



INDUSTRY FORCES INFLUENCING THE PERFORMANCE OF ONLINE APPLICATION BASED TAXI DRIVERS IN KENYA: A DESCRIPTIVE CASE STUDY OF UBER, BOLT, AND LITTLE CABS DRIVERS

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ABSTRACT

Purpose of the Study: The objective of the study was to determine the industry forces affecting the performance of online-based taxi drivers in Nairobi, Kenya. In particular, the investigation sought to determine how threat of new entrant, competition in the industry, buyer power, supplier power and threat of substitute products affect the performance of online-based taxi drivers.

Statement of the problem: To survive and be successful in the online ride-hailing industry, investors of taxi application services must strengthen and reshape their operations with a view to becoming more competitive and profitable despite the increased number of players in the sector.

Research methodology: The study used descriptive research design. The target population included all online-based taxi drivers operating in Nairobi metropolitan amounting to 4320. The unit of observation were drivers. The sample size was 366 that included 142 from Uber, 105 from Little Cab and 119 from Bolt.

Findings: The study found that threat of new entrant was negatively and significantly related to performance ($\beta=-.051$, $p=0.037$). Competition was positively and significantly related to performance ($\beta=.075$, $p=0.008$). Buyer power and performance was negatively and insignificantly related to performance ($\beta=-.036$, $p=0.054$). Supplier power and performance was negatively and significantly related to performance ($\beta=-.067$, $p=0.025$).Threat of substitute product and performance was positively and significantly related to performance ($\beta=.077$, $p=0.006$).

Conclusions: It was concluded that buyer power had a low impact on the performance of online-based taxi drivers. The study also concluded that threat of new entrant in the industry has a low and negative impact on the performance. Further it was concluded that supplier in the industry was the third most significant predictor of performance among online-based taxi drivers. The study further concluded that competition had the second most significant impact on the

performance. Finally, substitute products were the most significant predictor of performance among online-based taxi drivers.

Recommendations: It was recommended that online-based taxi drivers to enhance their service delivery not only to retain customers but also enhance consumer satisfaction with their services. It was also recommended drivers should be concerned about the threat of new entrant and focus on enhancing their brand image to fend off such rivals. Recommendations were made that high number of suppliers in the market was considered to have a considerable impact on performance and therefore drivers should cast their nets wide and work with more suppliers in the market. It was further recommended that drivers need to find approaches to fend off substitute products and compete with them effectively. The study also recommended drivers not only ensure that their clients are satisfied with their services but also their products are of superior quality compared to substitute services available in the market.

Keywords: *Bargaining, suppliers, customers, substitute products, new entry, competition, performance, online-based taxi drivers*

1.0 INTRODUCTION

The online ride-hailing industry was valued at \$36,450 million in 2017, and this value is still projected to rise to \$126,521 million by the year 2025 with North America being ranked the highest contributor globally with a market share of 12% (Herrera & Nowag 2017). In Kenya the industry is valued at Ksh. 1.2 billion and considered among the fastest growing industry in the country. Online ride-hailing services enable passengers to request and board a taxi via online applications such as Uber and Lyft. It has brought to existence one of the most comfortable and safest door to door services. The growth of the online ride-hailing services market has dramatically been driven by the rising trend for the demand for better transportation services, employment creation, and low car rate ownership witnessed among the millennial demographic (Wirtz & Tang, 2015).

Travel experience has been revolutionized by the online ride-hailing services due to the associated convenience and in the process enhanced movement within major towns worldwide. The integration of technology in the taxi industry has also changed the way transport; especially the way taxis are operated and experienced, a feat that has seen the industry grow with such online ride-hailing firms such as Uber and other online ride-hailing services expand to many countries globally. Indeed, currently, online ride-hailing services are being offered worldwide with companies such as Uber, Taxify, and Lyft being global leaders (Watanabe, Naveed, Neittaanmäki & Fox, 2017). Performance in the field of online-ride hailing services providers have been studied extensively. Melnyk, Bititci, Platts, Tobias and Andersen (2014) in their investigation considered the concept of performance as the realization of set organizational goals or objectives. Additionally, Charles and Kumar (2014) have also defined the concept of performance as a set of analytic processes that enable a firm realize its pre-selected goals. Performance measurement entails measuring of key performance indicators of a business against its monetary position or other organizational challenges. Measuring performance in any business plays an essential role in reducing process cost as well as enhancing productivity and mission effectiveness.

Competition in the taxi industry has increased since online taxi application firms joined the market (Ndungu, 2013). Companies have deployed competitive advantage strategies such as cost leadership, complementary services such as Wi-Fi aboard a taxi, and proactively endeavor to come up with innovations that will lure and keep customers. With the increased competitiveness in the taxi ride-hailing sector in Kenya, it is imperative that the industry forces affecting the performance of the players are undertaken. In light of the above, this research investigates the industry forces that affect the performance of online-based taxi drivers. The study further explores the extent these forces have on online taxi drivers' business performance and present strategies that increase efficiency and growth in the industry and place our industry on the global map.

1.1 STATEMENT OF THE PROBLEM

To survive and be successful in the online ride-hailing industry, investors of taxi application services must strengthen and reshape their operations with a view to becoming more competitive and profitable despite the increased number of players in the sector. Social reforms, innovation as well as new entrants, among other factors, have had a bearing on the growth and success of the industry, a situation that has necessitated potential investors or existing investors in the industry to develop other sources of competitiveness.

It could be that some serious unknown forces are shaping the demand-supply equilibrium of taxi services within a network under competition and regulation. For example, rapid advancements and change in technology and innovations require speedy adaptation that is sluggishly accepted and/or adopted by players in the industry, the omission of security-related aspects, and missing regulatory framework that governs the online ride company business. Such factors have heightened competition amid uncertainty among investors in the industry, thus perceived to pose a great risk on long-term online application business performance. Furthermore, despite the entry of online application-based taxi services in Kenya in 2005, there have been concerns that customers tend to suffer or experience frequent downtime due to strikes by drivers as witnessed in the previous strikes where customers decried lack of online-based taxi services after drivers downed their tools agitating for better operations (Njiana, 2019).

On the other hand, the drivers have openly expressed their 'dissatisfaction' with the profits they make. Attributing this to a lack of support from the government, regulatory bodies, and other stakeholders who are tasked with ensuring there is fair trade in the taxi business and reign on unfair trade practices. Based on this, it is necessary to determine whether there are exterior forces in the online application-based taxi industry. This study will provide data that may help industry players/stakeholders identify plans and actions that will be beneficial for investors and the industry at large. Despite many studies having been undertaken with the objective of determining competitive forces shaping businesses in different sectors, online based taxi business is still a new phenomenon that has attracted different market players. Therefore competitive forces shaping online one sector cannot be used in a different sector and consequently, it is imperative that forces influencing application-based taxi services are likewise investigated. As a result, this study sought to investigate external factors that influence the business performance of online taxi firms in Kenya.

1.2 RESEARCH OBJECTIVES

- i. To access the impact of bargaining power of suppliers on the performance of online-based taxi drivers.
- ii. To explore how the bargaining power of customers affect the performance of online-based taxi drivers.
- iii. To evaluate the impact of threat of substitute products on the performance of online-based taxi drivers.
- iv. To access how threat of new entry influences the performance of online-based taxi drivers
- v. To explore the impact of competition within the industry on the performance of online-based taxi drivers

1.3 CONCEPTUAL FRAMEWORK

Figure 1 below represents the conceptual framework used to guide the study.

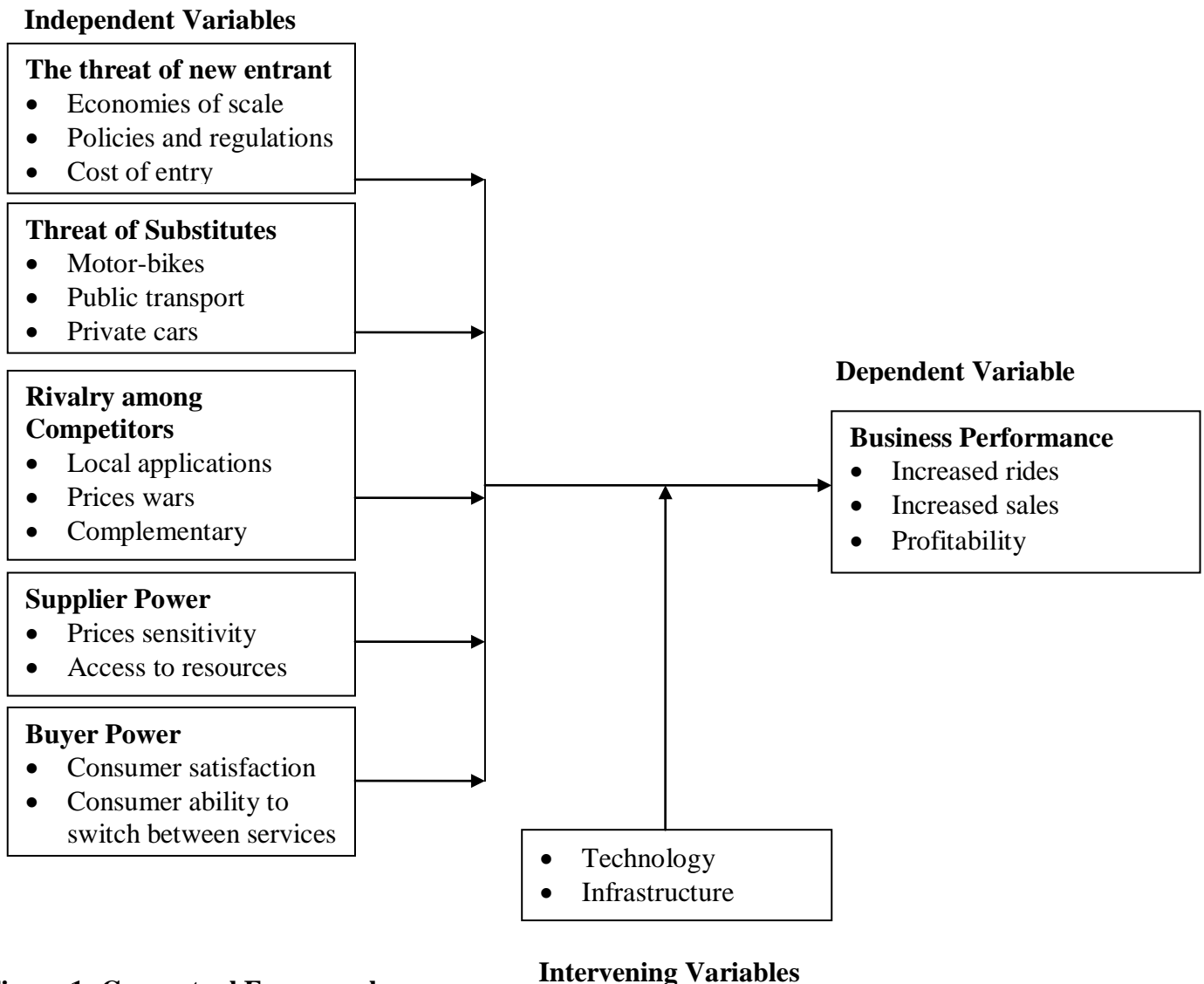


Figure 1: Conceptual Framework

2.0 LITERATURE REVIEW

2.1 Review of Theories

2.1.1 Balanced Score Card

Developed by Robert Kaplan and David Norton in 1992, the balanced scorecard is considered one of the dominant strategic performance measurement tool to translate a firm's mission and vision into actual actions or operations. Additionally, the tool is instrumental in offering information on various strategies. It can also be used in feedback management and understanding various processes and their operational performance within an organization (Wongrassamee, Simmons & Gardiner 2003). One of the tool's key features is that it looks into a firm's performance from different perspectives. Nørreklit, Kure and Renca (2018) note that perspective, in this case, is used in reference to performance dimension or lenses, putting a given strategy into context. The perspectives of a balanced scorecard include the financial, customer, learning, and growth as well as internal business processes perspective.

Online ride-hailing firms and, in particular, the drivers who happen to own the taxis can utilize this theory in order to enhance their performance or ensure that their performance is at par with industry standards. The model can be used for starters to measure the financial performance of the taxi drivers/owners of the taxis within the industry as well as to determine whether or not they are meeting their customer goals. In relation to business processes, the model can be deployed by the drivers/owners in establishing the business process that works for them as well as those that they need to adopt in order to enhance their operations and subsequently their performance. Finally, the drivers/owners of the taxis operating in the online ride-hailing industry can also make use of the model to determine factors indefinable factors that are likely to influence their performance and business output.

2.1.2 Resource-Based Model

Realized in the 1980s and further developed in the 1990s, the resource-based view also commonly referred to as RBV is a theoretical model that focuses on the resources within a firm. According to the model, it is the resources within an organization have that plays an important role in guiding its performance (Hart, 1995). As such, firms with better resources are likely to realize enhanced performance as compared to those that do not have the desired in realizing their desired competitive advantage. Proponents of the model have argued that to be successful, firms need to look inside the company to realize their sources of competitive rather than focusing on the competitive environment that they have no control on. According to Lockett, Thompson and Morgenstern (2009), the model is critical in isolating key resources both tangible and intangible that an organization can leverage to realize sustained competitive edge. It is the amount of resources within the reach of a firm that offers it an edge over its rivals thus the ability to realized enhanced performance.

At the core of RBV's argument is that a firm's success lies on its ability to realize that its future competitiveness is based on the uniqueness of its resources and its capability to put the resources to use while responding to industry changes. Barney (1996) demonstrates that a firm's unique and distinct resources provide it with the desired strategy for competition. If organization had similar resources and capabilities, they would not differ from each other competitively as well as in terms of performance. Through RBV, organizations are able to gain the desired competitive

edge as well as develop an understanding that through its resources, it can address emerging changes in the market to realized enhanced performance.

2.1.3 Porter's Five Forces

The framework was developed by Michael Porter in 1980 and that the model identifies and evaluates five complete forces that play an instrumental role in shaping every industry as well as helps in determining an industry's weaknesses and strengths. The model is often utilized in the identification of an industry's structure to determine corporate strategy and consequently can be applied in any sector of an economy to help develop an understanding of the level of competition with a given industry and increase a firm's long-term profitability. Lewis (2017) considers the model as a business analysis tool that is instrumental in helping one explain why different industries are able to maintain various levels of profitability. Porter in developing the model identified five forces that affect the competitive nature of an industry or an organization, namely; the bargaining power of suppliers, the bargaining power of consumers, the threat of new entrants, and competition in the industry and the threat of substitute's products.

Ride-hailing service providers can use the model and, particularly, drivers/owners of the cars to develop a better understanding of the market they operate in. For starters, the model can be used to determine the power of consumers as well as suppliers in the market in that it is expected that the higher the suppliers or consumers in the market, the lower the power of the drivers/owners in determining the prices of the service. Additionally, the higher the number of substitute products such as public transport and the use of motorbike and preference for walking due to health reasons, the lower the power of the drivers/owners in establishing control over the transport industry. Finally, the ease of doing business, which has seen several other app-based taxi services being launched, also impacts drivers/owners' performance as they are likely to create considerable competition within the market, thus denying existing firms their competitive edge.

2.2 Empirical Review

MoganeandJokonya (2019) looked into the factors that hinder the adoption of application-based services among SMME's in Western Cape. While noting that SME forms the largest share of the workforce in South Africa, the investigators observed that to sustain growth and development, such firms must embrace technological advancement in their environment. As such, it set out to investigate the factors influencing the adoption of new technologies by SMMEs. It adopted an interpretive paradigm as well as the qualitative technique for carrying out the investigation. Questionnaires have also used the investigation as the desired technique of data collection. Its findings demonstrated that government policies, decision making, as well as technological know-how significantly influenced the adoption of technological innovation among SMEs.

Roy (2017) investigated the intrinsic motivations, viewpoint, as well as adoption mechanism of app-based taxi services in India on a sample of 239 app-based cab users argued that the proliferation of mobile technology has significantly disrupted the transport industry as most customers today prefer to pay a premium for hassle-free services such as Uber and Ola. The study found that components such as consumer behavior, technology perception, and demographic profiles significantly influenced the adoption and usage of online ride-hailing taxi services.

Onyango (2016) investigated factors that affect the adoption and competitiveness of e-hailing applications in Kenya. Noting the e-hailing has brought about considerable competition within

the transport industry, the investigator set out to establish the drivers for adoption as well as factors affecting the competitiveness of e-hailing services in the country. Using a descriptive research approach, the investigation focused on those app-based taxi providers in Nairobi. A simple random sampling technique was used in identifying study participants with the investigator collecting his data through questionnaires. The investigation findings reveal that wait-time, consumer behavior, communication, and the relative advantage of using the application significantly influenced not only their adoption but also competitiveness within the Kenyan market.

Hussein (2016) sought to understand the impact of service quality on consumer satisfaction and preferences in relation to taxi services in Nairobi. While applying descriptive research approach and used a structured questionnaire to collect its primary information. Data in this case was analyzed using both inferential and descriptive approaches. The findings of the investigation demonstrated that consumer satisfaction with a given taxi service provider was positively related to the quality of service they received. A majority of the clients were observed to likely return to similar taxi company if they received enhanced service delivery in their previous ride. The investigation therefore recommended that taxi companies need to focus on service quality to not only increase consumer satisfaction but to also retain their customers.

Puche (2016) investigated the impact of regulating e-hailing services with a focus on Uber operations in Mexico. The study observes that despite the significance of taxi apps, current regulatory framework has made it a challenge for taxi applications such as Uber to revolutionize the public transport sector as they face a number of legal and regulatory challenges in almost every city, they start operations since the challenge was that Uber find it difficult to operate within the laws set for the traditional taxi business. The study therefore takes a comparative approach and compares various cities in Mexico with the objective of determining the challenges faced by Uber in entering the taxi market in the country. It observes that there is a relationship between Uber's poor performance in various cities in the country and the regulatory framework set to regulate the industry. It therefore recommends that the country needs to identify desired guidelines that will be key in governing its taxi system while enhancing the absorption of app-based taxi services.

On the local front, while investigating the competitive forces that impact the performance of bicycle taxis in Kisumu, Kokwaro, Ajowi and Kokwaro. (2013) in their study adopted a cross-sectional research approach and used Porter's five forces to evaluate the competition in the industry. A structured questionnaire was used to collect the data that informed the findings of the investigation. The results of the investigation demonstrated that the threat of new entrants in the industry and the availability of substitute products had the most impact on the performance of bicycle taxis in Kisumu respectively. Rivalry among existing competitors was also observed to have a considerable influence on the performance of the sector. The study therefore concluded that substitute public transport and emerging transport solutions in the industry should be the focus of bicycle taxis while formulating desired performance enhancement strategies.

Adji, Roza, Aziz and Karim (2011) looked at the differences between intercity bus transportation system and its competitors in the industry in Malaysia. The investigation used a comparative approach to help it determine the impact of other competitors on the performance of Malaysia's intercity transportation system. It compared the system to other transport solutions available to Malaysia residents. Its findings demonstrated that the performance of the intercity transport

system was heavily impacted by other competitors in the market including air and rail transport which were observed to be the preference for most residents in Malaysia. The investigation recommended that for the bus system to be competitive, it has to offer additional services and quality experience to help attract and retain more clients.

Onatere, Nwagboso and Georgakis (2014) investigated the performance indicators for urban transport in Nigeria. According to the investigation, the performance of urban transport in various developing nations are significantly low as stakeholders rarely understand or have a clear picture of what affects their performance. The study therefore sought to find out the key performance indicators that urban transport in Nigeria can use to measure their performance. It also sought to find out the factors affecting the performance of the industry. The investigation adopted a review of literature as the desired approach to addressing their research questions. Their findings demonstrate that among the performance indicators that affect urban transport in Nigeria include safety measures, environmental pollution, financial perspective, and customer satisfaction. Additionally, it was observed that customer satisfaction and intense competition within the industry occasioned by high number of substitute products significantly influenced the industry.

Kufuor (2019) investigated Uber in Ghana to establish the challenges faced by the organization in serving the transport sector of the country. The study looks at the organization's challenges from the perspective of New Institutional Economics, where they pull together scholars as well as various research methods to help expound on the rise of development and success or failure of organizations. Among the challenges identified to affect the growth of Uber operations in Ghana include the availability of substitute products, competition from other service providers, and consumer preference of using motorbike transport compared to a car. It makes the recommendation for Uber to change its marketing strategies in order for the organization to compete within the Ghanaian market.

Okwako (2017) investigated factors that affect the performance of public service vehicles in Nairobi. In particular, the investigation sought to find out the impact of alternative transport on the performance of the industry and how professionalism influences productivity in the PSV sector in Nairobi County. It adopted an explanatory research approach and used simple random sampling to identify its participants. Data was collected using structure questionnaire and analyzed using both qualitative and quantitative approaches. The investigation observed that the industry is affected by substitute products including personal cars and online taxi operators. It also demonstrated that maintaining professionalism was a key factor in enhancing performance in the industry. The investigation cited substitute products to offer consumers enhanced bargaining power and concluded that managerial skills are essential in ensuring that the industry increases its performance.

Haba and Dastane (2018) determined factors that facilitated the adoption of ride-hailing services among Malaysian consumers. The investigation used the theory of Venkatesh et al. (2003), the user theory of acceptance, and the use of technology concepts to base its argument. It used an adoption framework with four independent variables: performance expectancy, effort expectancy, social influence, and facilitating conditions. On the other hand, the dependent variable used in the investigation was consumer behavior and behavioral intentions. Using a convenience sampling technique, the study gathered information from 202 study participants drawn from Malaysia. It finds that performance expectancy, social influence, and facilitating

conditions positively correlated with consumer behavior while effort expectancy significantly influenced behavioral intentions.

Dzisi, Ackaah, Aprimah, and Adjei (2020) investigated the demographics of ride-sourcing and the factors influencing the adoption of such services among the youths. According to the investigation, there is little to no information regarding traveler's utilization or ride-sourcing in Ghana. As such, the investigation focused on evaluating the spread as well as utilization of ride-hailing services among various demographics in Ghana. Using stratified sampling to sample about 400 participants drawn from the Kwame Nkurumah University of Science and Technology, the investigation adopted the use of questionnaires to collect its data. It found that the factors that drive young people to use online-taxi services include the convenience of usage, safety concerns, and cost-related issues. The investigation recommends that drivers remain competitive within the transport industry; they have to innovate and adopt technologies that will help address the concerns of their clients.

3.0 RESEARCH METHODOLOGY

The investigation used a descriptive research approach. Creswell and Creswell (2017) define the descriptive research design as a technique that includes gathering data defining given situations, organizing the same data, and presenting or outlining it in charts and graphs for better understanding. The descriptive design was adopted in this study because of its ability to offer a description of the facts of the research as per the time the study was taken. The target population included all online-based taxi drivers operating in Nairobi metropolitan amounting to 4320. The unit of analysis was Uber, Little Cabs and Bolt. The unit of observation was drivers. The sample size was 366 that included 142 from Uber, 105 from Little Cab and 119 from Bolt.

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Descriptive Statistics on Variables

4.1.1 Effects of Threat of New Entrant on Performance of Online-Based Taxi Drivers

Table 1 below presents effects of threat of new entrant on the performance of online-based taxi drivers

Table 1: Effects of threat of new entrant on the performance of online-based taxi drivers

Items	Strongly			Agree (%)	Strongly Agree (%)
	Disagree (%)	Disagree (%)	Moderate (%)		
Economy of scale make it difficult for new entrants to affect the market	37.1	47.7	15.2		
Government policies make it difficult for new entrants to affect the market	14.5	48.4	37.1		
Cost of entry makes it difficult for new entrants to affect the market		39.4	42.9	17.7	

Table 1 above demonstrate that a majority of the participants disagreed with the statement that economies of scale made it difficult for new entrants to affect the market while 37.1% strongly disagree. 15.2% took a neutral stand. Similarly, most of the subjects 48.4% disagreed with the statement that government policies made it difficult for new entrants to affect the market while 14.5% strongly disagreed. 37.1% took a moderate view on the statement. A majority of the participants 42.9% held a moderate view on the statement that cost of entry made it difficult for new entrants to affect the market while 39.4% disagreed and 17.7% agreed with the statement.

The findings of the study demonstrate that economies of scale do not make it difficult for new entrants to get into the market thus affecting competition. Similarly, it is demonstrated that government policies in place also allows for new entrants to enter the market easily thus affecting business performance of the drivers. Despite the majority holding a moderate view that cost of entry does make it difficult for new entrants to affect the market, it is apparent that more drivers disagree with the statement. It can therefore be argued that to some extent, the cost of entry does not make it difficult for new entrants to affect performance in the market.

These results are supported by the studies realized by Dzisi, Ackaah, Aprimah, and Adjei (2020) who demonstrated that in industries that organizations have economies of scales, it is difficult for new entrants to gain entry into the market and negatively affect its performance. Similarly, the observations by Puche (2016) also back the findings of this study as they demonstrate reduced government regulations which makes it easy for new entrants to get into the market is likely to affect the performance of firms in the industry.

4.1.2 Effects of Competition in the Industry on the Performance of Online-Based Taxi Drivers

The effects of competition in the industry on the performance of online-based taxi drivers is shown in Table 2

Table 2: Effects of competition on the performance of online-based taxi drivers

Items	Strongly Disagree (%)	Disagree (%)	Moderate (%)	Agree (%)	Strongly Agree (%)
Upsurge in local service providers affect operation in the market		41.6	23.5	34.8	
Price wars in the industry affect operations in the market	28.1	52.6	14.4		
Complementary services from rivals affect competition in the market			21.3	41.6	37.1

Results presented in Table 2 demonstrates that a majority of the study subjects 41.6% disagreed with the statement that upsurge in local service providers affected operation in the market while 34.8% agreed with the statement. 23.5 took a neutral position on the statement. Similarly, most of the respondents 52.6% disagreed with the statement that price wars in the industry affected their operations while 28.1% strongly disagreed. 14.4% of the respondents took a neutral position with the statement. The study also observed that most of the respondents 41.6% agreed

with the statement that complementary services from rival firms affected competition in the market while 31.7% strongly agreed with the statement. 21.3% of the respondents had a moderate view on the statement.

These findings demonstrate that the upsurge in local competitors does not affect the performance of the drivers in the market. Similarly, it can also be observed that the market is not characterized by price wars and therefore reduced competition in the market. The study however, noted that complementary services offered by other service providers have an impact of the market as most respondents agreed with the statement. The findings of the study are in line with those observed by Lumbanraja, Dalimunthe, and Hasibuan. (2019) who was able to demonstrate that enhanced competition in a given market is likely to affect business operations. Additionally Adji, Roza, Aziz and Karim (2011) demonstrated that organizations that offer advanced or complementary services in an industry are likely to realized enhanced performance and affect the competition in the market.

4.1.3 Effects of Buyer Power on the Performance of Online-Based Taxi Drivers

The effects of buyer power on the performance of online-based taxi drivers is depicted in Table 3

Table 3: Effects of buyer power on the performance of online-based taxi drivers

Items	Strongly Disagree (%)	Disagree (%)	Moderate (%)	Agree (%)	Strongly Agree (%)
Satisfaction of the customer affect your business performance		14.2	18.1	67.7	
Ease of the customer to switch between rivals affects your business performance			17.1	41	41.9

From the Table 3 above, a majority of the respondents 67.7 of the subjects agreed that consumer satisfaction affected the performance of their business while only 14.2% disagreed with the statement. 18.1% of the participants took a moderate view on the subjects. On the other hand, a significant number of the study subjects 41% agreed with the statement that the ease of consumers to switch to other service providers affected their business performance while 41.9% strongly agreed with the statement.

The results demonstrate that satisfaction of consumers with the services they received had a considerable impact on the performance of the drivers. Most of the drivers agreed with the statement that unsatisfied customers are likely to affect their business. Similarly, the study also observed that the ease at which customers can switch between service providers affected the performances of the drivers. The findings realized are backed by those observed by Thilakarathne and Jayaratne (2019) who argued that consumer satisfaction was among the leading factors that affected organizational performance. Similarly, the study by Hussein (2016) also demonstrated that when consumers find it easy to switch between service providers, they gain their power to control the market and may likely affect the performance of given businesses.

4.1.4 Effects of Supplier Power on the Performance of Online-Based Taxi drivers

The effects of supplier power on the performance of online-based taxi drivers is presented in Table 4

Table 4: Effects of supplier power on performance of online-based taxi drivers

Items	Strongly Disagree (%)	Disagree (%)	Moderate (%)	Agree (%)	Strongly Agree (%)
The prices/rates of the suppliers affect your performance		41.9	16.1	41.9	
Access to suppliers’ resources affect your performance	29.4	55.2	15.5		

The results from Table 4 indicate that a majority of the study subjects 41.9% either agreed or disagreed with the statement that the prices and rates of the suppliers affected their business operations. 16.1% of the subjects had a neutral stand on the statement. On the other hand, most of the study participants 55.2% disagreed with the statement that access to suppliers’ resources affected the performance of the business. An additional 29.4% strongly disagreed with the statement while only 15.5% took a moderate stand point on the statement. The results demonstrate that the prices of the industry’s suppliers either affects or does not affect the performances of the drivers as observed in their responses. However, access to suppliers’ resources was observed to not have considerable impact on the market as most participants disagreed with the statement. These findings are backed by those realized by Lewis (2017) who argues that the prices set by suppliers can only affect the performance of an organization if the suppliers are few in number. Otieno, Awuor and Hayombe (2019) have also argued that supplier prices on the business product rarely affect the performance of an organization given that the cost is always passed to the consumer. Additionally, the observations made by Onyango (2016) are also in line with the results realized in this investigation as they demonstrate that access to supplier resources is likely to affect the performance of a business.

4.1.5 Effects of Threat of Substitutes on the Performance of Online-Based Taxi Drivers

Table 5 indicate the effects of threat of substitutes on the performance of online-based taxi drivers

Table 5: Effects of threat of substitute product on performance of online-based taxi drivers

Items	Strongly Disagree (%)	Disagree (%)	Moderate (%)	Agree (%)	Strongly Agree (%)
Presence of motorcycles in the market affect your performance			16.8	41.3	41.9
Public transport affect your performance		8.4	13.5	29.4	48.7
Personal cars affect your business performance			16.1	41	42.9

Results from Table 5 above indicates that a majority of the study subjects 41.9% were in strong agreement with the statement that presence of motorcycles affected the performance of the market. 41.3% agreed with the statement while 16.8% took a neutral stand. Similarly, a majority of the respondents 48.7% strongly agreed with the statement that public transport affected the performance of the market while 29.4% agreed with the statement. 13.5% took a neutral stand while 8.4% disagreed with the statement. Finally, 42.9 of the participants strongly agreed with the statement that personal cars affected performance of the market while 41% agreed with the statement. 16.1% took a moderate stand with the statement. The results of the study demonstrate that the presence of substitute products had a considerable impact on the performance of the drivers in the industry. Presence of motorbikes was observed to have an impact on the market performance as well as public transport and personal cars were also noted by the drivers to have a significant impact on their performance. The results are in line with those observed by Okwako (2017) who demonstrated that the presence of other service providers offering similar services is likely to affect the performance of the business. Kufuor (2019) also observed that substitute products like the presence of motor bikes affected the performance of taxis operating in Kisumu thus backing the findings of this investigation.

4.1.6 Effects of industry Forces on Business Performance

The effects of external forces on business performance of online-based taxi drivers is depicted in Table 6

Table 6: Effects of external forces on business performance of online-based taxi drivers

Items	Strongly Disagree (%)	Disagree (%)	Moderate (%)	Agree (%)	Strongly Agree (%)
The external forces affect your number of trips per day			11.9	47.4	40.6
The external forces affect business profitability			11.6	47.7	40.6
The external forces your innovation in your business			14.8	44.8	40.3

Table 6 indicates that the external forces affect business performance. A majority of the study subjects over 80% of the respondents agreed with the statement that the industry forces affect the number of trips they make. Only 11.9% held a neutral view. Similarly, the investigation observed that a majority of the study subjects 88.3% agreed with the statement that industry forces affect the profitability of the business. Only 11.6% held a neutral view. Finally, the investigation also demonstrated that external forces affect innovation in the industry with 89.1% of the participants agreeing with the statement. 14.8 held neutral positions. The findings of the study demonstrate that industry forces affect the performance of online-based taxi drivers. From the data collected, it can be observed that industry forces affect the number of trips drivers make per day, their general profitability and number of completed sales. The findings back those realized by Chee and Fernandez (2013) who demonstrated that external forces are likely to have an effect on organizational performance. According to the investigation, the degree of organizational performance depends on how they respond to external forces affecting its business operations. Similarly, Olukunga (2017) also demonstrated that external forces have a significant correlation with performance of firms. The investigation posits that for organizations to remain competitive and realize desired performance measure, they must identify the industry forces that are likely to affect their operations and respond the effectively.

4.2 Inferential Statistics

4.2.1 Regression Analysis

4.2.1.1 Model Summary

The model summary of is illustrated in Table 7

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.174 ^a	.030	.014	.55308

Table 7 above demonstrates the multiple correlation coefficients denoted by R value of 17.4% indicating a positive correlation between industry forces variables and the performance of online-based taxi drivers. The results represented by R² value of 0.03 or 3% implies that the combined effect of the predictor variables in the study affects the performance of the of the taxi drivers by a margin of 3%. This implies that the remaining 97% of the performance of the taxi business is explained by other factors not in the model. Based on the model, the variability in enhancing the performance of online-based taxi drivers was accounted for by the explanatory variable in the industry while random fluctuations on other unspecified variables accounted for the remaining percentage.

4.2.1.2 Analysis of Variance (ANOVA)

The Analysis of Variance (ANOVA) is presented in Table 8

Table 8: Analysis of Variance

1	Regression	2.894	5	.579	1.892	.005 ^b
	Residual	92.993	304	.306		
	Total	95.887	309			

Based on the results presented in Table 8, the model is statistically significant as the p-value is less than 0.05. The values of F (1, 304), P = 0.05, shows that industry forces in the model statistically and significantly predicts the performance of the hail-taxis under investigation. Consequently, the regression model is a good fit of the data and that industry forces significantly influence the performance. This demonstrates that the regression model was effective in describing the correlation between the study’s constants including industry forces as independent variable and driver performance as dependent constant. It also demonstrated that the five predictor variables also influenced the performance of online-based taxi drivers differently.

4.2.1.3 Regression Coefficients

The Regression Coefficients is shown in Table 9

Table 9: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.169	.408		10.212	.000
	Threat of new entrant	-.051	.057	-.051	-.895	.037
	Competition in industry	.075	.041	.104	1.835	.008
	Buyer power	-.036	.059	-.034	-.605	.054
	Supplier power	-.067	.058	-.065	-1.141	.025
	Threat of substitute product	.077	.050	.088	1.536	.006

The multiple regression model;

$$Y = 4.169 - 0.051X_1 + 0.075X_2 - 0.036X_3 - 0.067X_4 + 0.77 X_5$$

The results from Table 9 shows that threat of new entrant was negatively and significantly related to performance ($\beta=-.051$, $p=0.037$). This meant that a unitary increase in new entrant leads to an decrease in performance by 0.051 units holding other factors constant. Competition in industry was positively and significantly related to performance ($\beta=.075$, $p=0.008$). This meant that a unitary increase in competition in industry leads to an increase in performance by 0.075 units holding other factors constant. Buyer power and performance was negatively and insignificantly related to performance ($\beta=-.036$, $p=0.054$). This meant that a unitary increase in buyer power leads to an decrease in performance by 0.036 units holding other factors constant. Supplier power and performance was negatively and significantly related to performance ($\beta=-.067$, $p=0.025$). This meant that a unitary increase in supplier power leads to an decrease in

performance by 0.067 units holding other factors constant. Lastly, threat of substitute product and performance was positively and significantly related to performance ($\beta=.077$, $p=0.006$). This implied that a unitary increase substitute product leads to an increase in performance by 0.077 units holding other factors constant.

The results concur with the findings of Gerard (2018) who observed that the threat of substitute products significantly impacted the performance of businesses. Chee and Fernandez (2013) also demonstrated that the more there are substitute products in an industry the higher likelihood that the performance of given products will be negatively affected. Further, Lumbanraja, Dalimunthe and Hasibuan (2019) demonstrated that the higher the competition in the industry the more likely business operations and performance is to be affected. Similarly, Adji, Roza, Aziz and Karim (2011) also demonstrated in their studies that high competition in an industry has significant impact on the performance of an organization. Otieno, Awuor and Hayombe (2019)) also realized similar findings in their investigations as they demonstrated that when suppliers have power over a given market, they are likely to affect not only operations in the market but also its general performance. Hussein (2016) demonstrated that in a market with fewer client's businesses are likely to be affected as clients gain power to control prices and service delivery.

5.0 CONCLUSIONS

It was concluded that buyer power had a low impact on the performance of online-based taxi drivers. A majority of the respondents considered consumer satisfaction as well as their ability to switch between service providers to affect business performance. The study also made the conclusion that the threat of new entrant in the industry has a low and negative impact on the performance of online-based taxi drivers. From the findings of the investigation, a majority of the respondents noted that economies of scale and government policies did not have an impact on new entrants affecting the market.

Further it was concluded that supplier in the industry was the third most significant predictor of performance among online-based taxi drivers. Prices and rates set by the suppliers were observed to have an impact on the performance of the drivers. The study also concluded that competition had the second most significant impact on the performance of online-based taxi drivers. High number of local service providers was observed to impact the market. Finally, the substitute products were the most significant predictor of performance among online-based taxi drivers. New services or products similar to those already in the market were observed to have significant impact on the market.

6.0 RECOMMENDATIONS

It was recommended that online-based taxi drivers enhance their service delivery to not only retain customers but also realized enhanced consumer satisfaction with their services. Based on the observation that consumers have the ability to easily switch between services providers, this study recommended that in offering their services, to enhance business performance online-based taxi drivers have to offer the best experience for their clients to ensure that they always return to their preferred service provider instead of switching between providers. It is also recommended that the drivers should be concerned about the threat of new entrant and focus on enhancing their brand image to fend off such rivals. Despite it being easy for new entrants to enter the market and affect its operations, with the right brand image, drivers of online-based taxis can enhance their performances as clients relate with a given brand.

Recommendations were made that high number of suppliers in the market was considered to have a considerable impact on the market and therefore for enhanced business performance drivers should cast their nets wide and work with more suppliers in the market. It was observed that complementary services had a negative impact on performance, thus becomes critical for drivers of online-based taxis to offer additional services part from the common commute services the platforms they operate under are developed for. Finally, the investigation recommended that the drivers need to find approaches to fend off substitute products and compete with them effectively. This is considered as the most desired technique to enhance business performance among online-based taxi drivers. The study also recommended that drivers not only ensure that their clients are satisfied with their services but also that their products are of superior quality compared to substitute services available in the market.

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