UNIVERSITY OF GHANA

ANTECEDENTS, OUTCOME AND MEDIATING ROLE OF CONSUMER TRUST IN RIDESHARING SERVICES IN A DEVELOPING ECONOMY: A CASE OF UBER

BY:

SAMUEL ABOAGYE MENSAH

(10638006)

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MPHIL IN MANAGEMENT INFORMATION SYSTEMS DEGREE

JULY, 2019

DECLARATION

I do hereby declare that this thesis is my research and has not been presented by anyone for any academic award in this or any other university. All references used in the work was fully acknowledged. I bear sole responsibility for any shortcomings.

……. ……

SAMUEL ABOAGYE MENSAH DATE

(10638006)

CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the university.

……..….. …….

PROF. RICHARD BOATENG DATE

(SUPERVISOR)

……..….. …….

DR. ACHEAMPONG OWUSU DATE

(CO-SUPERVISOR)

DEDICATION

I dedicate this thesis to my Heavenly Father who made it possible for me to overcome. To my family, Pauline Maame Ama Boansi, Albert Enti and Adjei-Enti family. To my friends; Desmond, David, Amofa, Emmanuel B, Emmanuel M, Ines, Ella, Jessica, Benard Okyere and Adwoa Nyame. To a wonderful couple Dr. amd Mrs. Boadi Nyamekye. Lastly, I dedicate this to my future wife. I hope to see you soon.

ACKNOWLEDGEMENT

My appreciation goes to God for granting me wisdom, strength, and protection to complete this dissertation. My intense appreciation also goes to the ever-supportive supervisors, Professor Richard Boateng and Dr. Acheampong Owusu for their knowledge, suggestions and constructive criticisms which were very instrumental in the completion of the project. I cannot withhold my gratitude from Dr. Sheena Lovia Boateng who meticulously run me through the building blocks of analysis and Dr. Thomas Anning-Dorson who gave me the audience to access information that was relevant to my work.

Last, I want to thank my family, friends and colleagues who were diverse sources of inspiration throughout my academic journey.

May God richly bless you all.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

SE	Sharing Economy
IT	Information Technology
USD	United States Dollars
P2P	Peer-to-Peer
C2C	Consumer to Consumer
IP	Intermediary Processes
SL	Systems Layer
B2C	Business-to-Consumer
PL	Process Layer
CA	Consumer Applications
IA	Intermediary Applications
PA	Provider Applications
SoA	Social Applications
SA	Service Applications
LBSAs	Location-Based Mobile Social Applications
SCRM	Social Customer Relationship Management
SLM	Service Lifecycle Management
SDK	Software Development Kits
GPS	Global Positioning Systems
GPDAS	Ghana Post Digital Address System
DD	Digital Distribution
ESD	Electronic Software Distribution
VHS	Video Home System
MAS	Mobile Application Stores

GPRTU	Ghana Private Road Transport Union
RS	Rise Share
TRA	Theory of Reasoned Action
PM	Path Model
TPB	Theory of Planned Behavior
TAM	Technology Acceptance Model
WOM	Word of Mouth
SPSS	Statistical Package for the Social Sciences
SEM	Structural Equation Modelling
CB-SEM	Covariance Based Structural Equation Modelling
PLS-SEM	Partial Least Square Structural Equation Modelling
ANOVA	Analysis of Variance
MANOVA	Multivariate Analysis of Variance
EFA	Exploratory Factor Analysis
KMO	Kaiser-Meyer-Olkin
CMV	Common Method Variance
SME	Systematic Measurement Error
SPE	Satisfaction from past experience
AQ	Application Quality
CFA	Confirmatory Factor Analysis
Df	Degree of freedom
SRMR	Standardized Root Mean Square Residual
RMSEA	Root Mean Error of Approximation
GFI	Goodness Fit Index
CFI	Comparative Fit Index

IFI	Incremental Fit Index
TLI	Tucker-Lewis Index
NFI	Normed Indices of Fit
CR	Composite Reliability
CGM	Consumer Generated Media
eTrust	Electronic Trust
AVE	Average Variance Extracted

ABSTRACT

Ridesharing is gradually replacing traditional taxi and mini-bus services due to numerous benefits associated with it. However, the subject of trust continues to be the most predominant issue in the sharing economy and ridesharing service is not an exception. Extant studies relating to consumer trust have examined trust antecedents and outcome and the most studies concentrate on trust in e-commerce, whereas areas such as ridesharing is given less attention.

This study sought to investigate the antecedents and outcome of consumer trust in ridesharing services and determined to find the mediating role of trust between the antecedents and outcome. Guided by trust path model, the study adopted the quantitative survey research methodology. A total of 364 Uber consumers within a university in Accra responded to the questionnaire and were conveniently sampled for the data. The university campus was chosen for the study because it cradles a cosmopolitan mix of transport services as the general public and uber drivers converge near designated places.

Covariance Based Sturctural Equation Modeling (CB-SEM) approach was employed in analysing the data gathered from the respondents of the study. The results showed that trust significantly influences word-of-mouth in ridesharing services. Furthermore, the antecedent factors of trust namely perceived application quality, information quality, user experience and proficiency, and brand recognition significantly influence trust. The result further indicated that brand recognition in ridesharing services proved to be the strongest antecedent factor of trust. Regarding the mediating role of trust between trust antecedent factors and word of mouth, it was found that trust produced no mediation between the antecedents factors of trust and word of mouth.

The no-mediation role that Trust plays between antecedents' factors and outcome can be attributed to the fact that, ridesharing is a new entry in the transport sector. Secondly, the favourable reputation couched for the ridesharing services such Uber may be attributed to the service nature of ridesharing. The very fact that ridesharing service is electronic-oriented, intangible and novel, the motivation to engage the service far outweighs the social concern of trust.

In terms of research, the study adds to the body of knowledge on sharing economy by concentrating on the subject of trust in digital economies, particularly in the transport sector. Secondly, the study amplifies the genenralization power of the conceptual model as it can be added to particular sets of theories that have dominated extant literature in ridesharing. The study recommends that ridesharing firms should provide incentives and promotions to evince the benevolence aspect of trust. Further, a more tailored set of government policies for ridesharing firms should be developed to provide a comprehensive guideline and strategy for them to be distinct from traditional taxi systems.

The study is also limited in various ways. First, the study employed only the quantitative methodology to deduce the antecedent factor that impacts user trust in ridesharing. Also, the approach allowed the researcher to obtain in-depth knowledge into the issue under study and it was largely influenced by the understanding of the researcher. There is a need for future research to focus on antecedent factors that affect user trust from multi-user perspective and over a long period of time. Lastly, because the research was conducted in a University environment, it portrays that the study is skewed towards young, educated and working-class people. It would be insightful for future research to delve other groups of people to know if the results will differ.

CHAPTER ONE

INTRODUCTION

1.1 Research Background

The Sharing Economy (SE) is a business model where individuals share unused resources among them via peer to peer mediated services (Cohen & Kietzmann, 2014; Jarvenpaa & Teigland, 2017). SE has many names and some of the popular ones include collaborative-consumption, creative economy, market-mediated consumption, access-based consumption to name but a few. Casually, SE may be described as a scenario where consumers gain access to goods and services and pay for the experience, projecting that no ownership is transferred in these transactions (Pazaitis, De Filippi, & Kostakis, 2016; Rey, Aiello, Rey, & Lerman, 2017). Belk (2014) comprehensively explains it as a phenomenon where people coordinate "the acquisition and distribution of a resource for a fee or other compensation."

In academia, SE is generally categorised into three (3) sectors namely; Peer-to-Peer economy, On-Demand Economy and Gig Economy. It is worth knowing that, SE is a profitable area as the sectors within SE are expected to grow revenue to over €100 billion of annual transactions by 2025, with no economy falling short of this milestone (Frenken & Schor, 2017; Jarvenpaa & Teigland, 2017; Jahromi, & Kizildag, 2018). From the estimates given, it shows that sharing firms profit hugely. For instance, Airbnb, the pioneer in travel accommodation, is believed to be worth $10 billion, more than well-known hotel chains such as Kempinski, Marriot and Hyatt. Additionally, Uber alone is estimated to be worth more than Facebook at about $51 billion dollars (Chen, 2016; Zervas, Proserpio, & Byers, 2015).

Digital firms operating in the rideshare or peer-to-peer transportation sector have experienced outstanding breakthroughs. By developing scalable platforms to act as matchmakers, such

companies create global networks where individuals distribute and share accessible resources to enable transportation. In view of this, it can be deduced that digital firms in digital mediated sharing are 'eating the fruits of their labour' because they are making huge profits. Hence, an area clearly seeking the attention of research (Berger, Chen, & Frey, 2017; Brazil & Kirk, 2016; Mittendorf, 2016).

As the study focuses on the transport sector in SE, it is worthy to highlight the two categories of ride services. The first is the traditional ride market, where no application or technology is necessarily needed to match-make or enable transportation. The second is computerised enabled transportation market, where a digital or virtual platform enables matchmaking between passengers and drivers. In view of the latter, the proliferation of digital platforms has enabled the industry to "share" and also to reach beyond the prospects of traditional transport markets. What is interesting about platform enabled transpotation is that, continues development of the relatively new business model is required due to technological advancements in contemporary times. Currently, Africa hosts nearly sixty (60) ride-sharing services across 21 countries in the last 3 years (Africa Renewal Online, 2017). Hence, it is clear that ridesharing firms driven by digitalization emerge as competitive alternative to traditional transport markets.

There are abundant opportunities and benefits in the booming market, however, there still exist many challenges. As cautioned by some pensive academics and multinational firms; many service providers of the shared economy are perceived to be callous and exploitative. When these Hi-Tech or/and innovative firms become too prosperous or dominant in their industries, they always eventually lose track of their target market's needs and preference (Cohen-Almagor, 2018; Cohen & Kietzmann, 2014; Jordan, 2017). In recent times, some providers of

the shared and digital economy services are associated with data breaches, privacy concerns, despicable service delivery, violence and crime cases.

Customer trust, therefore, has become a global concern in all digital economies. This is because people are becoming aware of menaces associated with innovative platforms ranging from cases of data breaches, privacy concerns, violence and cybercrimes. For instances, in October 2017, personal information of 57 million drivers and customers were retrieved from Uber Technologies Inc. by hackers (Bloomberg, 2017). The firm also paid a sum of $100,000 to the attackers to keep the hack under wraps. Revelations like these promulgate academia to conclude that giant companies engaged in the sharing and digital economy, create unregulated and opaque 'intelligence platforms' and business brands that blindfold and expose customers to danger which in essence dampen the trust people have in firms. In view of the issues raised, there is the need to investigate the antecedents and outcome of trust in ridesharing services.

1.2 Research Problem

The Internet arguably remains the most revolutionary innovation in the 21st century; a medium that enables people to communicate, gather information and carry out business transactions devoid of physical barriers. Over the past decade, the internet technology has become a springboard for newer and more innovative business models like the SE. Hence, the scope of the digital market place keeps widening. In spite of the munificent benefits derived from SE, the issue that has earned a growing concern is the building of online trust and understanding its relationship with online consumers and their behavioural outcomes. The core reason for the growing concern regarding online trust with the absence of face-to-face interactions in online platforms which creates perceived risk and behavioural uncertainty, hence the distrust in these platforms (McKnight, Choudhury, & Kacmar, 2002; Mittendorf, 2017). The field of SE is

becoming popular in academia due to two principal facts: first, SE is rapidly coming of age with high revenue growth rates and second, the buoyant economy still harbours basic challenges that affect the economy as a whole.

Trust is the "currency" of sharing economy (Botsman, 2012). Some academic researchers have attempted to understand the phenomenon as to why trust is the most cited factor within most sectors in the SE especially with ridesharing services. For instance, Jarvenpaa and Teigland (2017) organized their first mini-track panel discussion and the focused on trusted systems in digital environments, identity and trust which was aimed at understanding to what degree trust matters, when trust matters, what nature trust takes, and what the reprecussions are. This panel discussion exhausted most of the questions on trust. However, the research took clustered users into a single perspective without intricately discussing what triggers comsumer trust.

Further, extant literature on trust and sharing economy have been done mainly from the perspective of e-commerce (Bartikowski & Merunka, 2015; C. Liu, Lin, & Deng, 2015; Oliveira, Alhinho, Rita, & Dhillon, 2017a), general online transaction (Filieri et al., 2015; Moriuch & Takahashi, 2016; Azam, 2015), and general sharing economy (Mittendorf, 2017; Möhlmann, 2016; Jarvenpaa & Teigland, 2017; Trang *et al.*, 2017; Amirkiaee & Evangelopoulos, 2018; Simmons, 2018; Lee *et al.*, 2018) with no specific focus on trust in the transportation sector within sharing economy. For example, Filieri et al. (2015) examined the antecedents and consequences of online trust and found that information quality predicts source credibility, customer satisfaction, and website quality. The authors also found that consumers' intentions could be influenced by the trust they have in media websites designed to suit them.

Similarly, Oliveira et al. (2017) in their study on consumer trust dimensions in e-commerce assert that consumers with high levels of trust possess higher intentions to engage online activities. While these two studies provide insight about trust, they tend not to focus on trust in ridesharing services. Additionally, these studies failed to examine if trust can play a mediating role between antecedents elements and outcomes. Evidently, studies on sharing economy and trust are few, the few do not pay attention to the antecedents and outcome of trust. For example, Mittendorf (2017) conductied a to investigate the implications of trust from the perspective of a potential customers. The author employed Gefen's (2000) model in analysing the influence of trust on customers' intentions to inquire about drivers and to request a ride. Although this study considered two antecedents of trust and two outcomes, it examined trust from a potential consumer perspective and it also failed to explore the role of trust as mediator between the antecedents and outcomes. It would have revealed how potential customers react to the trust, whether they could request a ride and inquire about a driver without necessarily trusting the platform or not.

Lastly, extant literature in developing economies have not gulped their fair share of research relating to trust and the ridesharing sector of the sharing economy. For instance, Simmons (2018) conducted a study to understand the disruptive influence of ridesharing on traditional taxi services in Ghana. The study pointed out four main affordances which enable ridesharing applications to be a disruption to the traditional taxi industry in a developing economy. However, the qualitative study neither concentrated on the subject of trust nor solicit interest from specific actors in ridesharing such as consumers or drivers. Lastly, study did not involve any form of statistics (numbers) to quantify the extent of disruption that ridesharing poses. There is, therefore, the need for studies that investigate the relationship between the factors that

lead to consumer trust in ridesharing services and also understand how trust mediates the relationship between the antecedent factors and the outcome of trust.

1.3 Research Purpose

The purpose of this study is to investigate antecedent factors and mediating role of consumer trust in ridesharing services.

1.4 Research Objectives

The research seeks to specifically meet the following objectives:

1. To assess the antecedents of consumer trust in ridesharing services.
2. To determine the mediating role of trust between antecedent factors and word-of-mouth in ridesharing services.

1.5 Research Questions

The research seeks to specifically meet the following objectives:

1. What are the antecedents of consumer trust in ridesharing services?
2. What is the mediating role of trust between its antecedent factors and word of mouth in ridesharing services?

1.6 Significance of research

The significance of this study can be classified into research, practice and policy. Concerning research, this study satisfies academic consumption by adding up to the existing store of knowledge on the subject. It, therefore, heightens the generality power to the conceptual model that is used to study consumer trust in ridesharing services in Ghana. Also, results of this study can be a blueprint or reference to students and researchers who would want to esplore on the subject in posterity. Concerning practice, stakeholders such as transport users will continue to

demand improvements in ride-sharing services offered by rideshare service providers. Also, as more research is carried out and existing research is made available to the transportation sector, expectations and possibilities will change. For example, consumers can expect the use of innovative vehicles, information and communication technologies from rideshare firms and firms can also implement strategies that would heighten the trust levels of their consumers or riders. Lastly, concerning policy, law enforcing stakeholders such as the government, can create enabling environment for appropriate policies, programs and legislation to foster and properly regulate digital firms such as ridesharing firms. A more tailored set of government policies for ridesharing firms will provide a comprehensive guideline and strategy for them to be distinct from traditional taxi systems, to survive and to grow.

1.7 Organisation of the Study

Chapter One introduces the research. The chapter discusses the background of the research, research problem, research purpose, objectives of the study, research questions, significance of the research and the organization of the research.

Chapter Two presents a review of literature for the study. It presents an overview of the Sharing Economy, framework and scope of Sharing Economy businesses, different perspectives of Sharing Economy, and Conceptual approaches to Sharing Economy and trust. Lastly, the chapter closes by presenting the discussion on research gaps and future research areas.

Chapter Three presents the research framework for the study. It showcases the research model for the study, explains the empirical grounding of the framework and highlights the hypotheses for the study.

Chapter Four discusses the research methodological approach which highlights the research strategy, paradigm, the discussion of sampling techniques and size utilized. The instrument for data collection and method used as well as data processing and analysis are expounded in this chapter.

Chapter Five is about the context of the study: The chapter begins by discussing the overview of ridesharing in developing economies. Next was the ridesharing in Ghana, followed by an overview of the Uber platform, as well as its business model and operations in Ghana. The final section summaries what has been discussed in this Chapter. The next chapter will analyse and discuss the finding of the study.

Chapter Six entails data presentation, analysis of findings and discussion of findings.

Chapter Seven is the conclusion and recommendation chapter. It presents the summary of the research process, mapping of research questions to the findings and discloses implications to research, practice and policy. Lastly, references and appendices are presented.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

As noted previously in Chapter one, businesses leveraging on digital platforms are perceived as more effective, productive and profitable as compared to the traditional ones. The growing concern of digitalization in ridesharing and its' attendant issues have triggered rigorous research into this phenomenon. This chapter, therefore, seeks to present a review of scholarly works on trust in ridesharing. The chapter starts by taking a detailed account into sharing economy; an overview and the various categories in the economy. It then delves deeper to review extant literature on trust and ridesharing and the various actors. This is to reveal the underpinning theories, methodologies, and current gaps in ridesharing.

2.2 The Sharing Economy: An Overview

Sharing economy (SE), which is also referred to as the collaborative economy, engages in economic arrangements to pair owners of assets with consumers in order to share underutilised assets for a fee (Bardhi & Eckhardt, 2012; Cohen & Kietzmann, 2014; Sundararajan, 2016). The caveat is that the matchmaking must be powered by a technological artefact, thus, peer-to-peer (P2P).

2.3 Different Perspectives of the Sharing Economy

Research on SE has been studied from different perspectives. These persepectives include hospitality (Cheng, 2016; Fang, Ye, & Law, 2016; Zervas et al., 2015), learning (Godelnik, 2017a; C. Liu et al., 2015), transportation (Ambrosino, Nelson, Boero, & Pettinelli, 2016; Cheyne & Imran, 2016; Paundra, Rook, Dalen, & Ketter, 2017) and consumer perspectives (Milanova & Maas, 2017; Roos & Hahn, 2017; Zhang et al., 2018)

Fang et al. (2016) explored the effect of sharing economy entry on employment in the tourism industry. The authors found that the entry of sharing economy provides enormous benefits to the entire tourism sector by generating new job positions and offering lower accommodation cost. Furthermore, Zervas et al. (2015) investigated the long-term impact of sharing economy. The authors observed that the impact squarely manifests itself through less-aggressive hotel room pricing which benefits just consumers and not all participators of the sharing economy. From the learining perspective, Godelnik et al. (2017) explored how millennials engage the sharing economy via a project called "Buy Nothing New, Share Everything Month". Godelnik et al. (2017) noted that out that the majority of the students perceived that sharing economy was ecologically sustainable and socially just.

From the transportation perspective, Cheyne and Imran (2016) studied energy demand and transport options for residents of small towns in New Zealand. They observed that, due to ownership of private vehicles in New Zealand, the transport sector contributes to higher rates of gas emissions than any sector. As a result, eco-friendly economies have devised innovative ways to use vehicles for different purposes such as car-sharing, car-pooling and peer-to-peer transport services for which common definitions are not identified. It is no surprise that newer business models such as Uber become more successful in environments where Eco-friendliness is a motivating factor. Yet, amidst the benefits associated with the sharing economy, there exist challenges that should not be overlooked or viewed with trivial lenses (Cheyne & Imran, 2016; Kashyap & Bhatia, 2018; Mittendorf, 2017).

Adding up to the deliberations amongst academics, notable research from consumer consumption perspective have examined the effects of shared consumption patterns on

consumers and their values, attitudes, and norms. The theory of planned behaviour (TPB) was used to guide the research, it was found that shared consumption had a positive effects on attitudes, subjective norms, values and personal norms (Roos & Hahn, 2017). Similarly, Zhang et al. (2018) highlighted the concept of value co-creation in sharing. Primarily aiming at investigating the role of value co-creation, the study examined consumers' willingness to pay a premium price in the sharing economy. They used an online survey which focused on three main stages; pre, mid and post consumption stages in exploring three types of value co-creation namely functional, emotional and social values. Zhang et al. (2018) observed that functional and social values at the pre-consumption stage induce consumers to pay premium prices than the other consumption stages. It was also found that emotional value is most important to consumers at the mid- consumption stage.

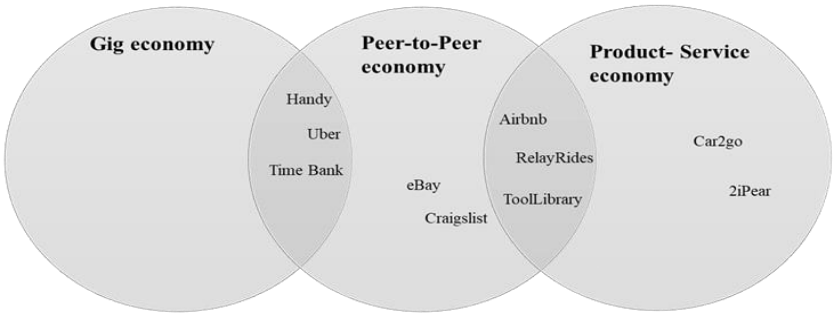
In a nutshell, the sharing economy with a specific trait of 'no ownership' seems to be embraced by all industries because of its prospects. Worldwide assessment of the sharing economy shows that the revenues to be generated from major companies engaged in 'sharing' will reach $335 billion by 2025. According to the company, keywords and phrases related to success were identified; trust between providers and users, affordability; efficiency; convenience; fun; a sense of community; and being an environmentally friendly practice (PriceWaterCoopers International Ltd., 2015).

2.4 Scope of the Sharing Economy

The SE is a broad term that integrates a variety of models based on sharing services. Botsman and Rogers (2010) categorised SE into three main economies namely; Peer-to-peer economy (P2P), Product-service economy and Gig economy. The peer-to-peer economy, at the core of SE, has a characteristic of dealing with customers and service providers as individuals and not organizations. P2P networks enable a peer, generally known as a user, to share files with another peer of a network (Argan, Argan, Ozer, & Kose, 2013; Rey et al., 2017). The second category of SE is the Gig Economy. Also labelled by many scholars as 'Online Labour', it emphasizes work and labour where non-physical or intangible work is delivered to clients on a digital platform and the labour is also rewarded accordingly with payment (Heeks, 2017; Vaskelainen & Tura, 2018). Lastly, the product-service economy deals with services where a producer or company allows access to physical products such as the rental of houses or cars. Whereas, the gig economy focuses on short work tasks for wages.

As presented in figure 2.1 below, the SE can be found at the intersections between different markets. There is no clear definition of SE amongst contemporary scholars. This is because SE brings together broad economies and so scholars define SE from various perspectives. For example, whereas SE is defined by Frenken (2017) as the intersection found between the gig economy and the peer-to-peer economy, Belk (2014) defines SE as the intersection between the for-profit half of the peer-to-peer economy and gig economy and the product service economy.

Figure 2.1 Three Categories of the Sharing Economy



Source: ***Vaskelainen and Tura (2018)***

2.5 Framework of the Sharing Economy

SE generates economic values derived from existing models of micro and macro-economic perspectives to establish a framework. The SE framework presents three core layers to serve as a guide to different approaches. The fundamental layers are Strategies, Process and Systems (Brenner et al., 2014; Puschmann & Alt, 2016).

2.5.1 Strategic Layer

At the strategic layer, consumers are directly connected through Consumer to Consumer (C2C) models or intermediary access. In a typical C2C scenario in the SE model, the difference between consumers and providers is not clear. This is because the production and distribution of services have a chain reaction approach, thus, consumers easily become providers to subsequent consumers. Such a characteristic is exhibited in peer-to-peer lending where consumers lend credit to other consumers. For example, the M-Pesa mobile money system is one of such platforms that encourages P2P lending amongst consumers.

2.5.2 Process Layer

On the process layer, different process categories are connected. These are the provider processes, the consumer processes, and intermediary processes. The provider processes, consist of seven generic phases that form its lifecycle processes to sustain provider strategies for specific and relevant processes. The generic phases under provider processes are as follows; identification, conception, requirements analysis, development, implementation, operation, and enhancement of services.

The second category, the intermediary processes (IP), is premised on three groups of processes namely; achieving market transparency, enforcing regulation and the use of service via an electronic infrastructure. One of the ways by which a firm's platform can be perceived as transparent is the listing services provided on the intermediary platform. Again, processes such as service contracting, billing, rating and fulfilment show that services provided by the platform are utilised, however, the processes listed above should be adapted based on the service context. For instance, ridesharing processes are entirely different from peer-to-peer lending. The last to take notice of is regulation. Rating, government policies, contractual agreements and structural assurances are all processes of regulation under IP.

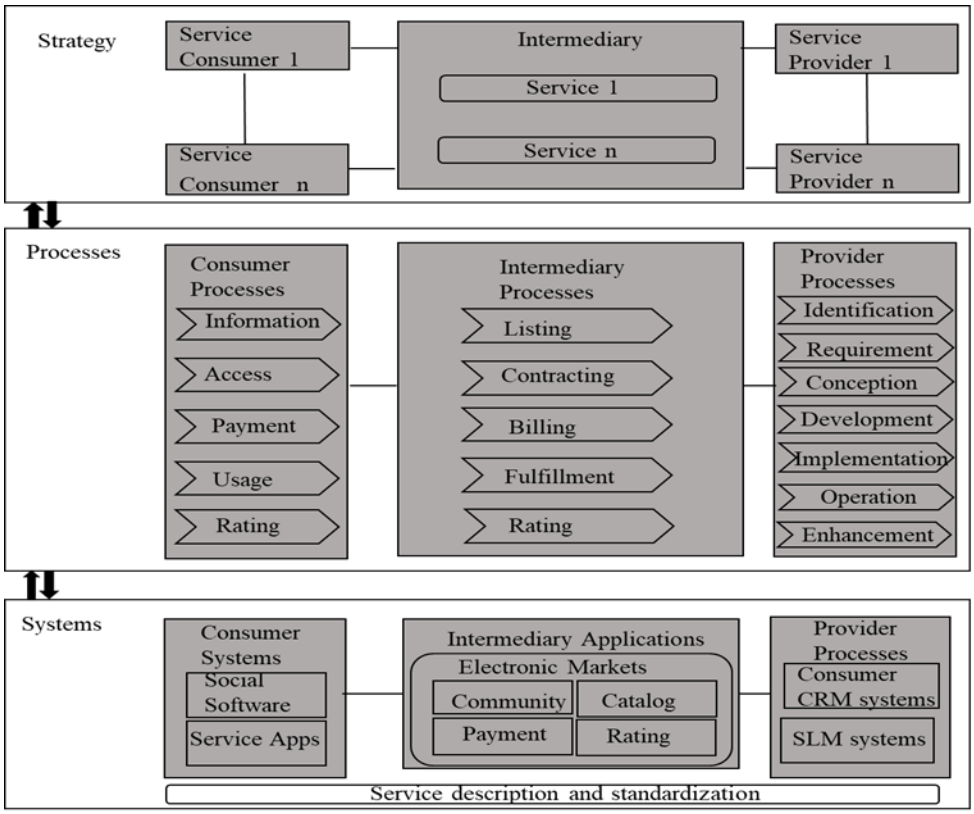
2.5.3 Systems Layer

Users identify shared goods and services at the Systems Layer (SL) depending on the model; whereas in a pure C2C model, consumers connect to themselves, the businesses and consumers are linked in a pure Business-to-Consumer (B2C) model. To begin with, this layer is synchronized with the process layer (PL) and it supports all the three generic categories of the PL which are market transparency, regulation and transaction consumers (Puschmann & Alt, 2016; Rey et al., 2017; Tadelis, 2016).

The SL highlights three phases; Consumer Applications (CA), Intermediary Applications (IA) and Provider Applications (PA). Firstly, consumer applications are software, services and digital content sold to the general public, whether as online subscriptions, installed applications, or embedded in consumer electronics. Under CA, social applications (SoA) and Service Applications (SA) are key. For instance, social applications such as location-based mobile social applications (LBSAs) of a system enable consumers to perform certain tasks which include; identify providers, select routes based on traffic information, download content faster, take a look at reviews from other users, select the preferred service provider or place reminders for friends among others. (Puschmann & Alt, 2016; Puttaswamy, Zhao, & Barbara, 2010).

Under the second phase of SL, Intermediary Applications create mechanisms for payment functions and fulfilment of reliable compensation for committing to shared services. The last phase of the SL is Provider Applications (PA). The provider's side focuses on Social Customer Relationship Management (Social CRM) and Service Lifecycle Management (SLM). In this context, the customer-focused system consists of a family of software modules that enable a consumer to engage in sharing activities. It integrates all the functional processes with the business operations of the provider. Social CRM systems, therefore, link online communities and provides interaction functions and analysis like social network analysis and social media monitoring. Additionally, Systems for SLMs provide functions for the management of integrated services from a technical and business stance. For example, the provision of homogeneous service description and value orientation which includes service portfolio view, costs and revenues of services and inter-organizational views. The figure 2.2 below presents the framework of a typical Sharing Economy as postulated by (Puschmann & Alt, 2016).

Figure 2.2 Framework of the Sharing Economy



Source: Puschmann and Alt (2016).

2.6 Ridesharing Overview

According to Cohen and Kietzmann (2014), the Columbia Law Review of 1942 highlighted that the initial form of rideshare became apparent during World War II. It also claimed that the U.S. Office of Civil Defence were the first proponents of carpooling. From then on, business models and texhnologies have evolved considerably. Now, ridesharing can therefore be grouped into four namely; carpooling, flexible carpooling, vanpooling, and P2P ridesharing (Chan & Shaheen, 2012; Cohen & Kietzmann, 2014).

2.6.1 Carpooling

Many carpooling schemes are not necessarily linked to profitmaking but rather to supporting the subsidized costs that are due vehicle owners and to contributing to pollution and traffic congestion (Azevedo & Maciejewski, 2015; Cheyne & Imran, 2016; Matherne & O'Toole, 2017; Wilhelms, Merfeld, & Henkel, 2017). Carpooling is explained as vehicle owners allowing other passengers to share ride experience from and to the same locations or destinations. Whereas matchmaking in earlier times was done with word of mouth or company arrangements, advancements in high levels of digitalization allows matchmaking to be done by leveraging on electronic platforms.

2.6.2 Flexible Carpooling

Unlike the standard carpooling where door-to-door was encouraged, flexible carpooling requires the use of an apportioned meeting place, where potential matchmaking takes place between potential consumers and drivers to meet for pooling arrangement. The narrative has changed in modern times because, carpooling service providers render community-based services that is non-profiting (Chan & Shaheen, 2012; Ferrin et al., 2007; Shaheen, 2016).

2.6.3 Vanpooling

Encouraged by forward-thinking companies, vanpooling started in the 1970s and the focus was to support larger numbers of passengers to share vans. In recent times, there are different types of vanpools that exist. Some of these include: publicly funded vanpools, corporate-sponsored vanpools for employee use and privately operated vanpools for commuters or trips to airports and hotels. (Azevedo & Maciejewski, 2015; Chan & Shaheen, 2012; Ferguson, Kevin, & Kathryn, 1994; Ferrin et al., 2007).

2.6.4 P2P Ridesharing

With the proliferation of mobile technologies and the Internet, P2P ridesharing has emerged as an important mobility alternative in cities all over the world. P2P ridesharing primarily uses the leverages on the availabilty of social networks (Brock, Blut, Linzmajer, & Zimmer, 2011; Werthner, Koo, Gretzel, & Lamsfus, 2015) and geolocation technologies to operationalize ridesharing in real-time over network members (e.g., Lyft and Uber). In a nutshell, ridesharing has a history that dates back to the 1970s. Whereas the older business models such as initially did not exist for profitmaking, newer business models have gained strong market positioning for profit initiatives

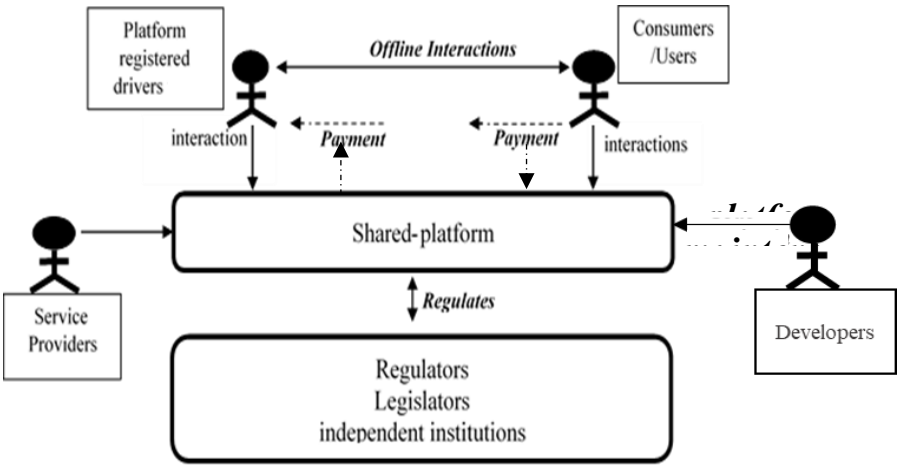
The innovative but disruptive nature of ridesharing services has its own pros and cons. Arguably, depending on the location, ridesharing firms' have failed to collaborate with local governments, transport authorities and individuals. That is why the longevity of these business models are threatened in many several countries (Posen, 2015). There are perceptions couched for Peer-to-peer operators. Firstly, whereas P2P is perceived by some as by avoiders regulation and profit-driven, others are of the view that these firms do not dodge regulation but regulatory institutions lack the requisite policies to regulate them. In recent times, not all economies would also like to grant ridesharing companies to operate without appropriate rules and regulations that protect citizens lives, privacy concerns etc.

2.7 Enablers of Ridesharing

A number of actors come into play to make the ridesharing successful. These actors include the consumer of the service, the driver, the application portal, the service provider and the regulatory bodies who are mostly the government which protect the interest of the service

consumers (Moriuchi & Takahashi, 2016; Schor & Fitzmaurice, 2015). These actors, therefore, play different independent roles.

Figure 2.3 Actors in Ridesharing



Source: Author's own construct

2.7.1 Developers

Innovative digital establishments see developers as the most promising affiliates. Creation of applications and sharing will be non-existent in the virtual world without them. Consumer-oriented firms comprehend that developers are means of serving existing customers better (by discovering new use cases) and reaching to new consumer markets by creating niches in the digital market place hence; driving their progress. It is no news in an era where businesses are driven by the internet that digital firms are more agile and dictates the business operations. For example, it is regular for digital firms to attach freelance developers to traditional ones in other to generate ideas, challenge existing applications and solve in-house and external environment problems for the purposes of gaining advantage ahead of other competitors (Hsieh & Hsieh, 2013). For developers to come out with applications that exhibit quality features such as correctness, reliability, performance, timeliness, durability, reusability and maintainability for the market, it is essential for them to be resourced with available software development kits

(SDK) that provide the necessary tools and resources for the analysis, development, installation, testing and maintenance of the applications(Xanthopoulos & Xinogalos, 2013).

2.7.2 The Application Portal

The software is the applications or system software which allows ridesharing digital platforms to run on the hardware. In the context of this study, the Uber application is sub-divided into two namely, the traveller (consumer) application and driver application. The Uber application serves as a gateway matchmakes consumers and drivers. The Uber digital platform therefore amalgamates and synchronises features such as Global Positioning System (GPS), Google map, and General Purpose Data Acquisition Shell (GPDAS).

2.7.3 Mobile Application Stores /Digital Distribution Service

Digital distribution (DD) also called electronic software distribution (ESD) can be explained as the delivery or distribution of digital media content such as audio, video, software and video games. The term is generally used to describe distribution over an online delivery medium, such as the Internet, thus bypassing physical distribution methods, such as paper, optical discs, and VHS videocassettes. The term online distribution is typically applied to freestanding products; downloadable add-ons for other products are more commonly known as downloadable content. Mobile application stores (MAS) such as Google PlayStore are examples of DD. In principle, the application store is an open market where applications like ridesharing apps such as Uber, Yenko and lyft can be downloaded.

2.7.4 The Driver

The services of drivers are needed in the ridesharing markets but sadly, there is no clear distinction to classify them as employees or independent contractors due to a few preliminary

issues which have to be acknowledged. First, the nature of the on-demand economy hardly retains any of the distinctions be it employee or independent contractor (Davidoy & Davidov, 2017; Katz & Krueger, 2016) This is because the rise of this new model of work (gigs) forms part of a larger phenomenon that shifts from traditional model of work to "alternative" work arrangements. It is such alternative arrangements that create hard cases in grey areas between "employee" and "independent contractor". For monitoring and control, drivers are required to abide by detailed rules of the firm regarding service delivery and they are at least observed to an extent through an application. The rating system is also is a tool used to control the drivers by relying on feedback from customers about their performance. However, the fact is that to customers, as long as drivers provide the services on behalf of service providers (for example Uber and Taxify), it suggests that they are somehow integrated into the organization. This explains why a relatively high degree of control is necessary to be administered so that a poor service would not harm a ridesharing company's reputation.

2.7.5 The Consumer/Riders

Many RS firms understand that customers' participation is important in the digital markets. This is because they are sensitive and they have high expectations of values that are functionally, emotionally, and aesthetically satisfying (Chae & Ko, 2016; Leipzig, Gamp, Manz, & Schöttle, 2017) Customers are increasingly expectant of complex and sustainable solutions from ridesharing firms due to a series of significant events that encourage their acceptance and participation. For instance, trends such as consumer awareness on environemental sustainability and economic recession can induce consumers to engage in transactions that allow them to access underutilized assets more conveniently. Due to this, ridesharing firms such as Uber, Taxify and Blackride continually engage in customer-oriented

solutions and commission aggressive competitive steps in order to gain higher market shares both in the home country and abroad.

2.7.6 Regulators

The growth of the SE firms is mostly inhibited by regulations and regulatory agencies. These agencies have a critical role in creating incentives to support RS firms by developing effective policies couched for new business models (Quattrone, Proserpio, Quercia, Capra, & Musolesi, 2016; Simmons, 2018). In the Ghanaian setting, for example, the Ministry of Transport and the Ghana Private Road Transport Union (GPRTU) are such authorities whose primary function is to provide transport services to the Ghanaian public and also to regulate transportation appropriately. However, many governments are not able to formulate effective policies due to lack of resources and failre to update outmoded policies may not apply to RS business model (Simmons, 2018). For the ridesharing markets to be effectively regularised, regulators, SE service providers and other stakeholders must form alliances to review and re-formulate outdated polices couched for such new models.

2.8 Overview of Trust

Studies on trust remain relevant as a topical issue with online social interactions. Researchers have extensively studied trust from different disciplines and Information Systems is not an exception (Azam, 2015; Brock, Blut, Linzmajer, & Zimmer, 2011; Ert, Fleischer, & Magen, 2016; García-Vega & Huergo, 2017; Gefen, 2002; Godelnik, 2017b; Jarvenpaa & Teigland, 2017; Lewicki & Brinsfield, 2017; McKnight et al., 2002). Trust is often used in the context of describing relationships between two or more parties. In basic English language, trust is defined as the "strong belief in the reliability, truth, or ability of someone or something" (Oxford dictionary, 2017).

Many scholars (e.g., Hawlitschek et al., 2016; Burt 2000; Capra et al., 2008; Fehr 2008) refer and agree with Coleman's (1988; 1990) definition of trust. He argues, if one actor does something for another actor in goodwill, trust then becomes the expectation and obligation that the exchange will be reciprocated or repeated in the future. This definition is further supported by Carnevale and Wechsler (1992), as they argue that trust fosters the exchange of relevant information and also determines if the parties involved are willing to allow others to influence their decisions and actions. Understanding derived from these definitions shows that discussions concerning trust are continuously inevitable amongst social interactions. Further, such discussions can be applied to RS services. As digital communities thrive to willingly partake in information sharing such as vehicle information, locations and addresses of their destinations, it builds trust as an important factor to motivate ridesharing usage.

2.9 Conceptual Approaches to Sharing Economy and Trust

This section discusses the dominant conceptual approaches to sharing economy and trust. Research on sharing economy and trust are dominated by theories which include the Theory of Reasoned Action (TRA), Path Model (PM), the Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM). Other theories include Agency theory, Fit theory, Social identity theory and Affordance have been used to study sharing economy and trust. The table below summarises the theories with their focus area of research and research gap. The continuation of the table is shown in Appendix E.

Table 2.1: Synthesis of Previous Research on Trust and Sharing Economy

Literature	Theory	Focus	Gap
Lee, Chan, Balaji, Chong, and Lee (2018)	Theory of reasoned action	Intention of Users to participate in the sharing economy	Need for studies to examine inhibiting and enabling forces that affect users' intention to participate in the sharing economy
Bartikowski and Merunka (2015)	Technology Acceptance Model	Online consumer Trust	Need to study trust from different technology acceptance theory perspective
Filieri, Alguezaui, and Mcleay (2015)	Conceptual	Antecedents and consequences of online trust	Need to study consumer trust from a developing country perspective
Oliveira, Alhinho, Rita, and Dhillon (2017)	Path Model	Consumer trust dimensions in e-commerce	Need to study trust from different services and geographic location
Mittendorf (2017)	Trust and Power	Implications of trust in the ridesharing industry	Need to investigate trust in passengers to form driver intentions on Uber
Jarvenpaa and Teigland (2017)	Conceptual	Trust in sharing economy	Need for studies that explain the relationship between trust in an organization's technology offerings and trust in the organization
Beugelsdijk and Klasing (2016)	Social identity theory	Trust and shared values	Need for research on the role of diversity to include value diversity as an aspect of diversity
Moriuch and Takahashi (2016)	Expectation confirmation theory	Trust and repeat purchase of online shoppers	Need to replicate the study from other ethnic groups
Simmons (2018)	Affordance theory	Disruptive digital technology services	Need to use theory to explain service change in the taxi industry, and the need to intensify the argument against disruptive digital technology companies in or outside Ghana.
Trang, Busse, Schmidt, Falk, and Marrone (2015)	Theory of Reasoned Action	Collaborative consumption services adoption	Need for studies from developing countries perspective
Möhlmann (2016)	Conceptual	Trusting beliefs towards theplatform, trusting beliefs towards the seller	Future research should assess trust-building measures and the trust concept and in different industries.

Literature	Theory	Focus	Gap
Han, Koo, and Chung (2016)	Fit theory	Trust in cognitive-based Airbnb	Need for studies using other theories to explain trust in sharing economy
Moffat and Zhang (2014)	Path Model	The paths to social licence to operate	Need for studies that examine antecedents of acceptance and approval
Xin, Tan, and Techatassanasoontorn (2013)	Trust Model	Dimensions of trust antecedents	Need for future research to compare pre-adoption and post-adoption of mobile payment trust behaviour and find out whether trust behaviours change over time
Kim and Ahn (2007)	Theory of Reasoned Action	Antecedents and consequences of trust in the e-marketplace	Need for a study that offers to understand in how customer's trust grows and declines in the e-marketplace
Hawlitschek, Teubner, Adam, Borchers, Moehlmann, and Weinhardt (2016)	Social Identity theory	User representation for trust in sharing economy platforms	Need for studies to examine the role review and reputation mechanisms play in the sharing economy
Matzner, Chasin, and Todenhöfer (2015)	Theory of Planned Behaviour	Antecedents of participation in IT-enabled sharing services	Need for research that clarifies the antecedents of participation in the context of collaborative consumption
Mulyono and Situmorang (2018)	Path Model	Customer experience in online platforms	Further studies are needed to explain customer experience, customer satisfaction and loyalty
Amirkiaee and Evangelopoulos (2018)	Conceptual	Reasons for participating in Rideshare	Need to examine trust as an antecedent for ridesharing

Source: *Author's construction*

2.9.1 Theory of Reasoned Action

The Theory of Reasoned Action (TRA) asserts that behaviour is influenced by behavioural intention and that a major determinant of intentions is the consumer's attitudes towards the behaviour (Kim et al., 2009). This is a well-known intention model for predicting and explaining human behaviour across diverse fields (Ajzen, 1985). TRA has five main constructs namely beliefs, attitudes, intentions, subjective norms, and behaviours (Southey, 2011).

Attitude toward a behaviour is determined by beliefs about the consequences of the behaviour and the effective evaluation of those consequences (Vallerand et al., 1992). Beliefs are defined as the individual's subjective probability that performing a given behaviour will result in a given consequence. The TRA model is suitable for situations where people may exert their choices. TRA has been used to make accurate predictions of human choice in situations as diverse as voting in elections, online purchasing and trust in the sharing economy (Dillon & Morris,1996; Kim & Ahn, 2007; Lee et al., 2018). While TRA is suitable for many behavioural intention instances, its major pitfall is that it relies mostly on an individual's intention to perform the intended behaviour. Also, TRA seems to be ill-equipped to predict situations in which individuals have low levels of volitional control (Yousafzai, Foxall, & Pallister, 2010).

2.9.2 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is an extension of the theory of reasoned action originally introduced by Ajzen (1985). TPB adds a third antecedent of intention, perceived behavioural control, to the TRA model (Dillon & Morris, 1996). Thus, three factors predict intention in the TPB model: attitude, subjective norms, and perceived behavioural control. Ajzen (1985, p. 181) defined intention as "an indication of a person's readiness to perform a given behaviour", an immediate antecedent of behaviour. Perceived behavioural control is determined by the availability of skills, resources, and opportunities, as well as the perceived importance of those skills, resources, and opportunities to achieve outcomes (Dillon & Morris, 1996). TPB holds that attitudes, subjective norms, and perceived behavioural control are direct determinants of intentions, which in turn influence behaviour (Dillon & Morris, 1996). The major shortcoming of TPB is that it does not account for the previous behaviour within the model, which in many situations is accountable for the intended behaviour (Yousafzai et al., 2010).

2.9.3 Path Model

Chen and Dhillon (2003) developed a conceptual model for instituting consumer trust in internet vendors which establishes a conceptual basis for undertaking empirical work on consumer trust in e-commerce. Chen and Dhillon (2003) postulate three trust dimensions: competence, integrity and benevolence; and four sources of trust: consumer characteristics, firm characteristics, website infrastructure and interactions that represent the dimensions of consumer trust in an Internet vendor. Recent studies empirically tested some of these sources of trust and trust dimensions (Oliveira et al., 2017).

2.10 Discussion of Research Gaps and Future Research Areas

Based on the literature review, trust in sharing economy has been given considerable attention by researchers (Filieri, Alguezaui, & McLeay, 2015; García-Vega & Huergo, 2017; Jarvenpaa & Teigland, 2017; Lee et al., 2017; Mittendorf, 2017; Oliveira, Alhinho, Rita, & Dhillon, 2017a; Simmons, 2018) . Synthesis and summary of the literature review are presented in table 2.1 and at appendix E. The literature review indicates that trust in sharing economy is a promising avenue for research and deserves more attention.

First, extant literature on trust and sharing economy have been done mainly from the perspective of e-commerce (Bartikowski & Merunka, 2015; Liu et al., 2015; Oliveira et al., 2017) general online transaction (Filieri et al., 2015; Moriuch & Takahashi, 2016; Azam, 2015), and general sharing economy (Mittendorf, 2017; Möhlmann, 2016; Jarvenpaa & Teigland, 2017; Trang et al., 2017; Amirkiaee & Evangelopoulos, 2018; Simmons, 2018; Lee et al., 2018) with no specific focus on trust in the transportation sector within SE. For example, Filieri et al., (2015) examined the antecedents and consequences of online trust and found that information quality predicts source credibility, customer satisfaction, and website quality. The

authors also found that trust towards a consumer-generated media website influences travel consumers' intentions to follow other users' recommendations and fosters positive word of mouth. Similarly, Oliveira et al. (2017) in their study on consumer trust dimensions in e-commerce assert that consumers with high overall trust demonstrate a higher intention to purchase online. While these two studies provide insight about trust from various sectors that has received attention like the hospitality sector, the focus of trust in e-transport systems is infinitesmal.

Furthermore, the few studies on trust in the sharing economy are also rather not specific to the transportation sector. The few also pay less attention to the antecedents and outcome of trust. To illustrate, Jarvenpaa and Teigland (2017) conducted a qualitative study panel discussion on trust, identity and trusted systems in the United States on digital environments which was aimed at understanding to what degree trust matters and the consequences of trust. However, this study discussed trust subjectively with no emphasis on the relationship between trust and the development and dynamics of self-regulated, decentralized trust in ridesharing services. Technology usage mostly reflects previous beliefs, available information, and technical features of the IS. In another breadth, Mittendorf (2017) investigated the implications of trust from the perspective of a potential customer of Uber. The author employed Gefen's (2000) model in analysing the influence of trust on customers' intentions to inquire about drivers and to request a ride. Although this study considered antecedents of trust, it examined trust from a potential Uber user perspective. Also, it failed to examine the outcome of trust in such ridesharing services. There is the need for studies that investigate the relationship between the factors that lead to consumer trust in ridesharing services and also understand how trust mediates the relationship between the antecedent factors and outcomes.

Further, a wide gap in the literature was revealed as most of the studies were conducted from a developed country perspective (see Lee et al., 2018; Moriuch & Takahashi, 2016; Trang et al., 2015; Möhlmann, 2016). The few conducted in a developing country rather focused on general digital technology services of online platforms. For instance, Simmons (2018) conducted a study in Ghana that explored how digital technology influenced Uber car ridesharing and its disruptive impact on taxi services. The study used the affordance theory as a theoretical lens to provide an explanation of Uber car ridesharing service as a disruptive digital technology.

Furthermore, conceptual approaches to trust and trust in the sharing economy as illustrated in Section 2.9 clearly indicate that literature on trust and sharing economy is dominated by a particular set of theories. These theories tend to focus on studying trust and technology usage independently to the neglect of the asymmetric market interaction of information between the technology and product provider, and the user (of the product, or technology). Consequently, there is the need to test other theories towards the conceptualization of trust in IT artefacts and to identify relevant sources that contribute to trust generation in digital markets to produce outcomes. There is also a call for more studies to develop a more thorough and complete framework that merges salient contributions towards the study of trust and online transactions. Some of these factors include personality-based experience factors, socio-psychological factors, sociological factors and technical factors like website quality in understanding online trust development (Beldad et al., 2010).

2.11 Chapter Summary

The purpose of this chapter was to provide an understanding of trust in ridesharing services within the sharing economy. In summary, this chapter provideed an overview of the literature

which pertains to the concept of the sharing economy. Furtherance to that, an in-depth review of literature regarding the sharing economy was done in order to understand current knowledge and gaps in the area. The next chapter will present an overview of the framework for this study and adopt its constructs to develop a conceptual framework for the study.

CHAPTER THREE

RESEARCH FRAMEWORK

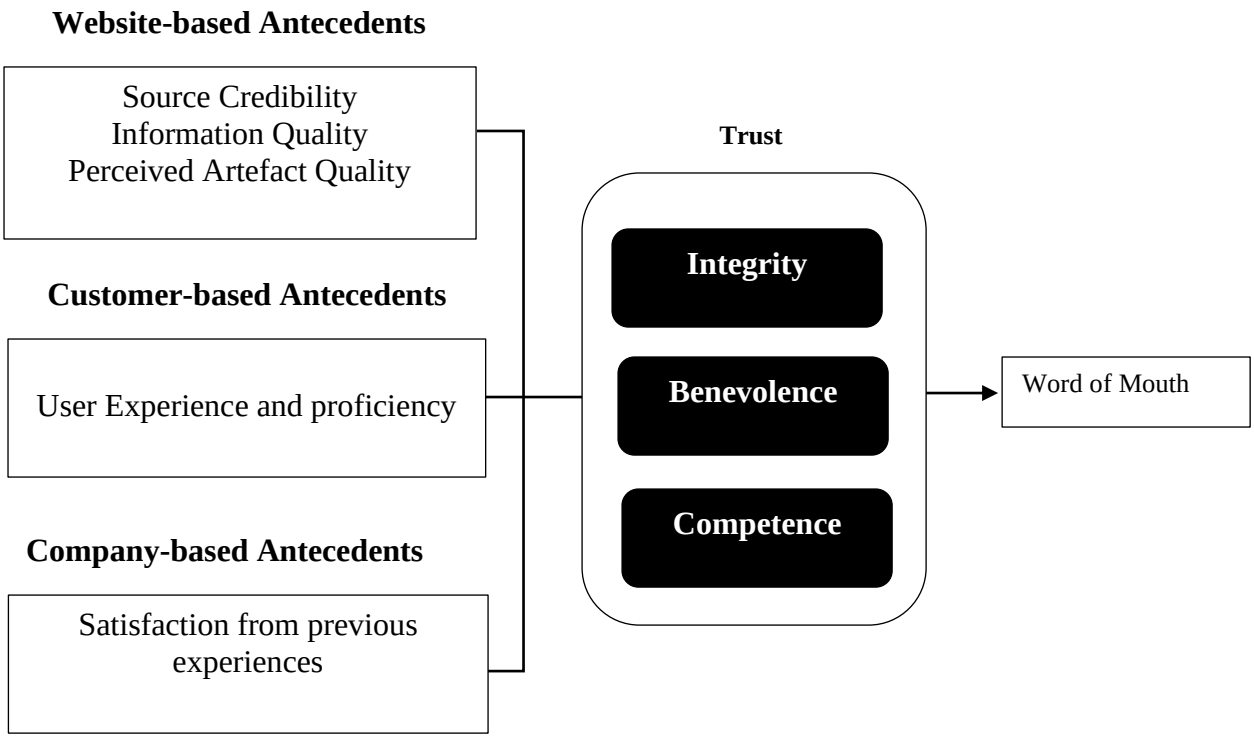
3.1 Chapter Overview

Chapter three entails the framework for the study. In the attempt to provide answers to the research questions of the study stated in Chapter one, this chapter discusses applicable literature that is directly related to the conceptual framework of the study. The underpinning theory for this study's framework is Filieri et al.'s (2015) model on the antecedents of trust in commercial and non-commercial websites.

3.2 Overview of Trust Path Model

Chen and Dhillon (2003) developed a path model for instituting consumer trust in internet vendors which establishes the conceptual basis for undertaking empirical works on consumer trust in e-commerce. Chen and Dhillon (2003) postulate three trust dimensions: competence, integrity and benevolence; and four sources of trust: consumer characteristics, firm characteristics, website infrastructure and interactions that represent the dimensions of consumer trust in an Internet vendor. According to Beldad et al.*'s* (2010), the sources/antecedents of trust can be categorised into three major sources namely customer-based antecedents (e.g. propensity to trust, experience and proficiency in Internet usage), website-based antecedents (e.g. information quality, perceived ease of use of the website, graphical characteristics, social presence cues, third-party guarantees, privacy assurances and security features) and company-based antecedents (organizational reputation, perceived size of the organization, experience and familiarity with the online company). These sources of trust are further discussed under the research model and hypotheses development section. Figure 3.1 below shows the general trust path model of antecedents and outcome.

Figure 3.1: Genereal Antecedents and Consequnces of Online Trust Path Model



Source: Filieri et al. (2015)

3.2.1 Dimensions of Trust

Most researchers agree that trust consists of different dimensions by virtue of its' nature and the common dimensions are namely; Benevolence, Competence and Integrity (Ert et al., 2016; Gefen, 2002; Hellwig, Morhart, & Girardin, 2007). For the purpose of this study, trust is viewed as a single construct but the various dimensions are explained below to understand the nature of trust more intricately.

- ***Benevolence***

The first construct, benevolence is the belief in one as being caring and not opportunistic or exploitative. For example, pricing on journeys must be viewed by the customers or public as

fair and devoid of outrageous exorbitance. It means that an actor has a belief that the other party of actor cares is motivated to act in his favour or interest. A benevolent driver would not be perceived to behave as an opportunist by taking advantage of the trustor or flouting the laws of its service provider to be cunning (McKnight et al., 2002). Benevolence reflects the specific relationship between trustor and trustee, not trustee kindness to all. In the context of the study, belief in ridesharing company's benevolence may have an effect on consumer information sharing because it provides certainty specific to this construct (Kestle, 2013; McKnight et al., 2002; Moriuchi & Takahashi, 2016).

- ***Integrity***

The second construct, integrity, is a perception in one's mind, viewing another as having the quality of being honest or having strong moral principles. In other words, it is the extent to which members or stakeholders count on themselves and the firm (Uber) to adhere to a set of moral principles (Gefen & Straub, 2004). Additionally, according to Hopkins (2012) Integrity is a concept of consistency of actions, values, methods, measures, principles, expectations and outcomes that connotes a deep commitment to doing the right thing for the right reason, regardless of situations at hand. Meanwhile, Hidalgo (2002) defines integrity acts as a guideline, a benchmark, a point of reference or a goal that is used to make decisions that rely on truth and honesty. Integrity can be explained as the act of the firm (Uber) acting in a reliable, consistent and honest manner towards all its stakeholders. The relationship between integrity and trust can be explained as the perception the trustors (Patrons, Driver and Consumers) have about the Trustee (Uber) adhering to a generally acceptable set of principles. For example, Trust items **T6**: *There is transparent communication between Uber and its users* and Trust item **T7**: *Consumer complaints are given necessary attention***)** are integrity measures for users to recognise that the trustee believes and respects in principles that the trustor believes in. For

example, if the trustors adhere to the principle of 'fair and equal treatment for all stakeholders', the trustor will believe the trustee to have integrity if the trustee also adheres to the same or similar set of principle. Similar to this assertion, Hope-Hailey et al. (2012) defined integrity as an "adherence to a set of principles acceptable to others encompassing fairness and honesty as well as the avoidance of hypocrisy".

Integrity acts as the foundation of character that describes an individual as an honest person in every area of his or her life. In the organizational context, integrity is the ability of the firm to act in accordance with stated and acceptable principles by all stakeholders. Trustors of Uber should be able to see the firm as one of great integrity and thus the integrity of the firm must be translated to its' artefact. Such principles include; truth-telling, fairness, timeliness and honesty. What this means is, the artefact of the firm must pose the integrity of the firm (Uber) such that the artefact follows the same principles that are respected by the firm and the trustors. For example, estimated prices given to consumers should not be too different from the actual prices of trips. Issue of low integrity arises when consumers are expected to pay higher prices than what was estimated at the time of request.

- ***Competence***

The last construct, competence, it is the belief that one has in another to accomplish needs and satisfy interests. Competence in a party means that the party has the ability to accomplish or fulfil its claims. For example, the Uber artefact must be able to match-make members, measure distances accurately and calculate prices correctly according to trips. If the artefact does not fulfil this functional requirement, it cannot be viewed as competent. Actors such as the driver should be perceived as professionally trained to be efficient and effective in other to better serve customers and in turn, be properly rated. In a Series of studies as conducted by Ferrin et

al. (2007), many researchers agree on their study on trust repair that sought to examine the effects of an apology versus alternative verbal responses. In their result, they discovered that the effectiveness of an apology depended heavily on violated competence trust than the other forms of trust (Kim, Song, Braynov, & Rao, 2005; Lewicki & Brinsfield, 2017).

3.3 Empirical Grounding for Trust Path Model

Recent studies in information systems have empirically tested the antecedents of trust and trust dimensions (Oliveira et al., 2017; Agag & El-Masry, 2017; Wang et al., 2015). For instance, Agag and El-Masry (2017) based on the trust path model tested a model of antecedents (consumer experience, propensity to trust, reputation, perceived website size, ease of use, perceived usefulness, and website quality) and consequences of consumers' trust toward online travel websites. The authors found that all the aforementioned factors with the exception of consumer experience influence consumer trust toward online travel websites.

In another breadth, Filieri et al. (2015) tested a trust path model of antecedents and outcome for consumer-generated media (CGM). The authors considered five antecedent factors namely source credibility, information quality, website quality, customer satisfaction, user experience with CGM. Using a sample of 366 users of CGM and analysing the data through structural equation modelling, the authors observed that all the aforementioned factors with the exception of source credibility and user experience influence consumer trust towards CGM. The authors further noted that trust towards a CGM website influences travel consumers' intentions to follow other users' recommendations and fosters positive word of mouth. It is worth noting that while these studies examined the antecedents of trust and outcome of trust based on a trust path model, they were not conducted in ridesharing services. Chen and Dibb (2010) in their empirically studied the antecedents and outcome of trust in the online retail context. The

authors examined the moderating role of consumers' familiarity with a web site in the relationship between website quality and trust. They considered trust antecedents such as website usability, security and privacy assurance, and product information quality. The authors observed that trust leads to significant outcomes in the formation of positive attitudes and behavioral intentions toward website.

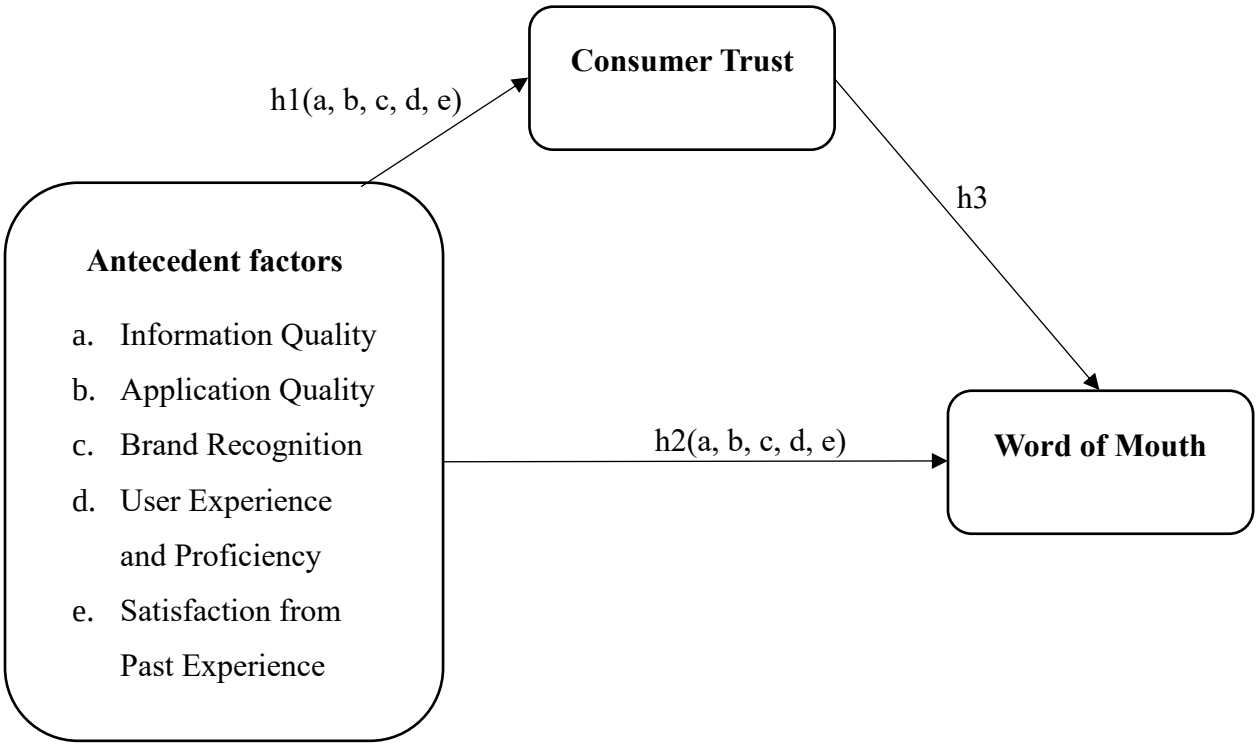
Besides the empirical studies, one study meta-analysed the antecedents and outcome of trust based on studies that tested a trust path model. Kim and Peterson's (2017) meta-analysis examined the role of online trust in business-to-consumer e-commerce. Kim and Peterson (2017) analysed 16 pairwise relationships derived from 150 empirical studies involving online trust revealed that online trust exhibits significant relationships with selected antecedents (e.g., perceived privacy, perceived service quality) and consequences (e.g., loyalty, repeat purchase intention, word of mouth). The authors observed that website type can moderate certain online trust relationships. These additional analyses indicated that the relationships between online trust and its antecedent factors and outcomes are simultaneously more idiosyncratic, complex, and subtle than previously envisioned. There is, therefore, the need to extend the trust path model to rideshring services within the sharing economy to explain the sources and outcome of trust as well as the mediating role of trust between its antecedent factors and outcome.

3.4 Research Model and Hypotheses

Having discussed the objectives and purpose of this study, this section aligns trust with the perspectives of the conceptual model and proposes hypotheses under each construct of the framework to enable the deduction of the research model. The framework of Filieri et al. (2010) was purposely designed for their study that was more into e-commerce and trust antecedents regarding the transaction of business activities on websites. The research model for this study

adapts the conceptual framework , the trust model by Chen and Dhillon (2003). The trust antecedents of the model which were used with regards to online transactions were adopted to fit the artefacts of Uber. The dimensions of trust from the trust model was adopted to provide a measure of the level of trust as a result of the trust antecedents. Figure 3.2 illustrates the research model:

Figure 3.2: Research Model for Trust in Ridesharing Service



Source: Author's construct

3.4.1 Information Quality in Reviews

According to Park, Lee, and Han (2007), information quality refers to the quality of the information contained in an online review and is defined as 'the quality of the content of a consumer review from the perspective of information characteristics. Information quality refers to the relevancy, accuracy, sufficiency, currency (Park et al., 2007; Cheung et al., 2008),

credibility, usefulness (Cheung et al., 2009) and value of the information provided. Information quality has been observed as a predictor of information adaptation (Filieri & McLeay, 2014) and usage intention of potential customers. Information quality also serves as a significant determinant of user trust in the artefact of ridesharing. In the context of this study, information quality describes the relevancy, accuracy, usefulness, credibility and currency of the information provided by Uber and other customers on the artefact. Consumers have diverse needs and therefore look out for different signals that trigger their intention to use the artefact of ridesharing. Some look at convenience, some consider speed, whiles others consider affordability. If a ridesharing firm wants to satisfy such a wide variety of customer and gain their trust, information of the artefact should be able to satisfy the informational need of all customers which will help increase their trust in the artefact. Hence the hypothesis:

H1a: *Information quality in reviews significantly influences trust towards ridesharing services*

H2a: *Consumer trust mediates word of mouth and information quality.*

3.4.2 Perceived Application Quality

Artefact/Application quality refers to customers' perception of an application's performance in information retrieval and delivery. This basically refers to the quality of the rideshare firm's artefact in terms of features, speed, security, reliability and other important factors to the customer. If the Uber artefact is perceived to be safe and secure, ease customer's navigation and has a forum where can interact and share information, the users will develop a strong impression about the artefact which will ultimately result in trust of the artefact. Hence the following hypotheses:

H1b: *Perceived application quality significantly influences trust towards ridesharing services*

H2b: *Consumer trust mediates word of mouth and Perceived Application Quality*

3.4.3 Brand Recognition

A brand is a symbolic embodiment to communicate information about a specific company, product or service which serves to create associations and expectations among a producer's products (Farhana, 2012; Kalakumari & Sekah, 2012). It arguably a firm's most valued intangible asset which can pledge some level of trust-worthiness and distinctive market positioning among a homogenous array of choices (Farhana, 2012; Ohnemus, 2009). The ability for customers to recognize a brand is a priceless value to be derived by most firms. For instance, if a consumer can differentiate brand logo and unique experience that pertains to a particular brand, it becomes a clue for the consumer to preserve an image or perception about the brand and also consumer identify the brand under different conditions. Brand recognition (BR) can simply be explained as a consumer's ability to discriminate the brand from others even when homogenous with others. Different studies have posited that people usually choose and trust things that are familiar to them (Coates et al., 2006; Mcdonald & Sharp, 2000) hence the hypothesis below:

H1c: *Brand Recognition significantly influences trust in ridesharing services.*

H2c: *Consumer trust mediates word of mouth and Brand Recognition*

3.4.4 User Experience and Proficiency

The level of experience in using the artefact also serves as a significant determinant of trust and it is a very crucial factor to consider when investigating antecedents of trust. Lack of experience in the usage of the Uber artefact may lead to naivety and trusting of all information provided by the artefact which may later prove to be false. When that happens, the customer will feel deceived and issues of distrust in the artefact will start emerging. Some studies (Aiken, MacKoy, Liu, Fetter, & Osland, 2008) indicated that higher levels of web experience (artefact experience) is associated with lower levels of trust. Aiken and Bousch (2006) gave a possible

explanation to this argument by revealing that users with high levels of experience and proficiency in using the artefact may already have sufficient knowledge of possibilities that things could go wrong at any time.

A typical example with the case of Uber is where customers are expected to pay a higher amount than the estimated amount at the end of their rides. In this study, it is being argued that, customers who have accumulated high levels of experience and proficiency may feel confident of not being deceived by unreliable artefact information. First-time users who have less knowledge and experience in the artefact may not be able to tell the reliability of information on the artefact and as a result, they may be more cautious towards the usage of the artefact. This is typical with the services of Uber as first-users mostly are shocked at the end of their rides when they are expected to pay much higher than the estimated price upon requesting the ride.

H1d: *User experience and proficiency significantly influences trust in ridesharing services*

H2d*:* *Consumer trust mediates word of mouth and User experience and proficiency*

3.4.5 Satisfaction from Previous Experiences

Customer satisfaction is a measure of general satisfaction of a customer which is based on all cumulative experiences with a company, product or service (Artefact in the case of Uber). This implies that customer satisfaction is not based on a specific transaction but rather based on the cumulative of past experiences (Xu, Cenfetelli, & Aquino, 2016). What this also means is that, a previous transaction, trip and/or experience with Uber will help determine customers' trust in the artefact. Based on this literature, it can be said that users of Uber who have had series of positive experiences are more likely to trust the artefact and the Uber organization as a whole.

On the contrary, a customer who has had some bad or negative experience are less likely to trust Uber.

H1e: *Satisfaction from previous experience significantly influences trust in ridesharing services.*

H2e: *Consumer trust mediates word of mouth and Satisfaction from previous experiences*

3.4.6 Word of Mouth

According to Filieri, Alguezaui and McLeay (2015), there is a scarcity of studies in online settings about the role of trust on consumer's intention to engage in positive word of mouth (WOM). In the framework of this study, users who trust Uber are more willing to talk to their friends and acquaintances about the services and experience they had. It is also believed that a customer who uses the recommendations of other customers is more likely to improve his/her decision making before using the product/service. Based on the explanations of trust and word of mouth, we can then establish our first hypothesis that:

H3: *User trust in ridesharing services significantly influences Word of Mouth.*

3.5 Chapter Summary

The chapter discussed the research framework for the study which is the trust path mdel. From the underpinning theory, a conceptual model for the study was developed with eight hypotheses proposed under each element of the framework. The chapter elaborated on the extent to which the path model has been used in IS, thereby showing empirical support for the theory. The next chapter presents the methodology for the study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Chapter Overview

The purpose of this chapter is to discuss the philosophical assumption and the methodology to be used for this study. The methods of quantitative and qualitative research are also discussed in this chapter and justification for choosing the research approach and philosophy underpinning the study. This chapter additionally discusses the method as well as the data collection instruments and how data will be analysed. Finally, the chapter discusses the sampling techniques as well as an explanation on the constructs to be measured in this study.

4.2 Research Paradigm

The concept of research paradigms as defined by Mertens (2012, p.256) refer to "philosophical frameworks that delineate assumptions about ethics, reality, knowledge, and systematic inquiry". Paradigms include our "view of the world, the conceptual frameworks in which we work to understand the world, an epistemological stance and shared beliefs" (Freshwater & Cahill, 2013, p. 50). Thus, paradigms enable a researcher to better defend the stance chosen in relation to other possible alternatives and does not dwell on the researcher's philosophical know-how or the ability to reflect on a specific philosophical choice. There are primarily three paradigms used in information systems research. These are; positivist, interpretivist and critical realist paradigms (Mingers, 2004). Sections 4.2.1 to 4.2.3 briefly describe these paradigms.

4.3 Interpretive Paradigm

The stance of interpretative study is to understand the context and meaning people assign to a social phenomenon (Walsham, 2006). Interpretative research goes beyond what can be seen or observed within the context of social phenomena and understanding the subjective meanings

they assign to their actions and thereby interpret and understand the reasons behind those actions (Neuman, 2011). In essence, knowledge without the researcher is unrealistic since the experiences drawn from the researcher may help in steering the study. Furthermore, the perception of the respondent and the researcher may change as a result of the interaction with each other during the study (Nardi, 2018).

4.4 Critical Realist Paradigm

Critical realism paradigm, on the other hand, holds that perceptions have certain plasticity (Fisher, 2010) and that there are differences between reality and people's perceptions of reality (Bisman, 2002). The purpose of the critical realist is not to predict but to explain social phenomena taking into consideration the context-mechanism-outcome configurations such as patterns of associations and a possible explanation. Thus, critical realist research seeks to bring to the fore these restraining circumstances in order to positively impact the lives of people who are affected by these circumstances so that they can exploit their potential and liberate themselves from the less fortunate circumstances they find themselves in (Bygstad, Munkvold & Volkoff, 2016). This paradigm has been extensively used by information systems researchers.

4.5 Positivist Paradigm

The positivists hold a deterministic philosophy in which causes (probably) effects or outcomes (Phillips & Burbules, 2000). Thus, the problems studied by positivists reflect the need to identify and assess the causes that influence outcomes, such as found in experiments. It is also reductionistic in that the intent is to reduce the ideas into a small, discrete set to test, such as the variables that comprise hypotheses and research questions. The knowledge that develops through a positivist lens is based on careful observation and measurement of the objective

reality that exists “out there” in the world (Creswell & Creswell, 2017). Thus, developing numeric measures of observations and studying the behavior of individuals becomes paramount for a positivist. The aim of the positivist is to provide some generalisation on the results of the population under study (Iofrida, De Luca, Strano & Gulisano, 2018).

The positivist research paradigm holds that objective reality can be observed empirically and explained with logical analysis. This paradigm maintains that the researcher and the study must be seen as separate entities. Thus, it is assumed that the positivist researcher is neither affected by the subject under study nor does he affect the subject under study since the researcher is deemed as being independent of the subject of research (Phillips & Burbules, 2000). Hence, it uses direct observation in establishing facts (Krauss, 2005). The assumption of positivism is not only based on the existence of reality or the real world that exists beyond the cognition of human beings, but also on the acquisition of objective knowledge of reality or the real world (Weber, 2004). Information systems researchers who adopt the positivist paradigm focus their emphasis on measurable quantifiable variables, hypothesis testing based on phenomena samples from a population acknowledged in the study and the proposition of formal evidence. This study adopts the stance of a positivist in the construct of this study

4.6 Justification for the Choice of Positivist Paradigm

Having explained the various paradigms that are applied in research, this section seeks to provide some justification on the choice of positivism as the research paradigm to be adopted to this study. According to Weber (2004), positivists do not only assume the existence of reality or the real world that exists beyond the cognition of human beings, they also assume that acquiring the objective knowledge of reality or the real world is possible. Corbin and Strauss (2008) have said that the intention to identify regularities in, and to form an association between

some elements, through the manipulation of reality with variations in only a single independent variable is called positivism. Information systems researchers have, over the years, used the positivist paradigm in various works, causing Orlikowski and Baroudi (1991) to posit that there is a clear dominance of the positivist perspective in the field of information systems literature. Similar to this accession, many scholars opined that 81% of published empirical information system research is dominated by positivist research (Ali & Chowdhury, 2015; Chen & Hirschheim, 2004; Liu & Myers, 2011).

The positivist paradigm was adopted for this study because it proposes the use of organised standards for making objective judgments in the conduct of a study (Guba, 1990). The paradigm is relevant for this study as it is the right way to provide certain knowledge that is grounded through quantification and objectivity (Kamil 2011). As explained above, objectivity implies that the researcher and the phenomenon being researched are separate (Weber 2004). Secondly, a full understanding based on experiment and observation can be realised when the positivism paradigm is employed. Hence, allowing the study to achieve objective scientific information. In as much as researchers need to respect the views of different researchers in their use of different research paradigms, in dealing with human research there is the need for researchers to understand and depict individual or social group differences in order to adopt a democratic approach to group opinions for value selection.In the light of this, the positivist paradigm was deemed appropriate for this research.

4.7 Research Design and Method

The research design refers to the manner in which data is collected for collecting, unionized and integrated in order to unearth the findings of research (Johnson & Onwuegbuzie, 2004). Despite the existence of many research method classifications, the most dominant group of

classification are the quantitative and the qualitative (Johnson & Onwuegbuzie, 2004; Myers, 1997). Detailed descriptions of the two most dominant research methods are described in sections below.

4.7.1 Qualitative Method

The qualitative research method is a research method that is used with the aim of conducting research in order to gain an in-depth understanding of the social and cultural issues surrounding the study. Additionally, it seeks to provide an understanding of the given research problem from the perspectives of the population under study and is especially effective if the researcher wants to acquire some culturally specific information about the values, opinions, behaviours, and social contexts of particular populations (Mack, Woodsong, MacQueen, Guest & Namey, 2005). In the view of Myer (1997), the use of observations interviews, questionnaires, documentation and the researcher's impressions and reactions are the sources of data for conducting qualitative research.

4.7.2 Quantitative Method

Quantitative research methods are research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationships. The quantitative method is objective and normally involves gathering quantitative data in the form of numbers; hence statistical methods can be used to test hypotheses (Ary, Jacobs & Razavieh 2002). The quantitative approach is a deductive process that answer questions on relationships within measurable variables and is helpful in making predictions, explaining and understanding cases, models and theories (Saunders et al., 2009). Furthermore, Straub et al. (2004) stated that the essential tools used for quantitative researchers involve statistical tools and software

packages due to the presence of numbers in such research. This method has been linked with the positivist paradigm (Mingers et al., 2013).

4.8 Research Strategy

Saunders, Lewis, and Thornhill (2009) defined a research strategy as the general plan that a researcher uses in order to find answers to posed research questions. Saunders et al. (2009) further indicated that appropriate research strategy has to be selected based on research questions and objectives, the extent of existing knowledge on the subject area to be researched, the amount of time and resources available, and the philosophical underpinnings of the researcher. There are three categories of research strategies, these include; experiments, surveys, or case studies. These three instances; experiments, surveys, and case studies have different questions to be answered. The choice of any research design is influenced by the type of research question, the extent of control that the researcher has over actual behavioural events and the focus on contemporary issues regarding the topic as against what has already happened in history (Yin, 2003).

In this study, the method adapted is a survey, as it has been developed within the context of the positivist paradigm (Neuman, 2011). Survey is firmly grounded in the positivist paradigm, hence, best fit as this study adopted the Positivism paradigm as a methodological lens. Survey is used "to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyse trends across time, and generally, to describe what exists, in what amount, and in what context" (Isaac & Michael, 1997, p. 136). In the view of Creswell (2009), surveys provide a numeric description of trends, attitudes, or opinions of a sampled population under study. Hence, from the results of the sample, the researcher can then make a claim or generalize about the

population. Additionally, the limited time frame in conducting this study makes the survey approach appropriate since it allows for the investigation of a particular phenomenon to some depth whiten a limited time frame.

4.9 Conducting the Survey

The following sections below (4.9.1 to 4.9.3) highlight how the survey was conducted for this study.

4.9.1 Questionnaire Development

In the preparation of the questionnaire instrument, Krabbe, Stalmeier, Lamers, & Busschbach (2006) and Straub's (1989) proposal for the design of survey instruments were used as a guide to establishing validity and reliability. The researchers proposed that the development of a good survey instrument should go through background, questionnaire conceptualization, data analysis and refinement of validity and reliability and conclusion. Since the principles of the positivism paradigm view the use of the questionnaire instrument as appropriate, the study agreed to the choice and employed the fitting tool (Mcevoy & Richards, 2006). After the initial questionnaire was conceptualized and developed from constructs as postulated by literature, reliability and content validity were undertaken via refinement. The questionnaire was presented to my supervisors, other researchers and colleagues in Department of Operations and Management Information Systems to seek their expert opinions since the majority of them are savvy to researches in technology trends and new business models like the ridesharing. This was done to validate the content of the survey instruments through logical sequencing, interpretation and consistency that fits the purpose of the study.

From then on, a pilot study was conducted using sample questionnaire with via distribution of 20 printed forms and also the dissemination of digitally developed questions (*threshold of 20 responses*) to users of ridesharing services who are also in the university environment. The feedback from the pilot demonstrated reliability because the Cronbach alpha estimates satisfied the criteria for reliability. The coefficients fell between 0.7 and 0.9 with 0.6 being lower limit for acceptability hence, a pointer to begin data collection (Krabbe, 2017). The hypotheses that were established informed the design of the questionnaire for the survey. The questionnaire is made up of two parts; the first part was to retrieve responses on demographic data and the second part is sub-divided into three sections; Section A elicited responses for antecedents that may influence a user to trust ridesharing services; Section B obtained responses for trust measures reflect a user's interest to make informed decisions and lastly, Section C was developed to measure the outcome of trust may be made by users. Respondents were asked to respond to a series of questions using the a 7-point Likert Scale where **1**= Strongly Disagree **|** **2** = Disagree **| 3 =** Slightly Disagree **| 4** = Neutral **| 5** = Slightly Agree **| 6 =** Agree **| 7** = Strongly Agree. Table 4.1 illustrated below shows the factors, the number of items under each scale, reliability assessment of pilot study using Cronbach Alpha and the sources where scales were retrieved. See Appendix A for the comprehensive questionnaire.

Table 4.1: Questionnaire Development

Factors	**No. of questions**	**Cronbach Alpha**	**Sources of Factors**
User trust	10	0.93	Oliveira et al. (2017)
Brand Recognition	3	0.92	
Perceived Information Quality	8	0.92	Filieri et al. (2015)
Perceived Application Quality	6	0.87	
Satisfaction from previous experience	3	0.80	
User experience and proficiency	5	0.81	
Word of Mouth	5	0.65	

Source: author's construction

4.9.2 Selection of Sample for the Study

The student population of the University of Ghana (2019) as provided by the Public Affairs Directorate of UG is forty-one thousand, eight hundred and fifteen (41,815) (with a male/female ratio of about 3:2). Additionally, included in this number are 7,206 post-graduates as against the undergraduate population of thirty-four thousand, seven hundred and seven. Senior members engaged in research and teaching in total are one thousand, two hundred and ninety-three (1,293) and a total number of two hundred and fifty (250) professional and Senior Administrative staff. In total, the estimated population of student and employees is 43,108. The basic statistics of students and staff are displayed in Table 4.2 and Table 4.3 below.

Table 4.2: Student Population

Students	Male		Female		Grand Total
	No.	%	No.	%	No.
Undergraduate Student	19,035	55%	15,574	45%	**34,609**
Graduate Students	4,008	56%	3,198	44%	**7,206**
					41,815

Source: Author's Construction

Table 4.3: Teaching and Research Employees

Teaching and Research Employees	Male		Female		Total	
	No.	%	No.	%	No.	%
Professor	75	8.1	8	2.2	83	6.4
Associate Professor	111	12	33	9	144	11.1
Senior Lecturer	229	24.7	67	18.3	296	22.9
Lecturer	283	30.6	141	38.4	424	32.8
Assistant Lecturer	132	14.3	74	20.2	206	15.9
Senior Research Fellow	38	4.1	13	3.5	51	3.9
Research Fellow	57	6.2	31	8.4	88	6.8
Assistant Research Fellow	1	0.1	-	-	1	0.1
Total	**926**	**100**	**367**	**100**	**1,293**	**100**

Source: Author's Construction

Sampling is the process of systematically selecting a representative group from a population under study. According to Field (2005), it is the process that finalizes "a smaller (but hopefully representative) collection of units from a population used to determine truths about that population". This means that in sampling, there is the need to define the population from which the sample is drawn. Because there is very rarely enough time or money to gather information from all units in a population, a sample can become a representation of the population. Obtaining relevant data gathering is important in research. This is because, no amount of analysis can make up for improperly collected data (Bernard, 2017). Due to this understanding, the data collection process was conducted with sound judgement in other to obtain data that contributes to a better understanding of the theoretical framework used in this study.

A purposive sampling technique, commonly known as judgment sampling, was used to administer questionnaire thus, the people who engaged in the use of ridesharing within the University of Ghana campus were contacted. The non-random technique involves a "deliberate choice of a participant due to the qualities the participant possesses"(Ilker, Sulaiman, &

Rukayya, 2016). The intrinsic bias of this type of sampling is that, it stays robust when tested even against random probability sampling and it can also be employed in both qualitative and quantitative techniques (Tongco, 2007). In calculating for the sample size, the Taro Yamane's formula was employed. According to Yamane (1967), the formula is simple and ideal for very large populations whether they are known or approximated. It is given as:

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

Where N represents population size or estimate, ***n*** is the resulting sample and ***e*** represents the levels of precision. In relation to this study, the sample size with a 5% confidence interval is calculated as follows:

$$n = \frac{43{,}108}{1 + 43{,}108(0.05)} = 396$$

According to Alreck and Settle (1985), for a population of 10,000 or more, it is reasonable for even the most experienced researchers to consider a sample size between 2% to 10%. In view of that notion, we can conclude that our sample size is within an acceptable range. Again, it was necessary to collect information from users of ridesharing with the university community whether the participant were students, lecturers, tutors and experts of University of Ghana. Hence a sample size of not less than 396 respondents was targeted for this study.

4.10 Data Collection Method

Four hundred (400) sets of questionnaires were issued to consumers of ride sharing service within the university of Ghana. After the responses have been received, close scrutiny of the responses was done in order to ensure questionnaires that were not fully completed, those that were found to be filled by unauthorized individuals (people outside the target group) and those

that showed lack of understanding of the questions are not used in the study. The data collection lasted for a period from 1st of November, 2018 to 11th of February, 2019.

4.11 Data Analysis

Having collected quantitative data, the next stage is to analyse the data by organising and summarising it based on the variables selected from existing literature and according to the research questions. Data analysis refers to the process of probing, cleaning, metamorphosing and modelling collected data into meaningful information that provides an adequate response to the research question (Clark & Creswell, 2011).

In view of this, the study analysed the data collected from respondents and compares the findings based on the research questions and the selected variables. The raw data from the personally administered survey was first be reviewed in order to identify non-answered questions. Having edited the responses, they were coded and entered into different data files. The coded database was then be analysed using version 2.0 or above of SPSS. Data analysis consists of multiple facets and encompasses approaches that help describe facts, detect patterns, develops explanations and tests hypotheses (Berkowitz, 1997). Based on this, other techniques were employed in order to describe the facts, detect patterns, develop explanations and test hypothesis of the collected data.

This study employed the use of Structural Equation Modelling (SEM) technique in analysing data gathered from the respondents of the study. SEM is a statistical framework that is used to model complex relationships between direct and indirect observable variables (Stein, Morris & Nock, 2012). SEM consists of several multiple regression models that can act as a response variable in one instance and a predictor variable in another instance. Therefore, SEM can be

said to be comparable with other common quantitative methods, such as correlation, multiple regression and analysis of variance (ANOVA), as well as factor analysis and multivariate analysis of variance (MANOVA) (Weston & Gore, 2006).

In as much as the use of multiple regression provides an assessment of the causal effect of variables and the assessment of the degree of association between variables, one major limitation of the multiple regression model is its inability to handle more than a single dependent variable at a time. However, unlike the multiple regression, using SEM enables a researcher to conduct a study and handle more than one dependent variable at a time. In view of this, the Structural Equation Modelling technique is regarded as having certain advantages that distinguish it from other quantitative and multivariate techniques. Using use SEM involves generalisation and extensions of first-generation procedures (Chin, 1998).

The SEM technique was employed to enable a researcher evaluate multiple dependent variables at a time hence, bearing all the functions of the multiple regression analysis. Therefore, it is able to help test the significance of a model, determine the error terms, and provide standardised and unstandardized coefficients. SEM is also viewed as an appropriate tool to incorporate Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA) and Path Analysis for multiple activities. Lastly, the SEM presents an interactive graphical user interface which makes viewing of items and the interpretation of relationships between variables much easier. In view of this, the technique was chosen due to its agility and its ability to distinguish itself for other multivariate techniques, for examples, constructing unobservable variables to represent multidimensionality, modelling relationships among variables, measuring model errors and statistically testing prior theoretical and measurement assumptions against empirical data.

There are two approaches to conducting Structural Equation Modelling. These include the partial least square SEM (PLS-SEM) and covariance-based SEM (CB-SEM). To decide on which approach to use, it is important not to overlook three (3) considerations which include; the research objective, the model set-up and the data characteristics (Bakare, Owusu, & Abdurrahaman, 2017; Hair, Sarstedt, Ringle, & Mena, 2012; Rönkkö & Evermann, 2013). The Covariance Based-SEM has been selected for this study because, firstly, confirming the relationships between latent variables is a major concern. The second reason is that, the structural model is low to moderate complexities due to the reflective mode of the measurement and finally, the sample size is large.

Again, the software called Analysis of Moment Structure (Amos) was identified to be the most appropriate tool for analyzing the Covariance Based SEM based on the aforementioned considerations of the research (Garson, 2012; Urbach & Ahlemann, 2010). It is worth noting that, both PLS-SEM and CB-SEM approaches may compliment each other and neither is superior to the other. For instance, in a study where the proposed structural model is complex, lacks theoretical supports and requires a data with small sample size can employ the PLS- SEM approach (Owusu, Agbemabiese, Daha, & Bakare, 2017).

4.12 Chapter Summary

This chapter presented information regarding the research method used in the study in order to answer the research questions for this study. This was done by taking into consideration the research paradigm, research method, sampling technique, data collection and analysis methods of this study. The research paradigm chosen for this study is the positivist paradigm ad the method adopted was quantitative research method which is an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and

analysed with statistical procedures in order to determine whether the predictive generalizations of the theory hold true (Creswell & Creswell, 2017). The next chapter discusses the context of this study which paves way for the analysis of the data gathered using the methodology discussed in this chapter.

CHAPTER FIVE

CONTEXT OF THE STUDY

5.1 Chapter Overview

This chapter presents the context of the study. The scope of the discussion is particularly limited to the Ghanaian setting, specifically the Ayawaso West Constituency. This region was chosen because it is an area that cradles institutions for higher learning but the focus was on the University of Ghana. The chapter covers the topics; RS in developing economies, RS in Ghana, an overview of the Uber platform, business model and operations of Uber in Ghana. The final section of the chapter summaries what has been discussed in this chapter. The chapter therefore establishes a basis of the data to be collected on the antecedents and consequence of trust in rideshare services in developing countries precisely in Ghana.

5.2 Ridesharing in Developing Economies

Uber has arguably become one of the popular technologically inclined means of transport, providing more than a million daily rides and is the most valued venture-backed company (Kooti et al., 2018). The popularity of Uber makes it an attractive means for studies aimed at understanding participation in the sharing economy. One major issue with the ridesharing system is its exclusivity as far as public transport is concerned hence its non-conformity regulations that govern them. In Ghana, for instance, these services are not bound by the prices determined by the Ghanaian Federation for Private Road Transport Union (GPRTU) every six months. The ridesharing organisation sets its own prices. In the year 2017, Uber in Lagos, Nigeria cut down prices by about 40% (O'Grady, 2017) with its drivers going on strike- a subtle indication of their autonomy in the transport industry. Vehicles used for rideshare services tend to have access to areas that typically are inaccessible to public transport vehicles since they are used both as a private and commercial car ("DVLA to regulate Operations", 2018). This

situation offers them an advantage over other transport services but compromises the control the state has over them, thus a compromise on security.

Whereas others are licensed, registered commercial cars, these are not (Houeland, 2018). In Ghana, for example, there have been concerns by Driver Vehicle and Licence Authority (DVLA) to differentiate vehicles used for rideshare companies like Uber and Taxi from other private cars. Digital transport vehicles were to undergo road-worthy certification twice a year, as all commercial vehicles do and have a unique sticker to indicate their commercial activity ("DVLA to regulate Operations", 2018). There has been a monumental expansion in the subscription to rideshare services globally. Frost & Sullivan pointed out some reasons why people patronize Uber, which include ease of payment (35%), short waiting time (30%), faster commute (30%) and ease of approach (21%). Other studies however reveal that Uber's unclear insurance policies, surge pricing, the inability to hail an Uber, and uncertainty about data security and safety issues, are major concerns of consumers (Kuuire, 2018).

5.3 Ridesharing in Ghana

Platform mediated Ride-sharing service provided by Transportation Network Companies (TNC) or Mobility Service Providers (MSP) is a fairly new phenomenon in the transportation industry in Ghana and it has only existed for a little over a decade in Ghana. Prior to Digital mediated Ride Sharing services such as Uber and Lyft, citizens were familiar commuting with traditional transportation such as mini-bus rides locally known as 'tro-tros', taxi rides and rental cars. Today, the proliferation of MSPs have changed the nature of transport in Ghana. The rapid development of Mobile Applications and Global Positioning Systems (GPS) that has been the backbone of these disruptive technologies include BlacRide, Taxify, Lyft and Uber.

Countries like South Africa and most recently Nigeria are experiencing the perks of having Uber operating within them (Edelman & Geradin, 2015).

5.4 The Uber Platform – An Overview

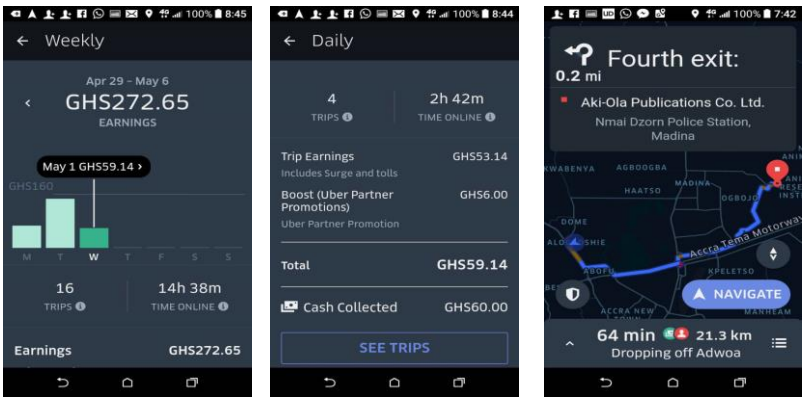
Uber is a popular ride-sharing application that matches people who need a ride (or riders) with drivers who are willing to provide it using their personal vehicles (Kooti, Grbovic, Aiello, Djuric, Radosavljevic, & Lerman, 2017). Founded in 2009 with multiple vision and prospects it is based on using a cell phone to order a ride from the exact location of someone needing a car ride and those who have cars to respond to the request by picking them up and taking them to their destinations (Cohen & Kietzmann, 2014). People would no longer have to wait, hoping for a car to pass or walk the streets in search of one. This seemed to please many people, as Uber quickly became popular in big cities like San Francisco and Paris. The company is worth $68 billion and is rapidly gaining grounds in the African market.

5.4.1 Business Model for Uber Ridesharing

Under the Uber ride-hailing model, a driver who wants to be a contractor in offering taxi services would first have to go through the necessary checks to meet all requirements set up by Uber. Having met the requirements Uber then signs up the driver to the platform. Requirements for a registered driver include; having the required type of vehicle, being a qualified driver and meeting the minimum age requirements of 25 years. The driver must also go through compulsory safety screening. On the part of consumers, they are required to download the Uber application and sign up with their details (Oei & Ring, 2016). The first step in the business model is about creating a demand. People have a smartphone app which lets them request a cab instantly or schedule it for some time later. As soon as the request is made, a notification about your details is sent to the nearest driver who has the option to accept or reject the ride. In the

event where he rejects, notification is sent to another driver in that area. A customer can track the cab when it is arriving and the estimated time of arrival also shown to the customer. The meter starts as soon as the customer sits in the cab which can be tracked through the customer's side app as well. Friendly drivers make sure that the ride is comfortable for the passenger. Once the ride is over, the customer gets an option to rate the driver. The rating system is an important part of the business model as it lets a person know about the driver before booking a ride and helps him trust the driver.

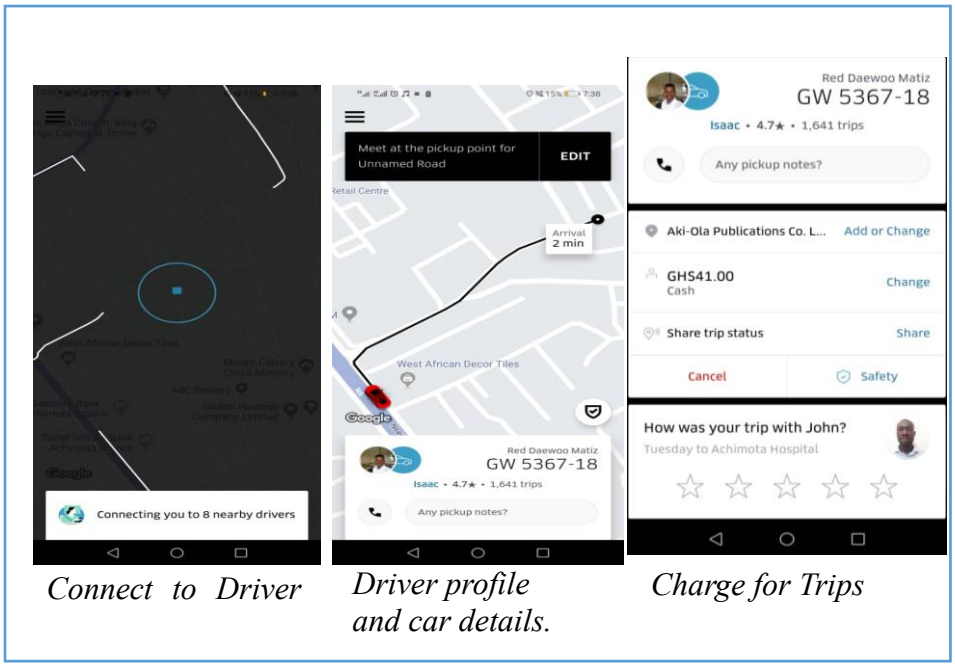
Figure 5.1: Sample of the System Interface of the Driver



Weekly Earnings *Daily trips and earnings* *GPS enabled Trips*

Source: Uber, 2019

Figure 5.2: Sample of the System Interface for a Rider/Consumer



Connect to Driver | *Driver profile and car details.* | *Charge for Trips*

Source: Uber, 2019

5.4.2 Operations of Uber in Ghana

Uber began operations in Ghana's capital Accra on 8th June 2016 after it had entered an agreement with Ghana's Ministry of Transport to develop holistic policy guidelines for taxi-hailing operations. In view of this, Ghana became one of the first countries on the continent to sign the 'Statement of Understanding' (SOU) with Uber, whose operations in other parts of the continent have received resistance from traditional taxi drivers. Uber introduced its service in the second city of Ghana Kumasi in July 2017 to reach out to more prospective commuters.

5.5 Chapter Summary

This chapter discussed the context within which this study was conducted. The chapter begins by discussing the ridesharing in developing economies. Next was the ridesharing in Ghana, followed by an overview of the Uber platform, as well as its business model and operations in Ghana. The final section summaries what has been discussed in this Chapter. The next chapter will analyse and discuss the finding of the study.

CHAPTER SIX

ANALYSIS AND DISCUSSION OF RESULTS

6.1 Chapter Overview

This chapter presents the assessment and testing of the proposed research model using Covariance Based SEM as previously explained. The chapter begins by focusing primarily on demographic characteristics of respondents, screening of data, analysis and results of data gathered through the survey instrument and lastly, the chapter will delve into the discussion of the findings in the preceding section and the final section present a summary of the chapter. The analysis aspect of this chapter is sub-divided into three subsections. The first subsection provides the description of the respondents' demographic characteristics such as gender, age, level of education, occupation, average income, years and frequency of usage in ridesharing and purpose of patronage. The second subsection of the analysis involves the assessment of the research model presented in Chapter 3 of the study using SEM to test the model fit and validity based on the results. The last subsection of the analysis presents the test of the research hypothesis formulated in Chapter 3 of the study.

6.2 Response Rate

At each variable score of the accepted range, errors were checked and corrected to avoid data incongruence. A total of 364 sets of questionnaires were used after the data cleaning which represents a response rate of 89.8%.

6.3 Demographic Profile of Respondents

This section presents a tabular representation of the demographic profile of the respondents sampled for the study. The table has been profiled according to gender, age, educational qualification, occupation, average income, and number of years using the RS services has been

used, frequency of using RS mobile applications to make requests and purposes of patronizing RS services. This information is summarized in Table 6.1

Table 6.1: Demographic Characteristics of Respondents

Characteristics	**Respondents**	
Sex	**Frequency**	**%**
Male	165	45.3
Female	199	54.7
Total	**364**	**100.0**
Age		
Less than 18	6	1.6
18-24	202	55.5
25-34	146	40.1
35-44	7	1.9
45-54	1	.3
55-64	2	.5
Total	**364**	**100.0**
Educational Level		
Secondary	27	7.4
Bachelor's Degree	257	70.6
Master's Degree/PhD.	78	21.4
Professional Degree	2	.5
Total	**364**	**100.0**
Occupation of Respondents		
Student	104	28.6
Intern/National service	49	13.5
Unemployed	28	7.7
Self-Employed	56	15.4
Employed for wages	126	34.6
None	1	.3
Total	**364**	**100.0**
Average income per month		
Less than 1000	225	61.8
1000-2000	97	26.6
More than 2000	42	11.5
Total	**364**	**100.0**
Years spent using Ride-share system		
Less than 1 year	164	45.1
1-2 years	162	44.5

Characteristics	Respondents	
3-5 years	36	9.9
5 years and More	2	.5
Total	**364**	**100.0**
Frequency of use per week		
Never	16	4.4
Rarely	229	62.9
Occasionally	15	4.1
Often	98	26.9
Always	6	1.6
Total	**364**	**100.0**
Purpose for using service		
Work	14	3.8
School	14	3.8
General mobility trips for all purposes	189	51.9
Special occasions	147	40.4
Total	**364**	**100.0**

Source: Field Survey, 2019

The tabular representation above (Table 6.1) shows the demography of the respondents used for the study. Out of the (364) valid questionnaires obtained, 165 of the respondents were from the male sex category representing 45.3% and 199 of them belonged to the female category representing the remaining 54.7% respectively. For views not to be skewed towards a particular gender, both sexes were engaged to demonstrate an impartial demographic result. It is therefore fair elaborate that the ratio of men to women in this study is unbiased and does not have a significant influence on the responses. Table 6.1 also presents the statistics on the ages of the respondents that took part in the study. The results show that 202 of the respondents were from the ages of 18 to 24 with the highest percentage of 55.6 and then, the 25 to 34 age range followed with a total of 146 respondents indicating 40.1%. The lowest number of respondents were those in the 45 to 54-year group with a percentage of 0.3. With respect to education or academic levels of the respondents who were part of the study, the majority of the respondents had bachelor ‘s degree (70.6%), followed by those at the post graduate level of 21.4%.

Respondents at the secondary level came third with a total of 7.4% and the least with academic levels category were who had earned professional degrees (0.5%) with as presented in table 6.1.

Furthermore, the occupation of respondents in table 6.1 indicates that majority of the respondents are employees 34.6%, followed by the Students 28.6%, Entrepreneurs/Self-employed 15.4%, Interns and National Service personnel 13.4% and the Unemployed 7.7%. 0.3%of the respondents were not part of any of the categories. Also, the average income of the respondents per month was assessed. Sixty-one percent of the respondents received less than 1000 Ghana cedes per month, 26.6% of them received incomes between 1000 and 2000 and 11.5 belonged to the average income earners of more than 2000 cedes per month as provided in Table 6.1.

In addition, the number of years the respondents spent using the RS system were analysed. 164 of the respondents representing 45.1% have spent less than a year on the RS service followed by those who have spent 1-2 years on the service (44.5%). Elaborations are found in table 6.1. Concerning the frequency of use per week, 229 of the respondents representing 62.9% of the respondents rarely used the shared transport service. 98 of them representing 26.9% often used the service per week. Detailed presentations are found in Table 6.1. Lastly, regarding the purpose for which respondents use the RS service,189 of the respondents representing 59.1 admitted to using the service for general mobility purposes whereas 147of the respondents representing 40.4% use the service on special occasions. Table 6.1 throws more light on this.

6.4 Descriptive Statistics

The display of the mean and standard deviations of the various variables presented in Appendix B is used for the study. The Mean characterized is a measure of central tendency where single values describe a set of data by identifying the central position within the data set. Hence, estimating the centre point of the distribution of values. The mean is calculated when individual values are added under a particular item and divided by the number of values. Secondly, the standard deviation which is a measure of dispersion explains the extent by which respondents disagree or agree with the measure of central tendency; mean. Hence, an accurate measure to identify outliers. From Appendix B, the variables mean results indicate how each statement performed given the 364 respondents. The highest mean was 5.30 belonging to AQ1 (*with the uber application everything is easy to understand)*. This is a reflection of a high rate of literacy amongst respondents as degree holders alone record 70.6% responses in the data set. Meanwhile, the lowest mean was 3.26 (the *uber app loads faster even under limited internet connectivity*) belonging to AQ.

6.5 Exploratory Factor Analysis for SEM

To understand the relationships that exist between variables and the constructs that undie them, a statistical data reduction technique is needed. For the purposes of this study, the Exploratory Factor Analysis (EFA) was appropriate to ascertain the number of latent variables within a set of observed variables. The basis of this technique is that, factors or latent variables explain relationships between observed variables hence, a number of factors were mathematically derived to convey as much information on the observed variables as possible. Boateng (2018) posits the five major steps a researcher must undergo to successfully perform an EFA and to obtain an optimal set of factors used in Structural Equation Modelling. The steps include: Data Sustainability, Factor Extraction, Factor Rotation, Factor Interpretation, and Factor Transformation.

6.5.1 Data Suitability

Before getting into multivariate modelling such as Structural Equation Modelling (SEM) for the purpose of this study, univariate analysis is carried out to look at one variable at a time to in other to know if there are item errors within that variable. Hence, inter-correlation tests such as Kaiser-Meyer-Olkin and Bartlett's test were carried out on the data in this study.

- ***Inter-correlation Tests***

Without inter-correlation, it is practically impossible to extract from any given data (Hair, Ringle, & Sarstedt, 2011). Whereas Tabachnick & Fidell, (2007) recommend that inspection of the correlation matrix is key to identify correlation coefficients over 0.3, Hair et al. (2011) highlights the rule of thumb as a more desirable measure since it categorises factor loadings: $\pm$ 0.30 = minimal, $\pm$ 0.40 = important and $\pm$ 0.50 = practically significant. Higher levels above 0.5 pose the threats of multi-collinearity. The Bartlett's test of sphericity and the Kaiser-Meyer-

Olkin (KMO) were used as measures of sampling adequacy to assess the factorability of the given dataset.

In assessing the factorability of the data, the KMO index was to ascertain that items under individual factors were large enough and Bartlett's test of sphericity was also used to measures the overall significance of all variable correlations within the data set. These tests were completed before the extraction of components.

Table 6.2 indicates the data of respondents were run to ascertain the KMO test and Bartlett test of Sphericity. The Bartlett test of Sphericity (Approx.: Chi-square= 9284.088, df. 703, sig. 0.000) and the KMO measure of sampling adequacy (value of 0.952) affirm the warrant of using exploratory factor analysis due to high relationships among variables. The KMO (with an overall statistic of 0.952) indicates that the data set used for the study is suitable for EFA since it is above the threshold of 0.6. This is evidence that the variables used for the study have a higher probability of inter-correlations between them, making them conducive for the analysis. Hence, the pursuance of analysing the factors that contribute to the usability analysis is in the right direction.

Table 6.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.952
Bartlett's Test of Sphericity	Approx. Chi-Square	9284.088
	Df	703
	Sig.	.000

Source: Field Survey, 2019

6.5.2 Factor Extraction

Maximum Likelihood method was employed to extract factors from the dataset as shown in Appendix D. Individual items under each variable, representing opinions of respondents, were analysed to ascertain the optimal number of factors to retain for additional analysis and also describe relationships among variables that are of relevance. As existing literature corroborate that it is recommendable for multiple approaches to be used in factor extractions, the eigenvalues, scree tests and cumulative percentage of variance were employed. This prevents over factoring and under factoring when a single approach is used (Boateng, 2018; Maskey, Fei, & Nguyen, 2018).

- ***Eigenvalues***

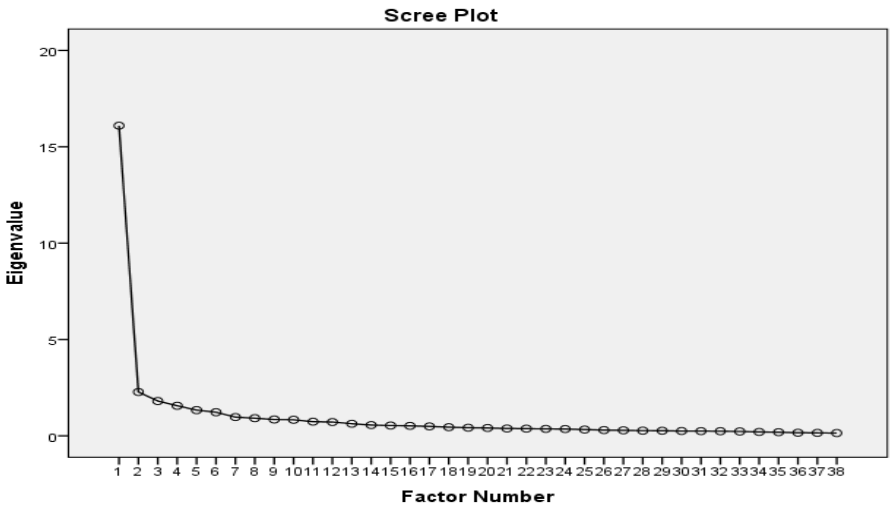
Using the Kaiser's criterion, six (6) factors were retained because they had eigenvalues greater than or equal to 1.0. The factors with eigenvalues less than the threshold of 1.0 were discarded because they were not relevant for further analysis. The selected factors represented 56.7% of the total variance explained as indicated at the sixth Maximum Likelihood Factor in Appendix D. Using Eigenvalues is a major indicator to differentiate important items from possible extracted factors in EFA it was not the only approach used in the factor extraction it is although a common approach.

- ***Scree Tests***

In a simple line plot commonly known as the scree plot, the eigenvalues of the successive factors were displayed to graphically determine the optimal number of factors to retain. Proposed by Cattell (1966), identifying the elbow effect which is the points at which the shape

of the curve becomes convex to know the factors that contributed the most to the explanation of the variance in the dataset. Figure 6.2 presents the scree plot of the study.

Figure 6.1: Scree Plot



Source: Field Survey, 2019

6.5.3 Assessment of Common Method Variance (CMV)

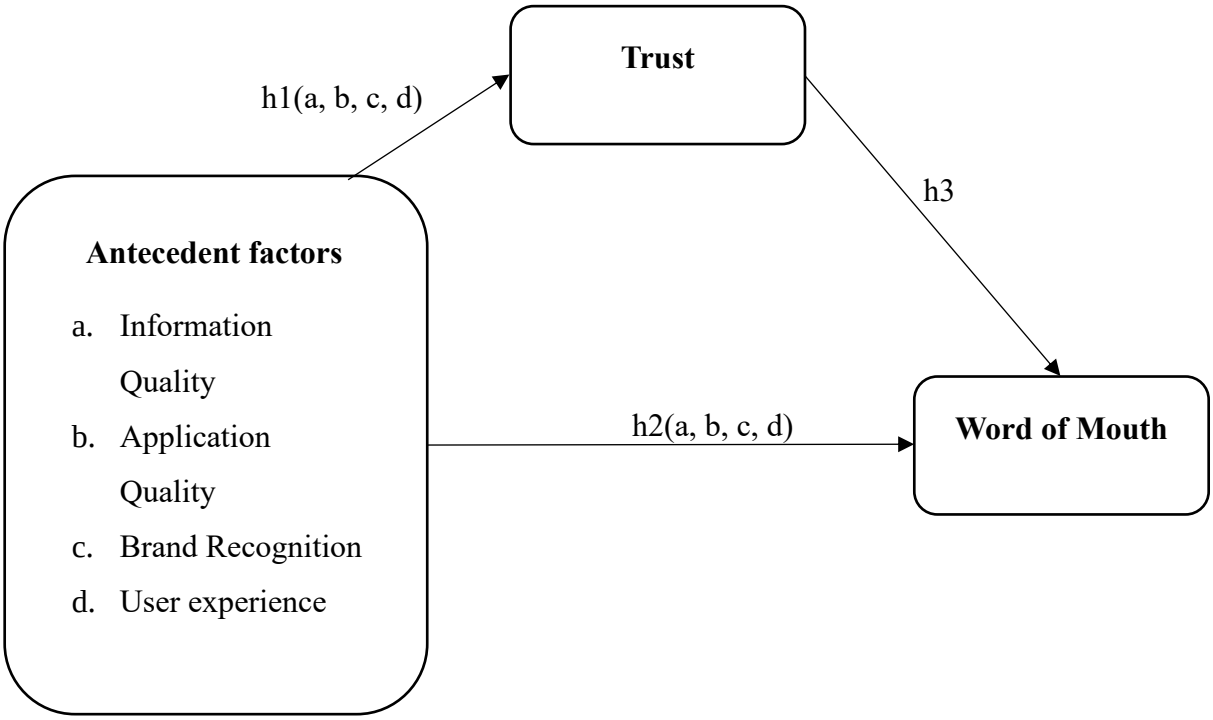
CMV occurs when a measurement method causes an erroneous variance called Systematic Measurement Error (SME) in statistical data (Fuller, Simmering, Atinc, Atinc, & Babin, 2016; Podsakoff, MacKenzie, & Podsakoff, 2012). This is when there exist biases in the estimates of true relationships amongst theoretical constructs. It is for this reason that Harman's one-factor test was leveraged on as part of the analysis to test for potential issues associated with CMV. The basis of Harman's one-factor test is that, when there is a large amount in CMV values it means that only one general factor will accumulate the total variance of the variables. Hence, Harman's one-factor test reveals biases when more than 50% variance is extracted from only one factor. As presented in Appendix D, the first factor (Factor 1) accounts for 42.36% of the variance explained which is less than the 50% ceiling recommended the one-factor test indicating that CMV will not affect the interpretation of the results (Boateng, 2018; Calisir,

Gumussoy, & Iskin, 2011). The post-study model resulting from the preliminary analysis is explained in the next section.

6.5.4 Post-Study Framework

In Chapter 3, the conceptual model in Figure 3.2 that was initially presented with its hypothesis and constructs was revised and modified after exploratory factor analysis (EFA). As depicted earlier, one of the independent elements namely, Satisfaction from past experience (SPE) was not retained during the EFA. Additionally, one of the constructs, Perceived Application Quality (AQ) although retained, behaved in a unique manner during the Promax rotation. It loaded items; *AQ1, AQ3 and AQ8* during EFA for reliability but instead loaded *AQ1, AQ2 and AQ3* with the pattern matrix in SPSS. The latter items were used since the pattern matrix was crucial for further analysis. This result of the revised model, therefore, explains the predicting factors that influence a Ghanaian user or consumer to trust a rideshare service and also to engage in word of mouth. The framework in Figure 6.3 particularizes four main antecedent factors for trust namely; Perceived Information Quality, Application Quality, Brand Recognition and User Experience and Proficiency. Hence, the new model builds up two eight (8) revised hypotheses to be tested as can be seen in Figure 6.3. The pattern matrix to be used for SEM is displayed in appendix C.

Figure 6.2: Post-Study Framework



Source: Author's construction

6.6 Confirmatory Factor Analysis for SEM

The purpose of leveraging on Structural equation modelling for this study was to test the hypothesis of the research model. The recommended two-phase stages; measurement and structural phase were employed for the analysis of the study. The results of the two stages are shown and discussed in our subsequent sections.

6.6.1 Stage 1: Measurement Phase of Structural Equation Modelling

The Confirmatory Factor Analysis (CFA) was employed to provide an assessment of fit by determining issues of dimensionality and internal consistency for construct measurement. Through the validity and reliability of the measurement model, CFA is applied to confirm a good representation of the proposed items of constructs and the conceptual model (Hair et al., 2011). Hence, the essence of a CFA test is to ascertain whether the proposed research model

and the data collected are consistent or agree together in simple terms. Pertaining to this study. The CFA tested the overall measurement model of seven (7) constructs with thirty-eight (38) items. The initial measurement model did not entirely meet the standard criteria of the level of acceptance for all indices. Some of them were below the requirement. For example, whereas standard parameter estimates for each variable were significant at $p < 0.001$, the minimum discrepancy or χ^2 (Chi-square) = 617.68, df (Degree of Freedom) = 215 and the Standardized Root Mean Square Residual (SRMR) = 0.08, others indices that did not meet the criteria were the Root Mean Error of Approximation (RMSEA) = 0.07, χ^2/df ratio = 2.87, Goodness Fit index (GFI) = 0.86, Comparative Fit Index (CFI) = 0.92, Incremental Fit Index (IFI) = 0.92, Tucker-Lewis Index (TLI) = 0.90 and Normed Indices of Fit (NFI) = 0.88. The measurement model was therefore adjusted and re-specified to derive a better model fit. The indices are summarized below in Table 6.3.

Table 6.3: Fit Indices for Measurement Model

Fit Indices	Criteria	Initial Level	Adjusted Level
χ^2 (Chi-Square) / df (degrees of freedom)	**≤ 2 or 3**	2.87	1.56
Comparative Fit Index (CFI)	**≥ 0.95**	0.92	0.98
Goodness Fit index (GFI)	**≥ 0.95**	0.86	0.95
Incremental Fit Index (IFI)	**≥ 0.95**	0.92	0.98
Tucker-Lewis Index (TLI)	**≥ 0.95**	0.90	0.98
Normed Indices of Fit (NFI)	**≥ 0.95**	0.88	0.96
Root Mean Error of Approximation (RMSEA)	**≤ 0.06 to 0.08**	0.07	0.04
Standardized Root Mean Square Residual (SRMR)	**≤ 0.08**	0.08	0.03

Source: Schreiber (2008)

Due to the adjustment of the initial model to improve the fit indices and the model fit, some of the items that were highly correlated were covaried and some redundant items were removed

from the selected variables. A total of five (5) items were removed prior to further analysis in other to enhance the fit for the measurement model. The information on the measurement that was deleted are tabled below:

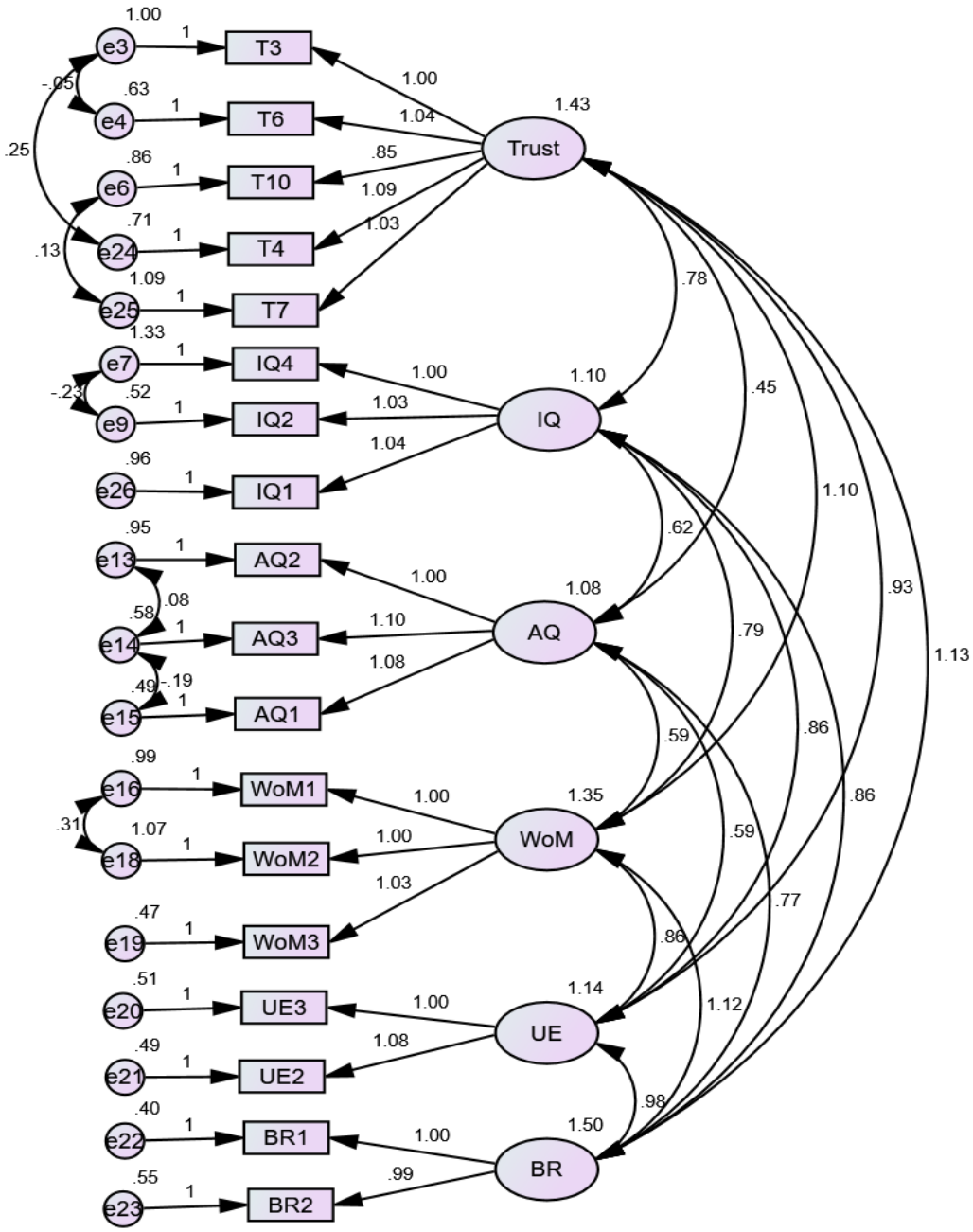
Table 6.4: Deleted Measurement items and their Description

Item Code	Description of deleted original items	Items Deleted
T2	There are occasionally free rides for Uber users	deleted
IQ3	Information on Uber is complete and updated	deleted
AQ6	The Uber App loads faster even under limited internet connectivity	deleted
AQ7	Is easily accessible from different locations	deleted
WoM5	I have recommended this Uber service to close personal friends	deleted

Source: Author's construction

CFA was performed again after the five items presented in Table 6.4 were deleted. Also modifying the model by covarying the items with were highly correlated errors of measurement proved useful as shown in Figure 6.3 below. When the items were deleted and the indices of fit improved significantly meeting the required acceptance criteria (Boateng, 2018; Leogrande, d'Ovidio, Schinzano, Viola, & Mancarella, 2014). The minimum discrepancy or χ^2 (Chi-square) = 176.7, df (Degree of Freedom) = 113 and the Standardized Root Mean Square Residual (SRMR) = 0.03, others indices that did not meet the criteria included Root Mean Error of Approximation (RMSEA) = 0., χ^2/df ratio = 1.56, Comparative Fit Index (CFI) = 0.98, Goodness Fit index (GFI) = 0.95, Incremental Fit Index (IFI) = 0.98, Tucker-Lewis Index (TLI) = 0.98 and Normed Indices of Fit (NFI) = 0.96. As a result of the of the above improvements, it was concluded that no further adjustment is needed for the model. The final measurement model is presented below in Figure 6.4.

Figure 6.3: Final CFA Measurement Model



χ^2 (Chi-square) = 176.7, df (Degree of Freedom) = 113, SRMR = 0.03, RMSEA = 0.95, χ^2/df ratio = 1.56, CFI = 0.98, GFI = 0.95, IFI = 0.98, TLI = 0.98 NFI = 0.96

Source: Field Survey, 2019

- ***Validity and Reliability of Final Measurement Model***

Table 6.5 below presents the overall CFA for the final measurement model. It incorporates the initial assessment of the constructs' reliability by using their Cronbach alpha (**α**) from Table 6.3. The table shows factor loadings which are all in alignment with the criteria recommended by researchers such as Hair et al. (2011) and Krabbe (2017). It additionally tables the Composite Reliability (CR), Average Variance Extracted (AVE) from the CFA. The values of each of the constructs the met the recommended thresholds with AVE to be ≥ **0.5** and CR ≥ **0.7** constructs (Bagozzi & Yi, 2012; Hair et al., 2011). With the data gathered, it is concluded that the measurement model fit specified is a reliable fit for the research.

Table 6.5: CFA Results for Final Measurement Model

	Item Code	Factor Loading	T value	R Square value	CR	AVE	Cronbach Alpha (α)
Information Quality	IQ4	0.67***	Fixed	0.45	0.80	0.75	0.87
	IQ1	0.75***	10.88	0.56			
	IQ2	0.83***	11.36	0.69			
Application Quality	AQ2	0.73***	Fixed	0.53	0.85	0.80	0.80
	AQ1	0.85***	10.81	0.72			
	AQ3	0.83***	11.18	0.69			
Brand Recognition	BR1	0.89***	Fixed	0.79	0.86	0.87	0.86
	BR2	0.85***	20.21	0.73			
Trust	T3	0.77***	Fixed	0.59	0.89	0.79	0.91
	T4	0.84***	19.32	0.71			
	T6	0.84***	15.88	0.71			
	T7	0.76***	14.31	0.58			
	T10	0.74***	13.86	0.55			
User Experience & Proficiency	UE3	0.83***	Fixed	0.69	0.83	0.84	0.86
	UE2	0.85***	17.328	0.73			
Word of Mouth	WoM1	0.76***	Fixed	0.58	0.84	0.79	0.65
	WoM2	0.75***	16.93	0.56			
	WoM3	0.87***	15.56	0.75			

P<0.001

Source: Field Survey, 2019

- ***Convergent and Discriminant Validity***

Validity was performed to ascertain that the measuring instrument measures what it is intended to measure. The notion is that, measures can sometimes be reliable but not valid and vice versa. For instance, a measurement item can be valid for a factor but invalid for another factor. SEM was employed to perform a higher order analysis technique using the CFA to ensure that individual item appropriately form and measure the same factor. As shown in Table 6.5, the individual items that measured the various constructs had high loadings and they were significant at $p < 0.001$. The convergent validity of each construct was tested using the AVE. As indicated below in Table 6.6, all the AVEs for each construct indicated convergent validity since their respective values are above the threshold of 0.5 (Bagozzi & Yi, 2012; Muntinga et al., 2017).

Table 6.6: Correlation Matrix with AVEs

	IQ	AQ	BR	UE	Trust	WoM
IQ	**0.752**					
AQ	0.572	**0.80**				
BR	0.671	0.607	**0.87**			
UE	0.769	0.535	0.753	**0.84**		
Trust	0.625	0.360	0.770	0.727	**0.793**	
WoM	0.646	0.489	0.789	0.695	0.79	**0.792**

Source: Field Survey, 2019

From table 6.6 above, it can be observed that the AVEs are greater than the squared correlations obtained between the construct. It can be concluded that the constructs that were measured meet the requirements of discriminant validity. Hence, the need to transition into Stage 2 of the SEM analysis.

6.6.2 Stage 2: The Structural Phase of The Model

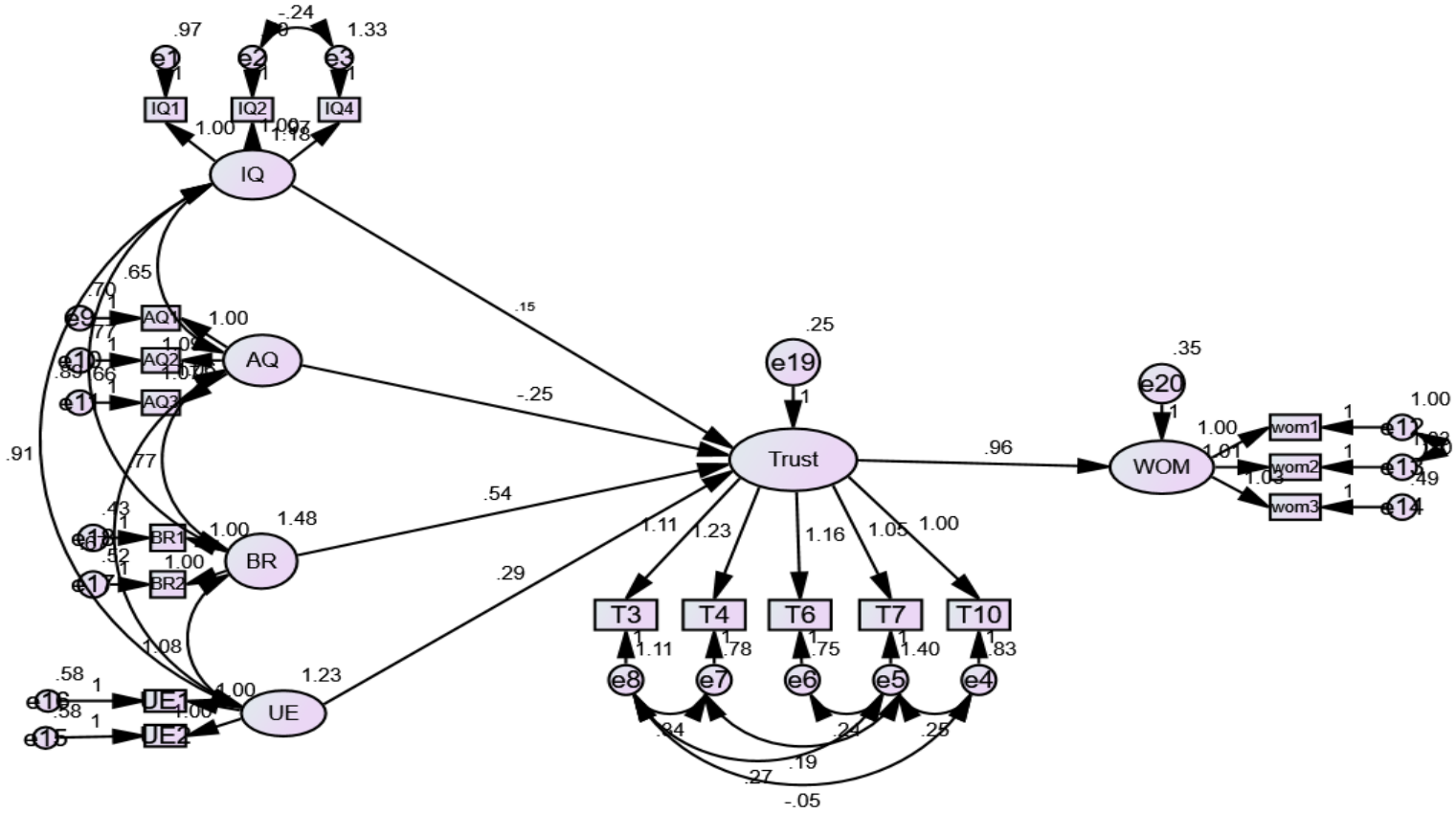
The presentation of a structural model succeeds a fit measurement model that is proven to be reliable and validated. To test a structural model, it involves the testing of the hypothesized theoretical model as well as the relationship between its latent constructs. As shown in Figure 6.4, it is at the structural phase that interrelationships amongst constructs or latent variables are described appropriately and the focus placed on the nature and magnitude of the relationship between constructs. The fit statistics values for the structural model were all within acceptable limits. The minimum discrepancy or χ^2 (Chi-square) = 202.8, df (Degree of Freedom) = 116, the Standardized Root Mean Square Residual (SRMR) = 0.04, Root Mean Error of Approximation (RMSEA) = 0.05, χ^2/df ratio = 1.74, Comparative Fit Index (CFI) = 0.98, Goodness Fit index (GFI) = 0.94, Incremental Fit Index (IFI) = 0.98, Tucker-Lewis Index (TLI) = 0.97 and Normed Indices of Fit (NFI) = 0.95. The summarized indices for the structural model are shown in Table 6.7.

Table 6.7: Indices for the Structural Model

Fit Indices	Criteria	Indices Level
χ^2 (Chi-Square) /df (degrees of freedom)	**≤ 2 or 3**	1.74
Comparative Fit Index (CFI)	**≥ 0.95**	0.98
Incremental Fit Index (IFI)	**≥ 0.95**	0.98
Tucker-Lewis Index (TLI)	**≥ 0.95**	0.97
Normed Indices of Fit (NFI)	**≥ 0.95**	0.95
Root Mean Error of Approximation (RMSEA)	**≤ 0.06 to 0.08**	0.05
Standardized Root Mean Square Residual (SRMR)	**≤ 0.08**	0.04

Source: Field Survey, 2019

Figure 6.6: The Structural Model



χ^2 (Chi-square) = 202.8, df (Degree of Freedom) =116, SRMR = 0.04, RMSEA = 0.05, χ^2/df ratio = 1.74, CFI = 0.98, GFI = 0.94, IFI = 0.98, TLI = 0.97 NFI = 0.95.

Source: Field Survey, 2019

6.7 Path Analysis for Assessment of the Structural Model

To assess the structural model, the basis is that the data should support the specified theoretical relationships within the model (Bagozzi & Yi, 2012). Upon the laid down premise, the structural model of this study sought to determine the hypothesized relationships that are either supported or not supported by the data. The hypothesis testing was conducted in three parts; ypotheses 1(a,b,c,d); where the relationship between trust and its antecedent factors were tested Hypotheses 2(a,b,c,d); where the direct relationships between the antecedents of trust and word of mouth were assessed and lastly, Hypotheses 3; where the relationship between trust and word of mouth was assessed. Hence, path analysis of the structural model as shown in Table 6.8 below.

Table 6.8: Structural Path Analysis

Hypothesized Path	Standardized Coefficients	t-value	p-value	Results
H1a: Information Quality ⟶ Trust	0.072	2.01	0.044	Supported
H1b: Application Quality ⟶ Trust	0.061	-4.04	***	Supported
H1c: Brand Recognition ⟶ Trust	0.081	6.65	***	Supported
H1d: User Experience & Proficiency ⟶ Trust	0.099	2.93	0.003	Supported
H2a: Information Quality ⟶ Word of Mouth	0.092	1.966	.0049	Supported
H2b: Application Quality ⟶ Word of Mouth	0.074	-.961	0.337	Unsupported
H2c: Brand Recognition ⟶ Word of Mouth	0.100	5.759	***	Supported
H2d: User Experience & Proficiency ⟶ Word of Mouth	0.123	1.332	0.183	Unsupported
H3: Trust ⟶ Word of Mouth	0.078	12.40	***	Supported

*p< 0.05, **p < 0.01, ***p <0.001

Source: Field Survey, 2019

6.7.1 Analyzing Antecedents Factors of Trust in Ridesharing

To begin, Hypothesis 1a stated that "Information quality in reviews significantly influences trust towards ridesharing services." The standard coefficient of the path from Information quality to trust is 0.072 with a p-value of 0.044. Since the p-value is lesser than the alpha level of 0.5 ($p<0.05$), Information quality has a significant influence on trust within an institutional setting hence the hypothesis is accepted. Therefore, due to the proven evidence above we conclude that the first hypothesis is worthy of acceptance.

Secondly, Hypothesis 1b also postulated that "perceived application quality influences trust towards ridesharing services". The results indicated that the path between perceived application quality and trust has a standard coefficient of 0.061 with a p-value less than 0.001. Since the p-value is less than the significance level of 0.001 and a t-value of - 4.04, the hypothesis was accepted. The negative means the sample mean is less than the hypothesized mean but there still remains a significant relationship between perceived application quality and trust since the standard coefficient is larger than the t-value. Hence, we conclude that perceived application quality significantly influences users' trust when it comes to ride sharing services.

Again, assessing hypothesis 1c revealed the standard coefficient for the path from brand recognition to trust is 0.081 and the p-value is .000. Therefore, the hypothesis that "Brand Recognition influences trust in ridesharing services." was accepted since there was enough evidence to support it. In conclusion, Brand Recognition significantly influences trust in ridesharing services. Lastly, Hypothesis 1d stated that User experience and proficiency influences trust in ridesharing services. The standard coefficient for the path User experience to Trust is .099 with a p-value of 0.003 and a t-value of 2.93. Since the p-value is less than the

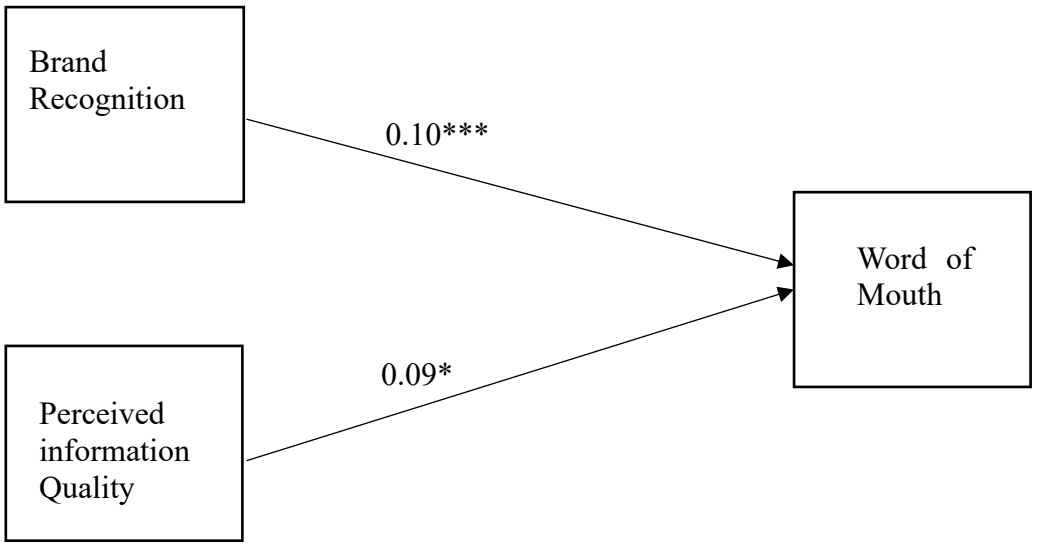
significance level of 0.01, the hypothesis is accepted because there is enough evidence to support it.

6.7.2 Mediation Analysis

- ***First Pre-Condition: Testing direct Relationships Between Trust Antecedent Factors and Word of Mouth***

The section presents assessment in hypotheses 2(a,b,c,d) as highlightled in Table 6.8. It shows the results of the direct relationship between the antecedent factors of trust and word of mouth. Application Quality, Information Quality, User experience and Proficiency, Brand Recognition, Satisfaction from Past Experiences were all analysed and the outcome of results suggest that only the direct relationship between brand recognition and perceived information quality were statistically significant as indicated in the Figure 6.8;

Figure 6.7: Direct Relationship Without Mediator



*p< 0.05, **p < 0.01, ***p <0.001

Source: Field Survey, 2019

H2a and H2c were all statiscally in predicting word of mouth in the ridesharing. This means that the two factors, can influence word of mouth significally. Brand Recognitionn was the antecedent factor that has the highest predictive power on word of mouth with standard estimate of 0.10 at p-value <0.001. Perceived Information Quality follows with standard estimate 0.09 at p-value 0.05. The path diagram of the direct relationship between between Brand Recognition and Information Qulaity is represented above.

- ***Second Pre- condition: Relationship between trust and word of mouth***

In the last part of the test is assessing the relationship between trust and electronic word-of-mouth. In view of this, H3 predicted that user trust in ridesharing services influences word of mouth. From the path analysis above in Table 6.8, the standard coefficient of the path from Trust to Word of Mouth is .078 with a t-value 12.40 and p-value less than 0.001. Since the p-value is less than the significant value of 0.001, it shows that, user trust has a significant relationship with word of mouth in ridesharing services. Therefore, the first hypothesis which is, "trust in ridesharing services significantly influences word of mouth" was accepted because of the sufficient evidence supporting it. The table 6.9 below shows the full details of the mediation effect of the proposed model.

Table 6.9: Mediation Effect

Relationships	Direct without mediator	Direct with mediator	Indirect Effects	Mediation effect
Information Quality→ Trust → Word of Mouth	0.09(0.049)	0.07 (0.006)	0.066 (.315)	No mediation
Brand Recognition→ Trust→ Word of Mouth	0.10(***)	0.09 (***)	0.66 (0.98)	No mediation

*p< 0.05, **p < 0.01, ***p <0.001

Source: Field Survey, 2019

After meeting Baron and Kenny's (1986) pre-conditions for mediation in the previous section, the study sought to assess the mediating effect of trust on Word-of-mouth and Trust antecedent factors. As presented in Figure 6.8 , it was, however, observed that only Brand recognition and Information Quality qualified for the mediation analysis because, they have significant and direct relationship with word-of-mouth. As indicated in the table 6.8, the results produced no mediation after bootstrapping was conducted, although, it statistics seem to portray a partial mediation effect according to Baron and Kenny's basis for mediation. If this analysis solely depended on Baron and Kenny's yardstick for determining mediation, they would have suggested that, trust should achieve partial mediation between information quality and word-of-mouth; and partial mediation between brand recognition and word-of-mouth however, the results produced no mediation after bootstrapping. In conclusion, both brand recognition and information quality, although highly significant in the path assessement in the previous section, achieved no mediation effect between Consumer trust and Word of Mouth. It simply means that both antecedents factors directly maps to word-of-mouth without a mediator.

6.8 Discussion of the Results

The section transitions to discuss the analysis presented in the previous section in other to evaluate research questions of the study and glean out the relevant findings. The study is in three parts reflecting the questions as well as the constructs used in the research model.

6.8.1 Antecedents Factors of Consumer Trust in Ridesharing Services

The first objective of this study seeks to assess the antecedent factors of consumer trust in ridesharing. Empirical study have suggested that the nature of antecedent sources derived from customer, company and website characteristics can lead to consumer trust context of ridesaharing. The assessment of these antecedent elements or factors are discussed below:

- ***Perceived Information Quality in Reviews***

The first hypothesis (H1a) sought to determine the impact of perceived information quality reviews on user trust. In this regard, the hypothesis stated that, perceived information quality will significantly influence user trust in ridesharing. This hypothesis was supported and confirmed that indeed, perceived information quality has a significant impact on the user or consumer trust. Information quality is described as "the degree to which a user views the information provided by a website as current, accurate, relevant, useful and comprehensive" (Yi et al., 2013, p. 286). So, for online users to perceive information on websites or applications as current, accurate, relevant, useful and complete, they must regard the information to be of high quality, credible and sufficient for decision making when transacting e-business. Hence, in order to gain the trust of users, it is the duty of the ridesharing companies to prioritize the quality of information that is channelled online users.

The finding can be explained by the reason that, perceived information quality is a crucial characteristic for online transactions. In this study, it was found that perceived information quality has significant impact on trust. The finding is consistent with related findings such as Nico laou and McKnight (2006) Yi, Yoon, Davis and Lee (2013), Filieri, Alguezaui, and McLeay (2015), Shankar, Urban, and Sultan, (2002), Cheung, Lee and Rabjohn (2008). In their study, Nicolaou et al. (2006) sought to examine the role that information quality plays in an inter-organizational electronic data exchange setting, it turned out that, the effect of perceived information quality on trust was significant. Similarly, Yi et al. (2013) sought to extend the knowledge base on trust formation and aid researchers and practitioners to develop more robust tools for guiding consumers. In this regard, they leveraged on the elaboration likelihood model (ELM) and Toulmin's model of argumentation to propose a model of initial trust formation in Web-based health information.

The results largely supported the proposed model by explaining substantial variance in trust and highlighting the importance and distinct role of user perceptions of information quality in determining a person's decision to trust health information online. In their findings, perceived information quality had a significant impact on trust. Again, contextually, the results obtained from IQ in online health information settings does not differ from that of e-commerce setting however, it is argued that the result is not concrete as factors on trust can change as experience is gained or as time evolves. (Yi et al., 2013; Zahedi & Song, 2008).

The finding of this study further finds ample support in a very recent study conducted by Filieri et al. (2015). They investigated how trust influences the behaviour of travel consumers by testing a new model of antecedents and consequences of trust for consumer-generated media (CGM). It was found that information quality in reviews was the most important antecedent factor of trust towards CGM, which means that for travellers, information quality criteria related to a review message indicates a level of credibility and reliability of a source. This result is consistent research in other research (Chen, Jubilado, Capistrano, & Yen, 2015). Also, travellers feel empowered when they use online customer reviews to make inform decisions. Although perceived information quality in reviews is not necessarily the most important antecedent factor to trust in ridesharing, it has been proven to be one of the relevant factors with a high correlation to trust.

- ***Perceived Application Quality***

The second hypothesis (H1b) of the research was to assess if perceived application quality has a significant influence on trust towards ridesharing. Specifically, it was hypothesized that perceived application quality has a significant influence on user or consumer trust. Consistent with this prediction, the results from the study indicated that the path between perceived

application quality and trust indicated significance and accounted for substantial variance explained. Hence, the hypothesis was accepted. Due to the fact that perceived application quality and trust have a strong relationship, it means the quality of the application in terms of features, speed, security, reliability and other factors are important to the user. In a nutshell, The quality in the performance of an application which is perceived as functional, usable, likeable, safe and secure will develop a positive impression about the artefact which will ultimately result in trust of the application. The result of the study is consistent with the results of many previous studies (Agag & El-Masry, 2017; Filieri et al., 2015; Oliveira et al., 2017; Wang, Law, Guillet, Hung, & Fong, 2015).

Agag and El-Masry (2017) in their study, for example, looked at the relationship between website quality and consumers' trust toward online travel websites in Egypt. The result of their study revealed that website quality is one of the strong predictors ($\beta = 0.48$, $P < 0.001$) of consumer trust which means that the higher online travel websites are perceived as quality, the more users will trust in online travel website. Their result is consistent with previous research that website or artefact quality is mediated through trust to make informed decisions. This is agreeable in most research in the tourism industry (Filieri et al., 2015; Wang et al., 2015). In support, Wang et al.(2015) in their study, observed how hoteliers could leverage on their web artefacts such as websites as marketing tools to attract target consumers. They sought to investigate how hotel website quality impacts electronic Trust or eTrust as well as the interaction effect of eTrust on informed decisions such as online booking intentions.

The established relationship between Website quality and eTrust was reaffirmed by their study. They found a significantly strong influence from website quality on consumers' eTrust. In agreement, Filieri et al. (2015) argue that the more a website is effective in fulfilling

consumers' needs and in facilitating them in accomplishing their tasks, more positive and reliable impressions on the website or artefact. In other words, they establish that website quality has a siginicant impact on consumer satisfaction. The finding is also consistent with a study carried out in the Philippines on online tax filing system. In their study, Chen et al. (2015) sought to examine citizens' propensity of use for electronic governmental website services via the IS Success Model in general. It was found that website quality has a significant impact on the perceptions towards the Electronic Filing and Payment System.

- ***Brand Recognition***

The third hypothesis (H1c) of the research predicted that brand recognition has a siginicant influence on trust towards ridesharing. It was hypothesized that brand recognition has a significant influence on user trust. Consistent with this prediction, the results from the study indicated that the brand recognition was the strongest antecedent factor to trust compared to the other antecedent factors. Hence, the hypothesis was accepted. Brand recognition can be explained as a type of brand awareness that enables a consumer to recognize and discriminate the brand when any of its features or elements such as colours, logos and slogan are exposed to the consumers or potential consumer. This means that an extent of brand recognition which is represented brand features can trigger brand interest and generate trust.

The result of the study continues to be congruent with the results of many previous studies. (Agag & El-Masry, 2017; Chen & Dhillon, 2003; Khurram & Sheeraz, 2018; Oliveira, Alhinho, Rita, & Dhillon, 2017; Urbano, Rocha, & Oliveira, 2013). Brand is often argued as a firm's most valued intangible asset and it can pledge some level of trust-worthiness and distinctive market positioning among a homogenous array of choices (Farhana, 2012; Ohnemus, 2009). So, for a consumer, any visual differentiation such as a brand logo or unique

experience with the brand can become a clue for the consumer to preserve an image or perception about the brand in the memory which helps the consumer identify the brand under different conditions.

In agreement, Chen and Dhillon (2003), argues that although there is empirical evidence to support that good reputation and consumer trust are related, a more powerful factor that leads to consumer trust is brand recognition. Also, in a study conducted by Chari et al. (2007), the user-generated-brand recommendation on Facebook, was considered as a consequence of trust. Additionally, in the case of Oliveira et al. (2017), they sought to use a path model to empirically define and test consumer trust in electronic commerce transactions and also assess the influence of overall trust on consumer purchase intentions. In their result, it was shown that brand recognition substantially explained trust in electronic commerce. This means that brand recognition is relevant for trust formation which is called brand trust. So, it implies that brand recognition leads to brand trust; and brand trust for the consumer evolves into emotional satisfaction (Hess & Story, 2005), it is imperative for service firms to build formidable relationships between consumers and the brand that will ultimately lead to commitment to the brand which is termed as brand loyalty (Delgado-Ballester & Luis Munuera-Alemán, 2003; Hess & Story, 2005; Morgan & Hunt, 1994).

- ***User Experience and Proficeincy***

The fourth hypothesis (H1d) of the study was to determine if the variable, User Experience & Proficiency has a signicant influence on trust. Specifically, it was hypothesized that, user experience and proficiency will significantly influence user trust. This prediction was supported by the results in the present study. The result has plainly shown a significant influence of user experience & proficiency on trust. however, it was found that levels of user

experience in mobile application and website usage were significant but not at the highest level of significance. This means that the level of experience in using ridesharing services and online reviews is not necessarily a strong factor comparing to other factors to consider in the decision-making when firms investigate the antecedents of trust (Beldad et al., 2010). In this study, it is argued that, customers who have accumulated high levels of experience and proficiency may feel confident of not being deceived by unreliable artefact information. First-time users who have less knowledge and experience in the artefact may not be able to tell the reliability of the information on the artefact and as a result, users may be more cautious towards the usage of the artefact.

However, the finding of this study is contradictory to that of other studies that found that high levels of internet and platform experience affect the user's tendency to trust internet technology (Aiken et al., 2008; Beldad et al., 2010; Corbitt, Thanasankit, & Yi, 2003; Filieri et al., 2015). In their study, Aiken et al. (2008) explain the argued that users of users with high levels of experience and proficiency are already vexed in knowledge and so they know of possibilities of failure of systems at any time while online. they found that Internet experience and online trust is parallel with respect to novices and intermediate users but negative in the case of intermediate and expert users. Again, other studies are also emphatic that user experience and as well as proficiency has no relation with website or user trust. In the case of Filieri et al. (2015), they found out that the level of consumer experience was not a significant predictor of trust toward travel websites online. This notwithstanding, Brown et al. (2007), held their view that lack of experience can lead to naivety and enough knowledge and experience with the particular platform online can spur greater confidence and inflate online trust levels.

6.8.2 The Mediating Role of Trust between Antecedent Factors and Word of Mouth

The second objective of this study seeks to assess the mediating role of trust between Trust Antecedent Factors and Word of Mouth. First of all, evidence from the current study has shown that most of the respondents who took part in the survey believe that trust has a strong relationship with the quality of information like real-time GPS locations, correct pricing of fares and so on, however trust in itself produces a no mediating role between information quality and word-of-mouth. The situation is the same for testing mediation for trust on brand recognition and word-of-mouth. Although it observed in the path analysis that brand recognition can lead to Brand Trust and trust can also lead to word-of-mouth as confirmed in the previous sections, it necessarily does not make trust a mediator.The findings of this study corroborate studies of Filieri et al. (2015) and Lin and Lu (2010) that trust may have a strong relationship with antecedents as well as outcomes but will produce no mediation between them.

The no-mediation role that Trust plays between antecedents' factors and outcome can be attributed to the fact that, ridesharing in Africa is still at its initial stages of growth and Ghana is not an exception (Dube, 2015; Simmons, 2018). There seems to be a growing acceptance for the ridesharing services such Uber because it is still identified as a new entrant as well as a game changer in the transport sector. Due to this, trust is not yet viewed as a social concern. This means that ridesharing users who trust Uber services are more willing to talk to their friends and acquaintances about the services and the good experiences they have with the service. Consequently, the more a user trusts the service, the more word of mouth is performed regarding the service. This could be attributed to the service nature of ridesharing. The very fact that ridesharing service is intangible and novel, users would rather prefer opinions from friends and other users of the service than the producer of the service. And the fact that word

of mouth does not involve the producer of the service, thus, it occurs between users and potential users, it could lead to both positive and negative effects.

6.8 Chapter Summary

This chapter presented thorough discussion on the analysis and the findings of the data. The analysis and discussion were purposed to answer the questions that were posed at the beginning of the study. In relation to the first research question, the findings indicated that all the variables namely; Perceived Information Quality, Application Quality, Brand Recognition and User Experience and Proficiency had significant influence on trust. However, the Satisfaction from past experience could not be retained after employing the pattern matrix. It was also revealed that the variable, Brand Recognition, is the most important antecedent factor to trust. Regarding the second objective that sought to assess the mediating role of trust between Trust Antecedent Factors and Word of Mouth, it was found out that trust produced no mediation between the antecedents factors of trust.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

7.1 Chapter Overview

The final chapter starts by reviewing the questions posed in Chapter One and also explains how the questions were addressed by the study. The chapter further discusses the study's contribution to knowledge by spelling out three specific implications namely; implications for research, practice and policy. Lastly, the chapter closes by discussing the limitations and recommendations for further research.

7.2 Summary of the Research Process

This study sought to the to investigate the antecedent factors of consumer trust in ridesharing services and how trust mediate the relationship between trust, its antecedent factors and word of mouth. To this end, these research objectives were formulated:

1. To assessing the antecedents of consumer trust in ridesharing services
2. To determine the mediating role of trust between antecedent factors and word-of-mouth.

In achieving the above objectives, the trust model proposed Filieri et al. (2015) along with Chen and Dhillon's (2003) path model was adapted as a guide to understand the subject of trust and its relationship with antecedent factors in the ridesh aring or e-transportation context. The conceptual model was established to assess antecedents of trust in ridesharing from three different perspectives (Website-based, Company-based and Customer-based antecedents). Lastly, to assess the mediating role of trust between antecedent factors and word-of-mouth. The conceptual model was selected for this work because it is a model that can best be used to understand the subject of consumer trust. It brings light which antecedent factors are relevant

consumers and which ones are not. Following a comprehensive review of literature, appropriate hypotheses were developed, the context of the study was discussed and questionnaires were distributed to collect data from consumers of rideshare services. The constructs employed in the study were validated by employing Inter-correlation tests such as Kaiser-Meyer-Olkin and Bartlett's test, reliability and factor extractions, reliability and re-specification of factors and employing CFAs for Structural Equation Modelling.

7.3 Summary of the Research Findings

The finding of the study is in two parts. First, the findings on assessing the antecedents of trust in ridesharing. The Second part is findings on the mediating role of trust between antecedent factors and word-of-mouth. Discussion on detailed findings is provided in the two subsections below.

7.3.1 Assessing Trust Antecedent factors in Ridesharing

The first research objective of assessing antecedents of trust in ridesharing necessitated the use of CFA and Path Analysis using Amos 22 to validate the conceptual model and the hypotheses of the study. First of all, data suitability, factor extractions, reliability of factors, re-specifications of factors, and assessments of CMVs were employed for the EFA. From then on, the CFA was conducted by looking at the measurement and structural phases of SEM. Lastly, Path Analysis assessment of SEM was used to determine the hypothesized relationships that are supported by the data. The conceptual model was built from the model proposed by Filieri et al. (2015) along with the path model consisted of five (5) factors. The results after EFA was used to test the overall measurement model indicated that Perceived Information Quality, Perceived Application Quality, Brand Recognition and User Experience and Proficiency were all factors

that were applicable to determining user trust and Electronic Word of Mouth in ridesharing in Ghana.

The Confirmatory Factor Analysis technique together with other techniques was used to test and validate the hypotheses proposed in relation to the five (5) factors and the dependent variable. The CFA test indicated that all six (6) factors were statistically significant. Thus, their p-values were significant at various stages where where *p< 0.05, **p < 0.01, ***p <0.001. Hence, all the p-values were less than 0.05 (p<0.05). Overall, the respective paths from antecedent factors which include Perceived Information Quality, Perceived Application Quality, Brand Recognition and User Experience and Proficiency to trust had strong correlations.

Finding 1: Highest Predictive Factor of Consumer Trust

It was found that brand recognition was the strongest antecedent factor to trust compared to the other antecedent factors with standard coefficient value of 0.08 and a p-value at the highest significant level (< 0.001). From the results, it is deduced that the ability for users to recognise brand can the most treasured intangible asset that can promise some level of trust-worthiness and distinctive market positioning among a homogenous array of choices (Farhana, 2012; Ohnemus, 2009).

7.3.2 Mediating role of trust between Antecedent Factors and word-of-mouth

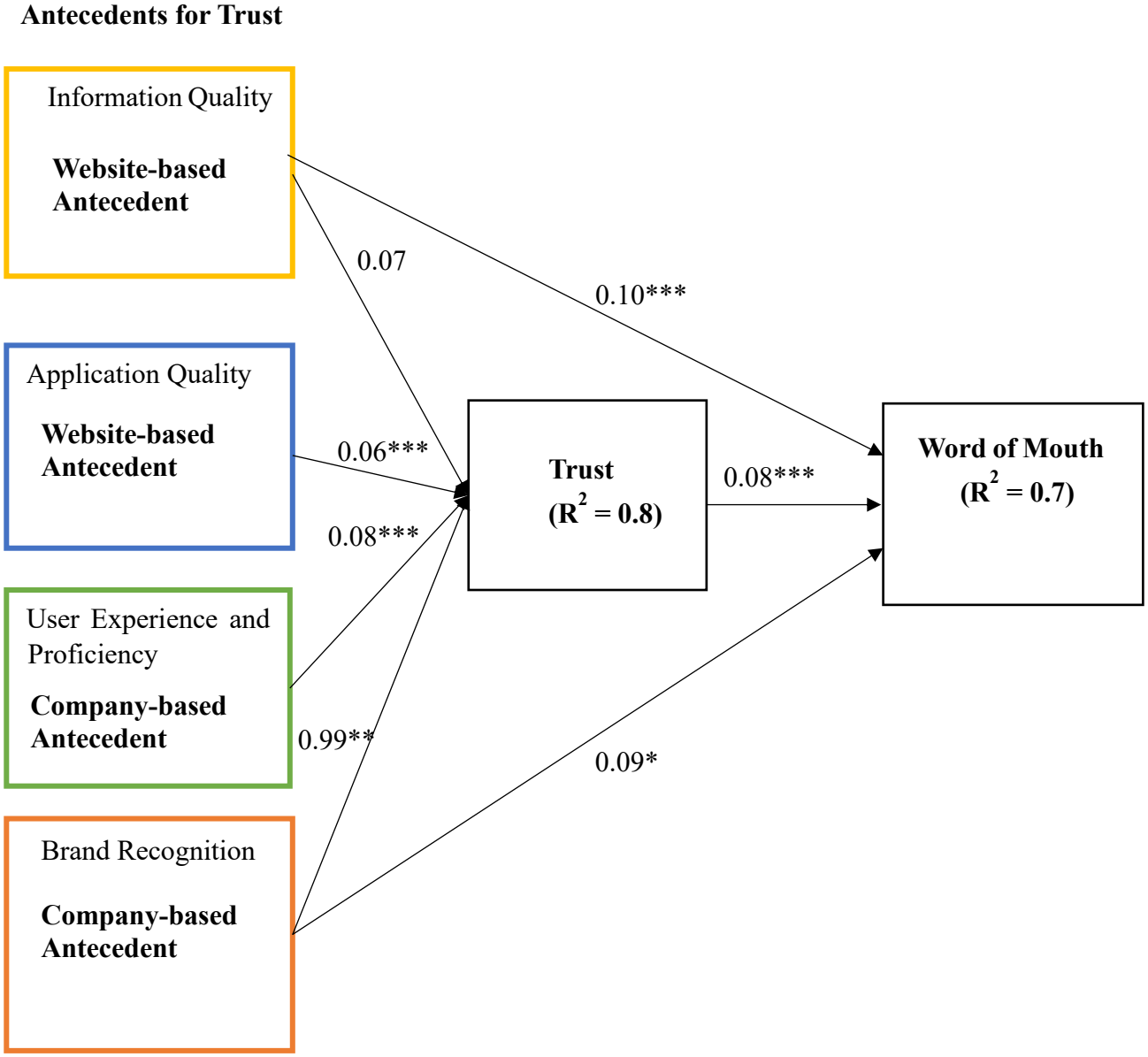
First of all, evidence from the current study has shown that most of the respondents admit that they are abreast with Uber services and they are confortable with activites on the Uber platform such as real-time GPS locations system, bailing system and so on. trust has a strong relationship

with the quality of info rmation like, however trust in itself produces a no mediating role between information quality and word-of-mouth. The situation is the same for testing mediation for trust on brand recognition and word-of-mouth. Although it observed in the path analysis that brand recognition can lead to Brand Trust and trust can also lead to word-of-mouth as confirmed in the previous sections, it necessarily does not make trust as a mediator.

Finding 2: Trust produced no mediation between the two antecedents factors and word-of-mouth

Prior to conducting mediation, the relationship between trust and word of mouth was tested and it The first finding indicated that millennials form the majority (95.6%) of users of ridesharing services than older age groups, although RS services have been in existence in Ghana for more than five years now. This is not a surprise as Godelnik (2017) asserts that because millennials are more digital-savvy, open to change and they form the most influential patronisers of newer business models like Ridesharing. Hence, it can be concluded that trusting ridesharing services and engaging in eWom is a natural fit for Ghanaian millennials.

Figure 7.1: Final Structural Model for Antecedents' Factors and Outcome of Trust in Rideshare Service



χ^2 (Chi-square) = 202.8, df (Degree of Freedom) =116, SRMR = 0.04, RMSEA = 0.05, χ^2/df ratio = 1.74. Numerical figures with asterisk indicate the p-values (significant values) for the factors where *p< 0.05, **p < 0.01, ***p <0.001

Source: Author's construction

7.4 Implications of the Study

The study contributes remarkably to areas of research, practice and policy as presented below:

7.4.1 Implication for Research

In terms of research, the study adds to the body of knowledge on sharing economy by concentrating on the subject of trust in digital economies, particularly in the transport sector. The study examines the relationship between antecedent factors and the development and dynamics of self-regulated, decentralized, trust in ridesharing. Again, there is an imperative contribution by introducing the conceptual model of using for a study in ridesharing within an African setting. Hence, this study amplifies the genenralization power of the conceptual model as it can be added to particular sets of theories that have dominated extant literature in ridesharing. The study further provides empirical support that the conceptualization of trust in IT artefacts can be studied from various trust sources or antecedents. One of the key company-based factors that the study added to the model is brand recognition (Beldad et al., 2010; Kim et al., 2005). The has, therefore, presented generality power to the concept of antecedents and consequence of user trust in digital businesses.

Lastly, the study provides specific antecedent factors that impact consumers to trust and engage in word-of-mouth. That is Perceived Information Quality, Perceived Application Quality, Brand Recognition, Satisfaction from past experience and User experience and proficiency. However, the study settles that the antecedents that lead to consumer/user trust can be subject to change. This is because user behavior may change overtime due to varying factors. Therefore, the findings of the study provide benchmark data which can be used for future research to ascertain if the results will vary in posterity. For example, Brand recognition which is the strongest antecedent factor in this study may not have the same impact over time.

7.4.2 Implication for Practice

Based on the framework used for the study, the study draws attention to specific factors that foster the trust of target riders or consumers in ridesharing. Thus, the current study deems it imperative to indicate the implications of the factors on ridesharing in Ghana. The findings suggested that, consumer perception on trust in rideshare services is largely characterised by brand recognition and perceived information quality. This implies that, a critical look at these factors can serve as pointers for rideshare firms within the Ghanaian e-transport space to obtain fundamental insight of the nature of the rideshare market and the character of users; a knowledge that may be peculiar from a developing country perspective. Hence, there is the need for rideshare firms to learnt and pick up cues that can increase the rate of customer value appreciation through the necessary variables which are more likely to result into user trust and eventually word-of-mouth engagements. For example, In Ghana, brands who leverage on the first mover advantage with proper innovation are easily recognized and eventually trusted especially consumers clearly identify the colors, logos, etc. For instance, all detergents in Ghana are called OMO because they were first recognised through rigorous which is a brand on its own; so are brands like Titus for sardines, Milo for cocoa beverages and Uber for rideshare services.

Finally, the study shows that the trust dimension that is very pronounced is amongst the dimensions of trust are benevolence and integrity. In view of this, rideshare firms can be advised to implement strategies that would heighten the trust levels of their consumers or riders. This implies that, consumers would accept rideshare transport compared traditional ones they perceive digital transport services as more caring and not opportunistic or exploitative. Therefore, rideshare firms are encouraged in to provide incentives and promotions to evince the benevolence aspect of trust. Again, another way that rideshare firms can do to heighten the

trust levels of customers is to improve or maintain high levels of integrity since users are particular about that aspect of trust. For example, rideshare firms should commit to their part of contractual agreements and structural assurances as clearly agreed with their consumers.

7.4.3 Implication for Policy

In the area of policy, law enforcing stakeholders such as government can create enabling environment for appropriate policies, programs, legislation to foster as well as proper regulate digital firms such as rideshare firms. A more tailored set of government policies for rideshare firms will provide a comprehensive guideline and strategy for them to be distinct from traditional taxi systems, to survive and to grow.

7.5 Limitations and Future Research Directions

Every research study is assumed to encounter basic challenges and this study is not an exception. A notable limitation is that, the study employed only the quantitative methodology to deduce the antecedent factor that impacts user trust in ridesharing. Also, the approach allowed the researcher to obtain in-depth knowledge into the issue under study and it was largely influenced by the understanding of the researcher. Lastly, time constraints could not allow the researcher to explore trust from a multi-stakeholder perspective to garner comprehensive understanding as to the various antecedents' trust factors that impact the various stakeholders such as driver, partners and consumers.

Moving on, future research study should be replicate the conceptual model of Filieri et al. (2015) in other business models of the Sharing Economy. This is to test the generalizability of the findings across the different perspectives of sharing in other to understand the different views of opportunities and challenges. It has also been argued by other researches that

impactful antecedent factors that contribute to user trust may not relevant over a long period of time. There is a need for future research to focus on antecedent factors that affect user trust over a long period of time. Lastly, most of the respondents were especially the young, the educated and working professionals. As a result, this research may be portrayed as skewed towards a particularly category of young, educated and working-class people. It would be insightful for future research to delve other categories of people to know if the results presented in this study will be the same.

Table 7.1: Mapping Research Objectives to findings and Contributions

Research Purpose: The main purpose of this study is to investigate antecedent factors and mediating role of consumer trust in ridesharing services.
Perceived Information Quality, Perceived Application Quality, Brand Recognition, User Experience and Proficiency, Satisfaction from Past Experience

Research Objective	Research Findings	Extant Literature	Contributions, Implications and Recommendations
To assess the antecedents of consumer trust in ridesharing services	1. The findings identified that four of the antecedent factors namely perceived Information Quality (IQ), Application Quality (AQ), Brand Recognition (BR) and User experience & Proficiency (UE) have significant relationships with trust. 2. The findings also revealed that when it comes to ridesharing in Ghana, brand recognition has the highest predictive power on trust. 3. The findings also disclosed that, rideshare consumers in Ghana identify Satisfaction from Past Experience (SPE) as a part of User Experience and Proficiency (UE) 4. It was also found that although Uber in Ghana have been in existence for more than half a decade, younger age groups between 18yrs and 24yrs effortless have a trusting embrace for the rideshare service than any groups of persons	Findings on perceived IQ and Trust is congruent with research (Cheung et al., 2008; Filieri et al., 2015; Nicolaou & McKnight, 2006; Yi et al., 2013) Findings on perceived AQ and Trust are coherent with research (Agag & El-Masry, 2017; Wang et al., 2015) Findings on BR and Trust are in alignment with research (S. C. Chen & Dhillon, 2003; Oliveira et al., 2017a) Findings on UE and Trust are in agreement with research (Aiken et al., 2008; Beldad et al., 2010) Young age groups (Millennials) and ridesharing services in agreement with research (Godelnik, 2017b)	About the implications of the study to research, the study adds to the existing studies and knowledge regarding ridesharing within the transport industry, from the context of developing economy. The study introduces a conceptual model can be added to particular sets of theories that have dominated extant literature on trust and the sharing economy The findings in the study provide benchmark data which can be used for future research to ascertain if the results will vary in posterity The study provides empirical support that the conceptualization of trust in IT artefacts can be studied from various trust sources or antecedents

		Finding congruent with extant literature on examining trust antecedents for ridesharing (Amirkiaee & Evangelopoulos, 2018)	Based on the conceptual model used for the study, attention is drawn to specific factors that foster the trust of consumers in ridesharing
Trust mediating antecedent factors and word of mouth (WOM)			
Research Objective	**Research Findings**	**Extant Literature**	**Contributions, Implications and Recommendations**
To determine the mediating role of trust between antecedent factors and word-of-mouth in ridesharing services.	1. The findings show that only Brand Recognition and Information Quality in Reviews had a direct relationship with electronic Word of Mouth outcome. 2. It was also realised that although AQ and UE, had no direct relationship with word of mouth, although they have significant relationships with Consumer trust. 3. Trust played no mediation role between the BR, IQ and word of mouth in ridesharing services.	Finding is congruent with research to examine the role examine the role review and reputation mechanisms play in the sharing economy (Hawlitschek & Adam, 2016) Finding fills the gap on the need to explain customer experience, customer satisfaction that relates to online platforms(Situmorang, Mulyono, & Azmi, 2018)	The study responds to the research gaps considering that very little studies have been done academically regarding the mediating role of trust within the sharing economy. Trust is not playing any mediating role between antecedent factors and word-of-mouth due to the fact that ridesharing is Ghana is perhaps relatively a new business model. The study has also revealed that Consumers of rideshare services do not need to trust the service before recommending to others. Consumers may not trust the service but will still engage in E-word of mouth

REFERENCES

Agag, G. M., & El-Masry, A. A. (2017). Why Do Consumers Trust Online Travel Websites? Drivers and Outcomes of Consumer Trust toward Online Travel Websites. *Journal of Travel Research*, *56*(3), 347–369. https://doi.org/10.1177/0047287516643185

Aiken, K. D., MacKoy, R., Liu, B. S. C., Fetter, R., & Osland, G. (2008). Dimensions of internet commerce trust. *Journal of Internet Commerce*, *6*(4), 1–25. https://doi.org/10.1080/15332860802086136

Ali, H., & Chowdhury, M. F. (2015). Positivism in Understanding the Contemporary Social World: A Critical Discussion, *11*(2), 215–232.

Ambrosino, G., Nelson, J. D., Boero, M., & Pettinelli, I. (2016). Research in Transportation Economics Enabling intermodal urban transport through complementary services : From Flexible Mobility Services to the Shared Use Mobility Agency Workshop 4 . Developing inter-modal transport systems. *Research in Transportation Economics*, *59*, 179–184. https://doi.org/10.1016/j.retrec.2016.07.015

Argan, M. T., Argan, M., Ozer, A., & Kose, H. (2013). A Study of Motivational Factors Associated With Peer-to-Peer (P2P) File-Sharing. *Procedia - Social and Behavioral Sciences*, *99*, 180–188. https://doi.org/10.1016/j.sbspro.2013.10.484

Azam, A. (2015). Investigation of psychological dimensions of trust on e-loyalty: A case of Saudi Arabia consumers. *Journal of Islamic Marketing*, *6*(2), 224–249. https://doi.org/10.1108/JIMA-12-2013-0083

Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, *40*(1), 8–34. https://doi.org/10.1007/s11747-011-0278-x

Bakare, A. S., Owusu, A., & Abdurrahaman, D. T. (2017). The behavior response of the Nigerian youths toward mobile advertising : An examination of the influence of values ,

attitudes and culture. *Cogent Business & Management*, *2*(1), 1–18. https://doi.org/10.1080/23311975.2017.1353231

Bartikowski, B., & Merunka, D. (2015). Modeling the effects of the three dimensions of trust towards the e-vendor on online consumer behavior. *Systèmes D'information & Management*, *20*(1), 9. https://doi.org/10.3917/sim.151.0009

Beldad, A., De Jong, M., & Steehouder, M. (2010). How shall i trust the faceless and the intangible? A literature review on the antecedents of online trust. *Computers in Human Behavior*, *26*(5), 857–869. https://doi.org/10.1016/j.chb.2010.03.013

Belk, R. (2014). You are what you can access : Sharing and collaborative consumption online. *Journal of Business Research*, *67*(8), 1595–1600. https://doi.org/10.1016/j.jbusres.2013.10.001

Berger, T., Chen, C., & Frey, C. B. (2017). Drivers of Disruption? Estimating the Uber Effect. *Journal of Retailing and Consumer Services*, *2018*(40), 295–298. https://doi.org/S0014292118300849

Bernard, H. . (2017). Research Methods In Anthropology (4th Edition). Oxford: Rowman & Littlefield Publishers. https://doi.org/10.1525/aa.2000.102.1.183

Boateng, S. L., & Narteh, B. (2016). Online relationship marketing and affective customer commitment - The mediating role of trust. *Journal of Financial Services Marketing*, *21*(2), 127–140. https://doi.org/10.1057/fsm.2016.5

Brazil, N., & Kirk, D. S. (2016). Uber and Metropolitan Traffic Fatalities in the United States. *American Journal of Epidemiology*, *184*(3), 192–198. https://doi.org/10.1093/aje/kww062

Brenner, W., Karagiannis, D., Kolbe, L., Krüger, J., Leifer, L., Lamberti, H. J., Zarnekow, R. (2014). User, use & utility research: The digital user as new design perspective in business and information systems engineering. *Business and Information Systems Engineering*,

6(1), 55–61. https://doi.org/10.1007/s12599-013-0302-4

Brock, C., Blut, M., Linzmajer, M., & Zimmer, B. (2011). F-Commerce and the Crucial Role of Trust. *Thirty Second International Conference on Information Systems*, 1–11.

Brown, J., Brodcerick, A. J., & Lee, N. (2007). an Empirical Investigation of Entrepreneurial. *Global Journal of Management and Business Research*, *15*(4), 10–22. https://doi.org/10.1002/dir

Calisir, F., Gumussoy, C. A., & Iskin, I. (2011). Factors affecting intention to quit among IT professionals in Turkey. *Personnel Review*, *40*(4), 514–533. https://doi.org/10.1108/00483481111133363

Chae, H., & Ko, E. (2016). Customer social participation in the social networking services and its impact upon the customer equity of global fashion brands. *Journal of Business Research*, *69*(9), 3804–3812. https://doi.org/10.1016/j.jbusres.2015.12.072

Chan, N. D., & Shaheen, S. A. (2012). Ridesharing in North America : Past , Present , and Future, *1647*. https://doi.org/10.1080/01441647.2011.621557

Chari, S. C., Christodoulides, G., Presi, C., Wenhold, J., & Casaletto, J. P. (2007). Consumer Trust in User-Generated Brand Recommendations on Facebook. *Psychology & Marketing*, *24*(9), 763–785. https://doi.org/10.1002/mar

Chen, J. V., Jubilado, R. J. M., Capistrano, E. P. S., & Yen, D. C. (2015). Factors affecting online tax filing - An application of the IS Success Model and trust theory. *Computers in Human Behavior*, *43*, 251–262. https://doi.org/10.1016/j.chb.2014.11.017

Chen, S. C., & Dhillon, G. S. (2003). Interpreting Dimensions of Consumer Trust in E-commerce. *Information Technology and Management*, *4*, 303–318. https://doi.org/10.1023/a:1022962631249

Chen, W., & Hirschheim, R. (2004). A paradigmatic and methodological examination of information systems research from 1991 to 2001. *Information Systems Journal*, *14*(3),

197–235. https://doi.org/10.1111/j.1365-2575.2004.00173.x

Cheng, M. (2016). Current sharing economy media discourse in tourism. *Annals of Tourism Research*, *60*, 111–114. https://doi.org/10.1016/j.annals.2016.07.001

Cheung, C. M. K., Lee, M. K. O., & Rabjohn, N. (2008). The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, *18*(3), 229–247. https://doi.org/10.1108/10662240810883290

Cheyne, C., & Imran, M. (2016). Energy Research & Social Science Shared transport : Reducing energy demand and enhancing transport options for residents of small towns. *Chemical Physics Letters*, *18*, 139–150. https://doi.org/10.1016/j.erss.2016.04.012

Cohen-Almagor, R. (2018). Social responsibility on the Internet: Addressing the challenge of cyberbullying. *Aggression and Violent Behavior*, *39*(February), 42–52. https://doi.org/10.1016/j.avb.2018.01.001

Cohen, B., & Kietzmann, J. (2014). Ride On! Mobility Business Models for the Sharing Economy. *Organization and Environment*, *27*(3), 279–296. https://doi.org/10.1177/1086026614546199

Corbitt, B. J., Thanasankit, T., & Yi, H. (2003). Trust and e-commerce: A study of consumer perceptions. *Electronic Commerce Research and Applications*, *2*(3), 203–215. https://doi.org/10.1016/S1567-4223(03)00024-3

Davidoy, G., & Davidov, G. (2017). The Status of Uber Drivers: A Purposive Approach. *Spanish Labour Law and Employment Relations Journal*, (1). Retrieved from https://ssrn.com/abstract=2877134

Delgado-Ballester, E., & Luis Munuera-Alemán, J. (2003). Brand trust in the context of consumer loyalty. *European Journal of Marketing*, *35*(11/12), 1238–1258. https://doi.org/10.1108/eum0000000006475

Ellyawati, J. (2015). Trust, Antecedent and Consequence in Online Shopping Context: Testing

the Role of E-Wom As Moderating Effect. *International Journal of Management and Applied Science*, (1), 2394–7926. Retrieved from www.the-marketers.com

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the sharing economy : The role of personal photos in Airbnb. *Tourism Management*, *55*, 62–73. https://doi.org/10.1016/j.tourman.2016.01.013

Fang, B., Ye, Q., & Law, R. (2016). Effect of sharing economy on tourism industry employment. *Annals of Tourism Research*, *57*(January 2013), 264–267. https://doi.org/10.1016/j.annals.2015.11.018

Farhana, M. (2012). Brand Elements Lead to Brand Equity : Differentiate or Die. *Information Management and Business Review*, *4*(4), 223–233.

Ferrin, D. L., Cligh, M. C., & Kohles, J. C. (2007). Can I Trust You to Trust Me ? and Cooperation in Interpersonal and Intergroup Relationships. *Group & Organization Management*, 465–499.

Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, *51*, 174–185. https://doi.org/10.1016/j.tourman.2015.05.007

Frenken, K. (2017). Sustainability perspectives on the sharing economy. *Environmental Innovation and Societal Transitions*, *23*(May), 1–2. https://doi.org/10.1016/j.eist.2017.04.004

Frenken, K., & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, *23*, 3–10. https://doi.org/10.1016/j.eist.2017.01.003

Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, *69*(8), 3192–3198. https://doi.org/10.1016/j.jbusres.2015.12.008

García-Vega, M., & Huergo, E. (2017). Trust and technology transfers. *Journal of Economic Behavior and Organization*, *142*, 92–104. https://doi.org/10.1016/j.jebo.2017.07.029

Garson, G. D. (2012). Testing statistical assumptions: Blue Book Series, 1–54.

Gefen, D. (2002). Reflections on the dimensions of trust and trustworthiness among online consumers. *ACM SIGMIS Database*, *33*(3), 38–53. https://doi.org/10.1145/569905.569910

Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services. *Omega*, *32*(6), 407–424. https://doi.org/10.1016/j.omega.2004.01.006

Godelnik, R. (2017a). Environmental Innovation and Societal Transitions Millennials and the sharing economy : Lessons from a " buy nothing new , share everything month " project. *Environmental Innovation and Societal Transitions*, *23*, 40–52. https://doi.org/10.1016/j.eist.2017.02.002

Godelnik, R. (2017b). Millennials and the sharing economy: Lessons from a "buy nothing new, share everything month" project. *Environmental Innovation and Societal Transitions*, *23*, 40–52. https://doi.org/10.1016/j.eist.2017.02.002

Greco, L. Del, Walop, W., & Mccarthy, R. H. (1987). Clinical Epidemiology Questionnaire development: 2. Validity and reliability. *Canadian Medical Association Journal*, *136*, 699–700. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1491926/pdf/cmaj00139-0021.pdf

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/mtp1069-6679190202

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the*

Academy of Marketing Science, *40*(3), 414–433. https://doi.org/10.1007/s11747-011-0261-6

Hawlitschek, F., & Adam, M. T. P. (2016). Trust in the Sharing Economy : An Experimental Framework Trust in the Sharing Economy : An Experimental Framework, (December).

Heeks, R. (2008). *Development Informatics*. *Development* (Vol. 32). https://doi.org/10.1016/0736-5853(84)90003-0

Hellwig, K., Morhart, F., & Girardin, F. (2007). Exploring Different Types of Sharing : A Proposed Segmentation of the Market for " Sharing " Businesses, 891–906. https://doi.org/10.1002/mar

Hess, J., & Story, J. (2005). Trust-based commitment: Multidimensional consumer-brand relationships. *Journal of Consumer Marketing*, *22*(6), 313–322. https://doi.org/10.1108/07363760510623902

Ilker, E., Sulaiman, A. M., & Rukayya, S. A. (2016). A comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *61*(3), 105–111. https://doi.org/10.6224/JN.61.3.105

Jarvenpaa, S., & Teigland, R. (2017). Trust in Digital Environments : From the Sharing Economy to Decentralized Autonomous Organizations. *Proceedings of the 50th Hawaii International Conference on System Sciences*, 5812–5816.

Jordan, J. M. (2017). Challenges to large-scale digital organization : the case of Uber. https://doi.org/10.1186/s41469-017-0021-2

Kalakumari, T., & Sekah, M. (2012). A Conceptual Study of Building a Strong Brand. *International Journal of Multidisciplinary Research*, *2*(1), 7.

Kashyap, R., & Bhatia, A. (2018). Taxi Drivers and Taxidars: A Case Study of Uber and Ola in Delhi. *Journal of Developing Societies*, *34*(2), 169–194. https://doi.org/10.1177/0169796X18757144

Kestle, R. (2013). Online Trust: Do People Trust the Internet and the E-Commerce Environment? *Thesis*.

Khurram, M., & Sheeraz, M. (2018). The Role of Brand Recall , Brand Recognition and Price Consciousness in Understanding Actual Purchase. *Journal of Research in Social Sciences*, (2), 219–241.

Kim, D. J., Song, Y. I., Braynov, S. B., & Rao, H. R. (2005). A multidimensional trust formation model in B-to-C e-commerce : a conceptual framework and content analyses of academia / practitioner perspectives, *40*, 143–165. https://doi.org/10.1016/j.dss.2004.01.006

Kooti, F., Grbovic, M., Aiello, L. M., Djuric, N., Radosavljevic, V., & Lerman, K. (2018). Analyzing Uber's Ride-sharing Economy, (January), 574–582. https://doi.org/10.1145/3041021.3054194

Krabbe, P. F. M., Stalmeier, P. F. M., Lamers, L. M., & Busschbach, J. J. V. (2006). Testing the interval-level measurement property of multi-item visual analogue scales. *Quality of Life Research*, *15*(10), 1651–1661. https://doi.org/10.1007/s11136-006-0027-7

Lee, Z. W. Y., Chan, T. K. H., Balaji, M. S., & Chong, A. Y.-L. (2017). Why people participate in the sharing economy: an empirical investigation of Uber. *Internet Research*, 0. https://doi.org/10.1108/IntR-01-2017-0037

Leipzig, T. Von, Gamp, M., Manz, D., & Schöttle, K. (2017). Initialising customer-orientated digital transformation in enterprises. *Procedia Manufacturing*, *8*(October 2016), 517–524. https://doi.org/10.1016/j.promfg.2017.02.066

Leogrande, D., d'Ovidio, F. D., Schinzano, A., Viola, D., & Mancarella, R. (2014). A Multivariate Analysis of the Quality of Public Transport Services. *Procedia Economics and Finance*, *17*(14), 238–247. https://doi.org/10.1016/s2212-5671(14)00868-5

Lewicki, R. J., & Brinsfield, C. (2017). Trust Repair. *Annual Review of Organizational*

Psychology and Organizational Behavior, *4*(1), 287–313. https://doi.org/10.1146/annurev-orgpsych-032516-113147

Lin, L. Y., & Ching Yuh, C. Y. (2010). The influence of corporate image, relationship marketing, and trust on purchase intention: the moderating effects of word□of□mouth. *Tourism Review*, *65*(3), 16–34. https://doi.org/10.1108/16605371011083503

Liu, C., Lin, C., & Deng, K. (2015). Online knowledge sharing experience with Creative Commons. https://doi.org/10.1108/OIR-12-2013-0280

Liu, F., & Myers, M. D. (2011). An analysis of the AIS basket of top journals. *Journal of Systems and Information Technology*, *13*(1), 5–24. https://doi.org/10.1108/13287261111118322

Maskey, R., Fei, J., & Nguyen, H. O. (2018). Use of exploratory factor analysis in maritime research. *Asian Journal of Shipping and Logistics*, *34*(2), 91–111. https://doi.org/10.1016/j.ajsl.2018.06.006

Mcevoy, P., & Richards, D. (2006). A critical realist rationale for using a combination of quantitative and qualitative methods. *Journal of Research in Nursing*, *11*(1), 66–78. https://doi.org/10.1177/1744987106060192

McKnight, H., Choudhury, V., & Kacmar, C. (2002). Developing and Vaidating Trust Measures for E-Commerce. *Information Systems Research*, *13*(3), 334–359. https://doi.org/10.1287/isre.13.3.334.81

Milanova, V., & Maas, P. (2017). Sharing intangibles : Uncovering individual motives for engagement in a sharing service setting ☆. *Journal of Business Research*, *75*, 159–171. https://doi.org/10.1016/j.jbusres.2017.02.002

Mittendorf, C. (2016). What Trust means in the Sharing Economy: A provider perspective on Airbnb.com. *Americas Conference on Information Systems*, 1–10.

Mittendorf, C. (2017). The Implications of Trust in the Sharing Economy–An Empirical

Analysis of Uber. *Proceedings of the 50th Hawaii International Conference on System Sciences*, 5837–5846. Retrieved from http://scholarspace.manoa.hawaii.edu/handle/10125/41866

Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, *58*(3), 20–38. https://doi.org/10.1177/002224299405800302

Moriuchi, E., & Takahashi, I. (2016). Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade. *Australasian Marketing Journal*, *24*(2), 146–156. https://doi.org/10.1016/j.ausmj.2016.02.006

Muntinga, M. E., Steyerburg, E., Blom, J., Olde-Rikkert, M. G. M., Krabbe, P. F. M., Melis, R. J. F., … Bleijenberg, N. (2017). Measurement properties of the EQ-5D across four major geriatric conditions: Findings from TOPICS-MDS. *Health and Quality of Life Outcomes*, *15*(1), 1–11. https://doi.org/10.1186/s12955-017-0616-x

Nicolaou, A. I., & McKnight, D. H. (2006). Perceived information quality in data exchanges: Effects on risk, trust, and intention to use. *Information Systems Research*, *17*(4), 332–351. https://doi.org/10.1287/isre.1060.0103

Ohnemus, L. (2009). B2B branding : A financial burden for shareholders ? *Business Horizons*, 159–161. https://doi.org/10.1016/j.bushor.2008.10.004

Oliveira, T., Alhinho, M., Rita, P., & Dhillon, G. (2017a). Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behavior*, *71*, 153–164. https://doi.org/10.1016/j.chb.2017.01.050

Oliveira, T., Alhinho, M., Rita, P., & Dhillon, G. (2017b). Modelling and testing consumer trust dimensions in e-commerce. *Computers in Human Behavior*, *71*, 153–164. https://doi.org/10.1016/j.chb.2017.01.050

Owusu, A., Agbemabiese, G. C., Daha, T. A., & Bakare, A. S. (2017). Determinants of

Business Intelligence Systems Adoption in Developing Countries : an Empirical Analysis From Ghanaian Banks. *Journal of Internet Banking and Commerce*, *22*(May), 0–25. Retrieved from https://www.researchgate.net/publication/317584080_Determinants_Of_Business_Intelligence_Systems_Adoption_In_Developing_Countries_An_Empirical_Analysis_From_Ghanaian_BankS%0Ahttp://www.icommercecentral.com/open-access/determinants-of-business-intelligence

Paundra, J., Rook, L., Dalen, J. Van, & Ketter, W. (2017). Preferences for car sharing services : Effects of instrumental attributes and psychological ownership. *Journal of Environmental Psychology*, *53*, 121–130. https://doi.org/10.1016/j.jenvp.2017.07.003

Pazaitis, A., De Filippi, P., & Kostakis, V. (2016). Blockchain and value systems in the sharing economy: The illustrative case of Backfeed. *Technological Forecasting and Social Change*, (July 2016), 0–1. https://doi.org/10.1016/j.techfore.2017.05.025

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*, *63*(1), 539–569. https://doi.org/10.1146/annurev-psych-120710-100452

Posen, H. A. (2015). Ridesharing in the Sharing Economy : Should Regulators Impose Uber, *1*.

Puschmann, T., & Alt, R. (2016). Sharing economy. *Business and Information Systems Engineering*, *58*(1), 93–99. https://doi.org/10.1007/s12599-015-0420-2

Puttaswamy, K. P. N., Zhao, B. Y., & Barbara, U. C. S. (2010). Preserving Privacy in Location-based Mobile Social Applications.

Quattrone, G., Proserpio, D., Quercia, D., Capra, L., & Musolesi, M. (2016). Who Benefits from the "Sharing" Economy of Airbnb?, 1385–1393. https://doi.org/10.1145/2872427.2874815

Rey, M., Aiello, L. M., Rey, M., & Lerman, K. (2017). Analyzing Uber ' s Ride-sharing Economy, (January), 574–582.

Rönkkö, M., & Evermann, J. (2013). A Critical Examination of Common Beliefs About Partial Least Squares Path Modeling. *Organizational Research Methods*, *16*(3), 425–448. https://doi.org/10.1177/1094428112474693

Roos, D., & Hahn, R. (2017). Does shared consumption a ff ect consumers â€™ values , attitudes , and norms ? A panel study. *Journal of Business Research*, *77*(April), 113–123. https://doi.org/10.1016/j.jbusres.2017.04.011

Shankar, V., Urban, G. L., & Sultan, F. (2002). Online trust: A stakeholder perspective, concepts, implications, and future directions. *Journal of Strategic Information Systems*, *11*(3–4), 325–344. https://doi.org/10.1016/S0963-8687(02)00022-7

Simmons, R. O. (2018). Disruptive Digital Technology Services : The Case of Uber Car Ridesharing in Ghana, 1–10.

Situmorang, S. H., Mulyono, H., & Azmi, A. (2018). Effect Of Servicescape And Customer Experience On Social Location Marketing (Case Study At Caf, In Medan), *46*(Ebic 2017), 546–552. https://doi.org/10.2991/ebic-17.2018.86

Straub, D. W. (1989). Validating Instruments in MIS Research. *MIS Quarterly*, *13*(2), 147. https://doi.org/10.2307/248922

Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics. *Harper Collins*, 980. https://doi.org/10.1037/022267

Tadelis, S. (2016). Reputation and Feedback Systems in Online Platform Markets. *Annual Review of Economics*, *8*(1), 321–340. https://doi.org/10.1146/annurev-economics-080315-015325

Tongco, M. D. C. (2007). 126-454-1-Pb. *Ethnobotany Research and Applications*, *5*, 147–158. https://doi.org/10.17348/era.5.0.147-158

Urbach, N., & Ahlemann, F. (2010). Structural Equation Modeling in Information Systems Research Using Partial Least Squares. *Journal of Information Technology Theory and Application JITTA*, *11*(2), 2.

Urbano, J., Rocha, A. P., & Oliveira, E. (2013). The impact of benevolence in computational trust. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *8068 LNAI*, 210–224. https://doi.org/10.1007/978-3-642-39860-5_16

Vaskelainen, T., & Tura, N. (2018). Exploring Problems Associated With the Sharing Economy. *EJBO Electronic Journal of Business Ethics and Organization Studies*, *23*(1). Retrieved from http://ejbo.jyu.fi/pdf/ejbo_vol23_no1_pages_37-45.pdf

Wang, L., Law, R., Guillet, B. D., Hung, K., & Fong, D. K. C. (2015). Impact of hotel website quality on online booking intentions: ETrust as a mediator. *International Journal of Hospitality Management*, *47*, 108–115. https://doi.org/10.1016/j.ijhm.2015.03.012

Wu, J., Ma, P., & Xie, K. L. (2017). In sharing economy we trust: the effects of host attributes on short-term rental purchases. *International Journal of Contemporary Hospitality Management*, 00–00. https://doi.org/10.1108/IJCHM-08-2016-0480

Xanthopoulos, S., & Xinogalos, S. (2013). A comparative analysis of cross-platform development approaches for mobile applications. *Proceedings of the 6th Balkan Conference in Informatics on - BCI '13*, 213. https://doi.org/10.1145/2490257.2490292

Xu, J. (David), Cenfetelli, R. T., & Aquino, K. (2016). Do different kinds of trust matter? An examination of the three trusting beliefs on satisfaction and purchase behavior in the buyer–seller context. *Journal of Strategic Information Systems*, *25*(1), 15–31. https://doi.org/10.1016/j.jsis.2015.10.004

Yamane, T. (1967). Stastics; An introductory analysis, 869. https://doi.org/10.2307/2282703

Yi, M. Y., Yoon, J. J., Davis, J. M., & Lee, T. (2013). Untangling the antecedents of initial

trust in Web-based health information: The roles of argument quality, source expertise, and user perceptions of information quality and risk. *Decision Support Systems*, *55*(1), 284–295. https://doi.org/10.1016/j.dss.2013.01.029

Zahedi, F. "Mariam," & Song, J. (2008). Dynamics of Trust Revision: Using Health Infomediaries. *Journal of Management Information Systems*, *24*(4), 225–248. https://doi.org/10.2753/mis0742-1222240409

Zervas, G., Proserpio, D., & Byers, J. W. (2015). The Impact of the Sharing Economy on the Hotel Industry. *Proceedings of the Sixteenth ACM Conference on Economics and Computation - EC '15*, 637–637. https://doi.org/10.2139/ssrn.2366898

Zhang, T. C., Jahromi, M. F., & Kizildag, M. (2018). Value co-creation in a sharing economy: The end of price wars? *International Journal of Hospitality Management*, *71*(May 2017), 51–58. https://doi.org/10.1016/j.ijhm.2017.11.010

APPENDIX A: RESEARCH QUESTIONNAIRE

UNIVERSITY OF GHANA BUSINESS SCHOOL
DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS

QUESTIONNAIRE

Introduction:

I am grateful for your valuable contribution in advance. Your involvement is to the success of this research. My name is Samuel Aboagye Mensah, a second-year student pursuing MPhil. Management Information Systems at the University of Ghana Business School. The purpose of this study is to explore trust antecedent factors that influence the behaviour of users to engage in word of mouth in ridesharing services. This questionnaire is subject to your willingness to participate and you are at liberty to discontinue this research at any time. I also assure you that any data collected will be treated as confidential and used for research purpose only. Thank you for your kindest cooperation.

Background characteristics - Please tick [√] the option that corresponds to your response where appropriate and fill in your response where appropriate.

1. **What is your gender?**

   [ ] Male [ ] Female

2. **How old are you? Please tick where appropriate.**

   [ ] < 18 yrs
   [ ] 18 -24 yrs
   [ ] 25 – 34yrs
   [ ] 35 – 44yrs
   [ ] 45 – 54yrs
   [ ] 55 – 64yrs
   [ ] > 64 yrs

3. **What is your highest completed level of education?**

   [ ] Up to Basic [ ] Secondary [ ] Undergraduate [ ] Postgraduate [ ]
   Please specify others: ……

4. **What is your main occupation? Please specify: …….**

   [ ] Student
   [ ] Intern
   [ ] Unemployed
   [ ] Self-Employed
   [ ] Employed for wages **[ ]** Other

5. **What is your average income in a month?**

   [ ] < 1000 [ ] 1001 – 2000 [ ] > 200

6. **How many years have you used the Uber service?**

   [ ] < 1 year [ ] 1- 2 years [ ] 3 - 5 years [ ] > 5 years

7. **On average How often do you use the Uber service in a week?**

   [ ] Never [ ] Rarely [ ] Occasionally [ ] Often [ ] Always

8. **What do you usually use the Uber service for?**

[ ] Trips
[ ] Trips to School
[ ] For special occasions
[ ] General Mobility for all purposes.

SECTION A – ANTECEDENT FACTORS FOR TRUST

Trust antecedent scales namely ***Application Quality, Information Quality, User experience, Brand recognition and Satisfaction from past experiences*** *were retrieved from:*
Directions: Indicate the extent to which you agree with the assertions below by ticking only one of the answers.
The following are **antecedents that may influence a user to trust Uber services**. As a consumer, of Uber services, kindly rate your level of agreement for each item on a scale of 1-7 by ticking the appropriate space (where 1 means strongly disagree and 7 means strongly agree).
1= Strongly Disagree | **2** = Disagree | **3** = Slightly Disagree **4** = Neutral | **5** = Slightly Agree | **6** = Agree | **7** = Strongly Agree

	RATINGS	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	Application Quality							
1.	With the Uber application everything is easy to understand							
2.	The application is simple to use even when it is for the first time							
3.	The interface of Uber App has well-organized buttons							
4.	The Uber App has customized search functions							
5.	The Uber App provides opportunities to interact with other customers and drivers							
6.	The Uber App loads faster even under limited internet connectivity							
7.	Is easily accessible from different locations							
8.	The organization of the contents of the Uber app makes it easy for me to know where I am navigating it							

	Information Quality							
9.	Information on Uber is Timely							
10.	Information on Uber is relevant to my needs							
11.	Information on Uber is complete and updated							
12.	Information concerning drivers of the Uber is reliable.							
13.	I trust consumer reviews and ratings on Uber.							
14.	Adequate feedback from Uber is given when needed.							
	User experience and proficiency							
15.	Uber has provided me with a great experience							
16.	How would you rate your level of experience in terms of be Uber?							
17.	Please would you rate your level of experience with online recommendations?							
	Brand recognition							
18.	In my opinion, Uber has a good image in the minds of consumers.							

19.	In general, I believe that Uber always fulfills the promises that it makes to its customers.							
	Satisfaction from past experiences							
20.	I am satisfied with the information I have received from this travel reviews website.							
21.	I am satisfied with my previous experiences with Uber.							
22.	I am satisfied with the customer services of Uber.							
23.	I am satisfied with the pricing system of Uber.							

SECTION B – TRUST DIMENSIONS

The following are **trust measures reflect a user's interest to make informed decisions**. As a consumer, of Uber services, kindly rate your level of agreement for each item on a scale of 1-7 by ticking the appropriate space (where 1 means strongly disagree and 7 means strongly agree).
1= Strongly Disagree | **2** = Disagree | **3** = Slightly Disagree **4** = Neutral | **5** = Slightly Agree | **6** = Agree | **7** = Strongly Agree

	RATINGS	1	2	3	4	5	6	7
	TRUST measures							
T1.	I am familiar with Promotion packages offered by Uber							
T2.	There are occasionally free rides for Uber Users.							
T3.	Uber is concerned about my welfare as a user.							
T4.	I believe Uber has a good reputation of being caring							
T5.	Uber is known to adhere to good standards in their dealings with its customers.							
T6.	There is transparent communication between Uber and its users.							
T7.	Consumer complaints are given necessary attention.							
T8.	I believe in the privacy and security policies of Uber							
T9.	I trust Uber to provide me with quality ride services.							
T10.	Uber has the capability to provide solutions to issues I face using Uber.							

SECTION C- TRUST OUTCOMES

The following are **outcome of trust may be made by users**. As a consumer, of Uber services, kindly rate your level of agreement for each item on a scale of 1-7 by ticking the appropriate space (where 1 means strongly disagree and 7 means strongly agree).
1= Strongly Disagree | **2** = Disagree | **3** = Slightly Disagree **4** = Neutral | **5** = Slightly Agree | **6** = Agree | **7** = Strongly Agree

	RATINGS	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	Word of mouth							
1.	I usually mention to others that I seek good ride services from Uber.							
2.	I make sure that others know that I rely on Uber for my travel needs.							
3.	I speak positively about Uber to others							
4.	I do not recommend Uber to others although I use it							
5.	I have recommended this Uber service to close personal friends							

Closing Remarks:
I am done with my questions;

1. Do you have any general comments about the Uber platform you may want to share?

2. Are there any available documents (manuals, brochures, flyers) that can provide me with further information?

Thanks for your time and participation

APPENDIX B – SPSS DESCRIPTIVE STATISTICS

	N	Mini	Max	Mean	Std. Dev.	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Statistic	Std. Error	Stat	Std. Error
AQ1	364	1.00	7.00	5.3022	1.32860	-.660	.128	.318	.255
AQ2	364	1.00	7.00	5.0522	1.42586	-.476	.128	-.145	.255
AQ3	364	1.00	7.00	5.1071	1.37151	-.581	.128	.249	.255
AQ4	364	1.00	7.00	4.6566	1.75030	-.429	.128	-.697	.255
AQ5	364	1.00	7.00	4.1374	1.75585	-.177	.128	-.832	.255
AQ6	364	1.00	7.00	3.2582	1.62938	.254	.128	-.622	.255
AQ7	364	1.00	7.00	4.0165	1.74859	-.072	.128	-.889	.255
AQ8	364	1.00	7.00	4.7225	1.39359	-.379	.128	-.107	.255
IQ1	364	1.00	7.00	4.5604	1.46931	-.400	.128	-.182	.255
IQ2	364	1.00	7.00	4.7857	1.29768	-.342	.128	-.169	.255
IQ3	364	1.00	7.00	4.7692	1.32638	-.325	.128	.023	.255
IQ4	364	1.00	7.00	4.6264	1.55981	-.410	.128	-.307	.255
IQ5	364	1.00	7.00	4.6154	1.44519	-.342	.128	-.134	.255
IQ6	364	1.00	7.00	4.6099	1.45133	-.299	.128	-.233	.255
UE1	364	1.00	7.00	4.9698	1.34908	-.392	.128	-.110	.255
UE2	364	1.00	7.00	4.8819	1.34627	-.417	.128	-.128	.255
UE3	364	1.00	7.00	4.7775	1.28455	-.331	.128	.156	.255
BR1	364	1.00	7.00	4.9451	1.38160	-.720	.128	.556	.255
BR2	364	1.00	7.00	4.6621	1.41756	-.443	.128	.070	.255
SPE1	364	1.00	7.00	4.6264	1.38388	-.387	.128	.045	.255
SPE2	364	1.00	7.00	4.8187	1.48457	-.732	.128	.325	.255
SPE3	364	1.00	7.00	4.6978	1.48153	-.533	.128	-.029	.255
SPE4	364	1.00	7.00	4.3956	1.65064	-.334	.128	-.510	.255
T1	364	1.00	7.00	4.2308	1.82771	-.225	.128	-.879	.255
T2	364	1.00	7.00	3.8901	1.92819	-.096	.128	-1.142	.255
T3	364	1.00	7.00	4.4121	1.56246	-.357	.128	-.339	.255
T4	364	1.00	7.00	4.5302	1.55405	-.422	.128	-.242	.255
T5	364	1.00	7.00	4.6566	1.42593	-.399	.128	-.023	.255
T6	364	1.00	7.00	4.5797	1.47960	-.328	.128	-.229	.255
T7	364	1.00	7.00	4.4203	1.61492	-.312	.128	-.500	.255
T8	364	1.00	7.00	4.6154	1.43179	-.197	.128	-.370	.255
T9	364	1.00	7.00	4.8489	1.39330	-.441	.128	-.120	.255
T10	364	1.00	7.00	4.6758	1.38244	-.271	.128	-.133	.255
WoM1	364	1.00	7.00	4.5577	1.53184	-.334	.128	-.257	.255
WoM2	364	1.00	7.00	4.4011	1.55473	-.334	.128	-.418	.255

WoM3	364	1.00	7.00	4.7335	1.38384	-.266	.128	-.196	.255
WoM4	364	1.00	7.00	3.0852	1.75053	.414	.128	-.870	.255
WoM5	364	1.00	7.00	5.0577	1.47876	-.593	.128	-.170	.255
Valid N (listwise)	364								

Source: Field Survey

APPENDIX C – PATTERN MATRIX USED FOR SEM

Pattern Matrix[a]

	Factor					
	1	**2**	**3**	**4**	**5**	**6**
T4	.852					
T7	.821					
T3	.819					
T6	.738					
T2	.687					
T10	.553					
IQ3		.813				
IQ2		.789				
IQ1		.669				
IQ4		.557				
AQ2			.831			
AQ1			.675			
AQ3			.699			
AQ6			.669			
AQ7			.656			
WOM1				.700		
WOM5				.641		
WOM2				.638		
WOM3				.551		
SPE2					.708	
UE3					.651	
UE2					.526	
BR1						.830
BR2						.598

Extraction Method: Maximum Likelihood.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

APPENDIX D – VARIANCE TABLE

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	16.096	42.357	42.357	15.659	41.207	41.207	14.098
2	2.274	5.984	48.342	1.886	4.964	46.170	9.869
3	1.805	4.750	53.092	1.298	3.416	49.586	8.232
4	1.559	4.103	57.195	.922	2.427	52.013	9.431
5	1.334	3.510	60.705	.939	2.471	54.483	9.159
6	1.224	3.220	63.926	.849	2.235	56.719	1.390
7	.973	2.560	66.486				
8	.917	2.413	68.899				
9	.847	2.228	71.128				
10	.833	2.193	73.321				
11	.733	1.929	75.250				
12	.716	1.885	77.135				
13	.626	1.649	78.784				
14	.558	1.469	80.253				
15	.534	1.405	81.658				
16	.515	1.355	83.014				
17	.488	1.283	84.297				
18	.447	1.176	85.473				
19	.419	1.102	86.575				
20	.405	1.066	87.640				
21	.378	.994	88.634				
22	.371	.976	89.610				
23	.359	.944	90.554				
24	.352	.925	91.480				
25	.324	.853	92.333				
26	.296	.779	93.112				
27	.285	.751	93.862				
28	.267	.704	94.566				
29	.263	.693	95.259				
30	.247	.651	95.910				
31	.245	.644	96.554				
32	.239	.629	97.183				
33	.224	.591	97.773				
34	.201	.529	98.303				

35	.188	.495	98.798				
36	.163	.428	99.226				
37	.152	.400	99.625				
38	.142	.375	100.000				

Extraction Method: Maximum Likelihood.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

APPENDIX E: ARTICLE DISTRIBUTION

Literature	Theory	Focus	Gap
Lee, Chan, Balaji, Chong, and Lee (2018)	Theory of reasoned action	Users' intention to participate in the sharing economy	Need for studies to examine inhibiting and motivating forces affecting users' intention to participate in the sharing economy
Bartikowski and Merunka (2015)	Technology Acceptance Model	Online consumer Trust	Need to study trust from different technology acceptance theory perspective
Filieri, Alguezaui, and Mcleay, (2015)	Conceptual	Antecedents and consequences of online trust	Need to study consumer trust from a developing country perspective
Oliveira, Alhinho, Rita, and Dhillon, (2017)	Path Model	Consumer trust dimensions in e-commerce	Need to study trust from different services and geographic location
Mittendorf (2017)	Trust and Power	Implications of trust in ridesharing industry	Need to investigate the need of trust in passengers to form driver intentions on Uber
Jarvenpaa and Teigland (2017)	Conceptual	Trust in sharing economy	Need for studies that explain the relationship between trust in an organization and trust in the organization's technology-based offerings
García-Vega and Huergo (2017)	Conceptual	Effects of trust on technology transfers	Need to study the effects of trust on technology transfer from a developing country perspective
Beugelsdijk and Klasing (2016)	Social identity theory	Trust and shared values	Need for research on the role of diversity to include value diversity as an aspect of diversity

Literature	Theory	Focus	Gap
Moriuch and Takahashi (2016)	Expectation confirmation theory	Trust and repeat purchase of online shoppers	Need to replicate the study from other ethnic groups
Simmons (2018)	Affordance theory	Disruptive digital technology services	Need to use theory to explain service change in the taxi industry, and the need to intensify the argument against disruptive digital technology companies in or outside Ghana.
Azam (2015)	Consumer trust decision-making model	Consumer trust and e-loyalty	Need for a comparative study between Muslim and non-Muslim brands
Berger, Frey, and Chinchih (2017)	Conceptual	Technological change and Uber	Further research is required to guide policy making surrounding Uber and the sharing economy
Trang, Busse, Schmidt, Falk, and Marrone (2015)	Theory of Reasoned Action	Collaborative consumption services adoption	Need for studies from developing countries perspective
Möhlmann (2016)	Conceptual	Trusting beliefs towards the platform, trusting beliefs towards the seller	Future research should assess trust-building measures and the trust concept and in different industries.
Han, Koo, and Chung (2016)	Fit theory	Trust in cognitive based Airbnb	Need for studies using other theories to explain trust in sharing economy
Guido and Jacovella (2016)	Conceptual	Uber's web of relationships with different categories of users	Need to explore trust relationships among Uber users
Moffat and Zhang (2014)	Path Model	The paths to social licence to operate	Need for studies that examine antecedents of acceptance and approval

Literature	Theory	Focus	Gap
Xin, Tan, and Techatassanasoontorn, 2013	Trust Model	Dimensions of trust antecedents	Need for future research to compare pre-adoption and post-adoption of mobile payment trust behaviour and find out whether trust behaviours change over time
Kooti, Grbovic, Aiello, Djuric, Radosavljevic, and Lerman (2017)	Conceptual	Factors affecting user participation in the sharing economy (Uber)	Need to examine factors affecting user participation from developing countries perspectives
Kim and Ahn (2007)	Theory of Reasoned Action	Antecedents and consequences of trust in the e-marketplace	Need for a study that offers understanding in how customer's trust grows and declines in the e-marketplace
Cohen and Kietzmann (2014)	Agency theory	Shared mobility business models for sustainability (ridesharing)	Need for research to shed light on the future evolution of the sharing economy in smart and sustain-able city initiatives around the globe.
Zhang, Jahromi, and Kizildag (2018)	Marketing Exchange theory	Value co-creation in a sharing economy	Need to study the cumulative effects of additional dimensions of value co- creation in the sharing economy that shape service-oriented firms' corporate strategies and sustainable competitive advantage
Hawlitschek, Teubner, Adam, Borchers, Moehlmann, and Weinhardt (2016)	Social Identity theory	User representation for trust on sharing economy platforms	Need for studies to examine the role review and reputation mechanisms play in the sharing economy

Literature	Theory	Focus	Gap
Matzner, Chasin, and Todenhöfer (2015)	Theory of Planned Behaviour	Antecedents of participation in IT-enabled sharing services	Need for research that clarify the antecedents of participation in the context of collaborative consumption
Mulyono and Situmorang (2018)	Path Model	Customer experience in online platforms	Further studies are needed to explain customer experience, customer satisfaction and loyalty
Amirkiaee and Evangelopoulos (2018)	Conceptual	Reasons for participating in Rideshare	Need to examine trust as antecedent for ridesharing