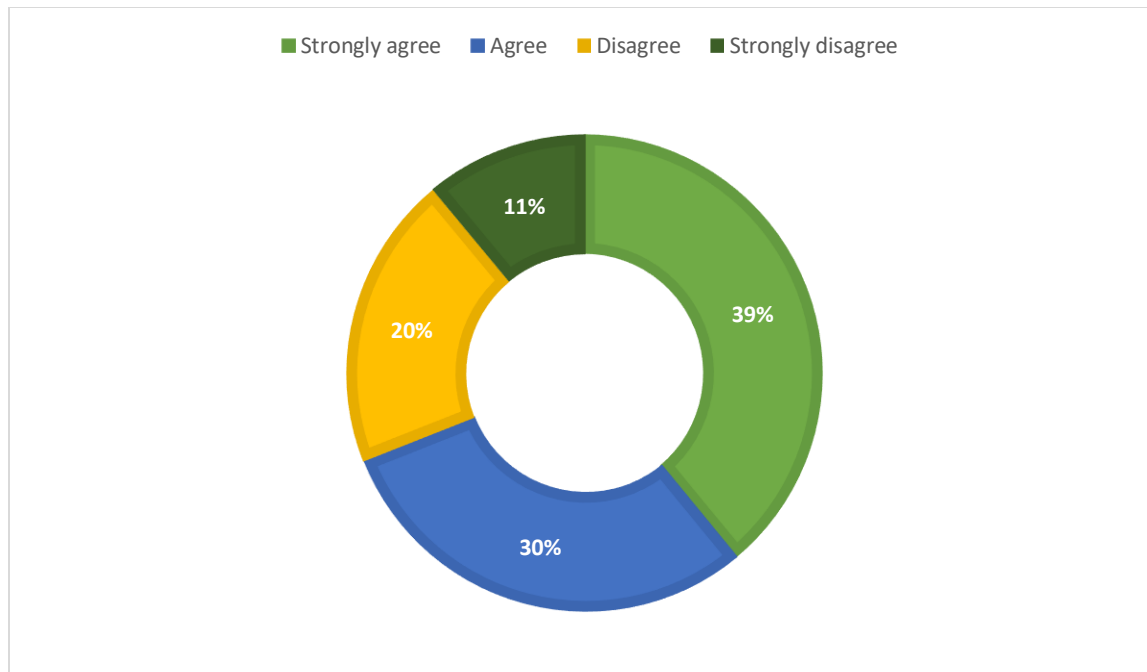
4.1.5.2 Automation on car location

The researcher wanted to establish if automation had enabled the customer to identify the location of the car.

Table 4 14: Automation on car location

Automation on car location	Frequency	Percentage
Strongly agree	36	39
Agree	27	30
Disagree	18	20
Strongly agree	10	11
Total	91	100

Source: Author 2018



Source: Author 2018

Figure 4 14: Automation on car location

The results indicated that automation of Uber taxi services enable the customer to identify the location of the car as one waits for pick-up as of 39% that strongly agreed, 30% agreed, 20% disagreed and 11% strongly disagreed. From the study it is well evident that by use technology customers are able to know the location of the car hence giving Uber competitive advantage over other taxis.

4.2 Summary of Data Analysis

Most of the respondents had the age of 25 to 40 years where female were more than men. Degree holders were more and most of the respondents had worked there between 0-2 years. On the current position, majority were customers and drivers.

On time efficiency, Uber was confirmed to maintain pick-up time. The cars used by the company are clean and of good quality. Customer service to customers rated average. The drivers are experts and also competent.

Pricing is low as compared to other taxi providers. During surge time the price is normally exaggerated. Uber taxi services has very low automated payment services. The automation on identification of car location by customers is reliable.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The chapter focuses on the results obtained in chapter four where the summary of the findings is done, the conclusion drawn from the summary and the recommendations obtained from the conclusion.

5.1 Summary

5.1.1 Demographic Information

On the age, the results indicated that those respondents below 25 years were at 8%, 25- 30 years at 17%, 31- 35 years at 38%, 36- 40 years at 31% and then above 40 years at 6%. It was noted that who participated in the study were 37% while female were 63%. The results indicated that the academic qualifications of the respondents were K.C.S.E 24%, certificate 9%, diploma 15%, degree 42% and then 10%. It was established that those who had worked at Uber taxi services from 0- 2 years were at 68%, 2-5 years at 22% and then those above 5 years at 10%. On the current position an individual holds in the provision of Uber taxi services Kenya, it was noted from the results that staff made up of 16%, drivers at 38% and Customers at 46%.

5.1.2 Timeliness

It was confirmed from the study that pick-up time for Uber taxi services is time efficient according to 76% of the respondents while 24% did not affirm. The findings showed that Uber taxi services maintained pick-up time after request of taxi and waiting time indicated according to 18% who strongly agreed, 33% agreed, 35% disagreed and 14% strongly disagreed.

5.1.3 Quality Service

It was very clear from the respondents that Uber taxi services have clean and quality cars according to 61% of the respondents, somehow clean at 16%, not clean at 5% and don't know at 9%. It was noted from that customer service offered at Uber taxi services is excellent according to 24% of the respondents, 35% for normal services, 31% for sub-standard services and 10% for poor services. It was evident from the respondents that Uber drivers are competent and expert in driving efficiently at service delivery as attributed by 17% who strongly agreed, 50% who agreed, 17% disagreed and 16% strongly disagreed.

5.1.4 Pricing

The results indicated that Uber taxi services offers low pricing than other traditional taxi services according to 78% of the respondents while 22% did not agree. It was evident from the results that Uber taxi services has surge valuation time where demand for taxi services is higher than the available cars and this makes them to exaggerate their pricing always as of 68% of respondents, sometimes at 16%, no at 5% and don't know for 11%.

5.1.5 Automation

On the automated payment services like use of Visa card, it was established that 11% affirmed, 20% used sometimes, 36% not used at all and 33% did not know. The results indicated that automation of Uber taxi services enable the customer to identify the location of the car as one waits for pick-up as of 39% that strongly agreed, 30% agreed, 20% disagreed and 11% strongly disagreed.

5.2 Conclusion

5.2.1 Demographic Information

It was noted that majority of the respondents were between the age of 25- 35 years of age majority of them being female. The holders of degree were majority followed by the K.C.S.E level of education. On the duration of service, it was clear that those worked between 0-2 years were the majority and those above 5 years being the least and finally customers were majority then drivers.

5.2.2 Timeliness

It was confirmed that pick-up time for Uber taxi services is efficient but on the time maintained for pick-up time after request of taxi and the time of pick-up indicated was not so explicit.

5.2.3 Quality Service

The results confirmed Uber taxi services having clean and quality cars. The customer service offered is normal or just like any other taxi service company though at times they offer sub-standard services. It was also very clear that drivers at Uber taxi services are competent and experts in driving efficiently at service delivery.

5.2.4 Pricing

It was explicitly clear that Uber taxi services offers low pricing than other traditional taxi services. It was proved that Uber taxi services exaggerate their pricing during surge evaluation time where demand for taxi services is higher than the available cars.

5.2.5 Automation

It was noted that automated payment services like use of Visa card were sometimes used though majority have never used it or were not aware the service existed. Automation has enabled the customer to identify the location of the car as one waits for the pick-up.

5.3 Recommendations

It was not conclusive on the taxi service maintaining time for pick-up after request of taxi and time for pick-up indicated therefore there is need to explore more on the factors affecting time maintenance upon request.

More to be done to establish why Uber taxi services has just normal customer services and at times offering sub-standard services to customers.

It is important for the company to put in mechanisms to curb exaggeration of pricing during surge evaluation time so as not to exploit clients.

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APPENDIX I: QUESTIONNAIRE

QUESTIONNAIRE FOR THE INFLUENCE OF TECHNOLOGY ON COMPETITIVE ADVANTAGE OF TAXI BUSINESS IN KENYA: THE CASE OF UBER KENYA

Section A: Background Information

1. How old are you?
Below 25 years ☐
25 – 30 years ☐
31 – 35 years ☐
36 – 40 years ☐
Above 40 years ☐
2. Your Gender?
Female ☐
Male ☐
3. Your academic qualification
K.C.S.E ☐
Certificate ☐
Diploma ☐
Degree ☐
Post-graduate ☐
4. Your duration of service
0 – 2 years ☐
2 – 5 years ☐
Above 5 years ☐
5. Your current position?
Staff ☐
Driver ☐
Customer ☐

Section B: Time Efficiency

6. Does Uber pick up time effective?
Yes []
No []
7. Do you agree that the estimated time for pick up after request is always maintained by Uber?
Strongly agree []
Agree []
Disagree []
Strongly disagree []
8. In comparison with Uber and traditional taxi for the efficiency in time, does Uber lead in time efficiency?
Yes []
Not sure []
No []
Don't know []

Section C: Quality Service

9. Does Uber taxi services have clean and quality cars as compared to other taxi service providers?
Yes []
Somehow []
No []
Don't know []
10. How do you rate the customer service offered by Uber taxi drivers?
Excellent []
Normal []
Sub-standard []
Poor []
11. Does Uber drivers have competent and expert drivers efficient at service delivery?
Strongly agree []

- Agree []
Disagree []
Strongly disagree []

Section D: Pricing

12. Does Uber taxi services offer lower rates/pricing than other traditional taxi services?
Yes []
No []
13. In Uber services there is surge valuation time where demand for taxi services is higher than the cars available. Does Uber taxi services exaggerate their rates/pricing?
Always []
Sometimes []
No []
Don't know []
14. Do you agree that Uber taxi services offer discounts to their loyal and dependable customers?
Strongly agree []
Agree []
Disagree []
Strongly disagree []

Section D: Automation

15. Does Uber taxi services have automated payment services like use of Visa card?
Yes []
Sometimes []
No []
Don't know []
16. Has automation of Uber taxi services and facilitation of request for pick up through the mobile application been effective?

Yes ☐

Somehow ☐

No ☐

Not sure ☐

17. Does automation of Uber services enable the customer to identify the location of the car as one waits for the pick up reliable?

Strongly agree ☐

Agree ☐

Disagree ☐

Strongly disagree ☐