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Consumer perceptions of long-distance ride-sharing services in South Africa

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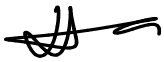
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Declaration

I, **Nyasha Horonga**, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Nyasha Horonga 

Signed at Boksburg

On the 19 day of August 2024

Our premise is that many of the circumstances that seem to block us in our daily lives may only appear to do so based on a framework of assumption we carry with us. Draw a different frame around the same set of circumstances and new pathways come into view
The Art of Possibility - R.S. Zander

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Abstract

The research focuses on the analysis of consumer perception towards a long-distance peer-to-peer ridesharing service. Due to the rising cost of living, travelling has become a challenge. While other people are already hitchhiking to reduce spending on travelling, some are a bit hesitant due to the risk associated with it. The research proposes that to address challenges associated with hitchhiking, a platform which only allows those who have been vetted for security purposes can access and share their travelling plans. Such a platform which ideally works if both the driver and the passenger have an intention to travel the same distance is linked to shared travelling costs. Qualitative analysis is used to identify the factors that affect consumer perception towards adoption of long-distance ridesharing services and quantitative analysis is used to analyse and rank the factors. This research examines the seven factors which include: perceived usefulness, perceived risk, perceived ease of use, compatibility, trust, social influence, and facilitating conditions. These factors are analysed to identify the socio-economic attributes that drive them. Results obtained highlight that there is a relationship between perceived usefulness and travelling frequency, age, level of education, ridesharing history and earnings. The younger generation agrees that such a platform is useful while the older and more educated population do not agree. It is believed that this is because they still have enough funds to travel alone. Results also suggest that social influence has a relationship with earnings and age. The older population do not agree that they can be influenced by society when choosing to adopt long-distance ridesharing while the younger generation is more likely to be influenced. Results also show that those with higher levels of education and high-income earners do consider risk as an important factor when adopting ridesharing services while the younger generation is comfortable with the level of risk they are used to in the current ehailing services. Participants in the survey were also asked to rank these factors according to their importance. The ranking was compared to a similar exercise which was done in India. It was found that these rankings are different meaning that studies done in other countries may not necessarily apply in another country.

INTRODUCTION

Background

Ride sourcing is the practice of sourcing a vehicle when travelling and has been traditionally limited to family members. However, the advancement in mobile technology has made short-distance ride sourcing common even among strangers (Motsi et al., 2023; Sutherland & Jarrahi, 2018). As a result of these technological advancements, there have been changes in consumer behaviour to align with the changes in the transportation industry (Dwivedi et al., 2021). These mobile technology advancements have enabled individuals to share their trip details on an online platform that facilitates the matching of riders and drivers (Dwivedi et al., 2021).

The technology-driven ride-sourcing business models have disrupted the conventional transport system. Uber was founded in 2009 and within ten years, it was servicing over 65 countries and over 700 cities with close to 4 million registered drivers (Entrepreneur First, 2023). DiDi which was founded in June 2012 is now being reported to service 450 million users with 21 million registered drivers (DiDi, 2024). These reported numbers highlight the pace at which the ridesharing platforms have grown in just 10 years. Some of the reasons for the rapid adoption pace have been reported as the ease of use, provision of door-to-door services, reduced travelling cost compared to public transport and vehicle ownership (Gomez et al., 2021) and relatively short waiting time.

While these platforms started as ride-sourcing (ehailing) platforms, they have also evolved to include ridesharing services. Ridesharing has primarily been used as an alternative mode of transport in congested areas and is also believed to have the potential to minimize congestion as many people are spending more time on the road. In some cases, it means that people would work while they are being driven to work hence the increase in productivity.

In South Africa, people travel long distances between cities and towns using long-distance taxis, and, in some cases, they resort to hitchhiking. Hitchhiking is defined by (Serumula & Vanderschuren, 2024) as sourcing a ride from a private vehicle or a taxi that does not have a route permit at an affordable cost. There have been many cases of criminals posing as hitchhikers or car owners and this has made hitchhiking unsafe for both drivers and

hikers (Businesstech, 2021; Parys Gazette, 2017). In addition, long-distance taxi drivers have already started intimidating hitchhikers forcing them back to long-distance taxis (Gilili, 2018; GroundUp, 2017).(Serumula & Vanderschuren, 2024) is also said to be common in areas with high poverty, high educational and gender inequality and high unemployment.

Long-distance taxi ranks are also not always close to the community but rather situated in town. This means that, for one to take the taxi, they would need to first take local short-distance taxis to town. To add to the challenges, short-distance taxi ranks are in some cases not close to the long-distance taxi ranks. This means that once one has arrived in town, they would need to walk across town to get to the long-distance taxi ranks. With the reported increase in crime especially in towns, safety in these towns is not always guaranteed. These first and last leg challenges are what make using traditional taxis challenging.

On the other hand, the increase in travelling costs also makes it difficult for car owners to drive to different destinations with the price of fuel reaching the highest levels in September 2021 (AA, 2021). To make some of their journeys possible, car owners are having to risk their lives by stopping for hitchhikers.

Problem Statement

The above highlights the pains one will need to go through to take long-distance taxis, and it sometimes limits people from travelling. Of late, fuel prices have soared with the highest price being recorded in November 2022 according to AA South Africa which resulted in significant adjustments to taxi fares. A solution that addresses some of these pains might be easily accepted by the market.

Research has also shown that 54.8% of South African households' sources of income are from salaries, 23% from social grants, 10,4% from other incomes, 8.8% from remittances and 3% from pensions (STATS SA, 2024). Stats SA also reported that 72.6% of South African households have access to the internet through mobile phones (STATS SA, 2024).

A ridesharing platform for long-distance appears to be one of the solutions as it allows individuals to share transport costs with car owners going in the same direction and it can provide a level of security for both the drivers and hikers. The cost is envisaged to be around the similar range as the traditional taxis because the vehicle owner would have had the initial intention to travel to the destination. Given that ride-hailing (ehailing) has been accepted given the increasing adoption rates for Uber and Bolt in South Africa, there is a certain level of technology acceptance that can be leveraged for the long-distance ridesharing service concept.

This study is being conducted because consumer perceptions will help entrepreneurs who are considering developing long-distance platforms understand some key considerations for the success of their businesses.

Research Purpose Statement

The research aims to identify, analyse, and rank factors that affect consumer perception towards the adoption of an alternative long-distance peer-to-peer (P2P) ride-sharing service in South Africa. With the current challenges in the public transportation system and the rising cost of travelling, a service that matches long-distance hitchhikers to drivers travelling in the same direction will potentially maximise the use of private vehicles and reduce the cost of travelling. In addition, the current platforms available in South Africa mainly offer a business-to-customer (B2C) service and this research focuses on long-distance P2P ride-sharing services.

Research Questions

The objectives of the research will be achieved when the following research questions are answered:

1. What are the factors affecting consumer perception towards the adoption of long-distance P2P ridesharing services in South Africa?
2. Is there a link between socio-economic attributes and factors that affect the adoption of long-distance peer-to-peer ridesharing services?
3. How are the factors that affect the adoption of long-distance ridesharing services ranked?

Research Overview

Chapter 2 will review the literature on ridesharing services to identify factors that have been flagged to influence the adoption of ridesharing services. These factors once identified will be used to formulate a questionnaire that will be distributed in South Africa.

Chapter 3 will look at the methodology. In this chapter, the aim is to identify the type of research and formulate a structure to be followed in order to answer the research objectives.

Chapter 4 presents the results of the study.

Chapter 5 will discuss the results and will conclude on whether the research objectives were met.

LITERATURE REVIEW

INTRODUCTION

People have traditionally seen asset ownership as desirable, but recent trends have seen many preferring temporary ownership or sharing services over ownership (Matzler et al., 2015). This has resulted in rapid growth in the sharing economy which has seen a significant market share increase in platforms such as Airbnb, Uber, and Bolt. This trend has been fuelled by the increased use of smartphones and the internet (Matzler et al., 2015). In addition, the ever-rising cost of living has also seen many looking for ways to cut costs. This chapter discusses the existing literature on the sharing economy. It also narrows the sharing economy to ridesharing services and how other countries have managed this shift in the transport industry. The literature will also look at what is trending in developed countries and some of the factors that are seen as influencing consumer perception towards the adoption of ridesharing services.

The taxi industry in South Africa is large and has serviced over 60% of the population (Bridge Taxi Finance, 2024). This industry was deregulated in 1987 resulting in a large influx of operators (Ingle, 2009). Efforts to manage the industry have resulted in the formation of Associations which have now become very powerful. There have been reported cases of taxi violence in South Africa over routes. The taxi industry has seen rail and buses as competition and in some cases resorted to violence. In the recent case, the Intercape bus operator has been requesting the transport ministry to intervene in what was believed to be targeted bus attacks by the taxi owners. This was followed by several court challenges against the Police ministry and various Provincial Commissioners which ordered them to investigate these acts of violence against long-distance buses (Carlisle, 2024; Eastern Cape High Court, 2024). This indicates some of the challenges which other modes of transport are facing in challenging the powerful taxi association. Truck drivers from various routes across South Africa have also seen an opportunity to earn extra money by stopping for hitchhikers. However, those who have been caught by taxi marshals have been beaten and in the worst case have their trucks damaged.

Of late, there have been many lift club Facebook pages that have been created where people share their travel plans and whoever is driving in the same direction would agree

on the fee, pickup and drop-off points. One such page (Lift Page) has also gone on to create a website where drivers register their vehicles to enhance security (Lift Club, 2024). These pages are open to the public and have over 65,000 members who are subscribed. Another lift club (Lift Club Gauteng to Limpopo, Tzaneen/Bolobedu) has 68,000 members while Gaza Lift Club has 130,000 members and Eastern Cape Lift Club has 116,000 members. These lift clubs together with numerous ones found on Facebook, highlight the need for a more consolidated platform.

LITERATURE ON THE SHARING ECONOMY

There has been an exponential increase in researchers looking into the sharing economy in recent years. Most of the research has been focusing on Airbnb and Uber (Sutherland & Jarrahi, 2018). These researchers have been looking at the following categories: flexibility, matching algorithm (Benoit et al., 2017), reach (Cohen & Kietzmann, 2014), transactions management, building trust and building on social capital (Sutherland & Jarrahi, 2018). In other words, there has been a significant focus on how these platforms work.

LITERATURE ON RIDESHARING SERVICES

The following sections of the literature survey focus on the broader ride-sharing concept and the research that has been done on ridesharing.

The studies done by (Rayle et al., 2016) on ride-sharing focused on evaluating factors associated with adoption and frequency of use and investigating the potential impacts of travel-related dimensions such as vehicle ownership, congestion, and road safety. These studies have shown that there is a relationship between ride-sharing users and age, education, income, and proximity to urban areas (Rayle et al., 2016). However, these studies were only limited to San Francisco and the population geographical area studied was small relative to a long-distance ridesharing model. Some of the limitations of the research done by (Rayle et al., 2016) included the oversampling of evening users who would have gone out for leisure purposes and also focused on certain income brackets. There were fewer studies done on those travelling between towns.

(Gomez et al., 2021) expanded the research done by (Rayle et al., 2016) to investigate the concept of ride-sharing in other geographic areas and this case looking at Madrid. This study was also done in the same context as the studies done in New York, San Francisco, Boston, Chicago, and Washington (Gomez et al., 2021) and the contexts included functional public transport, high density, and environmental. In addition, studies have been done in areas where congestion-related delays are high.

A study done by (Alemi et al., 2018) linked technology-based transport system adoption and frequency to personal perceptions. The study concluded that there is a relationship between technology savviness and the adoption of technology. The study also found that those who have previously used ridesharing services (both P2P and B2C) are more likely to adopt new technology-based transport systems. The outcome of this study will also be used to select the population for this study.

There are several ridesharing service providers in the market which include Uber, Lyft, BlaBlaCar, and Camar operating in Europe and the US (Alemi et al., 2018). BlaBlaCar and Camar operate in a model that only accepts passengers going in the same direction as the driver. The model assumes that there is an intention for the driver to drive even if the driver does not find travellers going in the same direction. This means that it primarily focuses on reducing the cost of travelling and increasing vehicle utilization (Hanchuk et al., 2023; Saxena et al., 2020). Uber and Lyft platforms initially operated on a B2C model where a driver does not need to have the intention to travel in the same direction and hence the mobility needs of the passengers take precedence over the driver's (Alemi et al., 2018). However their models have since been modified to allow travellers to connect with available car owners or other users travelling in the same direction but this is only being applied in big cities in the USA (McBride, 2015).

A study was done by (Farajallah et al., 2019) to investigate how BlaBlaCar (P2P platforms) work in France. The study found that, unlike Uber and Lyft, BlaBlaCar allowed drivers to set their prices, and thus, it had a decentralised pricing model. The study also concluded that, under this model, drivers gained more experience. The studies further recommended BlaBlaCar to assist new drivers in maximizing revenue (Farajallah et al., 2019). In addition, the studies concluded that demographics play a key role and suggest that the drivers be identified with only their IDs to ensure that there is no discrimination.

There has also been interest in the regulatory environment in which ridesharing services are operating worldwide. The most notable challenges include taxi operators citing unfair competition and the classification of Uber drivers (Posen, 2015). Most of these issues have not yet been fully addressed as there are ongoing legal battles (Anwar, 2020).

Attitude in this context has been defined as the degree to which a customer's mindset is favourable or unfavourable towards the use of a service. These factors are in some cases referred to as facilitators or barriers to shared mobility (Jie et al., 2021)

There has been extensive research that has been done to identify factors that affect the adoption of new technology. These studies were conducted using different models ranging from the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Innovation Diffusion Theory (IDT), Decomposed Theory of Planned Behavior (DTPB) and Unified Theory of Acceptance and Use of Technology (UTAUT). These models have been found to be valid and are widely used to predict user acceptance (Cheah et al., 2020) (Bertrand & Bouchard, 2008).

Research done by (Davis, 1989) using TAM concluded that perceived usefulness and perceived ease of use were the most critical factors that influenced perception towards user acceptance. The research was further expanded by (Ajzen, 1991) using the extended Theory of Reasoned Action (TRA) model to include perceived behavioural control. Further research by (Lu et al., 2008; Rogers Everett, 1995; Taylor & Todd, 1995; J.-H. Wu & Wang, 2005) have all concluded that perceived usefulness, perceived behavioural control, perceived risk, subjective norm, trust, innovativeness, perceived ease of use and perceived enjoyment were the main factors that affected adoption of new technology.

A study by (Serumula & Vanderschuren, 2024) focused on rural long-distance hitchhiking demand in South Africa with a specific focus on the Waterberg district municipality in Limpopo. Hitchhiking is a form of ridesharing that has been practised in South Africa for many years. This study concluded that most hitchhikers preferred to make prior travelling arrangements. The research also concluded that hitchhiking services had shorter waiting periods compared to minibus taxi services. The research also identified factors that influence people's decision to hitchhike. These factors include affordability, time efficiency, safety, social environment, travel comfort and flexibility.

These factors although not formulated from a TAM, can be linked to the factors identified using the TAM.

A more recent study by (Motsi et al., 2023) also looked at factors affecting the adoption of e-hailing platforms by metered taxis. This study used TAM to understand technology adoption by taxi operators in South Africa. The study was limited to Sandton City in Gauteng. This study found that the adoption of ehailing was influenced by perceived ease of use, perceived cost, perceived safety, perceived accessibility and perceived convenience. The research does indicate that there are various TAM model variations but does not indicate the specific model used. The study was also done specifically to identify factors affecting a specific group (metered taxi operators) from migrating to an e-hailing platform.

The work done by (Arumugam et al., 2020) looked at 11 articles and the factors they analysed. It narrowed the key factors to social norms, perceived usefulness, perceived ease of use, compatibility, relative advantage, safety and user satisfaction. Based on the review of studies done on ridesharing services or ehailing services, it is clear that most of the factors that are linked to the adoption of ridesharing services can be analysed by using the TAM model.

FACTORS AFFECTING CONSUMER PERCEPTION TOWARDS THE ADOPTION OF NEW TECHNOLOGY

Based on previous research, the following factors have been identified and widely used especially in research which assesses the adoption of platform-based technologies which include ehailing and ridesharing platforms. It is for the same reason this study will be limited to the factors discussed in this section. Also to ensure that there is easier comparability between the results of this study and studies done in other parts of the world that have done similar studies.

Perceived Ease of Use

Perceived Ease of Use was defined as the degree to which consumers believe that adoption of the technology will be effortless (Cheah et al., 2020; Motsi et al., 2023). This has been found to affect consumer perception and behavioural intention (Arora et al.,

2021). Previous research has similarly found that there is a strong relationship between perceived usefulness and user adoption. Research done by (Maruf, 2021) using a simplified TAM model also found that there is no direct relationship between perceived ease of use and perception towards the use of ridesharing applications in Dhaka India. This finding is also supported by the research done by (Cheah et al., 2020) which concluded that there is no strong correlation between ease of use and user adoption in ridesharing services. This conclusion is also contrary to the research done by (Arora et al., 2021) which confirms alignment with previous theory on user adoption. A more recent paper It is clear from the above that various research done in the past have yielded contradictory findings and this further supports the need to do further studies in this area of study.

Perceived Usefulness

Perceived usefulness has been defined as the degree to which consumers believe that the adoption of the technology will positively affect their job performance (Davis, 1989; Motsi et al., 2023). Research done by (Karim et al., 2020) has also found that there is a strong relationship between perceived usefulness and behavioural intention. This finding was also supported by (Weng et al., 2017), (Lim et al., 2018; Peng et al., 2014). (Ruangkanjanases & Techapoolphol, 2018) uses the term relative advantage however the definition aligns with the definition of perceived usefulness. The questions that were asked in the survey also appear to assess the usefulness of the services. It is therefore concluded that perceived usefulness and relative advantage are used interchangeably.

Social Influence

Social influence has been defined as the extent to which a user is persuaded to adopt a new system just because other users are already using it. (Arora et al., 2021) consider the term social influence to carry the same meaning as subjective norms. Research shows that generally, users adopt new technology just because other users are using it already (Hsu & Lu, 2004; Kulviwat et al., 2009; W.-Y. Wu & Li, 2007). The same theory is true in ridesharing adoption (Joia & Altieri, 2018). In their research, they concluded that several ridesharing users started using the platform after receiving recommendations from colleagues, friends, and family members. This finding is consistent with the findings of

the research done by (Arumugam et al., 2020; Giang et al., 2017; Lim et al., 2018). A paper written by (Ruangkanjanases & Techapoolphol, 2018) concluded that social influence only has an effect on men. This is contrary to the findings of other researchers

Compatibility

The factor is defined as the extent to which innovation is perceived to be similar to past experiences and existing values (Arora et al., 2021). Research shows that users are likely to adopt technologies that they believe to be similar to the technology already in use. Research done by (Rogers Everett, 1995) found that compatibility is one of the key factors of innovation diffusion. (Joia & Altieri, 2018) further found that even in the current environment, e-hailing app usage was compatible with other mobile applications. The research concluded that compatibility had a strong correlation with user intention to use e-hailing apps. Similar outcomes have been found by (Peng et al., 2014). Research done by (Kim et al., 2019) took a different approach to compatibility. In this research, it was concluded that adoption of the e-hailing apps was most likely if it was compatible with the traditional way of hailing taxis. In other research, compatibility was assessed on the use of mobile apps. In this research, compatibility is assessed by measuring user adoption against the use of smartphones.

Facilitating Conditions

This has been defined as "the degree to which an individual believes that organizational and technological infrastructure are available to support the new technology"(Venkatesh et al., 2003). This factor looks at the available tools, and assistance rendered to support this long-distance ridesharing service. Research has highlighted a significant relationship between facilitating conditions and perception toward the adoption of new technology (Alrawashdeh et al., 2012).

Perceived Risk

This has been defined as the uncertainty a user is confronted with while deciding to use new technology and the likely resultant loss (Bauer, 1960). This has been highlighted as an important factor considering the current advanced technological era. Research has

shown that the growth in online transactions also means increased risks (Motsi et al., 2023). These risks can be classified as financial, psychological, physical, social, time, and product performance according to (Sims & Xu, 2012; J.-H. Wu & Wang, 2005). Some of the information shared when a user does an online transaction includes location, telephone number, address and bank card details and sharing such information has increased awareness of the risks involved. Research done by (Zhang et al., 2017) concluded that there is a negative correlation between the perceived risks and user intention to use ridesharing services.

Trust

Researchers have emphasized the need to include trust as a key determinant in the technology acceptance models (L. Wu & Chen, 2005). This factor postulates that users can adopt technologies that they trust. Studies done by (Razi et al., 2019) have found that there is a relationship between trust and intention to adopt ridesharing services. The findings were further confirmed by the study done by (Zhang et al., 2017).

RANKING OF FACTORS THAT AFFECT THE ADOPTION OF RIDESHARING SERVICES

A study was conducted in India (Arora et al., 2021) to confirm is the above factors could be ranked. The research was aimed at verifying if the factors carried equal weighting in terms of their importance by users. This research found that these factors did not carry equal weight and that they could be ranked. The research further found that perceived usefulness had a higher ranking followed by perceived ease of use (Arora et al., 2021). This research aims to follow the same approach where it will confirm if the factors can be ranked. The research further compares the findings done in India to the findings in South Africa. Similarity in the ranking of these factors would mean that studies done in other regions would be applicable in South Africa. However if the utcome of the studies are different, this would mean that solutions to long distance ridesharing services are location specific and findings would not necessarily apply in other regions.

CONCLUSION

The above factors are used to assess user willingness to adopt a long-distance ridesharing service. Given that this service is not yet available in South Africa, the study has identified a gap in the literature on consumer perception of long-distance ridesharing services specifically in the South African context. Also, no studies have been done on whether the ranking of factors that affect consumer perception is the same anywhere in the world. This study will also aim to assess the rankings and compare them with findings from other parts of the world (in this case India). The study will aim to identify and rank factors that affect consumer perception of ridesharing. To do this, the research will leverage studies done on ehailing services in other regions. Results of the research on long-distance ridesharing which was done in other parts of the world will be compared to the findings of this research.

METHODOLOGY

INTRODUCTION

This chapter provides details on the research methodology to be used in this research. It also provides details on the population being targeted and the recommended sample size. It confirms that the information that will be collected will remain anonymous and will be always kept confidential.

RESEARCH PARADIGM

The research will follow a positivist research paradigm which assumes that only factual knowledge is gained by observation and that there are true answers to the problem. The role of the researcher will be limited to data collection and interpretation and seeks to confirm or disconfirm the answers through a series of hypotheses. Positivism relies on quantifiable outcomes that lead to statistical analysis.

DESIGN AND METHODS OF DATA COLLECTION

The research methodology will be a mixed approach (qualitative and quantitative). Qualitative analysis was used to identify the factors that affect the adoption of long-distance ride-sharing services. Quantitative was used to disprove a series of hypotheses. It will involve measuring variables and testing relationships between variables to identify potential patterns or casual relations. A quantitative approach is used because it is ideal where important variables are known beforehand. Previous research on the sharing economy has highlighted important factors to consider and using this prior information from similar studies done in other regions or on short-distance ridesharing services, the study will aim to validate the current known factors and their relative importance.

Based on the literature review that was done, it has been identified that there is a gap in knowledge of consumer perceptions towards the adoption of long-distance P2P ridesharing services in South Africa. Prior research done in other regions has identified factors that affect user perception towards the adoption of ridesharing services. However, these factors have not been tested in the South African context and also specifically

looking at long-distance ridesharing. An online questionnaire will be used to gather the data required to establish these casual relationships. This online survey will also guarantee anonymity. A set of predetermined questions with a limited range of possible answers will be used to guide the respondents into answering questions that will lead to answers to the research question.

POPULATION, SAMPLING, AND SUBJECTS

The research is being done in South Africa and targeting travellers between the ages of 18 and 65. Because these ridesharing technologies are digital, the survey will target those with access to smartphones. In addition, the research is limited to travellers over 18 years and below the age of 65 which is estimated to be approximately 36 million according to Stats SA (Statistics South Africa, 2019). (Statista, 2021) further highlights that there are approximately 26 million smartphone users in South Africa. The population is further limited to the current ridesharing users in South Africa as previous research has highlighted that they have a higher level of technology acceptance compared to those using the service.

It is also assumed that, since Uber was the first mover in the South African market, most consumers who are using Bolt are also Uber users. The research will also test these predetermined factors against different segments of the population when such as demographics, household income, and gender. The population covers those who are currently making use of social media and other ride-sharing services. For this reason and to ensure that the sample represents the true population, an online questionnaire will be posted on various social media platforms, various universities, and workplaces. It is believed that those who are likely to use the service are frequent users of social media and it is on this basis that the online survey will target social media users. The survey will be posted on Facebook, LinkedIn, and various universities.

With the South African target population size of 26 million people (Statistics South Africa, 2019), 95% confidence level and 5% confidence interval, and response distribution of 50%, the target sample size for this research is 150. This sample size has been determined by evaluating sample sizes that have been used in similar research on the adoption of new technology although statisticians do agree that a minimum sample size to infer meaningful results should not be less than 100 (Survicate, 2024)

DATA COLLECTION

The target sample size is 150 and to ensure that the research receives enough responses, the survey will be posted on LinkedIn, Facebook, WhatsApp, and several companies. The survey aims to remain anonymous, and all the information required will not be sufficient to identify participants. The survey also aims to maintain confidentiality and therefore, data received will only be available for this study. This data will be kept in a computer that is password protected. In addition, the information will be submitted to the University of Witwatersrand after the studies in a password-protected zipped folder. All other copies will be destroyed.

The survey questions will be structured into 4 different groups, and these include:

1. Socio-demographics
2. General ridesharing
3. Factors affecting user perception towards ridesharing services.
4. Ranking of predetermined factors

See Appendix A for the full survey.

Section A - Socio-demographics

In this section, the survey will aim to obtain the following information: profession, age, gender, monthly income range, education level, current occupation, and current province where the respondents are staying and also information on the provinces they frequently travel to. The questions will be multiple-choice with an option to select an answer that closely aligns with the respondents from a list of determined answers. Some of the questions have multiple answers.

Section B – Ridesharing history

In this section, the survey aims to obtain information on social media activities, hitchhiking history and reasons for hitchhiking, ridesharing usage frequency, ride-sharing platforms subscribed to, and vehicle ownership information. The section has been

designed to test if the factor profiles for those who have hitchhiked before differ to those who have not and also to evaluate pushing factors for respondents to start using such a platform.

Section C - Factors affecting user perception towards ridesharing services

This section of the survey aims to test the factors affecting user perception towards ridesharing services in South Africa. These factors include perceived usefulness, perceived ease of use, social influence, compatibility, perceived risk, trust and facilitating conditions. A five-point Likert scale is used to measure the strength of the response. These responses are then recoded to a numerical scale where "1" has negative extreme views and "5" represents the strongest positive view. Some questions have a reversed Likert scale and these will be recoded to align with the rest of the data.

Section D – Ranking of factors.

Other regions that have done similar analyses found that perceived usefulness was ranked very high and perceived risk was ranked lowest. Also, social influence and facilitating conditions were highly ranked. This meant that targeting celebrities and also promoting referrals would persuade people to use long-distance ridesharing services. These findings are important because, given that South Africa is not in the same region and may have different risk profiles, these rankings may be different. This piece of information would be important because it would assist in identifying factors that a region is region-specific and also factors that can be applied across all regions.

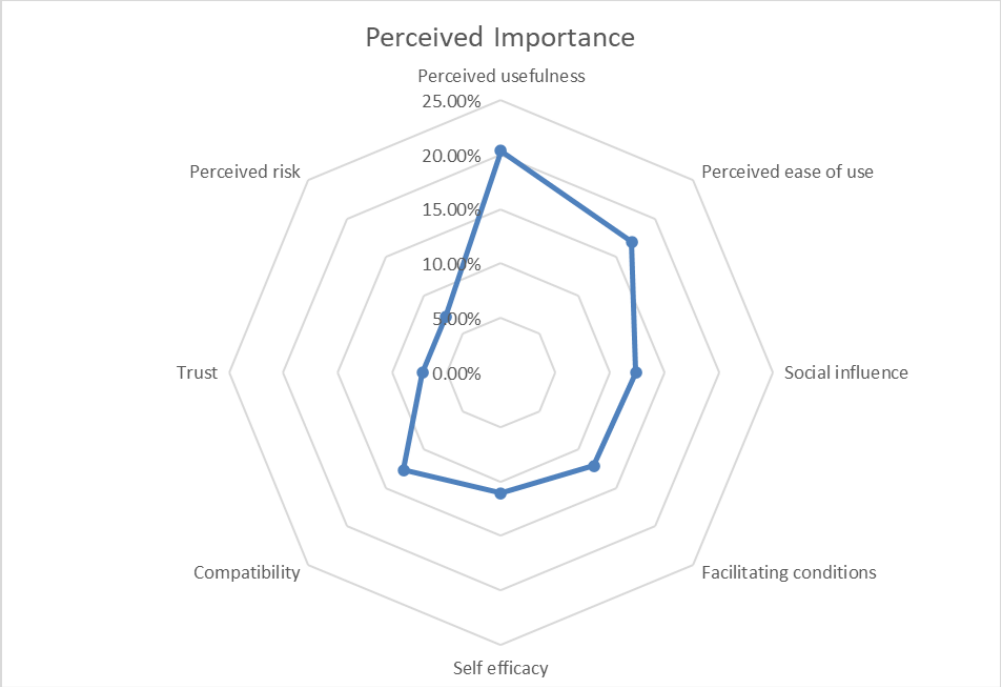


Figure 1: Ranking of factors that affect perception towards adoption of ridesharing services in Punjab and Chandigarh India (Arora et al., 2021).

Although some research in Chapter 2, has highlighted additional factors, the above-mentioned factors have been frequently used in the past and this research will only test for these factors. It is possible that there may be more factors to consider but these are considered to be part of future research focus.

The research also provides respondents with an option to highlight any other factors that may be important for them to adopt long-distance ride-sharing services. This will also be analysed to identify any other factors that may have been missed.

For this analysis, each of the observed variables in this section will be assigned a unique identifier which will be used during the data analysis.

DATA ANALYSIS AND ASSESSMENT

In the data analysis, the aim is to determine if the hypotheses presented as part of the research question have been supported or not. The data is prepared by exporting it into SPSS which will be used for data analysis. Once the data has been exported, errors will be checked and all the data that shows that respondents did not complete the survey and response bias will be analysed.

Once the dataset has been cleaned, the data will be assessed to check for reliability.

Research Reliability

Reliability is used to confirm whether the instrument and the questionnaire used to measure variables are accurate and stable. In this study, the reliability of the survey instrument will be measured by using Cronbach's alpha. If the alpha value is higher than 0.70, the instrument is considered to be reliable. Assessment of the reliability is included in the next chapter.

Research Validity

Research validity is the extent to which requirements of the scientific research method have been adhered to in the process of generating research outcomes (Middleton, 2019). Validity is done to ensure that appropriate methodology has been used in the research, an appropriate time scale has been selected, and the sample of the population has not been coerced into specific choices of answers. In this research, this is done by selecting questionnaires that have been used and tested in other regions to ensure that it is measuring exactly what the research aims to measure, ensuring that the sample size is reflective of the population

Research Delimitations

Several delimitations have been applied in this study. These include:

1. The research is geographically limited to South Africa.
2. The factors to be evaluated are limited to those identified and presented in the literature review.
3. The data collection has been limited to those between the ages of 18 and 65.
4. Study sample was limited to the consumers who are currently on social media.
5. Comparison of the ranking of factors has been limited to India and South Africa.

Descriptive statistics reporting

These descriptive statistics will include (Leavy, 2017):

1. Frequencies
2. A measure of central tendency
3. Measure of dispersion

Exploratory factor analysis is done to confirm if the observed variables can indeed be reduced to the predetermined latent variables. The observed variables that are not aligned with the determined latent variables are either removed from the sample or regrouped to form a new list of latent variables to improve the reliability of the results. Confirmatory factor analysis can also be used but for this study, it is believed that it would likely yield similar results. It is not necessary to constrain observed variables to load onto one latent variable. What is important is the conclusions.

The observed variables are given the following unique identifiers in Table **1**

Table 1: Unique identifiers of variables

Unique IDs	Observed variables
PU1	Travelling using long-distance ride-sharing services would be difficult.
PU2	Using long-distance ride-sharing services would give me greater control over my travel plans.
PU3	Using long-distance ridesharing would improve the way I travel between cities.
PU4	The use of ride-sharing services for long distances would address the challenges I am currently having with traditional long-distance transport.
PU5	Using long-distance ridesharing would save time.
PU6	Long-distance ride-sharing services would make travelling easier.
PU7	Long-distance ride-sharing services are useful.
PU8	Long-distance ridesharing is convenient.
SI1	The more users of long-distance ride-sharing services, the more I am likely to use them.
SI2	I am likely to use a long-distance ride-sharing service if it is well known.
SI3	I follow platforms that are being used by my family and friends.

SI4	Social media trends would influence my decision to use long-distance ride-sharing services.
PEU1	Ridesharing service apps are often confusing to use.
PEU2	It is easy to make errors when using ridesharing platforms.
PEU3	Interacting with ridesharing platforms is often frustrating.
PEU4	The ability to consult other users to understand how to use ridesharing services would influence my decision to use a long-distance ride-sharing platform.
FC1	The availability of resources on long-distance ride-sharing platforms would influence my decision to use the services.
FC2	Long-distance ridesharing services would be used even if people did not know how to use the platforms.
FC3	Long-distance ridesharing would be used if users were easily available.
FC4	Long-distance ridesharing would be used if assistance could be accessed easily in case of users experiencing difficulties.
Co1	Long-distance ride-sharing services should be compatible with existing smartphones.
Co2	Long-distance ride-sharing services should fit my lifestyle.
Co3	Long-distance ridesharing should be compatible with existing online payment platforms.
PR1	Long-distance ride-sharing services' safety levels should be similar to those of the current short-distance ridesharing platforms in the market.
PR2	Long-distance ride-sharing service platforms should make it difficult for users to be targeted by current long-distance taxi drivers and associations.
PR3	Long-distance ride-sharing services pick-up and drop-off locations should be safe.
PR4	Only verified users should be allowed on long-distance ride-sharing service platforms.
PR5	Vehicles used on the long-distance ride-sharing platforms should be monitored to ensure they abide by the road regulations.
PR6	The age of vehicles used on the long-distance ride-sharing platform is important to me.
PR7	Zero tolerance for drinking and driving on the long-distance ride-sharing platform is important to me.
PR8	Pre-trip inspection for roadworthiness must be compulsory for all vehicles on the long-distance ride-sharing platform.

Tr1	I would use the long-distance ridesharing platform if it is recommended by my family and friends.
Tr2	I would use the ridesharing services if platform users were placed first

Figure **2** has the list of the predetermined latent variables together with the observed variables linked to them.

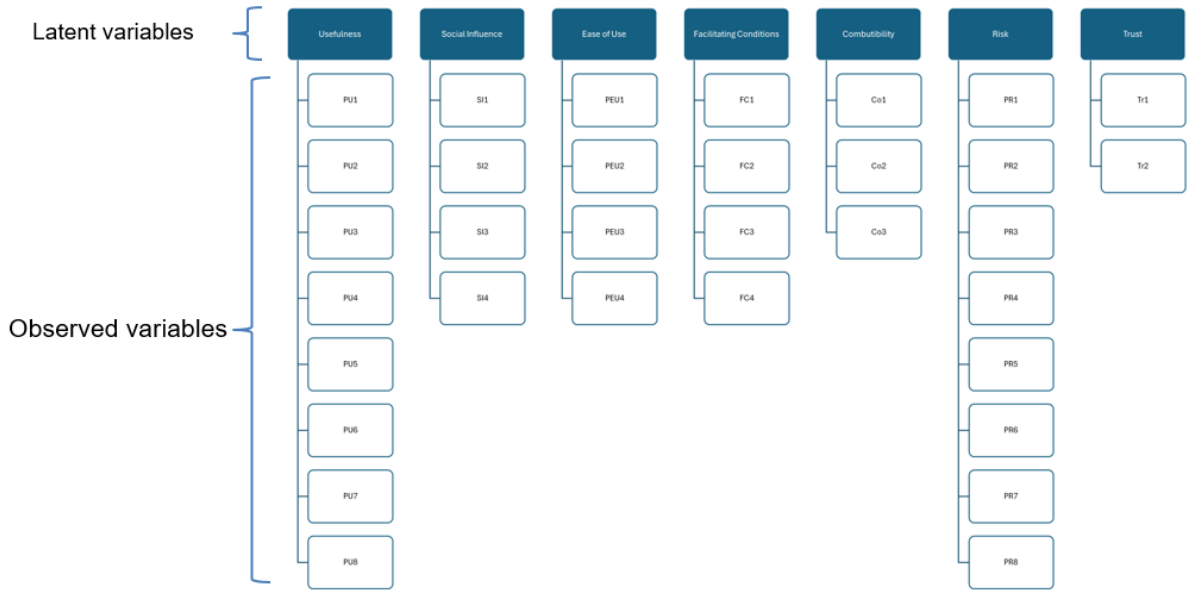


Figure 2: Predetermined latent variables together with the observed variables linked to them.

Hypothesis Testing Process

The hypotheses will then be tested using inferential statistics and in this case, null hypotheses significance testing (NHST) is used. For these significance testing results, a p-value of less than 0.05 will be considered statistically significant and therefore should infer a relationship between variables.

Hypothesis testing will follow the following process:

a. Defining the null and alternative hypothesis
b. Determining the region where the null hypothesis will be accepted.
c. Calculating sample test statistic
d. Comparison between the region of acceptance and the sample statistic

e. Drawing statistical conclusions.

Hypothesis testing will be used to identify casual relationships between various demographics and the factors that affect long-distance ridesharing services. This analysis can be used to narrow down the social attributes that will need consideration to identify a suitable market segment for the services.

DATA ANALYSIS

INTRODUCTION

This chapter provides detailed results of the survey that was conducted to identify the important factors that influence consumer perception towards the adoption of a long-distance ride-sharing service in South Africa. As part of the study, over 160 people responded. In this chapter, the data received from the survey is imported into SPSS for analysis. This data is then cleaned to ensure that obvious errors are excluded from the rest of the analysis.

Prior research has highlighted the perceived importance of these factors in other regions and the research will also aim to compare if these factors are ranked the same in terms of their importance.

RESPONSE RATE

The survey was done using Qualtrics. It was published on the 17th of January 2023 on various social media platforms, and it was closed on the 31st of January. In total 168 people responded to the survey. 5 responded when the survey was still a preview and 163 responded after it was published. Out of the people who responded, 109 people completed the full survey which represented a 66.9% completion rate. With the initial target of 150 responses, only 72.3% was achieved. It is believed that the responses could have been higher if the survey was also shared on the school mailing address and if a longer time was allowed for to receive responses.

DESCRIPTIVE STATISTICS

A total of 109 people responded to the survey. 62.4% of the respondents were male, 35.8% were female and 1.8% preferred not to say as displayed in Table **2**. These figures do show that they are skewed towards the researcher's gender which possibly suggests that those that responded were likely in the researcher's cycle of friends. The survey also required respondents to highlight their age group. Over 65% of the respondents were under the age of 35 years and above 18 years. This is displayed in Table **3**.

Table 2: Gender distribution of participants

Category	Frequency	Percent (%)
Male	68	62.4
Female	39	35.8
Prefer not to say	2	1.8
Total	109	100.0

Table 3: Age distribution of participants

Age group	Frequency	Percent (%)
18 - 25 years	26	23.9
25 - 30 years	16	14.7
30 - 35 years	29	26.6
35 - 40 years	16	14.7
40 - 50 years	21	19.3
> 50 years	1	0.9
Total	109	100.0

The research further looked at the employment status of the respondents. 63% were employed full-time, 16.5% were students and 10.1% were looking for employment. The results are shown in Table **4**

Table 4: Employment status of participants

Employment status	Frequency	Percent (%)
Employed full-time.	69	63.3
Employed part-time.	8	7.3
Unemployed looking for work.	11	10.1
Unemployed not looking for work.	2	1.8
Retired	1	.9
Student	18	16.5
Total	109	100.0

The survey further looked at the level of education of the respondents in Table **5**. Over 84% of the respondents have a Masters or a Degree with only 6.4% representing those that have a Matric or lower.

Table 5: Level of education of participants

	Frequency	Percent (%)
Matric or lower	7	6.4
National Certificate	3	2.8
Diploma	7	6.4
Degree	59	54.1
Masters	33	30.3
Total	109	100.0

The survey questions also asked respondents to indicate their salary range and 33.9% represented those that earned less than R150 000. More than 37% earned above R750 000. This is summarised in Table **6**. The survey will also analyse if there is any correlation between the income bracket and their ranking of various factors which are linked to the adoption of long-distance ride sharing.

Table 6: Income distribution of participants

Salary range	Frequency	Percent (%)
< R150 000	37	33.9
R150 001 - R300 000	7	6.4
R300 001 - R450 000	6	5.5
R450 001 - R600 000	8	7.3
R600 001 - R750 000	10	9.2
> R750 000	41	37.6
Total	109	100.0

The survey further asked about the respondents' current province they reside and also the provinces they frequently travel. More than 50% of the respondents are staying in Gauteng, 11.9% stay in Limpopo and 10.1% in 20.2% in Western Cape and North West. More than 58% of these respondents have indicated that they do travel regularly between cities.

Table 7: Provinces where participants reside.

Province	Frequency	Percent (%)
KwaZulu Natal	4	3.7
Free State	1	.9
Mpumalanga	6	5.5
Eastern Cape	6	5.5
Western Cape	11	10.1
Limpopo	13	11.9
North West	11	10.1
Northern Cape	2	1.8
Gauteng	55	50.5
Total	109	100.0

Table 8: Frequency of traveling between cities/towns

	Frequency	Percent (%)
Never	6	5.5
Twice per year	13	11.9
Four times per year	20	18.3
Six times per year	6	5.5
More than six times per year	64	58.7
Total	109	100.0

Respondents have also indicated that they prefer to travel between cities using their own vehicles. This indicates that other alternative modes of transport may not be offering value-add and therefore those that do take other modes of transport are doing so because they do not have their own vehicles. With the perception of vehicle ownership changing, it is likely that those with vehicles will seek to monetize their seats and offer the seats to those who may be interested if their specific factors are addressed.

Table 9: Mode of transport preferences

Mode of transport	Frequency	Percent (%)
Private vehicle (own vehicle)	53	48.6
Taxis	11	10.1
Buses	9	8.3
Airplane	33	30.3
Other	2	1.8
Total	108	99.1

RELIABILITY ANALYSIS

Cronbach's alpha is used to measure consistency in the data. The research utilises Likert questions and to check if it is reliable, Cronbach's alpha is used. The following Table **10** how the results are interpreted.

Table 10: Cronbach's alpha interpretation

Alpha Cronbach's Alpha	Interpretation
α > 0.9	Excellent
α > 0.8	Good
α > 0.7	Acceptable
α > 0.6	Questionable
α > 0.5	Poor
α < 0.5	Unacceptable

Table 11: Reliability of variables

Variable	**Unique Identifier**	**Cronbach's alpha**	**Reliability**
Perceived usefulness	PU	0.895	Good
Perceived ease of use	PEU	0.784	Acceptable
Social Influence	SI	0.622	Questionable
Facilitating condition	FC	0.781	Acceptable
Compatibility	Co	0.863	Good

Perceived risk	PR	0.918	Excellent
Trust	Tr	0.828	Good

Table **11** shows Cronbach's alpha of most of the variables is above the acceptable range except for social influence with Cronbach's alpha of 0.622 which highlights that data may not be reliable.

EXPLORATORY FACTOR ANALYSIS

The research initially identified factors that may affect perception towards the adoption of long-distance ride-sharing services. These factors were identified from previous literature. A set of questions were formulated to confirm how these factors are viewed by respondents. As an initial stage of the analysis, exploratory factor analysis (EFA) was done on the set of questions asked. This analysis was to confirm if the questions were loaded together with the other related questions. After running the EFA, the Kaiser-Meyer-Olkin (KMO) which measures sample adequacy was found to be 0.8 which is higher than 0.5 indicating the appropriateness of the factor analysis for the data at hand.

Table 12: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	2385.711
	df	528
	Sig.	<.001

Bartlet's test checks for the correlation of variables. If the variables are not correlated, it simply means that they cannot be grouped. A value less than 0.05 typically indicates that the data will not produce an identity matrix, and this means that there is a significant relationship among variables and therefore EFA would yield meaningful results. The test done on the research data resulted in a Bartlet 's test with a significance of <0.001 which indicates a meaningful EFA. Communality which measures the variance variables shared with other variables under consideration was also checked. Typically, variables with values less than 0.5 are dropped as they indicate that they do not fit well with other factors.

In the research data, none of the variables had values less than 0.5 and therefore all of them were considered.

Because the factors were known beforehand, EFA was used to confirm that the questions asked were aligned with the factor groupings. 7 factors were expected from the analysis in the grouping highlighted in Table **13**. After performing EFA, the following was found:

a. SI1 and SI2 were loading with questions on PU and therefore the variables were removed.
b. PU1 and PEU4 were not loaded with any of the factors and therefore were also removed.
c. FC2 was not loading with other variables from the same factor.

The above-mentioned variables were removed from the analysis as they were not loading with the other variables in the predetermined groups. It is also assumed that the removal of these variables will not have an effect on the extracted factors however it is also recommended that, after excluding other variables, to re-run EFA. Optimised variables are presented in Figure **3**. This was not done in this study in the interest of time.

Table 13: Grouped variables before EFA

	Component							
	1	2	3	4	5	6	7	8
PR5	.879							
PR7	.864							
PR3	.853							
PR6	.847							
PR4	.828							
PR8	.821							
PR2	.663							
PR1	.519							
PU6		.869						
PU5		.825						
PU8		.804						
PU3		.750						
PU4		.748						
PU2		.660						
PU7		.648						
SI1		.595						
SI2		.595						
FC3			.733					
FC4			.730					
FC1			.596					
PEU4								
CO2				.844				
CO3				.772				
CO1				.757				
PEU2					.846			
PEU1					.836			
PEU3					.672			
TR2						.841		
TR1						.836		
SI3							.752	
SI4							.459	
FC2								.673
PU1								

Table 14: Grouped variables after EFA

	1	2	3	4	5	6	7	8
PR5	.879							
PR7	.864							
PR3	.853							
PR6	.847							
PR4	.828							
PR8	.821							
PR2	.663							
PR1	.519							
PU6		.869						
PU5		.825						
PU8		.804						
PU3		.750						
PU4		.748						
PU2		.660						
PU7		.648						
FC3			.733					
FC4			.730					
FC1			.596					
CO2				.844				
CO3				.772				
CO1				.757				
PEU2					.846			
PEU1					.836			
PEU3					.672			
TR2						.841		
TR1						.836		
SI3							.752	
SI4							.459	

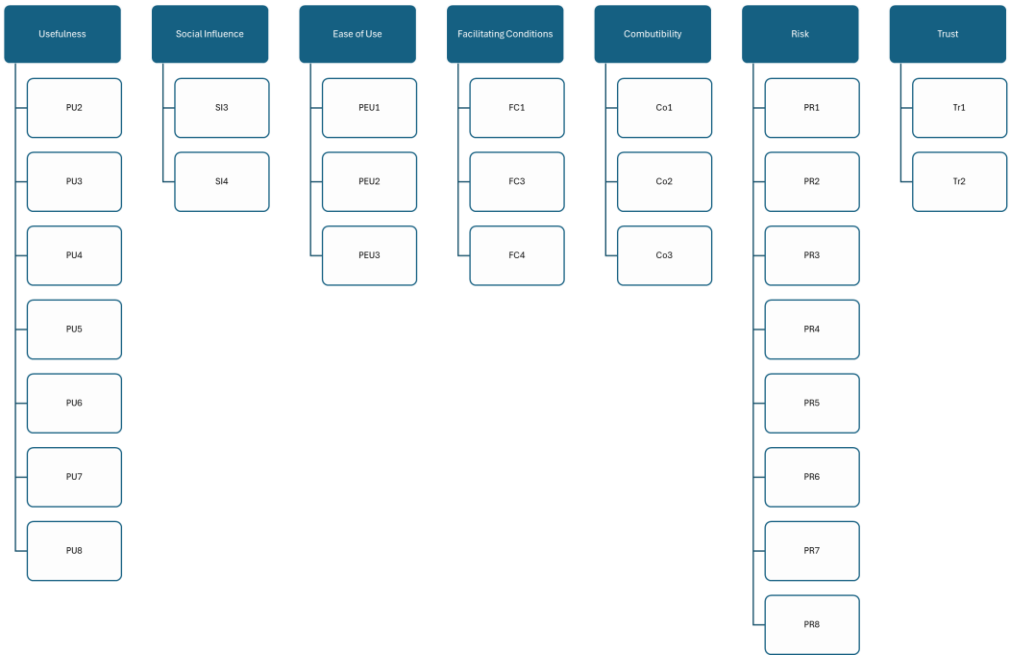


Figure 3: Grouped factors after EFA and removal for factors which are not loading with other factors in the same group.

HYPOTHESIS TESTING

Research was performed to identify factors that would influence the adoption of long-distance ridesharing services. As a first step, a review of previous literature was conducted to identify these factors. Further investigations on previous literature narrowed down the number of factors to seven which include Perceived ease of use (PEU), perceived usefulness (PU), social influence (SI), facilitating conditions (FC), compatibility (Co), perceived risk (PR), and trust (Tr). The research through an online survey investigated how well participants agreed with these factors. It then further investigated how these factors are ranked by respondents. In this section, the aim of the research will test several hypotheses.

Interpretation of correlations

Interpreting the magnitude of correlation results

The correlation will be interpreted as shown in Table **15**.

Table 15: Interpretation of magnitudes of correlation

Size of Correlation	**Interpretation**
1	Perfect Positive/Negative Correlation
± .90 to ± .99	Very High Positive/Negative Correlation
± .70 to ± .90	High Positive/Negative Correlation
± .50 to ± .70	Moderate Positive/Negative Correlation
± .30 to ± .50	Low Positive/Negative Correlation
± .10 to ± .30	Very low Positive/Negative Correlation

Interpretation of the direction of the correlation

Factor	**Scale direction**	**Meaning**
PU, SI, PEU, FI, Co, PR, Tr	Strongly Disagree (1) – Strongly Agree (5) (Positive)	The higher the number the higher the respondents agree that the factor must be considered for them to adopt long-distance ride-sharing services

Social attributes and factors affecting long-distance ride-sharing

This section of the report tests the relationships between various socio-economic attributes and factors that influence the adoption of long ridesharing services. To minimize the test cases, only those with significant relationships will be explored in detail while a general statement will cover where there are no relationships.

RELATIONSHIP BETWEEN EARNINGS AND FACTORS THAT AFFECT LONG-DISTANCE RIDESHARING

Spearman correlation is used for the analysis of these hypotheses because the variables being analysed are ordinal. Significance is set at 0.05 as initially discussed.

H1 - Null Hypothesis: There is a significant relationship between earnings and perceived usefulness.

After completion of the analysis of the relationship between earning range and perceived usefulness, it was found to have a very low negative correlation of -0.278 with a significance value of 0.03. This means that those who are in the higher earning bracket do not agree that perceived usefulness is an important factor when considering the adoption of long-distance ridesharing services. This means that long distance is considered useful by those in the lower income brackets. The null hypothesis is **accepted**.

H2 - Null Hypothesis: There is a significant relationship between earnings and perceived risk.

After an assessment of the relationship between earnings and perceived risk, it was found to have a very low positive correlation between earnings of 0.249 with a significance value of 0.09. This means that those in a higher income bracket the more likely to be influenced by risk when deciding to adopt long-distance ridesharing services while those in the lower income brackets do not consider risk as a factor when adopting long-distance ridesharing. This can possibly explain why those who currently hitchhike given the high-risk nature of it are low-income earners. The null hypothesis is **accepted**.

H3 - Null Hypothesis: There is a significant relationship between earnings and social influence.

After an assessment of the relationship between earnings and social influence, it was found to have a very low negative correlation between earnings of -0.194 with a significance of 0.44. This means those who are in a higher income bracket are less likely to be influenced by other people when adopting long-distance ridesharing. Low-income earners will likely adopt the service if there are positive reviews from other people using it. The null hypothesis is **accepted**.

Table 16: Spearman's correlation between earnings and factors that influence the adoption of long-distance ride-sharing.

	Spearman's rho	Significance(2-tailed)
Earnings per year - Trust	-.064	.507
Earnings per year - Risk	**.249**	**.009**
Earnings per year - Compatibility	.071	.465
Earnings per year - Facilitating conditions	-.132	.171
Earnings per year - Ease of Use	-.033	.737
Earnings per year - Social influence	**-.194**	**.044**
Earnings per year - Usefulness	**-.278**	**.003**

The study also tested the relationship between earnings and the remaining factors which included facilitating conditions, compatibility, perceived ease of use, and perceived trust and it was to have no significant casual relationships. Detailed results are presented in Table 16.

RELATIONSHIP BETWEEN AGE AND FACTORS THAT AFFECT LONG-DISTANCE RIDESHARING

H4 - Null Hypothesis: There is a significant relationship between age range and perceived usefulness.

On completion of the analysis of the relationship between age range and perceived usefulness, it was found to have a very low negative correlation between earnings of -0.253 with a significance of 0.08. This means that the younger generation does consider long-distance ridesharing services to be useful and is more likely to use the service than the older generation. The null hypothesis is **accepted**.

Table 17: Spearman's correlation between age and factors that influence the adoption of long-distance ride-sharing.

	Spearman's rho	Significance(2-tailed)
Age range - Trust	-.081	.403
Age range - Risk	.160	.097
Age range - Compatibility	-.007	.944
Age range - Facilitating conditions	**-.206**	**.032**
Age range - Ease of Use	.029	.761
Age range - Social influence	**-.215**	**.025**
Age range - Usefulness	**-.253**	**.008**

H5 - Null Hypothesis: There is a significant relationship between age range and social influence.

On completion of the analysis of the relationship between age range and social influence, it was found to have a very low negative correlation between earnings of -0.215 with a significance of 0.025. This means that the young generation is more likely to adopt long-

distance ridesharing if it is socially acceptable for others are use it. The null hypothesis is **accepted**.

H6 - Null Hypothesis: There is a significant relationship between age range and facilitating conditions.

On completion of the analysis of the relationship between age range and facilitating conditions, it was found to have a very low negative correlation between earnings of -0.206 with a significance of 0.032. This means that the decision to adopt long-distance ridesharing for the younger generation is influenced by facilitating conditions. The null hypothesis is **accepted**.

RELATIONSHIP BETWEEN LEVEL OF EDUCATION AND FACTORS THAT AFFECT LONG-DISTANCE RIDESHARING

The research also tested the relationships between the level of education and the factors that affect the adoption of long-distance ridesharing.

H7 - Null Hypothesis: There is a significant relationship between level of education and risk.

It was found that there is a very low positive correlation of 0.191 between the level of education and risk. This means that people with higher levels of education will consider risk when deciding to adopt long-distance ridesharing services. Those with lower levels of education are less likely to be influenced by risk when adopting long-distance ridesharing. **The null hypothesis is accepted**.

Table 18: Spearman's correlation between the level of education and factors that influence the adoption of long-distance ride-sharing.

	Spearman's rho	Significance(2-tailed)
level of education - Trust	-.037	.706
level of education - Risk	**.191**	**.046**
level of education - Compatibility	-.003	.974
level of education - Facilitating conditions	-.024	.803
level of education - Ease of Use	-.014	.884
level of education - Social influence	-.095	.325
level of education - Usefulness	**-.275**	**.004**

H8 - Null Hypothesis: There is a significant relationship between level of education and perceived usefulness.

On completion of the analysis of the relationship between the level of education and usefulness, it was found to have a very low negative correlation between earnings of -0.275 with a significance of 0.04. This means that highly educated people do not consider long-distance ridesharing services to be useful compared to those with low levels of education. This means that the population with a low level of education are more likely to consider adopting the service compared to the population with a higher level of education. The null hypothesis is **accepted**.

RELATIONSHIP BETWEEN PREVIOUS EHAILING USAGE AND FACTORS THAT AFFECT LONG-DISTANCE RIDESHARING

H9 - Null Hypothesis: There is a significant relationship between the current frequency of ehailing usage and perceived usefulness.

Spearman's correlation analysis has been done in SPSS and it was found to have a significance value of 0.024. The Spearman's correlation (rho) was found to be 0.216 which reflects a very low positive correlation. Since the correlation has been found to be significant, the null hypothesis **is accepted.** This means that those who are currently using ehailing services more frequently do consider long-distance ridesharing services to be useful compared to the less frequent users.

Table 19: Spearman's correlation between the current frequency of ehailing usage and factors that influence the adoption of long-distance ride sharing.

Relationships	**Spearman's rho**	**Significance(2-tailed)**
Ridesharing usage - Trust	**.224**	**.019**
Ehailing usage - Risk	-.123	.203
Ehailing usage - Compatibility	-.067	.487
Ehailing usage - Facilitating conditions	.135	.163
Ridesharing usage - Ease of Use	-.136	.158
Ridesharing usage - Social influence	.172	.073
Ridesharing usage - Usefulness	**.216**	**.024**

H11 - Null Hypothesis: There is a significant relationship between the current frequency of ridesharing usage and trust.

Spearman's correlation analysis has been done in SPSS and it was found to have a significance value of 0.019. The Spearman's correlation (rho) was found to be 0.224 which reflects a very low positive correlation. Since the correlation has been found to be significant, the null hypothesis **is accepted.** This means that more frequent current ridesharing users are more likely to trust long-distance ridesharing services compared to less frequent ridesharing users.

Other factors such as perceived risk, compatibility, facilitating conditions, ease of use and social influence have been found to have no casual relationships with the ridesharing frequency.

RELATIONSHIP BETWEEN PREVIOUS TRAVELING FREQUENCY HISTORY AND FACTORS THAT AFFECT LONG-DISTANCE RIDESHARING

H12 - Null Hypothesis: There is a significant relationship between the current frequency of travelling between cities or towns and usefulness.

Spearman's correlation analysis has been done in SPSS and it was found to have a significance value of 0.019. The Spearman's correlation (rho) was found to be -0.225

which reflects a very low negative correlation. Since the correlation has been found to be significant, the null hypothesis **is accepted.** This means that those who travel more frequently between cities do not consider long-distance ridesharing to be useful compared to those who travel less frequency.

Table 20: Spearman's correlation between the frequency of travelling between cities/towns and factors that influence the adoption of long-distance ride-sharing.

	Spearman's rho	Significance(2-tailed)
Travelling frequency - Trust	.033	.731
Travelling frequency - Risk	.089	.356
Travelling frequency - Compatibility	-.071	.464
Travelling frequency - Facilitating conditions	-.115	.235
Travelling frequency - Ease of Use	-.095	.325
Travelling frequency - Social influence	-.075	.435
Travelling frequency - Usefulness	**-.225**	**.019**

Correlation between factors

The study has also looked at the correlation between the factors that affect the adoption of long-distance ridesharing. The factors with a significance value of less than 0.05 were considered to be significant. Trust was found to have a low positive correlation with facilitating conditions and social influence. This shows that an increase in trust will result in an increase in facilitating conditions and social influence. The more the services are being socialized (talked about) the more trust. Risk was also found to have a moderate positive correlation with compatibility. Facilitating conditions were found to have a low negative correlation with ease of use while it was also found to have a moderate positive correlation with social influence. Table **21** has a detailed correlation table showing the relationship between factors. These relationships mean that the more one factor is addressed the more likely it will have an impact on the other factors. An example is increasing the rating of risk would also likely result in an increase in compatibility.

Table 21: Pearson correlation between the factors

		Trust	Risk	Compatibility	Facilitating conditions	Ease of Use	Social influence
Trust	Pearson Correlation	--					
Risk	Pearson Correlation	.024	--				
	Sig. (2-tailed)	.801					
Compatibility	Pearson Correlation	.010	.549**	--			
	Sig. (2-tailed)	.916	<.001				
Facilitating conditions	Pearson Correlation	.471**	.151	.091	--		
	Sig. (2-tailed)	<.001	.117	.346			
Ease of Use	Pearson Correlation	-.228*	-.114	-.187	-.351**	--	
	Sig. (2-tailed)	.017	.238	.051	<.001		
Social influence	Pearson Correlation	.353**	.136	.101	.542**	-.325**	--
	Sig. (2-tailed)	<.001	.158	.297	<.001	<.001	
Usefulness	Pearson Correlation	.184	-.049	-.035	.452**	-.235*	.464**
	Sig. (2-tailed)	.056	.615	.716	<.001	.014	<.001

Ranking of factors affecting long-distance ride-sharing

H13 - Null hypothesis: There are equal mean ranks amongst the factors that affect long-distance ridesharing.

Friedman ANOVA was performed to test the null hypothesis. The test was found to be significant with a p-value of <0.001 and a Chi-square of 426.063. From the results, it is also apparent that there is some consistency in the way the factors were ranked, with Perceived risk being ranked the most important with a mean rank of 2.55 and social influence being ranked least important as shown in the

Table **22**. This means that the null hypothesis of equal mean ranks has been **rejected.** This means that the mean ranking are not the same and people are able to identify factors which are considered important for them to adopt long-distance ride-sharing services.

Table 22: Mean ranks of factors affecting the adoption of long-distance ride-sharing services.

	Mean Rank	Rank
Perceived usefulness	3.58	3
Social influence	6.10	7
Ease of use	3.66	4
Facilitating conditions	4.89	6
Compatibility	4.61	5
Risk	2.55	1
Trust	2.61	2

Summary

The chapter presented the results of the analysis done on factors that affect long-distance ridesharing. The chapter discussed the descriptive statistics and went on to test various test cases. These test cases will be discussed in the following chapter.

DISCUSSION

Introduction

This chapter aims to reflect on the results obtained in Chapter 5. It concludes the objective of the study and confirms if the results obtained have been able to answer the research questions. The study aimed to identify, analyse and rank factors that affect the adoption of long-distance peer-to-peer ridesharing services. The factors were identified by reviewing studies that have been done in other parts of the world. The study was then used to confirm if these factors were applicable in the South African context and whether their mean rankings were comparable to the rankings done in other parts of the world.

Summary of Results

a. Factors that affect the adoption of long-distance ridesharing services

The initial part of the study was to identify factors that affect the adoption of long-distance ridesharing services. This was done through a literature review of similar studies done in other parts of the world. Since the concept of long-distance peer-to-peer ridesharing had not been done in South Africa, studies that considered Technology Acceptance Models were used to identify factors that influence the adoption of new technologies. It was found that these models focused on a few factors that were expanded to include the seven factors that have been considered in this study.

Even though the study narrowed down the factors to seven, it also allowed participants to suggest other factors if they felt that the survey did not cover everything. From the high-level review of the responses provided by participants, their proposed additional factors are summarised below.

Suggestions from participants	Coded Factors
Driver rating, Security. Condition of the vehicles and vetting, Consider women only like the short-distance rides,	Risk
Quality of service and cost, Comfort	Facilitating conditions
The flexibility to prep book your trip, Availability, reliability	Facilitating conditions
The availability of the service in places where transport is difficult to obtain. I think having a ridesharing office would also work for users who are not technologically apt. e.g. in Paris, there is a blahblah physical office where people can be helped to book.	Facilitating conditions
Engagement with other transport operators to avoid confusion and danger and provide safety to long-distance ride-sharing services.	Risk
Anti-hijacking services, Sharing of location	Risk
Access to emergency support	Facilitating conditions

The suggestions from the participants can be reduced to factors that had already been included in the study and therefore provide necessary comfort that all possible factors were covered. Many participants flagged risk as an important factor and went on to propose vetting of users to ensure that cars are roadworthy, and drivers have the necessary documents. In addition, a rating system was also suggested to ensure that those on the platforms are aware of the feedback from other users. This is important for entrepreneurs to ensure that all necessary aspects of risks have been covered. Given the current conflict between metered taxis and ehailing services, it is expected that the launch of a ridesharing

service would be met with similar resistance. However, ridesharing services would be difficult to target as the pickup and drop-off points are random. Also, because this service would be open to any vehicle, it would be difficult to target certain vehicles on the road.

Cost has also been flagged by participants as an important factor, this is in line with the nature of the platform. The foundation of these ridesharing services rests on the fact that the driver must have an intention to drive to the destination with or without passengers. This means that the driver is aware that he or she has the potential to bear the cost of the trip. The addition of passengers is only to reduce the cost of travelling. Based on this foundation, it is envisaged that even though the service may come as a more convenient option compared to the traditional taxis, the fare is not expected to be high. No assessment of the potential cost has been done but it is assumed that drivers would accept fares in line with the current taxi prices.

b. Analysis of factors that affect long-distance ridesharing services.

The previous chapter analysed the casual relationships between some social attributes and the factors affecting the perception toward the adoption of long-distance ride-sharing services. Spearman correlation was used to identify these relationships. Table **23** is a summary of various factors and how they are linked to socio-economic attributes. The study found that age had a significant relationship with only perceived usefulness, social influence and facilitating conditions.

Table 23: Factors affecting the adoption of long-distance ridesharing and the social attributes linked to them.

Factors	**Socio-economic attributes**
Perceived usefulness	Travelling frequency, age, level of education, ehailing history, earnings
Social influence	Earnings, age
Ease of use	
Facilitating conditions	age
Compatibility	
Risk	Earnings, level of education
Trust	ehailing history

Besides the relationship that has been found to exist between socio-economic attributes and factors that affect long-distance ridesharing services, a relationship between factors was also found. This means that, while age does have a relationship with facilitating conditions, it also has an indirect relationship with perceived ease of use, social influence, perceived usefulness, and trust. The youth are finding the concept of long-distance ridesharing to be useful. They are also not worried about the risk as long as they match similar risks in the ridesharing services.

High-income earners are also not finding the concept to be useful; this could be because they currently have enough income to travel alone. Based on the findings of the research, this concept will be accepted by middle to low-income earners. This is primarily because it presents a cheaper option in line with traditional taxi services while also offering convenience and flexibility. Results do confirm that target market.

The level of education has also been found to be a determinant of whether one would adopt the concept or not. Highly educated individuals do not find the concept useful; this can also be explained by the fact that level of education has a low positive correlation with earnings. This means that highly educated individuals are also high-income earners.

The research findings also conclude that those that are currently using ehailing frequently would find the concept useful. This trend similarly aligns with studies on technology acceptance done in other regions. Those that are currently using ehailing services have a certain level of acceptance based on their history. It also confirms the decision made in their earlier discussions when a sample of the population was being selected.

The research also found that there was no relationship between socio-economic attributes and compatibility and ease of use. However, it was found that there is a relationship between ease of use and social influence and also between ease of use and perceived usefulness. This means that for this research, ease of use can be tested through social influence and perceived usefulness. As part of the future, it is recommended that the socio-economic attributes that have a relationship with this factor be identified so that it is effectively assessed.

c. Ranking of factors that affect long-distance ridesharing services.

Studies done in Punjab and Chandigarh, India (Arora et al., 2021) indicated that risk was the least important factor however as expected in South Africa, risk has been ranked as the most important factor. This can be attributed to the current tension between ehailing services and traditional taxis. Trust was also ranked the second most important factor in South Africa, while it was ranked the second least important factor in India.

Table 24: Ranking of factors that affect perception towards adoption of ridesharing services in Punjab and Chandigarh India and South Africa (Arora et al., 2021).

Factors	**India ranking (Arora et al., 2021)**	**South Africa ranking**
Perceived usefulness	1	3
Social influence	3	7
Ease of use	2	4
Facilitating conditions	4	6
Compatibility	5	5
Risk	7	1
Trust	6	2

Social influence was also ranked higher in India than in South Africa and this means that how other people respond to the service will likely have an impact on others. What the research has also found is that socio-economic status does have a huge influence on the application and therefore for the two studies to be properly comparable, it must be done target samples of similar status.

The research also concluded that factors that affect user adoption of long-distance ride-sharing services are viewed differently in different regions. This means that results from this study on the adoption of long-distance peer-to-peer ridesharing services are only valid in South Africa.

Limitations

The following have been identified as limitations of the study

a. The study was aimed at assessing the perception of the sample of consumers from different geographical areas in South Africa but because of the limited time allowed for the distribution of the survey may not have achieved the intended reach.
b. The study focus was on consumer perception which may not necessarily reflect their actual intention when such a service is introduced. It is therefore important for entrepreneurs to do further research before investing in the idea of long-distance ridesharing services.
c. The study is based on correlations and does not necessarily infer causality.
d. Online surveys do not necessarily result in data that have the same richness as in-person interviews. It is recommended that in future, the study must also include in-person interviews.

Recommendations for Future Work

Some of the recommendations will refine the studies done in this research. The research aims to gather people's perceptions of long-distance ride-sharing services in South Africa. For a fair representation, the sample should ideally aim to be a fair representation of the population. Because the survey was shared amongst the researcher's circle, it may not necessarily represent the population. It is recommended that studies should be extended to users who are already practising long-distance ride-sharing. This can be done by requesting to join a number of these Facebook pages and requesting them to share their experience.

It is also recommended that in-person interviews be done to ensure the richness of the findings. Quantitative studies may not always capture the full perspectives.

Key Takeaway for Entrepreneurs

There are several key takeaways from the studies that must be taken note of by businesses and entrepreneurs planning to start a business in long-distance ridesharing services. These include:

a. Studies done in other parts of the world do not necessarily apply in the South African context. It has been found that the ranking of factors done in other developing countries does not necessarily correlate with the ranking in South Africa. Risk is the most important factor that must be considered in the South African context while the least focus should be on social influence.
b. For the platform to succeed, it must target low to medium-income earners. High-income earners still do not find the services to be useful.
c. Additionally, people with a high level of education do not find the concept to be useful and will unlikely use the service. This finding correlates with the fact that high-income earners are effectively those with high levels of education.
d. The study also confirms the initial assumption made that those who are currently using e-hailing services will likely find the services useful. This is specifically useful because there is a lot of research that has been done on ehailing that may apply to long-distance ridesharing services.
e. Given that many Facebook pages have been created to address the problem in this study, it is an indication that there is a need for a consolidated safe platform for users to share details of their trips.

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Appendix A

Section A and C questions have been self-developed and Section B questions on measuring perceptions of users towards long-distance ridesharing have been adapted from (Arora et al., 2021).

Questionnaire on long-distance ridesharing platforms

Q1

My name is Nyasha Horonga, and I am an MBA student at Wits Business School. I am conducting a study on identifying key factors affecting consumer attitudes towards the adoption of long-distance ride-sharing in South Africa. I am inviting you to be a part of this study by taking a few minutes to complete our survey where you will provide your perception and some of the key factors that should be considered.

Your study participation is completely confidential, no personal details or names will be required, and it is guided by the Wits ethics committee to ensure your protection. The findings of the study will be used for academic purposes only.

Please click on the link below to access the survey: (insert link) This survey should take you 15-30 minutes to complete depending on how detailed you want to be in your answers.

By clicking "Next Page" you agree to participate in this study.

Kind regards,

Nyasha Horonga
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Q2 Please indicate your gender

○ Male (1)

○ Female (2)

○ Prefer not to say (3)

Q3 Please indicate your age

	18 - 25 years (1)	25 - 30 years (2)	30 - 35 years (3)	35 - 40 years (4)	40 - 50 years (5)	> 50 years (6)
Please indicate your age range (1)	○	○	○	○	○	○

Q4 Please indicate your current work status

- ○ Employed full time (1)
- ○ Employed part-time (2)
- ○ Unemployed looking for work (3)
- ○ Unemployed not looking for work (4)
- ○ Retired (5)
- ○ Student (6)

Q5 Please indicate your current salary income bracket

- ○ < R250 000 (1)
- ○ R250 000 - R400 000 (2)
- ○ R400 000 - R600 000 (3)
- ○ R600 000 - R800 000 (4)
- ○ R800 000 - R1 200 000 (5)
- ○ > R1 200 000 (6)

Q6 Please indicate your highest level of education

- ○ None (1)
- ○ Matric (2)
- ○ National Certificate (3)
- ○ Diploma (4)
- ○ Degree (5)
- ○ Masters (6)
- ○ Doctorate (7)

Q7 Please indicate the current province you are staying

- ○ Kwazulu Natal (1)
- ○ Free State (2)
- ○ Mpumalanga (3)
- ○ Eastern Cape (4)
- ○ Western Cape (5)
- ○ Limpopo (6)
- ○ North West (7)
- ○ North Cape (8)
- ○ Gauteng (9)

Q8 Please indicate the provinces you frequently visit

- ☐ Kwazulu Natal (1)
- ☐ Free State (2)
- ☐ Mpumalanga (3)
- ☐ Eastern Cape (4)
- ☐ Western Cape (5)
- ☐ Limpopo (6)
- ☐ North West (7)
- ☐ North Cape (8)
- ☐ Gauteng (9)

Q9 How many times do you travel between cities

- ○ Very often (1)

- Often (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q10 What mode of transport do you prefer to use when travelling between cities

- Own vehicle (1)
- Taxis (2)
- Buses (3)
- Airplane (4)

Q11 Have you hitchhiked between towns before?

- Yes (1)
- No (2)

Display This Question:

If Q11 = 1

Q12 What made you decide to hitchhike?

- It was cheaper (1)
- I needed to arrive quicker (2)
- Bus/Taxi rank was far (3)
- It was easier (4)

Display This Question:

If Q11 = 1

Q13 During this trip did you in any way feel unsafe?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q14 Please indicate which platforms you have used so far

- ☐ Airbnb (1)
- ☐ BlablaCar (2)
- ☐ Uber (3)
- ☐ Bolt (4)
- ☐ Lift (5)

Q15 Are you currently using any of the e-hailing services

- ○ Yes (1)
- ○ No (2)

Q16 How often do you use e-hailing services

- ○ Very rarely (1)
- ○ Rarely (2)
- ○ Somewhat often (3)
- ○ Very often (4)
- ○ Extremely well (5)

Q17 Which of the ride-hailing services are you currently using

- ☐ Uber (1)
- ☐ Bolt (2)

Q18 Perceived usefulness

Travelling without using long distance ridesharing services would be difficult (1)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
Using long ridesharing services would give me greater control over my travel plans. (2)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
Using long distance ridesharing would improve the way I travel between cities. (3)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
The use of ride sharing service for long distance would address the challenges I am currently having with traditional long-distance transport. (4)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
Using long distance ridesharing would save time. (5)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
Using ride sharing services would make travelling easier. (6)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)
Overally, I find the concept of long-distance ride sharing services to be useful (7)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)

I find the concept of long-distance ridesharing to be more convinient (8)	○ Strongly disagree (1)	○ Somewhat disagree (2)	○ Neither agree nor disagree (3)	○ Somewhat agree (4)	○ Strongly agree (5)

Q19 Perceived ease of use

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I often become confused when I use the ridesharing service apps (1)	○	○	○	○	○
I make errors frequently when using ridesharing apps (2)	○	○	○	○	○
I find interacting with ridesharing apps is often frustrating (3)	○	○	○	○	○
I would need to consult other users (4)	○	○	○	○	○

Q20 Social Influence

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would use long distance ehailing services if many people are using it (1)	○	○	○	○	○
I would use long distance ehailing service if it is famous (2)	○	○	○	○	○
I would use long distance ehailing service if my family and friends are using it (3)	○	○	○	○	○
I would use long distance ehailing services if it is trending on social media (4)	○	○	○	○	○

Q21 Facilitating conditions

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would use the long distance if resources are easily available (1)	○	○	○	○	○
I would use long distance ehailing services if I have the necessary knowhow of how to use it (2)	○	○	○	○	○
I would use the long distance ridesharing if there clients are easily available (3)	○	○	○	○	○
I would use the long distance ridesharing if there vehicles are easily available (4)	○	○	○	○	○
I would use long distance ridesharing if assistance can be accessed easily in case of difficulties (5)	○	○	○	○	○

Q22 Trust

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would use long distance ridesharing if it is trustworthy (1)	○	○	○	○	○
I would use long distance ridesharing services is they keep to their promises (2)	○	○	○	○	○
I would use the ridesharing services if platform users are placed first (3)	○	○	○	○	○

Q23 Compatibility

I would use ridesharing services if it is compatible with existing technologies (1)	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I would use long distance ridesharing services if it fits my lifestyle (2)	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I would use long distance ridesharing if it is compatible with existing online payment platforms (3)	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
Using e-hailing services fits my lifestyle (4)	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)

Q24 Perceived risk

I would use the long distance ride sharing service if my safety concerns are addressed (1)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use the long distance ride sharing services if the risk is similar to that of the current ehailing platforms in the market (2)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use if the platform makes it difficult for the users to be targeted by current long distance taxi drivers and assosisations (3)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use it if the location for pick up and drop off is safe (4)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)

I would use it if it only allows verified users on the platform (5)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use it if vehicles used are monitored to ensure they abide by the road regulations (6)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use it if vehicles allowed in the platform are less than 5 years old (7)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use the platform if there is zero tolerance for drinking and driving (8)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
I would use it only if the vehicles used are roadworth and users are allowed to inspect the vehicles before the journey (9)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)
Possibility of being duped by unlicensed taxis would make me feel unsafe to use long distance ride sharing service (10)	○ Strongly agree (1)	○ Somewhat agree (2)	○ Neither agree nor disagree (3)	○ Somewhat disagree (4)	○ Strongly disagree (5)

Q25 Please order the following in the order of their importance to you when considering adoption of e-hailing services.

- Usefulness (1)
- Ease of use (2)
- Risk (3)
- Trust (4)
- Compatibility (5)
- Facilitating conditions (6)
- Social Influence (7)