UBER AND TAXIS: AN ANATOMY OF DISRUPTIVE INNOVATIONS

BY

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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This research project has been submitted for examinations with my approval as the chairman department of Management Science, School of Business, University Of Nairobi.

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DEDICATION

This project is dedicated to my family, my best half Dr. JB Hamad Ilkul, my angels Amara Buhiso, Abigael Deraso and to my son Arthur Roble.

To my parents Mr and Mrs Alyaro and my siblings. Thank you for your endless encouragement and support and for believing in me. God bless you so much.

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LIST OF ABBREVIATIONS AND ACRONYMS

IOT   The Internet of Things

KAA Kenya Airports Authority

KPA Kenya Ports Authority

RVR Rift Valley Railways Consortium

SGR Standard Gauge Railway

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ABSTRACT

The objective of the study was to establish the effect of Ubers disruptive technologies in Kenya. the study aimed to achieve this by establishing the disruptive innovations caused by Uber, to determine the effect of Uber's disruptive innovation in the transport industry and to determine the effect of Uber on technological efficiency of taxi services. This study employed a descriptive research design to gather information relating to the existing status of the phenomena to describe "what exists" pertaining to variables or state of affairs in the situation. The study population consisted of all the Uber drivers in Nairobi. According to Uber Kenya office, as at the end of August 2018, there were 16,897 registered Uber drivers in Kenya. The study used a sample of 51 respondents but achieved a response rate of 82%. Mugenda and Mugenda (2009) indicated that a response percentage of more than 70%, is considered good enough for examination and reporting. The study relied on primary data gathered via a research questionnaire. This study utilized both open ended and close ended questionnaires. Data analyzed via descriptive was presented through mean, standard deviation, graphs, tables and charts. Lastly, it will also use the (Statistical Package for Social Sciences) SPSS software to analyze data as well as make predictions based on data collection. Based on the findings in relation to specific objective, the study concluded that, Uber innovations have caused positive disruptions in Kenyan transport industry by enhancing efficiency, effectiveness cost control, reliability, and customer satisfaction. This study concludes that the changes brought forth by uber innovations are good, competitive, unsustainable and represent the way to the future. Other taxi operators are therefore advised to adapt to technology changes as uber services provide solutions to all previous limitations of ordinary taxis. This study is a relatively new study and there was very limited literature available to guide the researcher on the best methodological and analytical approaches. other limitations included limited time set aside for the research and the limited scope of study. Securing face to face interviews was a challenge due to the senior managers' busy schedules and the limited stipulated time to carry out the research. To counter this, appointments were sought and scheduled, sometimes outside the official working hours.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Disruptive innovation is the introduction of a product or service into an established industry that performs better and, normally, at a lower cost than current offerings, thus putting out of place the market leaders in that specific market space and changing the business. It's generally connected to any circumstance where another innovation acquires significant business, industry or market changes and disrupts the norm (Christensen, Michael & Rory, 2015).

Uber started with their budget option UberX which is the most popular service offered by Uber. It is a low-cost alternative for riders that allows them to quickly reach their destinations without the need of breaking their bank. Uber is currently operating in more than 72 countries and 800 cities across the globe and swelling month by month. Uber has expanded its operations across major cities and states worldwide. For instance, in Canada (Ottawa, Quebec City, Quebec and Toronto, Waterloo, Chatham-Kent, Edmonton, Alberta, Hamilton, Kingston among others). In Mexico (Guadalajara, Leon, Mexico City, Monterrey among others). In the U.S in some parts of Alabama, Arizona, Arkansas, California, and Florida among others). However, Uber has not by any stretch of the imagination made it in to the majority of the states in the U.S. because of legitimate reasons and driver strikes (Cramer & Krueger, 2016).

Furthermore, local cities and states feel Uber is not regulated adequate ly, hence have banned them till agreements on new rules are laid down. Uber is the world's most popular app not without controversy and has been banned in cities, for instance, In the U.S. its operations has been withdrawn in cities such as Alaska and Texas.

Europe in countries such as Bulgaria, Denmark, Hungary. In Canada its operations are illegal in Vancouver and British Colombia. In Asia Uber operations have been suspended in China and Taiwan. Similarly, in Australia, Northern territory has totally banned Uber operations. Uber however still operates in a number of other cities despite the legal battles. For instance, in Paris, France Uber's licensed private hire services are still popular. Rome Italy still used the ride hailing services after Uber firm won an appeal case at a higher court that overturned the ban. In Germany it still operates in only a limited chain of services in Berlin and Munich (Gaskell, 2017).

In Kenya, they have expanded to have over 5000 driver partners in Nairobi only. It has also stretched its presence in town such as Thika and Mombasa. However, Uber's expansion in operations in Kenya is being received with some of the similar kinds of protests the ride-hailing service encounters in different places across the globe. Uber Cab was burned in the Kenyan capital, Nairobi, the same day the service was launched in Mombasa. This made it not an easy ride for the company as their drivers are being targeted in attacks. Nonetheless, the company is still using Kenya as the hub of expansion of its operations and to finally launch the app in Uganda, and Tanzania (Itimu, 2018).

Uber disturbed the taxi business by joining present day innovation with adaptable payments as well as pricing strategies, while at the same time presenting a valuable platform for prospective drivers. Retrospectively, it is worryingly apparent that the car hire industry suits a geolocation mobile app similar to a glove on a hand. Uber identified this symbiosis, and generated its mobile app, which allows users to book an Uber ride with the comfort of a tap or swipe.

The app recognizes the location of the user, or enables the user to describe the picked up location of their choice and when. The user can then monitor the progression of the driver towards the pickup location, in real time. The app similarly entails a rating system, in which the drivers are assessed after the trip. Uber eliminates subpar drivers from its system, hence safeguarding a high customer service standard. Furthermore, comfort of its clients, Uber has discarded money installments. Clients characterize their payment details in the ride is carefully paid for subsequently sparing time. Clients are correspondingly given the approximated charge prior to the trip, hence increasing the service transparency (Business Daily, 2016).

Uber's disruption innovation has resulted in constant price wars between the conventional taxi operators and Uber, blaming Uber operators of lowering price hence making the business that used to be lucrative before their interruption become less lucrative. Uber counters by stating that they have leveraged on technology to in offering more cost-effective services. This even saw the Kenya Taxi Cabs Association asking Members of Parliament through a petition to create means of regulating fares so as to do away with price manipulation, which they stated has been brought by Uber (Utimu, 2018).

The disruptive innovation is similarly used to consider Airbnb's innovative business model, which is developed around new internet technologies, and Airbnb's distinctive appeal, which focuses on cost-savings, household amenities, as well as the prospective for more realistic local experiences. When it started, individuals were allowed to sleep on an airbed in some random individual's living room for an indeed low price.

People that were appealed to by Airbnb were different from those that were appealed to by Marriott as it did not have the good standards of a hotel. Its business model allowed for these low-value customers since it didn't need Airbnb to have the property or hire the operating staff. A low-cost answer to a low-value consumer. Certainly, as the popularity of Airbnb grew, the quality of its offering improved (Guttentag, 2015).

1.1.1 Disruptive Innovation

Disruptive innovation is a word of art created by Clayton Christensen and to refer to a process by which an item or administration flourishes at first in straightforward applications at the base of a market and after that determinedly advances markest, in the long run dislodging upcoming contenders (Christensen, et al., 2015). As businesses tend to innovate faster than the evolution of their customers 'demands. A number companies finally end up offering products or services that are essentially too complicated and too costly for several customers in their market. Firms chase these "sustaining innovations" at the higher levels of their markets since this is what has generally enabled them succeed. A disruptive innovation allows an entire new population of customers at the bottom of a market access to a product or service that was generally merely accessible to consumers with a lot of skills or money (Cramer & Krueger, 2016).

Features of disruptive companies, at their initial stages, can consist of: lower gross margins, smaller target markets, and modest products and services that could not seem as impelling as the current solutions when compared against traditional performance indicators.

Since these lower levels of the market give lower gross margins, they are unappealing to other companies moving upward in the market, making space at the bottom of the market for the emergence of new disruptive competitors. According to Christensen's theory of disruptive innovation, present enterprises themselves aid in creating the conditions that allow disruption to take place (Christensen, Michael & Rory, 2015).

Newer businesses get prospects to come into the space and have that pies of the pie of the market share that they can then build upon. He stated that disruptive innovation is a process. Disruption occurs when the smaller firm's product or service turn out to be the major choice, putting out of place the existing product or service. Disruptive innovations is significant in the business world. Business executives consider disruptive improvement as significant for creating benefits to clients and society, as the disruptive innovator offers a better product or service (often at a lower price) while simultaneously creating new value and impelling added improvements beyond the early repetitions of its product or service (Cramer & Krueger, 2016).

1.1.2 Uber Taxi Application

Uber is a ridesharing company that enables passengers request rides from drivers who have registered their private vehicles on the Uber mobile app. Uber as a technology platform uses smartphone apps connect drivers and riders. Clients use their rider app to request a ride, a nearby driver-partner accepts the request, the app then displays an expected arrival time of the driver heading to their pickup location. Rider app notifies the rider when the driver is almost to arrive.

The rider app similarly gives info about the driver with whom they will ride, containing driver's first name, vehicle type, as well as license number plate. This information enables the driver and the rider to connect at the pickup location. The rider uses their app to enter the preferred destination any time prior to or in the course of the ride. If the rider has a preferred route, it's necessary to talk through the directions with the driver (Gaskell, 2017)

When the client arrives at his or her destination and gets out of the cab, the trip ends. The fare for the trip is automatically calculated and charged to the method of payment that the client linked to his or her Uber account. In some cities however, Uber allows the passenger to pay his or her fare in cash. This option therefore ought to be selected prior to the request of the ride. Immediately after the client's trip ends, his or her app will ask them to give their driver a rating from 1 to 5 Stars. Drivers are similarly asked to rate their passengers. The feedback system of Uber is designed to adopt a community of respect as well as accountability for every individual (Business Daily, 2016).

Uber benefits the customers since the service provides a ride for those individuals who need taxi services at reasonable prices. There are lots of people, across a number of major cities who use such services and Uber has de-monopolized the taxi cab service and reinvented it in a number of ways. Uber is similarly restructuring the taxi industry and making the industry become more reputable. It does this by offering clean rides, making customer service their priority by offering up quality customer experiences, and accepting various methods of payments. They have also made it possible for riders to make payments using their credit cards from within the cab (Jalloh, 2018).

1.1.3 Transport Industry in Kenya

The transport industry in Kenya is very significant as it facilitates a number of other sectors. It contains, road transport which represents 80% of the aggregate development of travelers and cargo in Kenya. Typically, roads are the single methods for access to rural populations. The general population road network in Kenya is around 160,886 km long, comprising 16,544 km of National Roads under the Kenya National Highways Authority; 12,549 km of urban streets under the Kenya Urban Roads Authority; and around 131,794 km of country streets under Kenya Rural Roads Authority (Asingo, 2004).

The rail network controlled by the Kenya Railways Corporation, with a 1,083 km real line from Mombasa to Kisumu and Malaba. Cargo administrations make roughly 95% out of rail network activities and pay. presently, the rail framework transports about 2.4 million tons of payload every year which is around half limit. The Kenya and Uganda Railways mainline frameworks are directed together admission to a private administrator, Rift Valley Railways Consortium (RVR) in seeking to enhance efficiency. Recently the Standard Gauge Railway (SGR) from Nairobi to Mombasa, has been opened to facilitate faster movement of people and goods (World Bank, 2018).

Air transport is directed by the Kenya Airports Authority (KAA), comprised in 1991. KAA works nine primary airplane terminals countrywide, involving 3 universal air terminals, and 250 airstrips crosswise over Kenya. Current framework development attempts to the principle air terminals are planned for upgrading limit. Kenya has a solitary ocean port at Mombasa, which is under Kenya Ports Authority (KPA). The single oil pipeline in Kenya is under the Kenya Pipeline Company, from the port of Mombasa to Nairobi (450 km) with expansions to Eldoret (325km) and Kisumu (121 km).

The pipeline transports around 4 million cubic meters of oil based goods every year (World Bank, 2018).

Uber falling under road transport has completely revolutionized the transport subsector. Uber's business model seems to have allowed it to avoid local road transport rules and regulations by effectively adopting technological solutions to overcome local transport regulatory obstacles. Transport industry in Kenya include a huge segment of Kenya's administration area in its commitment to the nation's work and additionally salary age and their significance in trade, especially at the neighborhood local level.

1.2 Research Problem

Disruptive Technologies enable a firm maintain its competitiveness on Kenya's transport industry in the marketplace. Various terminology is used in the literature to define disruptive technologies associated with uncertainty and risk. Disruptive technologies are defined in comparison to sustaining technology. The few disputes and complaints, predominantly originating from the taxi part, against Uber is single distinct pointer of how Uber effectively set off a disturbance in the way "things were done previously". Also, it isn't just a secluded occasion, since these contentions even achieved the dimension where various legitimate moves have been made against the firm in a few urban communities over the world. It isn't just taxi firms and private taxi proprietors and administrators that are grumbling about Uber and its tasks (Cramer & Krueger, 2016).

Internationally, a number of studies have been carried out on the concept of disruptive innovation.

For instance, Feder (2018) conducted a study to establish the effects of disruptive innovations on productivity. The findings of the study indicated that we show that the effects of disruptive innovations constitute important aspects of the productivity measure. Govindarajan, Kopalle and Danneels (2011) the effects of mainstream and emerging customer orientations on radical and disruptive innovations. The study findings established that mainstream customer orientation positively affects the introduction of radical innovations however a negative effect on disruptive innovation, whereas emerging customer orientation positively affects disruptive innovation.

Similarly, local studies have been conducted on this concept. For instance, Aoko (2017) conducted a research to scrutinize the effect of digital disruption on the financial performance of commercial banks in Kenya: a case of Ecobank Kenya limited. The findings of the study established that an increase in industrial convergence, technological innovation and social digital trends increases the financial performance of the bank. Ang'asa (2017) effect of competitive strategies adopted by ride hailing companies in Nairobi, Kenya to sustain disruptions on Kenya's transport industry in the taxi industry. The results of the study revealed that the companies majorly used three competitive strategies; product differentiation, cost leadership and focus strategies each with a varying extent of impact on the disruptions on kenyas transport industry achieved. Mutai (2017) studied the effect of Ubers innovations on Kenya's transport industry in the context of Uber taxi Kenya. The findings of the study showed that Uber taxi Company applies adaptive capability in its operations. According to these studies, no research has been carried out on the effect of disruptive innovation by Uber on taxi operations in Kenya.

This study hence seeks to fill the existing study gaps by effect of disruptive innovation by Uber on taxi operations in Kenya. Therefore, the study seeks to answer the following research question: What is the disruptive innovation caused by Uber in Kenya?

1.3 General Research Objective

To analyze disruptive innovation in Kenya through Uber.

1.3.1 Specific Objectives

1. To establish the disruptive innovations initiated by Uber.

2. To determine the effect of Uber's disruptive innovation on the transport industry.

3. To determine the effect of Uber technological efficiency on taxi services.

1.4 Value of Study

The findings from this study was significant since they were used to formulate positive policies which were relevant as well as sensitive to the forces of the effect of disruptive innovation by Uber on taxi operations in Kenya. It was beneficial to the government and particularly the Ministry of Transport for policy decisions making whose overall objectives are to reduce the present challenges facing transport industry and particularly taxis owing to lack of present regulatory policies for Uber.

These study findings is of importance since it will assist leaders of other market players on how to respond to disruptive innovations in the industry for instance by strengthening relationships with major customers through capitalizing on sustaining innovations. It will similarly give business leaders a better sense of whether, when and where they ought to support investments into their individual strategic development of possible disruptive innovations.

Researchers as well as scholars will also use the findings of this research to contribute to the body of knowledge in the topic of disruptive innovations. It will similarly aid a number of researchers to further their researches on areas of interest that have not yet been exploited. To the academicians the study will contribute to the existing literature in the effects of disruptive innovations topic. It will act as an impetus for further studies to enhance as well as extend the current study particularly in Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter will cover different literatures on the anatomy of disruptive innovation on Uber and other Taxi applications as well as the theoretical foundations that underpin these processes. The chapter will equally bring into perspective some of the empirical studies relating to disruptive innovations within the industry in an effort to provide more insights into the subject of study.

2.2 Theoretical Foundations

This study was primarily based on the selection of different theories to expound more on the subject of study. Given this, a review was conducted on the Schumpeter's theory of innovation, the Knowledge-Based theory, and the Resource Based theory as discussed herein.

2.2.1 The Schumpeter's Theory of Innovation

Schumpeter's innovation theory was first crafted by Joseph Schumpeter who held on to the idea that businessmen had the capacity to earn or broaden their profit margins through the inclusion of innovation. In this regard, Schumpeter's innovation theory primes its prospects of profits as a reward for the incorporation of innovation in the functions of an organization or business. Schumpeter proverbially views innovation as a new approach that organizations and business entities choose to take in an effort to reduce their costs of production, albeit growing their demand for goods and services (Lemanowicz, 2015). According to this theory, innovation is mainly categorized into two levels; the first level consists of measures which are put in place with the intent of moderating and organizations production cost, evident in the inclusion of new processes and techniques through a combination of procedures and equipment's.

In the second category, organizations may incorporate new processes which may result in the growth of demand for manufactured products. This therefore involves the establishment and development of new products, new market openings, new quality merchandizes, and new product designs as well as features and new sources of raw materials.

The innovation theory of profit is relevant in the sense that it suggests that entrepreneurs have the capacity to broaden their profit margins in the event that the developed and established innovation is effective in decreasing the costs of production in an effort to ensure that the products gain more demands. In most of these cases, organizations remain at a better position to earn profits in a short time as competitors make efforts to imitate such a particular innovation. Once this is achieved, the innovation reaches a peak level where it ceases to be effective in accruing profits given the fact that it is replicated in the market by several competitors.

Businesses and organizations are therefore in a position to retain their huge profits in the event that laws and policies are enacted in ensuring that they have patents for their innovations (Hawkins and Davis, 2012). Patent products therefore discourage other competitors from imitating the product in the market. However, through time, the elements of time remain similar while the factor prices grow given the fact that the production costs are increased. On the other hand, organizations that adopt the new innovation remain in a position of increasing their price falls.

There are no modifications to this theory in as much as the changes relating to an organizations production process as well as marketing are viewed as innovations. Entrepreneurs therefore introduce these innovative measures in an effort to increase the gaps between price and production, thus resulting in the growth of profit margins. However, it is essential to note that the Schumpeter's theory of innovation as postulated in the views of Bellofiore (2009) has some limitations that organizations need to focus on in an effort to bridge the existing gaps between achieving profitability and pricing.

This lies in the fact that the theory primarily concentrates on innovations for an organization occurring profits in as much as several other factors are available that may be used to influence an entities profits when combined with innovation. On the other hand, Schumpeter believes that the development of an organization results from several domestic forces, an aspect that hinders underdeveloped economies who mainly depend and rely on imported technologies to achieve their profit-making goals given that they are influenced by exogenous forces in the initial phases of their product development.

2.2.2 Disruptive Innovation

The theory of disruptive innovation was primarily created by Harvard professor Clayton M. Christensen in his study on the disk-drive industry and afterwards make popular by his book "The Innovator's Dilemma", published in 1997. The concept describes the phenomenon through which an innovation changes the current market by bringing in simplicity, convenience, accessibility, as well as affordability where complication and high cost are the status quo.

Originally, a disruptive innovation is created in a niche market that seems unappealing or inconsequential to market incumbents, however ultimately the new product or idea totally redefines the industry (Christensen, Michael & Rory, 2015).

Unfortunately, disruption theory is in risk of becoming a victim of its own success. In spite of wide dissemination, the theory's basic concepts have been broadly misinterpreted, and its core principles usually misapplied. Additionally, crucial modifications in the theory over the past few decades seem to have been dominated by the popularity of the original formulation. Thus, the theory is at many times slammed for shortcomings that have at present been dealt with. Disruption theory does not describe everything regarding innovation particularly or business success largely. A number of other factors are considered, each of which will reward further study.

Combining them all into a broad theory of business success is a determined goal, one that is unlikely to be realized anytime soon. However, empirical tests indicate that using disruptive theory makes people measurably as well as significantly more accurate in their predictions of which new enterprise will succeed. Researchers as well as practitioners continues to build on disruption theory and mix it with a number of perspectives. This will lead to an even better insight of what aids companies successfully innovate (Christensen, Michael and Rory, 2015)

Understanding of how disruptive innovation occurs will enable business leaders get their enterprises ready to anticipate innovations that could turn out to be competitors. It similarly gives business leaders a better knowledge of whether, when as well as where they ought to facilitate investments into their individual strategic development of likely disruptive innovations (Yu & Hang 2010).

2.2.3 Resource-Based Theory

The resource-based theory is a significant approach that aids organizations to achieve their disruptions(competitive advantage) on Kenya's transport industry market. This theory was primarily used in the 20th century by Wernerfelt in 1980. As postulated in the views of Kristandl and Bontis (2007) organizations need to focus on resources that act as determinants of their competitive advantage as opposed to environmental factors, hence underpinning the need for organizations to rely primarily on tangible and intangible resources that are immobile and heterogeneous. According to the resource-based theory, firms and organizations may need to focus on the acquisition of strategic resources as evident in the case of Uber in an effort to establish their "over other firms" that fail to have such resources. The inclusion of other resources such as trucks and cash are however viewed as insufficient strategic resources since a firm's competitor remain at a better position to acquire the resources. Given this, a resource is perceived as strategic when it holds value and proves challenging for competitors to imitate and substitute.

A good illustration of the use of this theory remains evident in the case of Southwest Airlines. The resource-based theory is a golden opportunity that enables firms to develop their disruptions on Kenya's transport industry against their rivals. A strategic resource are assets that are rare, valuable, challenging to imitate, and non-substitutable. Resources are valuable when the held firms capitalize and leverage on their opportunities while creating strategies to ward of the threats that may be inculcated in the functions of an organization as established in the views of (Foss & Knudsen, 2003).

As evident in the case of Southwest Airlines, the resource-based view fits well given the fact that several airline companies struggle to gain their disruptions on kenyas transport industry and gain profitability. One of the key aspects remains in the establishment of an organizational culture that focuses on inspiriting the firm's employees to achieve their goals, a culture that has seen the firm minimize cases of staff layoffs, strikes, and poor work morale that are very common in the industry.

Modifications of the resource-based theory are evident in the knowledge-based theory. In light of this, it is essential to note that the firm's competitors may have a challenging time in replicating the firm's strategic resources given the fact that they are difficult to imitate. Some of the most difficult resources to imitate are primarily protected through legal measures and means such as the inclusion of patents, trademarks, and copyrights. On the other hand, some of the firm's resources may be hard to replicate given the fact that they have the capacity to evolve over a period of time and give a reflection of different unique qualities of an organization. In this regard, it is essential to note that Southwest airlines culture was developed through its humble beginnings (Kristandl & Bontis, 2007)

In this regard, it is essential to note that the RBT has limitations that require full understanding. This lies in the fact that the failure of firms to accurately establish proper views on the extent of their resources and to fully understand the scope of their administrative patterns, then there are chances that the ability to make use of direct strategies may be constrained. Secondly, the context upon which firms operate as established in the RBV theory may provide opportunities for their future as well as current growth, thus establishing the essence of environmental awareness that may be

used as another resource that may need to be included in an organizations inventory in as much as the contexts may change (Foss & Knudsen, 2003).

The influence and utility of the RBNV model in considering the manner in which organizations fit within the wider context or as a framework used on the making of decisions should not be dismissed given the fact that the theory is considered as an abstract framework that allows organizations to build their in the market rather than establish solutions.

2.2.4 The Knowledge-Based Theory

The competitive environment and market of organizations has gone through significant and dramatic changes over the past few decades. This is evident in the fact that the roles of the traditional sources established to achieve competitive advantage have depreciated due to the emerging technological changes brought by globalization. This has therefore seen several monopolies break down as an approach established to deregulate the market, hence resulting in diminishing returns and economies of scale (Balogun & Jenkins, 2003).

The context upon which firms operate as established in the RBV theory may provide opportunities for their future as well as current growth, thus establishing the essence of environmental awareness that may be used as another resource that may need to be included in an organizations inventory in as much as the contexts may change. Higher-technological changes have resulted in the creation of incentives for entrepreneurs and innovations that are seeking opportunities in the market today. The knowledge-based theory is relevant given that it's primarily focuses lies on the efficacy of entities

hierarchies in an effort to economize knowledge exchange. It is essential to note that the knowledge-based theory is an extension and modification of the resource-based model. Knowledge, as established as established in the views of Penrose, the developer of this theory is considered as a strategic resource that does not easily depreciate as compared to other economic elements and may generate increasing returns when harnessed in the functions of an organization (King & Zeithaml, 2003). The nature of knowledge-based resources is hedged on the fact that they are dynamic and intangible, an aspect that provides room for idiosyncratic approaches of development through casual ambiguity and path dependency which are perceived as crucial elements in the economic rent creation. Organizations and companies are therefore tasked with the role of establishing proper measures to acquire their needed resources while investing on harnessing organizational knowledge in their operations which would result in the acquisition of a sustainable competitiveness.

Literatures on the knowledge-based theories do not however provide any modifications of this model. However, the benefit of this model lies in the evolving economic parallels that have intensified the classical production aspects in the creation of wealth. Economic behaviors in this age are therefore attributed to knowledge, a critical element to the sustainability of competitiveness. Since its conception, literatures have pointed out that the knowledge-based theory plays a significant role in the generation of streams of empirical and theoretical research that serve as continuity to evolutions resulting from the refined understanding of knowledge sourcing that determines the manner in which managers identify valuable knowledge and knowledge transfer that determines the external and internal sources (Blackler, 2002).

2.3 Empirical Review

Ngeera (2013) in a study aimed at revealing the dynamics of disruptive technologies in most of the Commercial Banks in Kenya that served as his population sample in the study established that the inclusion of these technologies mainly hedged on the financial institutions efforts to enhance learning processes as well as knowledge management processes within the organizations. In light of this, it is evident that the failure of firms lies in their lack of capacity to accurately establish proper views on the extent of their resources and to fully understand the scope of their administrative patterns, pointing to the chances that the ability to make use of direct strategies may be constrained.

Mac and Bhaird (2013) on the other hand conducted a study on micro enterprises (SMEs) with the aim of revealing how financial resources, which are viewed as intangible assets are effective in achieving a firms disruption on Kenya's transport industry. The research study conducted surveys on 15 SME's and used the multivariate regression approach of analysis on the Irish SMEs. The findings of the research study revealed that in as much as financial resources are crucial in the undertakings and performance of an organization; they lack the capacity to generate a sustainable disruption on Kenya's transport industry in these small firms. Thus is hedged on the fact that value creation as evident in the resource-based theory remains contingent to their efficient and effective management.

Foss and Knudsen (2013) lastly in their study on a sustainable approach aimed at explaining disruptions on kenyas transport industry conducted on managerial representatives in 30 organizations in Europe support the need for research and development for organizations through the inclusion of knowledge-based views in involving the establishment and development of new products, new market openings,

new quality merchandizes, and new product designs as well as features and new sources of raw materials. These measures are crucial in achieving in the market.

Kiiru (2015) in a research study on small and medium-retain entities in Kenya conducted a study with the objective of determining the manner in which the companies in this competitive environment and market of organizations have gone through significant and dramatic changes over the past few decades due to the inclusion of the knowledge-based theory. The research conducted surveys through interviews on 230 small and medium sized retail businesses in Nairobi and revealed that the technological changes that have landmarked the business environment have resulted in the creation of incentives for entrepreneurs and innovations that are seeking opportunities in the market today, efforts that has seen organizations invest heavily in harnessing and transforming knowledge into a valuable resource that meets the current market needs of companies.

Consequently, Lemanowicz (2015) in a study driven towards evaluating the essence of an organizations strategic resource within an industry and their impact of the achievement of organizational goals conducted a research on 150 SME's in Israel through the use of the organizations specific profits as a proximal measure of their disruptions. The study focused much on intangible and un-imitated resources, efforts that resulted in a sharp variance in the findings of the study. The study revealed that neither a firm's sustenance nor the acquisition of its disruptions can be achieved through the inclusion of strategic resources. In this case, organizations may incorporate new processes which may result in the growth of demand for manufactured products.

This therefore involves the establishment and development of new products, new market openings, new quality merchandizes, and new product designs as well as features and new sources of raw materials.

In a study conducted by Gregorio, Pedro and Miriam (2016) with the aim of establishing a knowledge–based theory in a firm's innovativeness among pharmaceutical entities in Mexico, the researchers revealed the need for knowledge, relationships, and networks as fundamental drivers of an organizations innovation. The study conducted an empirical research on 15 pharmaceuticals in Mexico and revealed the need for managers to understand the nature of internal and external knowledge management procedures of a firm's innovation. In light of this study, it is assumed that the context upon which firms operate as established in the RBV theory may provide opportunities for their future as well as current growth, thus establishing the essence of environmental awareness that may be used as another resource that may need to be included in an organizations inventory in as much as the contexts may change.

Chege (2016) in a research study that collected 350 respondents from small and medium enterprises in Kenya with the aim of investigating competitive strategies adopted by these organizations revealed that firms and organizations need to focus on the acquisition of strategic resources as evident in the case of Uber in an effort to establish their over other firms that fail to have such resources. Given this, a resource is perceived as strategic when it holds value and proves challenging for competitors to imitate and substitute.

Cheung, Chan, and Kajewski (2017) in another research study objectified to determine the public sector's perspective on disruptive innovations: comparing the views of practitioners in Hong Kong and Australia revealed the need to overcome organizational weaknesses trough the inclusion of knowledge-based theories. The findings of this study reveal that knowledge plays a role in the development of new approaches that change the culture of organizations given the fact that knowledge and culture are expressed as the main unique sources of innovation.

2.4 Summary of Research and Knowledge

Ngeera (2013) researched on the dynamics of disruptive technologies in Commercial Banks in Kenya whereby it was established that the failure of firms lies in their lack of capacity to accurately establish proper views on the extent of their resources and to fully understand the scope of their administrative patterns. Foss and Knudsen (2013) looked at the sustainable approach aimed at explaining disruptions on kenyas transport industry conducted on managerial representatives in 30 organizations, whereby they established that these measures are crucial in achieving in the market.

Kiiru (2015) research on small and medium-retain entities in Kenya whereby it was established that the technological changes that have resulted in the creation of incentives for entrepreneurs and innovations that are seeking opportunities in the market today. Lemanowicz (2015) studied organizations strategic resource within an industry and their impact of the achievement organizational goals conducted a research on 150 SME's in Israel and established that neither a firm's sustenance nor the acquisition of its disruptions on Kenya's transport industry can be achieved through the inclusion of strategic resources.

Gregorio, Pedro and Miriam (2016) also in their study that sought to establish a knowledge–based theory in a firm's innovativeness among pharmaceutical entities in Mexico, revealed that the need for knowledge, relationships, and networks as fundamental drivers of an organization's innovation. Chege (2016) similarly investigated competitive strategies adopted by SME's in Kenya, whereby it was found that firms and organizations need to focus on the acquisition of strategic resources. It is evident that all these studies failed to focus on Uber and taxis with respect to Ubers disruptive innovation thereby leaving a research gap.

2.5 Conceptual Framework

A conceptual framework refers to a presentation of the dependent and independent variables relate. Disruptive innovations is the dependent variable while independent variables are Uber's disruptive innovations in the transport industry and Uber's technological efficiency on taxi services..

Independent Variables

Dependent Variable

The disruptive innovations adopted by Uber taxi services

Efficiency of the Transport industry

Technology adopted by uber taxi services
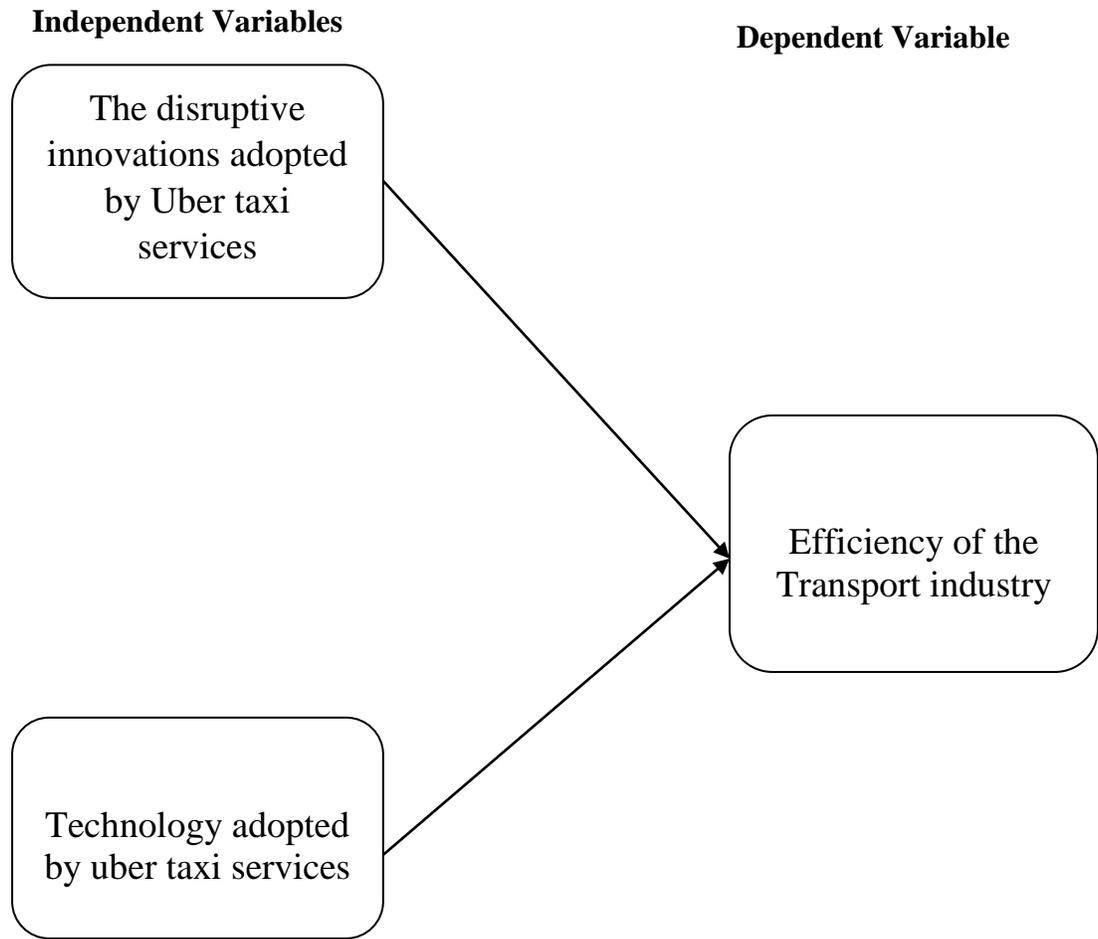
Figure 2. 1: Conceptual Framework

<center>**CHAPTER THREE: RESEARCH METHODOLOGY**</center>

3.1 Introduction

This section comprises the specific procedures and techniques that was adopted by this research to identify, select, process, and analyze information pertaining to the topic. It comprises of the research design, population of study, data collection and data analysis.

3.2 Research Design

A research design refers to a systematic approach that a researcher employs in conducting a scientific study (Yousaf, 2017). This study employed a descriptive research design to gather information relating to the existing status of the phenomena to describe "what exists" pertaining to variables or state of affairs in the situation. According to Mitchell and Jolley (2012) a descriptive research design refers to one in which information is obtained without changing the situation (i.e., not anything is manipulated).

It is justified that the study adopted a descriptive research design as the subjects or participants were observed in a natural as well as unchanged environment. Similarly, descriptive research was a pre-cursor to future studies since it was valuable in identifying variables that could possibly be measure. A descriptive study allowed for rich data to be gathered in large amounts. Furthermore, this type of research was utilized to create new research questions, or form hypotheses pertaining to the cause as well as influence connection (Maxwell, 2012).

3.3 Population of Study

Population refers to the entire group of individuals, events or relevant things that the researcher wishes to explore (Sekaran, 2005). It is the entire collection of cases or units about which the researcher will draw inferences. One of the key stages in creating a research design was to explain the population pertaining to the research objectives. Population of the study comprised individual participants of the study. It comprised 505 operators of Uber Taxi in Kenya to determine the sample.

3.4 Sample of the Study

A sample population of 51 was reached by taking 10% of 505. The proportion, 10%, chosen for the sample was guided by Mugenda and Mugenda (2008) which states that 10-30% of a target population is sufficient for drawing conclusion of an entire population.

3.5 Data Collection

The study relied on primary data gathered via a research questionnaire. This study utilized close ended questionnaire. It is justified to use questionnaires as large amounts of information was gathered within in a short period of time and in a quite cost-effective manner. Lastly, when data has been quantified, it was employed in comparing as well as contrasting other research and may be used to evaluate change (Maxwell, 2012).

3.6 Data Analysis

Data analysis for descriptive statistics was done to in this study to allow describe, indicate or summarize data in a meaningful manner such that patterns can develop from the data. Data analyzed via descriptive was presented through mean, standard deviation, tables and charts. Lastly, it will also use the (Statistical Package for Social Sciences) SPSS software to analyze data as well as make predictions based on data collection.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis, interpretation, and presentation of the study findings on disruptive innovations.

4.2 Response Rate

The study targeted a total of 51 Respondents who constituted of Uber drivers in Kenya. Out of these, 42 respondents could be reached and completed the questionnaires while the rest were not available to fill the questionnaires, hence the response rate of the study was 82%. Mugenda and Mugenda (2009) indicates that a response percentage of more than 70%, is considered good enough for examination and reporting.

Table 4.1: Response Rate

Response	Frequency	Percentage
Filled in questionnaires	42	82
Un-returned questionnaires	8	18
Total	**50**	**100**

4.3 Demographic Information of the Respondents

The demographic data obtained from individual respondents and their background is examined in this segment. Doing this enabled the researcher to comprehend the respondents setting and their capability to provide useful data. The results are presented according to the demographics and the research questions. The general information sought from the respondents included their age, the length of time they had worked for the Uber Taxi, their highest level of education and length of time employed by uber.

4.3.1 Age of the Respondents

The researcher sought to find out the age of the respondents.

Table 4. 2: Age of the Respondents

Age	Frequency	Percentage
18-28	3	7.2
29-39	18	45.2
40-50	17	40.5
51-60	2	7.1
Total	**40**	**100**

The findings indicate that 45.2 percent of the respondents were aged between 29 and 39 years, 40.5 percent were aged between 40-50 years while 7.2% of the respondents were aged between 18 to 28 years, while another 7.1 % were aged between 51 to 60 years. This implies that majority of the respondents that is 85% were neither too young nor too old and therefore represent vibrant and experienced population whose experiences and responses can be relied upon

4.2.3 Highest Academic Qualification

The Respondents were required by the study to state their highest level of education.

Table 3: Highest Academic Qualification

	Frequency	Percentage
Primary	2	3
Secondary	19	46
Tertiary	5	12
University	16	39
Total	**42**	**100**

According to the study findings, most (46 %) of the respondents had secondary education as their highest education level, 39% had attained bachelor degree, 12% had attained tertiary education while 3% had primary education as their highest education level as depicted by table 4.3. This implies that Uber has attracted highly educated people.

4.2.4 Length of Service in the Uber Taxi

The Respondents were required by the researcher to indicate the duration they had served in their organizations.

Table 4.4: Length of Service in the Uber Taxi

Years of Service	Frequency	Percentage
Less than 1 year	18	44
1 to 2 years	16	38
2 to 3 years	8	18
Total	**42**	**100**

According to the study findings, most (44%) of the respondents indicated that they had served in the Uber Taxi for a period less than one year, 38 % indicated that they had served for between one to two years while 18% indicated that they had served in the Uber Taxi for a period of between 2 to 3 years. This implies that Uber is still a young online tax company in Kenya as it has been in operational since 2015.

4.3 Disruptive Innovations Caused by Ubers in Kenya's Transport Industry

The study sought to find out the disruptive innovations caused by Uber in Kenya's Transport Industry using Likert Scale where 1.is Not at all 2. Little extent 3. Moderate extent 4. great extent 5. very great extent. The study results were as follows:

Table 4.5: Disruptive innovations caused by Uber

Statements	Mean	SD
Uber allows an entire new population of customers at the bottom of a market access to a product or service	3.79	0.898
Uber created a business for idle cars and taxi drivers, as it increased their utilization and allowed them to make money by driving when they would otherwise be idle	3.76	0.79
Uber has also served some non-consumers of taxis who previously had opted for mass transit (buses) as well as those for whom taxis have been accessible.	3.5	0.969
It has allowed reliability and availability without adding the fixed costs of owning cars and having a middleman	3.56	0.821
Uber's low pricing technique has been used as a marketing technique to enable it to acquire new customers	3.83	0.914
Uber's low pricing technique has been used as a new model that allows it to sustainably offer its services at lower cost	3.97	0.522
Uber technology has been able to eliminate the need for taxi companies' middleman dispatch services,	3.01	1.012
Traditional taxi operators protest the rise of Uber and are using regulations that preserve the status quo.	4.6	1.061
Uber has been able to move up-market and improve extremely rapidly inside of a business model of innovation	4.3	1.03

According to the study results, majority of the respondents indicated that the disruptive innovations caused by Uber is that traditional taxi operators protest the rise of Uber and are using regulations that preserve the status quo and also that Uber has been able to move up-market and improve extremely rapidly inside of a business model of innovation as illustrated by the mean score of 4.6 and 4.3 respectively. Also, the study respondents indicated to a great extent that the disruptive innovations caused by Uber is that its low pricing technique has been used as a new model that allows it to sustainably offer its services at lower cost at a mean response of 3.97, its low pricing technique has been used as a marketing technique to enable it to acquire new customers at a mean response of 3.83, it allows an entire new population of customers at the bottom of a market access to a product or service at a mean response of 3.79, it has created a business for idle cars and taxi drivers, as it increased their utilization and allowed them to make money by driving when they would otherwise be idle at a mean response of 3.76, it has allowed reliability and availability without adding the fixed costs of owning cars and having a middleman at a mean response of 3.56 and that it also serves some non-consumers of taxis who previously had opted for mass transit (buses) as well as those for whom taxis have been accessible as illustrated by the mean scores of 3.50 respectively. Additionally, the study established to a moderate extent that the disruptive innovations caused by Uber is that its technology has been able to eliminate the need for taxi companies' middleman dispatch services as depicted by the mean score of 3.01.

4.3.2 The Influence of Ubers Innovations in Kenya's Transport Industry

The study also sought to find out the influence of Ubers innovations in Kenya's transport industry using Likert Scale where 1is Not at all 2. Little extent 3. Moderate extent 4. great extent 5. very great extent.

Table 4.6: Influence of Ubers innovations in Kenya's transport industry

Statements	Mean	SDev
Uber taxi app has led to traditional taxi operators to lose on market share	3.95	0.731
Uber taxi application has led to traditional taxi operators to lose on sales	3.62	0.825
It has led the traditional taxi companies to introduce a smart phone application for ride request.	3.72	0.815
It has resulted to a general decrease in taxi fare in the industry	3.53	0.904
It has led to an increase in the number of taxis, that is, both the traditional taxis and those that use online application such Uber.	3.86	0.811
Enhanced security since Uber's mobile phone technology platform provides details of both the driver and the passenger	3.93	0.928

The research findings established that majority of the respondents indicated to a very great extent that the influence of Ubers innovations in Kenya's transport industry is that Uber taxi app has caused traditional taxi operators to lose on market share at a mean score of 3.95, there has been enhanced security since Uber's mobile phone technology platform provides details of both the driver and the passenger at a mean score of 3.93, and that it has led to an increase in the number of taxis, that is, both the traditional taxis

and those that use online application as indicated by the mean scores of 3.86 respectively. In addition, the study established to a great extent that the influence of Ubers innovations in Kenya's transport industry is that it has led the traditional taxi companies to introduce a smart phone application for ride request at a mean score of 3.72, the application has led to traditional taxi operators to lose on sales at a mean score of 3.62 and that it has resulted into a general decrease in taxi fare in the industry as shown by the mean scores of 3.53.

4.3.3 The Effect of Uber On Technological Efficiency of Taxi Services in Kenya

The study also sought to determine the effect of Uber technological efficiency on taxi services in Kenya using Likert Scale where 1is Not at all 2. Little extent 3. Moderate extent 4. great extent 5. very great extent.

Table 4.7: Effect of Uber on Technological Efficiency of Taxi Services in Kenya

Statements	Mean	SD
Uber is more convenient as it has an inbuilt mobile phones' GPS technology which allows drivers to navigate passengers to their destinations	3.67	0.754
Uber is significantly more affordable than the existing or traditional taxis.	3.5	0.969
The Uber application is simple to use	3.48	0.833
Uber application is low cost as it is able to strip out many of the costs of the taxi services	3.4	0.734
The application enables drivers to overcome their lack of knowledge on availability of prospective customers.	4.59	0.978
Uber drivers are keen to provide quality service since the technology allows customers to rate the performance of the driver thus, weeding unsafe drivers as well.	4.56	0.87
Taxi services has become more affordable due to Uber's network business model	4.3	0.349
It has led to increase or availability of taxi services since it took advantage of excess capacity from drivers who already own their cars and were now leveraging their downtime from earning income.	4.46	0.201

As per the study results, majority of the respondents indicated to a very great extent that the effect of Uber technological efficiency on taxi services in Kenya is that the application enables drivers to overcome their lack of knowledge on availability of prospective customers at a mean score of 4.59, their drivers are keen to provide quality service since the technology allows customers to rate the performance of the driver thus at a mean score of 4.56, weeding unsafe drivers as well, it has led to increase or availability of taxi services since it takes advantage of excess capacity from drivers who already own their cars and are now leveraging their downtime from earning income at a mean score of 4.46, that taxi services have become more affordable due to Uber's network business model as depicted by the mean scores of 4.3.

The study also found out to a great extent that the effect of Uber technological efficiency on taxi services in Kenya is that it is more convenient as it has an inbuilt mobile phones' GPS technology which allows drivers to navigate passengers to their destinations at a mean score of 3.67, and that it is significantly more affordable than the existing or traditional taxis as shown by the mean scores of 3.50. Lastly, the study established to a moderate extent that the effect of Uber technological efficiency on taxi services in Kenya is that the application is simple to use mean scores of 3.48 and that the application is cheap as it is able to strip out much of the taxi service costs as depicted by the mean scores of 3.40.

4.4 Inferential Analysis

4.4.1 Coefficient of Determination

Table 4. 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.598a	.5801	.498	0.4010

a Predictors: (Constant): disruptive innovations, technology

b. dependent variable: Uber and Taxis efficiency

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Uber and Taxis) that is explained by the two independent variables disruptive innovation and technology efficiency.

The two independent variables that were studied, explain only 58.015% of the disruptive innovations as represented by the adjusted R^2. This therefore means that other factors not studied in this research contribute 41.985% of the Uber disruptive innovations in the transport industry in Kenya.

Table 4.9: Summary of One-Way ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.986	7	2.998	17.503	.000b
	Residual	4.178	35	.182		
	Total	22.164	42			

a. Dependent Variable: transport industry efficiency

b. Predictors: (Constant), disruptive innovations and technology

The study used One-way ANOVA to establish the significance of the regression model from which a probability value of 0.000 was established. This indicates that the regression relationship was highly significant in predicting how the independent variables (disruptive innovation and technological efficiency) has caused efficiency in transport. Since significant value (0.001) is less than 0.05, this indicates that the model was significant.

Table 4.10: Regression Coefficients Results

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.109	.271		.647	.000
	X_1	.280	.049	.019	.279	.010
	X_2	.214	.077	-.025	-.309	.001

a Dependent Variable: Uber and Taxis

b. Predictors: (Constant), disruptive innovation, technological efficiency

X1 = disruptive innovations

X2 = technology

Both X_1 and X_2 are statistically significant

4.5 Discussion of the Findings

4.5.1 Demographic Information of the Respondents

On the demographic information of the respondents, the study established that most of the respondents were aged between 29-39 years, majority had secondary education as their highest education level, and that most had served in the Uber Taxi for a period less than one year.

4.5.2 Disruptive Innovations Caused by Ubers in Kenya's Transport Industry

On the first objective, the study found out to a very great extent that the disruptive innovations caused by Uber on Kenya's transport industry is that traditional taxi operators protest the rise of Uber and are using regulations that preserve the status quo and that Uber has been able to move up-market and improve extremely rapidly inside of a business model of innovation.

4.5.3 The Influence of Ubers Innovations in Kenya's Transport Industry

On the second objective, the study found to a very great extent that the influence of Uber innovations in Kenya transport industry is that Uber taxi app has caused traditional taxi operators to lose on market share, there has been enhanced security since Uber's mobile phone technology platform provides details of both the driver and the passenger, and that it has led to an increase in the number of taxis, that is, both the traditional taxis and those that use online application. This is spport by previos stdies like for example The rider app similarly gives info about the driver with whom they will ride, containing driver's first name, vehicle type, as well as license number plate (Cramer & Krueger, 2016). This information enables the driver and the rider to connect at the pickup location.

The rider uses their app to enter the preferred destination any time prior to or in the course of the ride. If the rider has a preferred route, it's necessary to talk through the directions with the driver (Gaskell, 2017).

4.5.4 The Effect of Uber Technological Efficiency on Taxi Services in Kenya

On the third objective, the study established that the effects of Uber technology on efficiency on taxi services in Kenya is that the application enables drivers to overcome their lack of knowledge on availability of prospective customers, their drivers are keen to provide quality service since the technology allows customers to rate the performance of the driver thus, weeding unsafe drivers as well, it has led to increase or availability of taxi services since it takes advantage of excess capacity from drivers who already own their cars and are now leveraging their downtime from earning income and that taxi services have become more affordable due to Uber's network business model. This is in agreement In some cities however, Uber allows the passenger to pay his or her fare in cash. This option therefore ought to be selected prior to the request of the ride (Jalloh, 2018). Immediately after the client's trip ends, his or her app will ask them to give their driver a rating from 1 to 5 Stars. Drivers are similarly asked to rate their passengers. The feedback system of Uber is designed to adopt a community of respect as well as accountability for every individual (Business Daily, 2016).

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings, conclusions, and recommendations. The findings are summarized in line with the objectives of the study which was to establish the effect of Uber innovations in Kenya's transport industry. The findings have been discussed relative to the questionnaire aspects which were on; demographic data on the respondents and the aspects of the predictor variables and how it influences Kenya's transport industry for Uber drivers in Kenya.

5.2 Summary of Findings

The objective of the study was to establish the effect of Ubers disruptive technologies in Kenya. The research adopted a descriptive research design. The study population consisted of all the Uber drivers in Nairobi. According to Uber Kenya office, as at the end of August 2018, there were 16,897 registered Uber drivers in Kenya. The study used a sample of 51 respondents but achieved a response rate of 82%. Mugenda and Mugenda (2009) indicated that a response percentage of more than 70%, is considered good enough for examination and reporting.

5.2.1 Demographic Information of the Respondents

The demographic data obtained from individual respondents and their background was examined. Doing this enabled the researcher to comprehend the respondents setting and their capability to provide useful data. The results were presented according to the demographics and the research questions. The general information sought from the respondents included their age, level of education and the length of time they had worked for the Uber Taxi.

On the respondents age, the study found out that 45.2% were aged between 29 and 39 years, 40.5% between 40-50 years, 7.2% between 18-28 years while7.1% were aged between 51-60 years.

On the highest level of education, the study established that 46 % of the respondents had secondary education as their highest education level, 39% had attained bachelor degree, 12% had attained tertiary education while 3% had primary education as their highest education level.

On the length of service in the Uber taxi, the study established that 44% of the respondents had served in the Uber Taxi for a period less than one year, 38 % for between one to two years while 18% had served in the Uber Taxi for a period of between 2 to 3 years.

5.2.2 Disruptive Innovations Caused by Ubers in Kenya's Transport Industry

On the disruptive innovations caused by Uber on Kenya's transport industry, the study found out to a very great extent that traditional taxi operators protest the rise of Uber and are using regulations that preserve the status quo and that Uber has been able to move up-market and improve extremely rapidly inside of a business model of innovation as shown by the mean scores of 4.6 and 4.3 respectively. The study also established to a great extent that Uber low pricing technique has been used as a new model that allows it to sustainably offer its services at lower cost, its low pricing technique has been used as a marketing technique to enable it to acquire new customers, it allows an entire new population of customers at the bottom of a market access to a product or service, it has created a business for idle cars and taxi drivers, as it increased their utilization and allowed them to make money by driving when they would otherwise be idle, it has

allowed reliability and availability without adding the fixed costs of owning cars and having a middleman and that it also serves some non-consumers of taxis who previously had opted for mass transit (buses) as well as those for whom taxis have been accessible as illustrated by the mean scores of 3.97, 3.83, 3.79, 3.76, 3.56 and 3.50 respectively. Further, the study established to a moderate extent that Uber technology has been able to eliminate the need for taxi companies' middleman dispatch services as depicted by the mean score of 3.01

5.3.2 The Influence of Ubers Innovations in Kenya's Transport Industry

On the influence of Uber innovations in Kenya transport industry, the study established to a very great extent that Uber taxi app has caused traditional taxi operators to lose on market share, there has been enhanced security since Uber's mobile phone technology platform provides details of both the driver and the passenger, and that it has led to an increase in the number of taxis, that is, both the traditional taxis and those that use online application as indicated by the mean scores of 3.95, 3.93, and 3.86 respectively. The study also found to a great extent that Uber has led the traditional taxi companies to introduce a smart phone application for ride request, the application has led to traditional taxi operators to lose on sales and that it has resulted into a general decrease in taxi fare in the industry as shown by the mean scores of 3.72, 3.62 and 3.53 respectively.

5.2.3 The Effect of Uber on Technological Efficiency on Taxi Services in Kenya

On the effects of Uber technological efficiency on taxi services in Kenya, the study established to a very great extent that the application enables drivers to overcome their lack of knowledge on availability of prospective customers, their drivers are keen to provide quality service since the technology allows customers to rate the performance of

the driver thus, weeding unsafe drivers as well, it has led to increase or availability of taxi services since it takes advantage of excess capacity from drivers who already own their cars and are now leveraging their downtime from earning income and that taxi services have become more affordable due to Uber's network business model as depicted by the mean scores of 4.59, 4.56, 4.46 and 4.3 respectively. The study also found out that Uber is more convenient as it has an inbuilt mobile phones' GPS technology which allows drivers to navigate passengers to their destinations, and that it is significantly more affordable than the existing or traditional taxis as shown by the mean scores of 3.67 and 3.50 respectively. Lastly, the study established to a moderate extent that Uber application is simple to use and that the application is cheap as it is able to strip out much of the taxi service costs as depicted by the mean scores of 3.48 and 3.40 respectively.

The coeffiennt in table 4.10 indicates. Holding all other factors constant (no influence of the predictor variables) the uber and taxis transport system would be constant at 0.109. a unit increase in disruptive innovations caused by uber would lead to an increase in efficiency of the transport sector by 0.28 while technology innovations leads to improved transport system in Kenya by 0.214.

5.3 Conclusion

The study sought to find out the disruptive innovations of Uber on Kenya's transport industry. Therefore, based on the findings of the study, the following conclusions were made:

The study concluded that the key disruptive innovations caused by Uber on Kenya transport industry are that traditional taxi operators always protest the rise of Uber hence they are using regulations that preserve their status quo and also that Uber has moved up-market and hence has improved extremely rapidly inside of a business model of innovation.

The study also concluded that, the influence caused by introduction of Uber innovations in Kenya transport industry is that it has caused traditional taxi operators to lose on market share enhanced security of both the passengers and the drivers, as well as increasing the number of taxis both the traditional taxis and those that use online application.

Further, the study concluded that the effects of Uber technological efficiency on taxi services in Kenya is that it has enabled drivers to overcome their lack of knowledge on availability of prospective customers, drivers are keen to provide quality service, it has led to increase or availability of taxi services and also that taxi services have become more affordable due to Uber's network business model

5.4 Recommendations

This study concludes that the changes brought forth by uber innovations are good, competitive, unsustainable and represent the way to the future. Other taxi operators should therefore be advised to adapt to technology changes as uber services provide solutions to all previous limitations of ordinary taxis. This is because Uber innovations combine modern technology with flexible payment as well as pricing strategies, while at the same time presenting a valuable platform for prospective drivers. Uber mobile app also allows users to book an Uber ride with the comfort of a tap or swipe.

The app recognizes the location of the user or enables the user to describe the picked up location of their choice and when. The user can then monitor the progression of the driver towards the pickup location, in real time. The app similarly entails a rating system, in which the drivers are assessed after the trip. Uber eliminates subpar drivers from its system, hence safeguarding a high customer service standard. Users are similarly provided the approximated charge prior to the trip, hence increasing the service transparency. All these good attributes of Uber point to inevitable changes in Kenya's transport industry that every stakeholder needs to adapt to.

5.5 Limitations of the Study

This study is a relatively new study and there was very limited literature available to guide the researcher on the best methodological and analytical approaches. Other limitations included limited time set aside for the research and the limited scope of study. Securing face to face interviews was a challenge due to the senior managers' busy schedules and the limited stipulated time to carry out the research. To counter this, appointments had sought were scheduled, sometimes outside the official working hours.

5.6 Suggestions for further Research

This study investigated disruptive innovations caused by Uber in Kenya transport industry. The study therefore suggests that further research to be done on challenges affecting all online taxis operations in Kenya. The study also suggests that further study be done on the impacts of online tax services on the transport sector in the country. Other studies should be undertaken to establish the implications of innovations on operational efficiencies in other sectors other than the transport industry.

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APPENDIX I: QUESTIONNAIRE

The questionnaire will help to collect information on the disruptive innovation caused by Uber; effect of Uber on taxi services; effect of Uber on technological efficiency of Taxi Services. Kindly answer the questions by writing a brief statement or ticking in the boxes provided as applicable. The information provided was treated as strictly confidential and at no instance will your name be mentioned in this research. This research is intended for an academic purpose only.

SECTION A:

1. Indicate your age bracket. (Tick one)

   18-27 [ ]   28-37   [ ]   38-47 [ ]   48 years and above   [   ]

2. What is your highest educational qualification? (Tick one)

    Primary [ ]   Secondary [   ]   Tertiary [   ] University

3. How long have you been employed at Uber?
    Less than 1 Year [   ]   1-3 Years [   ]   Above 3 Years [   ]

4. Who are your competitors?
………………………………………………………………………………………..
…………………………………………………………………………………………
…………………………………………………………………………………………
……..

SECTION B:

5. Below are several statements on disruptive innovations caused by Uber. Please indicate the extent to which you agree with each of the statement. Use a scale of 1-5 where; 1= No Extent, 2 Little Extent, 3=Moderately Extent, 4= Great Extent, 5= Very Great Extent.

	1	2	3	4	5
Uber allows an entire new population of customers at the bottom of a market access to a product or service					
Uber created a business for idle cars and taxi drivers, as it increased their utilization and allowed them to make money by driving when they would otherwise be idle					
Uber has also served some non-consumers of taxis who previously had opted for mass transit (buses) as well as those for whom taxis have been accessible.					
It has allowed reliability and availability without adding the fixed costs of owning cars and having a middleman					
Uber's low pricing technique has been used as a marketing technique to enable it to acquire new customers					
Uber's low pricing technique has been used as a new model that allows it to sustainably offer its services at lower cost					
Uber technology has been able to eliminate the need for taxi companies' middleman dispatch services,					
Traditional taxi operators protest the rise of Uber and are using regulations that preserve the status quo.					
Uber has been able to move up-market and improve extremely rapidly inside of a business model of innovation					

SECTION C:

6. Below are several statements on the effect of Uber on taxi services. Please indicate the extent to which you agree with each of the statement. Use a scale of 1-5 where; 1= No Extent, 2 Little Extent, 3=Moderately Extent, 4= Great Extent, 5= Very Great Extent.

	1	2	3	4	5
Uber taxi app has led to traditional taxi operators to lose on market share					
Uber taxi application has led to traditional taxi operators to lose on sales					
It has led the traditional taxi companies to introduce a smart phone application for ride request.					
It has resulted to a general decrease in taxi fare in the industry					
It has led to an increase in the number of taxis, that is, both the traditional taxis and those that use online application such Uber.					
Enhanced security since Uber's mobile phone technology platform provides details of both the driver and the passenger					

SECTION D:

7. Technology efficiency of taxi services. Please indicate the extent to which you agree with each of the statement. Use a scale of 1-5 where; 1= No Extent, 2 Little Extent, 3=Moderately Extent, 4=

	1	2	3	4	5
Uber is more convenient as it has an inbuilt mobile phones' GPS technology which allows drivers to navigate passengers to their destinations					
Uber is significantly more affordable than the existing or traditional taxis.					
The Uber application is simple to use					
Uber application is low cost as it is able to strip out many of the costs of the taxi services					

The application enables drivers to overcome their lack of knowledge on availability of prospective customers.					
Uber drivers are keen to provide quality service since the technology allows customers to rate the performance of the driver thus, weeding unsafe drivers as well.					
Taxi services has become more affordable due to Uber's network business model					
It has led to increase or availability of taxi services since it took advantage of excess capacity from drivers who already own their cars and were now leveraging their downtime from earning income.					

Great Extent, 5= Very Great Extent.