



The Dimensions of Service Quality and Customer Choice of E-hailing Service Providers: Perceptions of Students from a Private Higher Education Institution in Gauteng, South Africa



Thesis submitted in fulfillment of the requirements for the degree **Master of International Business** at The Independent Institute of Education, IIE/MSA.

Michael Philippus Schoeman

Supervisor: Dr Takesure Zhoua

23/01/2024

DECLARATION

I, Michael Philippus Schoeman declare that this Research Report submitted for the Master of International Business degree to The Independent Institute of Education is my own unaided work and has not been previously submitted to another university or higher education institution for degree purposes. Any assistance that I have received has been duly acknowledged in the report.

Except where reference is made in the text, this report contains no material published elsewhere or extracted in whole or part from a thesis or report presented by me for another qualification. No other person's work has been used without due acknowledgment in the main text of the report.

Signed:



Date: 23 January 2024

ACKNOWLEDGEMENTS

I would like to say a special word of thanks to the following people, without whose guidance, support and encouragement this study would not have been possible:

- First and foremost, to my heavenly Father for blessing me with this opportunity and the strength to pursue it.
- I would like to extend my deepest gratitude to my supervisor, Dr Takesure Zhoua, for their knowledge, wisdom, insight and continuous support throughout this journey, constantly encouraging me to smile and be positive, push my boundaries and strive for excellence. Their patience, understanding and unwavering belief in my potential has made this journey not only possible but also enlightening and enjoyable.
- I owe a heartfelt thank you to my family and friends for their unrelenting support and love throughout my academic journey. To my family, who have been my rock, and my friends, who have provided endless encouragement and understanding, I am eternally grateful. Your belief in me has been a constant source of comfort and confidence, and this achievement is as much yours as it is mine.

DEDICATION

This dissertation is dedicated to my late mother, Jacoba Magdalena Schoeman, whose memory and influence have been my guiding light and my greatest source of inspiration. Her enduring spirit and belief in my abilities have been a source of strength and motivation, helping me to persevere even in the most challenging times.

ABSTRACT

E-hailing is a modern form of on-demand transportation that connects consumers to drivers through an online-enabled mobile application. E-hailing services have emerged as a powerful force that has transformed the public transportation landscape in many cities around the world. The South African e-hailing industry is characterised by intense competition, which, according to experts, favours the dominant international e-hailing corporations. This dynamic resulted in several local platforms withdrawing from the market shortly after their inception while numerous other domestic e-hailing start-ups continue to operate despite incurring financial losses. These local entities are searching for strategies to distinguish themselves and secure a viable market position. This study sought to determine the most important dimensions of service quality for e-hailing services from the perspectives of students. Students play a vital role in the e-hailing services industry, serving as both present and future customers, and it was therefore envisioned that their perceptions could assist in shedding light on the dimensions of service quality that e-hailing service providers should focus on for differentiation and competitive advantage.

The study adopted a quantitative approach involving the use of online, self-administered questionnaires. The research instrument was based on the SERVQUAL model and consisted of 22 closed-ended questions anchored on a 5-point Likert scale. The minimum sample size for the study was 381 participants. A combination of purposive and convenience sampling techniques was used to collect data from students at a selected private higher education institution in South Africa. The study found that all five dimensions of service quality, namely reliability, assurance, tangibles, empathy and responsiveness, were important to students when choosing an e-hailing service provider. The study further revealed that the dimension of reliability was the most important to students, followed by the assurance and responsiveness dimensions, and then the empathy and tangibles dimensions. The study concludes that local e-hailing organisations should ensure that they carefully consider, understand and improve upon each of the respective service quality dimensions, but direct most of their attention and resources to improving the reliability dimension, followed by the assurance and responsiveness dimensions, and then the empathy and tangibles dimensions. A few recommendations to local e-hailing service providers and industry experts, government and policymakers have been made as well as areas for future research.

TABLE OF CONTENTS

DECLARATION.....	I
ACKNOWLEDGEMENTS	II
DEDICATION.....	III
ABSTRACT.....	IV
TABLE OF CONTENTS.....	V
LIST OF TABLES.....	X
LIST OF FIGURES	XI
CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY	1
1.1 INTRODUCTION	1
1.2 BACKGROUND TO THE STUDY.....	1
1.3 PROBLEM STATEMENT.....	2
1.4 AIM OF THE STUDY	3
1.5 RESEARCH OBJECTIVES.....	3
1.5.1 Primary objective.....	3
1.5.1.1 Sub-objectives.....	3
1.6 RESEARCH HYPOTHESES	4
1.6.1 Primary hypothesis	4
1.6.2 Sub-hypotheses.....	4
1.7 CONCEPTUAL FRAMEWORK.....	5
1.8 SIGNIFICANCE OF THE STUDY.....	5
1.9 RESEARCH DESIGN AND METHODOLOGY	6
1.10 LIMITATIONS OF THE STUDY	6
1.11 CHAPTER OUTLINE	7

1.12	CONCLUSION	7
CHAPTER 2: LITERATURE REVIEW		8
2.1	INTRODUCTION	8
2.2	E-HAILING SERVICES: A FOCUS ON SOUTH AFRICA	8
2.2.1	Definition and evolution of e-hailing services.....	8
2.2.2	Global impact of e-hailing services.....	9
2.2.3	The transportation landscape in South Africa	11
2.2.4	E-hailing in the context of South Africa.....	12
2.3	SERVICE QUALITY	17
2.3.1	Service quality and competitive advantage	17
2.3.2	Quality perspectives: products vs services	18
2.3.3	Defining service quality	19
2.3.4	Distinguishing between service quality and customer satisfaction.....	20
2.3.5	Review of selected service quality models.....	21
2.3.6	Measuring service quality	27
2.4	SERVICE QUALITY IN THE TRANSPORTATION INDUSTRY	29
2.5	HYPOTHESIS DEVELOPMENT	30
2.5.1	The importance of reliability in the choice of e-hailing service provider	30
2.5.2	The importance of assurance in the choice of e-hailing service provider	31
2.5.3	The importance of tangibles in the choice of e-hailing service provider	31
2.5.4	The importance of empathy in the choice of e-hailing service provider	31
2.5.5	The importance of responsiveness in the choice of e-hailing service provider	32
2.6	CONCLUSION	32
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY		34

3.1	INTRODUCTION	34
3.2	RESEARCH PHILOSOPHY	34
3.3	RESEARCH DESIGN	34
3.4	RESEARCH APPROACH	35
3.5	RESEARCH STRATEGY	36
3.6	POPULATION AND SAMPLING	37
3.6.1	Target population	37
3.6.2	Sampling techniques	38
3.6.3	Sample size	38
3.7	DATA COLLECTION	39
3.7.1	Data collection instrument	39
3.7.2	Execution of the study	39
3.8	DATA ANALYSIS	39
3.9	RELIABILITY AND VALIDITY	40
3.9.1	Reliability	40
3.9.2	Validity	40
3.10	ETHICAL CONSIDERATIONS	40
3.11	CONCLUSION	41
	CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS	42
4.1	INTRODUCTION	42
4.2	PRESENTATION AND DISCUSSION OF RESULTS	42
4.2.1	Response rate	42
4.2.2	Descriptive statistics	42
4.2.2.1	Reliability dimension response distribution	43

4.2.2.2	Assurance dimension response distribution	44
4.2.2.3	Tangibles dimension response distribution.....	44
4.2.2.4	Empathy dimension response distribution	46
4.2.2.5	Responsiveness dimension response distribution.....	47
4.2.3	Confirmatory factor analysis	48
4.2.4	Cronbach alpha	49
4.2.5	Factor scores	50
4.2.6	Statistical ranking	51
4.3	THE OVERALL ANALYSIS OF THE FINDINGS.....	53
4.4	CONCLUSION	56
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS		58
5.1	INTRODUCTION	58
5.2	OVERVIEW OF THE RESEARCH PROBLEM AND OBJECTIVES	58
5.3	THE MAIN FINDINGS OF THE STUDY	59
5.3.1	Main findings from the literature review.....	59
5.3.1.1	E-hailing services	59
5.3.1.2	Service quality	60
5.3.1.3	Service quality in the transportation industry	60
5.3.2	Main findings from the primary data	60
5.4	RECOMMENDATIONS	61
5.4.1	Recommendations for e-hailing service providers.....	61
5.4.2	Recommendations for industry experts, government and policymakers	65
5.5	LIMITATIONS.....	65
5.6	RECOMMENDATIONS FOR FUTURE RESEARCH.....	66

5.7	SUMMARY OF THE STUDY	66
	REFERENCES.....	67
	APPENDIX A: QUESTIONNAIRE.....	79
	APPENDIX B: ETHICAL CLEARANCE	83
	APPENDIX C: CERTIFICATE OF EDITING.....	84

LIST OF TABLES

Table 2.1: Dimensions of service quality in land-based transportation services	30
Table 4.1: Confirmatory factor analysis.....	48
Table 4.2: Cronbach alpha	49
Table 4.3: Factor scores	50
Table 4.4: Paired sample t-test	52
Table 4.5: Statistical ranking.....	53
Table 4.6: Comparison of findings (number one).....	54
Table 4.7: Comparison of findings (number two).....	54

LIST OF FIGURES

Figure 1.1: Proposed conceptual framework	5
Figure 2.1: The service quality model of Grönroos	22
Figure 2.2: The gaps model	23
Figure 2.3: Determinants of perceived service quality	25
Figure 2.4: The three-component model.....	27
Figure 2.5: The SERVQUAL framework	28
Figure 2.6: The SERVPERF framework.....	29
Figure 3.1: Formula for required sample size.....	38
Figure 4.1: Reliability dimension response distribution	43
Figure 4.2: Assurance dimension response distribution	44
Figure 4.3: Tangibles dimension response distribution	45
Figure 4.4: Empathy dimension response distribution	46
Figure 4.5: Responsiveness dimension response distribution.....	47
Figure 4.6: Categorical factor response distribution.....	51

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

In the ever-changing landscape of urban mobility, e-hailing services have emerged as a powerful force that has transformed the public transportation landscape in many cities around the world. E-hailing is a modern form of on-demand transportation that connects consumers to drivers through an online-enabled mobile application. These services have become particularly revolutionary in developing nations where the needs and preferences of commuters are often neglected as a result of the challenges faced by traditional public transportation networks.

The South African e-hailing industry is characterised by fierce competition between local and international e-hailing operators, and local organisations are searching for strategies to distinguish themselves and secure a viable market position. This study focused on how students in private tertiary institutions in South Africa perceive the quality of e-hailing services to determine the service quality dimensions that local e-hailing service providers may need to pay attention to for differentiation and competitive advantage.

The purpose of this chapter is to provide the foundation and context of the study by introducing the relevant background from which the research problem was identified. The chapter presents the research problem, outlines the research objectives and hypotheses, and provides a summary of the research methodology used to address the research problem. It also includes the study's significance, limitations and delimitations, and addresses validity, reliability and ethical considerations before concluding with the structure of the study. Each aspect and how they pertain to the study are discussed in the following sections.

1.2 BACKGROUND TO THE STUDY

Transportation plays a critical role in the socio-economic development of a country. It facilitates mobility and provides individuals with greater access to employment, social activities, and essential goods and services (Development Bank of South Africa, 2023). Traditional modes of public transportation typically include buses, taxis and trains, which are accessible by the general public and operate according to scheduled times and predetermined routes (Vilakazi, 2013; Competition Commission, 2021).

In recent years, there has been a shift towards incorporating technology into traditional business models and processes, allowing for more competitive and efficient operations (Potjanajaruwit, 2023). A consequence of the digital revolution is the rapid expansion of the platform economy,

a business model facilitating connections between providers and consumers through various online applications (Luhlongwane, 2022). E-hailing represents a distinct manifestation of the platform economy that uses mobile applications to connect consumers in need of transportation with drivers who are ready to provide the service (Wilmans & Rashied, 2021). E-hailing has revolutionised the public transportation landscape by providing a convenient and frequently more efficient alternative to traditional modes of public transportation (Young & Farber, 2019).

E-hailing services were first introduced in South Africa in 2013 when a prominent foreign operator entered the local market, shortly followed by another (Diko, 2022). These services have received significant support within specific markets and, in some cases, have effectively established a new market (Department of Transport, 2020). South Africa's e-hailing market, valued at \$610.38 million in 2020, has grown significantly since its introduction and is expected to increase at a rate of 17.4% to reach a value of \$1881.78 million by 2027 (Research and Markets, 2023).

The advent of e-hailing services has elicited a complex array of responses throughout the nation (Giddy, 2019). Proponents acknowledge the value that e-hailing services has brought to consumers and the employment opportunities it has created for workers, but critics raise concerns about anticompetitive market structures, substandard working conditions and vague employment classifications for drivers (Henama & Sifolo, 2017; Competition Commission, 2021; Wilmans & Rashied, 2021).

1.3 PROBLEM STATEMENT

The South African e-hailing industry is characterised by intense competition, which, according to experts, favours the dominant international e-hailing corporations. This dynamic resulted in several local platforms withdrawing from the market shortly after their inception while numerous other domestic e-hailing start-ups continue to operate despite incurring financial losses. These local entities are searching for strategies to distinguish themselves and secure a viable market position (Competition Commission, 2021; Malinga, 2023).

Several scholars contend that delivering exceptional service quality to consumers can assist organisations to distinguish themselves from competitors and increase their likelihood of success (Nawaz, 2022; Hoffman & Bateson, 2023; Zhang, Jun & Palacios, 2023). For local e-hailing organisations to leverage service quality for service differentiation and competitive advantage, it is critical to examine and understand the expectations of consumers regarding the various factors and attributes of service quality and to deliver and promote a higher level of

service performance on those attributes particularly valued by their target customers (Wirtz & Lovelock, 2022; Zhang et al., 2023).

E-hailing is a relatively new phenomenon in the country, and there appears to be scant research that examined e-hailing in the specific contexts of service quality and in South Africa. This study investigates how students in private tertiary institutions in South Africa perceive the quality of e-hailing services and identifies the service quality dimensions that local e-hailing service providers may need to pay attention to for differentiation and competitive advantage.

1.4 AIM OF THE STUDY

This study aims to determine the most important dimensions of service quality for e-hailing services from the perspectives of students. Students play a vital role in the e-hailing services industry, serving as both present and future customers, and it was therefore envisioned that their perceptions could assist in shedding light on the dimensions of service quality that e-hailing service providers should focus on for differentiation and competitive advantage.

1.5 RESEARCH OBJECTIVES

Based on the aim of the study, the following research objectives were formulated.

1.5.1 Primary objective

The primary objective of this study was to determine the dimensions of service quality that students from a selected private higher education institution in South Africa perceive to be the most important when they select an e-hailing service provider.

1.5.1.1 Sub-objectives

In order to achieve the primary objective, the following sub-objectives were formulated for the study:

- **Sub-objective 1:** To determine how important reliability is to students when they select an e-hailing service provider.
- **Sub-objective 2:** To determine how important assurance is to students when they select an e-hailing service provider.
- **Sub-objective 3:** To determine how important tangibles is to students when they select an e-hailing service provider.

- **Sub-objective 4:** To determine how important empathy is to students when they select an e-hailing service provider.
- **Sub-objective 5:** To determine how important responsiveness is to students when they select an e-hailing service provider.

1.6 RESEARCH HYPOTHESES

Based on the aim of the study, the following research hypotheses were formulated:

1.6.1 Primary hypothesis

The service quality dimensions of reliability, assurance, tangibles, empathy and responsiveness are important to the students from a selected private higher education institution in South Africa when they select an e-hailing service provider.

1.6.2 Sub-hypotheses

To test the primary hypothesis, the following sub-hypotheses were formulated for the study:

- **H¹:** Reliability is important to students when they select an e-hailing service provider.
- **H²:** Assurance is important to students when they select an e-hailing service provider.
- **H³:** Tangibles is important to students when they select an e-hailing service provider.
- **H⁴:** Empathy is important to students when they select an e-hailing service provider.
- **H⁵:** Responsiveness is important to students when they select an e-hailing service provider.

1.7 CONCEPTUAL FRAMEWORK

The conceptual framework for the current study is displayed in Figure 1.1 below.

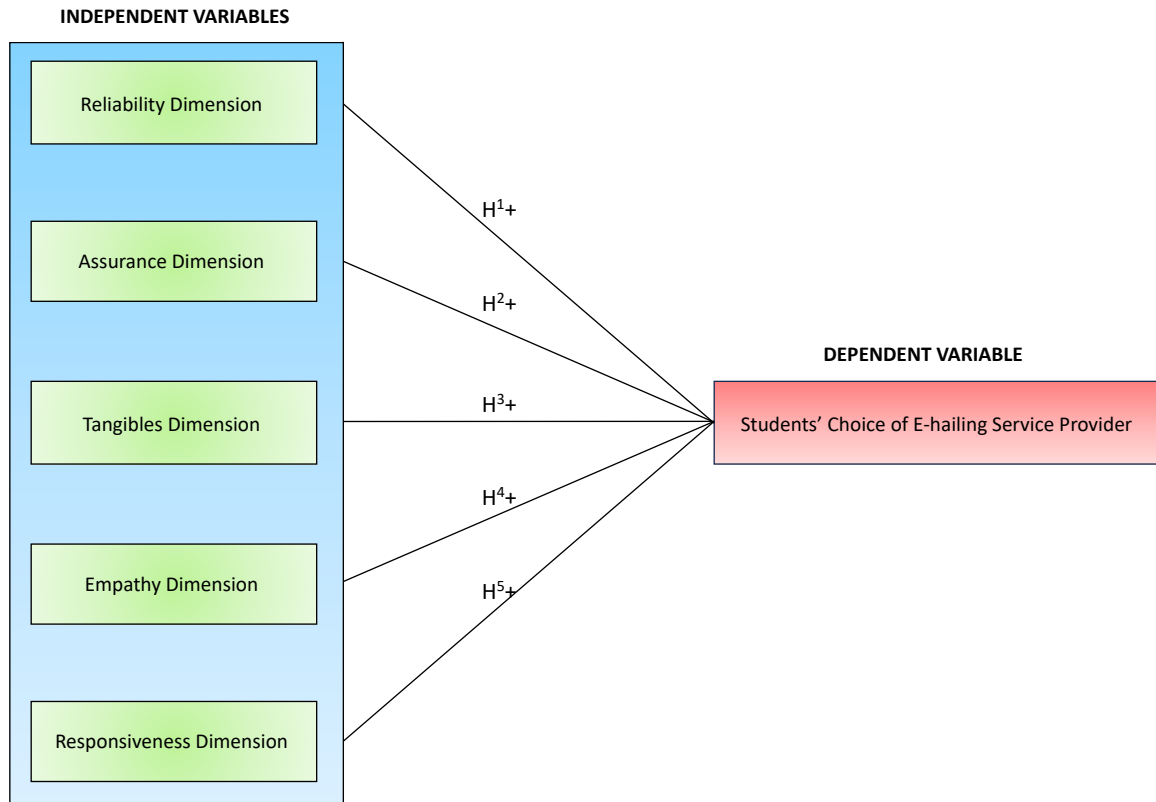


Figure 1.1: Proposed conceptual framework

Source: Researcher's own construction

The conceptual framework in Figure 1.1 identifies the independent variables for the study as the five dimensions of service quality, and the dependent variable as the students' choice of e-hailing service provider.

1.8 SIGNIFICANCE OF THE STUDY

The study is significant because it will advance the body of knowledge on the concepts of e-hailing and service quality. Moreover, it uses students as participants because they are a critical consumer segment constituting current and future consumers who are influential to other consumer segments in the consumption of the services. Furthermore, the findings of this study can assist in guiding various stakeholders in contributing to the development and growth of the local e-hailing industry to promote competitiveness and efficiency in this market and encourage the industry to explore new and innovative ways of operating, which could ultimately lead to better services for consumers and more opportunities for local companies.

1.9 RESEARCH DESIGN AND METHODOLOGY

This section presents a brief overview of the methods and techniques used to collect and analyse the data in this study. The study used a quantitative approach. A questionnaire with closed items was adapted from a validated scale and administered to students from a selected private higher education institution in South Africa for data collection. The responses were captured in an electronic spreadsheet and subsequently imported into a statistical software package for data analysis. The analysis involved performing descriptive and inferential statistics to determine the dimensions of service quality that students from a selected private higher education institution in South Africa perceive to be the most important when they select an e-hailing service provider. The results were presented in written, tabular and graphical formats.

1.10 LIMITATIONS OF THE STUDY

- The study used non-probability sampling techniques, which could restrict the generalisability of the findings to the broader population of tertiary students from private higher education institutions in South Africa.
- The study used a purely quantitative approach, which might have overlooked the in-depth knowledge that qualitative data could provide about the reasons underlying students' perceptions.
- The study's sole focus on students from private higher education institutions might not have captured the perceptions of consumers from different demographic groups.
- The study examined five essential dimensions of service quality but there may be more factors or dimensions that influence consumer perceptions of service quality.
- The study's use of a cross-sectional strategy only captured a snapshot of consumer perceptions at a given point in time and did not account for changes in perceptions over an extended period of time.

1.11 CHAPTER OUTLINE

The study is divided into five chapters as follows:

- Chapter 1 introduces the study, provides the background to the study and states the research problem, objectives and hypotheses. It also briefly overviews the methods and techniques for collecting and analysing data.
- Chapter 2 reviews the literature relating to e-hailing services and service quality from both international and local perspectives. It also details the theoretical framework underpinning the study.
- Chapter 3 presents a detailed description of the methods and techniques for collecting and analysing data to address the research problem identified in Chapter 1.
- Chapter 4 presents and discusses the study's results, identifying any similarities and differences between the literature and primary data.
- Chapter 5 consolidates the data analysis and presents the conclusions and recommendations of the study. The study's recommendations are derived from possible gaps in tandem with the research objectives.

1.12 CONCLUSION

This chapter provided a broad overview of the study. It identified the research problem as the foundation of the study and the justification for the research. The study's aim, objectives and hypotheses were specified, and a summary of the methodology for addressing the research problem was presented. Predicated on this foundation, the following chapter ensues with a critical review of the literature related to the study.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The preceding chapter laid the foundations of this study, which focused on how students in private tertiary institutions in South Africa perceive the quality of e-hailing services. This chapter critically analyses the existing literature related to the core aspects of this research and is structured into three main sections. The first section examines the concept and evolution of e-hailing services, from both global and local perspectives. The second section explores the theoretical foundation of service quality and synthesises several important models and frameworks from the extensive body of research on service quality. The third section examines service quality in the context of land-based transportation services, including e-hailing services, and delves into previous studies that have assessed the significance of service quality dimensions for consumers of these services. The fourth and final section focuses on the development of the hypotheses.

2.2 E-HAILING SERVICES: A FOCUS ON SOUTH AFRICA

2.2.1 Definition and evolution of e-hailing services

In the last few years, the sharing economy has experienced significant growth due to technological advancements and widespread internet connectivity (Giddy, 2019; Smith, 2021). The sharing economy is a peer-to-peer socio-economic system in which individuals and organisations provide short-term access to resources through online-enabled digital platforms in exchange for compensation (Lee, Chan, Balaji & Chong, 2018; Davlembayeva & Papagiannidis, 2023). It is argued that the sharing economy has the potential to improve socio-economic conditions by enhancing labour productivity, promoting consumption, and fostering entrepreneurship and innovation (Luhlongwane, 2022). Scholars assert that digital platforms have accomplished significant success by leveraging information and communication technology (ICT) to link service providers with consumers, effectively lowering the transaction costs, inefficiencies and barriers to market entry associated with traditional business models (Smith, 2021; Wilmans & Rashied, 2021).

E-hailing services have swiftly emerged as one of the most prosperous sectors within the broader sharing economy. They have reshaped transportation and urban mobility in various countries and regions around the world (Giddy, 2019). E-hailing, also known as ride-hailing or app-based transportation, is a modern transportation service that allows passengers to book

rides through smartphone applications (Shah, 2021). E-hailing companies are defined as peer-to-peer networking platforms that facilitate the connection between consumers in need of transportation and drivers who are prepared to supply the service (Deloitte, 2019; Giddy, 2019; Pahwa, 2023). E-hailing companies do not own or employ the means of production, that is, they do not own vehicles or employ drivers, but rather create the means of connection (smartphone application) to efficiently match passenger demand with driver supply in exchange for a commission on the fares of trips (Deloitte, 2019; Pahwa, 2023). E-hailing services rely on a combination of advanced technologies to facilitate their operations and provide convenient and efficient transportation services (Shah, 2021). Researchers in the transportation sector have theorised that the extensive implementation of advanced ICT to deal with pervasive problems in the traditional transportation industry is largely responsible for the sector's rapid growth in recent years (Olayode, Severino, Alex, Macioszek & Tartibu, 2023).

The following section summarises the steps involved in the process of e-hailing as described by Rayle, Dai, Chan, Cervero and Shaheen (2016), Mezulánik, Durda, Civelek and Malec (2020), Shah (2021) and Smith (2021). Upon downloading the dedicated e-hailing application onto their smartphone, users must create an account by entering their personal details and payment information. Following the registration procedure, users can log in to the application and request a ride at their convenience. Once the application is launched, the user enters their pick-up and drop-off locations. Based on this information, the application uses a combination of global positioning systems (GPS), geographical information systems (GIS) and advanced location-based algorithms to calculate the estimated fare and duration of the trip and to efficiently match the customer with a driver available nearby. Once available drivers are found, customers can review driver details and request a ride from their preferred driver with the tap of a button. Upon confirmation, the customer can view the estimated arrival time and track the driver's real-time location as they head towards the pick-up point. On completion of the trip, payment is automatically processed through the application, and both passengers and drivers can rate one another.

2.2.2 Global impact of e-hailing services

E-hailing services have challenged existing public transportation networks across the globe, which has sparked great debate as to their role in traditional transportation networks, how they should be regulated and the way in which they influence travel behaviour (Rayle et al., 2016; Giddy, 2019; Young & Farber, 2019; Mezulánik et al., 2020; Smith, 2021; Wilmans & Rashied,

2021). E-hailing services present substantial advantages over traditional modes of public transport, including greater convenience, flexibility and speed (Mezulánik et al., 2020; Shah, 2021; Wilmans & Rashied, 2021). The convenience of e-hailing services can be attributed to several factors and can be observed in every facet of travel (Gan, Fan, Jiao & Sun, 2021; Ann & Shafi, 2022). Convenience represents the degree of time and effort required to purchase and use a service (Berry, Seiders & Grewal, 2002), and it is considered to be one of the key factors that have influenced the adoption, use and overall success of e-hailing services (Smith, 2021). This is supported by several researchers who submit that e-hailing services are valued by consumers for their ease of use, short waiting time, point-to-point service, effortless payment options and the ability to access these services at the preferred location and time (Shen, Zou, Lin & Liu, 2020; Ann & Shafi, 2022). The e-hailing business model uses technology to minimise the distances covered between passenger trips and operates without boundaries (Smith, 2021). Moreover, e-hailing companies employ a dynamic pricing strategy to ensure that customers are always able to find a ride (Rayle et al., 2016). During periods of peak demand, when the number of drivers becomes limited, e-hailing companies temporarily increase their prices to incentivise more drivers to become available (Smith, 2021). Administrations are also available in places with little public transport, particularly in suburban districts (Nor, Sabri & Mat Isa, 2021). E-hailing services are accessible 24/7, providing a convenient alternative when late-night public transit is scarce and most public transport ceases operation after a specific hour (Ann & Shafi, 2022). Numerous other authors mention that e-hailing services are preferred to traditional modes of public transport because of their affordability, service quality, safety and security, punctuality, experience and trustworthiness (Henama & Sifolo, 2017; Mezulánik et al. 2020). E-hailing services have been commended for reducing the number of privately owned cars on the road and thereby decreasing the amount of greenhouse gas emissions (Olayode et al., 2023).

E-hailing services have established a platform that makes it possible for workers to earn a healthy income with flexible working conditions (Luhlongwane, 2022). In an effort to curb unemployment, a considerable number of individuals have joined e-hailing platforms to generate a reliable source of income (Berndt, Pretorius & Blaauw, 2021; Wilmans & Rashied, 2021). While initially marketed as a means to generate additional revenue, e-hailing services have now become the primary source of income for many drivers on the platform (Hall & Kreuger, 2018). The e-hailing business model is based on the concept of not directly employing

driver partners, but instead enabling them to use the platform technology in exchange for a commission (Malinga, 2023).

E-hailing services are sometimes regarded as disruptive innovations, characterised by their ability to establish new markets and value networks which often result in the eradication of incumbent technologies (Smith, 2021). The advent of e-hailing has posed significant challenges to regulatory bodies because e-hailing emerged well in advance of legislative frameworks designed to effectively address the transformative impact caused by the disruptive technology of these services (Henama & Sifolo, 2017). The rapid growth of e-hailing as a sub-sector within the broader transportation industry has sparked considerable regulatory concerns and debates involving both the companies (competition and legalities between companies and drivers) and the drivers (labour classification, worker rights and tax treatment) (Flores & Rayle, 2017; Wilmans & Rashied, 2021; Luhlongwane, 2022). Consequently, a significant amount of research has concentrated on regulation and policy implementation (Flores & Rayle, 2017; Giddy, 2019). At the forefront of regulatory deliberations is the relationship between e-hailing services and conventional metered taxis (Flores & Rayle, 2017; Giddy, 2019). The emergence of e-hailing has been met with tremendous resistance from the metered taxi industry, which argues that e-hailing services compete unfairly with their services because they target the same market but are not subject to the same regulations (Smith, 2021; Luhlongwane, 2022). For example, local governments in several cities require metered taxi operators to have an occupational license to control the number of individual operators, the fares that they can charge and the areas in which they are allowed to operate (Giddy, 2019) while e-hailing companies have often circumvented these regulations by stating that they are technological companies and not transportation companies, and that the regulations that are applicable to traditional transportation services are, therefore, not applicable to them (Berndt et al., 2021). Policymakers have adopted various strategies for regulating these services (Smith, 2021). Certain regions have enforced a complete prohibition on e-hailing services whereas others have imposed restrictions on the quantity of e-hailing drivers allowed to operate. Conversely, some regions have enthusiastically embraced the new competition introduced by these services (Cetin & Deakin, 2019; Giddy, 2019).

2.2.3 The transportation landscape in South Africa

South Africans spend more than 20% of their disposable income on public transportation, which is considerably higher than the global benchmark of 10% (Competition Commission,

2021). In South Africa, most commuters' day-to-day travel is for reaching employment and educational institutions (Statistics South Africa, 2020; Smith, 2021). Transport mode decisions for South African commuters are primarily influenced by travel time, followed by travel cost and flexibility (Statistics South Africa, 2020). The main modes of public transport in South Africa consist of minibus taxis, buses and trains (Vilakazi, 2016; Statistics South Africa, 2020; Kgwedi, 2022). Minibus taxis account for roughly 70% of trips and dominate the public transportation landscape (Statistics South Africa, 2020). Due to constraints in government expenditure, operational and institutional inefficiencies, and a fragmented and dilapidated infrastructure stemming from apartheid city planning, South Africa's public transportation system continues to be hampered by poor accessibility, reliability and safety (Luke & Heyns, 2020; Kgwedi, 2022; Development Bank of South Africa, 2023). Despite these challenges, low-income households, who represent the majority of the population, remain particularly dependent on the public transportation system for day-to-day travel because it is the only option connecting these households from their homes in rural areas to their places of work and education in the metropolis. Meanwhile, the middle-to-upper-income population, who represent the minority of the population, primarily use their own personal vehicles; a privilege typically reserved for this segment of the population (Govender, 2016; Giddy, 2019).

2.2.4 E-hailing in the context of South Africa

The emergence of e-hailing has proven to be particularly transformative in developing nations as a result of the enhanced accessibility they offer in urban areas with inadequate transportation infrastructure (Berndt et al., 2021). This is somewhat emphasised in the global South where the needs of end-users of transportation services are often neglected as a result of rapid urbanisation, urban sprawl and poor transport infrastructure (Giddy, 2019; Luke & Heyns, 2020).

The entrance of e-hailing services into South Africa has elicited a wide variety of responses throughout the country (Luhlongwane, 2022). E-hailing services have brought value to South African consumers by helping to bridge the gaps in the existing transportation network, extending the accessibility of transportation services for a broader segment of the population, both economically and geographically, and increasing consumers' sense of independence and freedom (Giddy, 2019; Smith, 2021; Diko, 2022). South Africa's e-hailing market, valued at \$610.38 million in 2020, has grown significantly since its introduction in 2013, and is expected to increase at a rate of 17.4% to reach a value of \$1881.78 million by 2027 (Research and

Markets, 2023). It has gained considerable traction and has become a desirable mode of transportation for a significant share of the population who value the convenience, safety and security associated with these services, and that it seamlessly integrates into the consumer's location and schedule (Department of Transport, 2020). Several scholars contend that consumers derive value from e-hailing services based on a combination of monetary and non-monetary benefits, including service quality, lower costs, frictionless payment options, convenience, enhanced safety features like driver background checks and trip tracking, increased availability, greater comfort and better reliability (Giddy, 2019; Smith, 2021; Wilmans & Rashied, 2021). In South Africa, where road safety and drunk driving are significant concerns, e-hailing has also become a popular alternative to driving under the influence (Berndt et al., 2021; Wilmans & Rashied, 2021). E-hailing contributes to the complex web of existing transport networks and has improved the mobility of vulnerable populations, including children, the elderly and women (Giddy, 2019; Fenton, Wafer & Fitchett, 2020).

It is argued that e-hailing services have effectively established a new market of public transportation users in South Africa (Giddy, 2019; Competition Commission, 2021). Compared to owning and using a private car, these services have gained a place in the low-end market and have created a whole new market of previous non-public transport users (Smith, 2021). Research conducted by Giddy (2019) and Smith (2021) provides strong empirical evidence that the market for e-hailing services in South Africa is more likely to consist of people who are young, educated, have a high income, live in urban areas and who typically do not use other modes of public transportation. Henama & Sifolo (2017) concur that e-hailing services primarily have an urban presence and have, therefore, become particularly popular and beneficial among middle-class consumers who reside in urban areas rather than among rural inhabitants. Further empirical findings suggest that e-hailing services are mostly used for occasional short-distance travel, particularly during weekends and night-time, and mainly for attending social and recreational events and reaching locations that are not typically covered by conventional public transportation (Giddy, 2019; Smith, 2021). Given that e-hailing services are mostly used at different times, for different reasons and by a different user demographic than traditional modes of public transport, various authors have argued that e-hailing services mostly complement rather than offer a substitute for existing modes of public transport (Rayle et al., 2016; Giddy, 2019; Young & Farber, 2019; Competition Commission, 2021; Smith, 2021).

The entrance of e-hailing in South Africa has created both intramodal competition (competition in each mode) and intermodal competition (competition between modes) (Competition Commission, 2021). While there are several e-hailing operators in South Africa, the industry is dominated by two international operators who collectively hold 99% of the market share (Luhlongwane, 2022). Experts argue that the intense competition favours the dominant international operators and that this has led to several domestic platforms exiting the market shortly after their inception, while numerous other local e-hailing start-ups continue to operate at a loss (Competition Commission, 2021; Luhlongwane, 2022; Malinga, 2023). It is argued that their dominance is primarily the result of strong barriers to entry and expansion related to first-mover advantages and brand loyalty, network effects and pricing strategies (Competition Commission, 2021). Competition requires rivals and, in markets where the barriers to entry are high, rivalry is limited. Limited rivalry in markets, among other things, heightens potential abuse and anticompetitive conduct (Competition Commission, 2021). International operators were the first to introduce e-hailing services into the country and were therefore able to establish a competitive advantage over later entrants by capturing the initial market demand, building a large customer base and creating substantial brand awareness and loyalty in the process (Competition Commission, 2021; Hill, 2021). E-hailing is a multi-sided digital platform consisting of drivers on the one side and passengers on the other who are connected through a digital platform that represents a network (Smichowski, 2018). The success of multi-sided digital platforms greatly depends on indirect network effects (Competition Commission, 2021), which essentially means that the greater the number of users on one side of the platform (for example, e-hailing passengers), the more attractive the platform becomes to the users on the other side of the platform (for example, e-hailing drivers) and vice-versa (Smichowski, 2018). Network effects rely on efficiency through economies of scale and therefore encourage network operators to get as many users to join the network as possible during the early stage of introduction, primarily through penetration pricing. In these situations, new market entrants often struggle to contend against long-standing enterprises for both operators and passengers and, therefore, encounter difficulties in achieving the requisite economies of scale that are pivotal for the actualisation of network effects and successful market penetration (Competition Commission, 2021). Network effects, therefore, tend to cultivate a market characterised by the dominance of a single victor which creates a barrier for new entrants (Smith, 2021). It is further argued that international e-hailing operators are involved in predatory pricing, effectively pricing other competitors out of the local market (Malinga, 2023). Henama & Sifolo (2017) mention that the success of e-hailing services in South Africa, with specific reference to

international operators, can be attributed to their superior technology for matching drivers with passengers, the ability to operate on a larger scale which allows for faster matches, the presence of outdated and inefficient taxi regulations, and a flexible labour model that incorporates surge pricing to better align supply and demand throughout the day.

The introduction of e-hailing services has sparked contention between e-hailing providers and metered taxi operators in many countries worldwide, including South Africa (Smith, 2021). The regulatory issues that inhibit the competitiveness of metered taxis largely consist of licencing requirements, geographical restrictions and pricing dynamics (Competition Commission, 2021; Wilmans & Rashied, 2021). For example, metered taxis in South Africa may only operate within specified zones and are obligated to return to these zones upon finishing a trip (Competition Commission, 2021). This process is uneconomical since the operator has to make an unoccupied return trip (Smith, 2021). Conversely, for e-hailing operators, the radius is not explicitly defined and the business model uses technology to minimise the distances covered between passenger trips (Competition Commission, 2021). Hence, the greater travel distances experienced by metered taxis between passenger trips leads to higher operating expenses, which is transferred to the consumer through higher trip fares, thus constraining the demand for metered taxis (Giddy, 2019; Smith, 2021). The competitive threat of e-hailing services has led to violence and strike actions from metered and minibus taxi operators, who have called for government regulation and policy implementation (Malinga, 2023). Kgwedi (2022) argues that competition-related violence in intermodal transportation leads to a vicious cycle of substandard service quality, minimal investment in services, negative market perceptions and greater use of private transport.

In addition to being victimised and harassed by the minibus and metered taxi industry, e-hailing drivers have experienced other challenges, including targeted attacks by criminal syndicates, low compensation and increased operating costs (Wilmans & Rashied, 2021; Malinga, 2023). The drivers of e-hailing companies have embarked on several strikes over the last few years to urge the government to implement regulations that would improve their working conditions in the industry (Diko, 2022). In South Africa, the e-hailing revenue model presents a number of serious obstacles due to the country's extreme level of income disparity (Giddy, 2019; Wilmans & Rashied, 2021) that has consequently generated significant concerns about the potential exploitation of drivers (Smith, 2021; Luhlongwane, 2022). The first problem is that minimum wage laws are frequently ignored, particularly when it comes to unregulated and part-time employment. This implies that drivers must work extremely long hours and provide multiple

rides in order to make a comfortable living, assuming that they are paid more than the minimum wage after operating expenses are deducted (Wilmans & Rashied, 2021; Luhlongwane, 2022). A second issue is that, in contrast to developed nations, drivers in South Africa typically cannot afford to purchase their own vehicles and, therefore, commonly rent vehicles from 'partners' who finance them (Luhlongwane, 2022). A further problem that arises is the considerably high commission percentage that the platform owners deduct, which significantly diminishes the profit of drivers (Wilmans & Rashied, 2021). This is significant when considering that most drivers must share their earnings with the owners of the vehicle, and drivers are responsible for the upkeep of their own vehicles, including auto maintenance, car insurance, data expenses, fuel costs and the purchase of a smartphone (Luhlongwane, 2022). Wilmans & Rashied (2021) contend that drivers in the South African e-hailing industry perceive improved prospects for self-employment, increased flexibility and higher earning potential when compared to their previous full-time occupations. In addition, drivers express a moderate level of satisfaction, mainly due to safety concerns.

Over and above the role of e-hailing services in the public transportation system, reports of poor service quality in South Africa have dominated discussions of these services in recent years (Le Roux, 2021; Daily Investor, 2023). Negative experiences reported by users include long waiting times, late arrivals and cancelled trips. In addition, customers have voiced their concerns about the substandard conditions of the vehicles, impolite drivers and poor adherence to the rules of the road. Moreover, users have argued that the e-hailing companies are not responsive to their problems and that their problems are not dealt with efficiently. A significant concern is the considerable amount of customers who claim to have been sexually harassed, robbed and, in some cases, violently attacked by drivers (Le Roux, 2021; Smith, 2021; Wilmans & Rashied, 2021; Ayo-Adewale, 2023; Daily Investor, 2023).

The regulatory situation of e-hailing services in South Africa is constantly changing and developing, as it mirrors the wider worldwide difficulties of incorporating innovative digital services into established regulatory and economic structures (Smith, 2021). The planned modification to South Africa's National Land Transport Act in 2020 introduces new regulations for the e-hailing industry. Once the act is passed into law, it is expected to promote fairness and equality in the transport ecosystem, facilitate co-existence between e-hailing services and existing taxi operators, promote fair and equitable labour practices for e-hailing drivers and improve the general safety of consumers (Wilmans & Rashied, 2021; Diko, 2022; Malinga, 2023).

2.3 SERVICE QUALITY

Over the years, customers have become tougher to please. They are more knowledgeable than in the past, their expectations have significantly increased, and they are more selective in how they spend their disposable income (Hoffman & Bateson, 2023). Furthermore, the service sector is the fastest-growing sector in the world (Adetokunbo & Edioye, 2020). It plays a significant role in the global economy, accounting for nearly two-thirds of global gross domestic product (GDP) and most new job creation worldwide (Wirtz & Lovelock, 2022). Due to the greater level of competition experienced between companies in the service sector and the increased pressure and demands from well-informed and educated customers, it becomes increasingly challenging and expensive to acquire and retain customers (Heyns & Kilbourn, 2022) and ever more important for service organisations to focus on service quality for business survival and success (Ali, Jusoh, Idris, Nor, Wan, Abbas & Alsharif, 2023).

2.3.1 Service quality and competitive advantage

In recent decades, the concept of service quality has emerged as a prominent focal point for practitioners, managers and researchers alike, owing to its substantial influence on business performance (Berndt & Boshoff, 2022; Nawaz, 2022; Hoffman & Bateson, 2023). Scholars contend that service quality is a crucial strategic weapon for organisations seeking to distinguish themselves from competitors and establish a long-term competitive advantage (Mphahlele, 2018; Nawaz, 2022; Hoffman & Bateson, 2023; Zhang et al., 2023). Service quality has a considerable impact on customer satisfaction and customer loyalty. It eventually results in greater revenues and profitability by way of repeat purchases and positive word-of-mouth (Slack & Singh, 2020; Berndt & Boshoff, 2022; Nawaz, 2022). Numerous empirical studies, conducted by scholars in various industries and cultures, have identified a positive relationship between service quality and customer satisfaction (Ravichandran, Mani & Prabhakaran, 2010; Ahmed, Al Asheq, Ahmed, Chowdhury, Sufi & Mostofa, 2023), service quality and behavioural intentions (Clemes, Dean & Thitiya, 2020; Pandey & Sahu, 2020), and service quality and customer loyalty (Teeroovengadum, 2020; Limna & Kraiwanit, 2022; Nawaz, 2022). Ensuring continuous and exceptional service quality is, therefore, of utmost importance for a company's long-term success (Zhang et al., 2023).

In order to ensure the highest level of service quality, it is crucial to have a deep understanding of consumer needs, dedicated service providers and well-designed service delivery systems that align with the company's commitment to quality (Hoffman & Bateson, 2023).

2.3.2 Quality perspectives: products vs services

Scholars contend that service quality is an elusive and abstract concept that is difficult to define and measure (Parasuraman, Zeithaml & Berry, 1985; Schneider & White, 2004; Bateson & Hoffman, 2023). Goods are objects, devices or things, whereas services are deeds, processes or performances that make up an experience (Wirtz & Lovelock, 2022). Kotler & Keller (2021: 422) define a service as ‘any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything’. Wirtz and Lovelock (2022) state that services are economic activities performed between two parties where the buyer of the service exchanges resources (such as time, money and effort) to obtain value from the access rather than ownership of value-creating elements (such as labour, skills, expertise, products, networks and systems) provided by the seller.

Services possess a generalised set of characteristics that distinguish them from goods, namely intangibility, inseparability, heterogeneity and perishability (Wirtz & Lovelock, 2022). The fundamental distinction between products and services lies in the characteristic of intangibility, which further represents the main source from which the other three distinctive characteristics emerge (Hoffman & Bateson, 2023). Services are inherently intangible because they do not possess any physical shape or form and, therefore, cannot be touched or seen in the same manner as goods (Kotler & Keller, 2021). Next is the characteristic of inseparability, which implies that the processes of service production and consumption cannot be separated because services are produced and consumed at the same time (Wirtz & Lovelock, 2022). The third distinguishing factor, namely heterogeneity, introduces the potential for service delivery to vary from one service transaction to another, while perishability, the final characteristic, implies that service capacity cannot be stored for later use (Berndt & Boshoff, 2022; Hoffman & Bateson, 2023).

Due to the unique characteristics of services, scholars agree that the criteria that constitute the quality of goods is insufficient to understand the quality of services and that consumers, therefore, evaluate the quality of services in a fundamentally different way from the quality of goods (Grönroos, 1984; Parasuraman et al., 1985; Kandampully, Mok & Sparks, 2001; Berndt & Boshoff, 2022). Product quality is frequently associated with technical specifications, including adherence to predefined standards and level of defects, which can be measured and assessed in an objective manner (Berndt & Boshoff, 2022). A service is commonly understood as a performance that takes place in the customer's presence and therefore the quality of a

service is primarily determined by the subjective perception of the customer's experience, rather than an objective evaluation of a tangible product (Kandampully et al., 2001).

Consumers evaluate the quality of a service in terms of technical quality (what the service delivers) and functional quality (how the service is delivered) (Grönroos, 1984; Parasuraman et al., 1985; Hoffman & Bateson, 2023). According to Schneider & White (2004), services typically possess limited technical aspects and, therefore, functional quality assumes paramount importance as the primary determinant for shaping perceptions of service quality. This is supported by several scholars who assert that, in the absence of tangible evidence and objective evaluative criteria, the service encounter (interaction between the customer and the firm) becomes the most critical aspect to any service provider, as customers primarily evaluate the service provider on the manner in which they deliver their services (Kandampully et al., 2001; Berndt & Boshoff, 2022).

2.3.3 Defining service quality

Perceived service quality is the outcome of a subjective evaluation process between customers' perceived expectations and perceived perceptions of service performance (Grönroos, 1982; Parasuraman et al., 1985; Limna & Kraiwanit, 2022). Expectations, on the one hand, concern the standard of service quality that customers want or desire from a service encounter, whereas perceived performance represents the subjective perception of the standard of service that customers actually receive in a service encounter (Berndt & Boshoff, 2022; Wirtz & Lovelock, 2022). Perceived service quality is defined as the degree to which a service meets or exceeds customer expectations (Grönroos, 1984; Parasuraman et al., 1985; Cronin & Taylor, 1992; Wirtz & Lovelock, 2022; Ali et al., 2023; Kankam, 2023).

This conceptualisation is grounded in the expectancy-disconfirmation paradigm, which means that once a service is delivered consumers experience the service performance and compare it to their pre-purchase expectations (Hoffman & Bateson, 2023). Expectations are then either positively disconfirmed, where perceived performance is greater than expectations, negatively disconfirmed, where perceived performance is less than expectations, or confirmed, where perceived performance is equivalent to expectations (Oliver, 1981; Wirtz & Lovelock, 2022). This implies that the quality of service, as perceived by the customer, will be of a high standard when the perceived service performance meets or exceeds expectations, and of a poor standard when the perceived service performance fails to meet expectations (Limna & Kraiwanit, 2022; Hoffman & Bateson, 2023).

The expectations before experiencing a service greatly influence the quality of the service (Berndt & Boshoff, 2022). Every customer approaches a service encounter with certain expectations regarding the interaction with the provider (Wirtz & Lovelock, 2022). Expectations are based on various sources, such as past experiences, word-of-mouth and advertising (Parasuraman et al., 1985). In order to ensure customer satisfaction and foster long-term customer loyalty, it is crucial to deliver a product or service that meets customer expectations of quality (Berndt & Boshoff, 2022). Truly successful firms are those that consistently exceed customer expectations (Kandampully et al., 2001).

2.3.4 Distinguishing between service quality and customer satisfaction

An important aspect of developing the service quality concept has been to distinguish it from the closely related concept of customer satisfaction (Cronin & Taylor, 1992; Schneider & White, 2004). In fact, Hoffman & Bateson (2023) assert that one of the most effective approaches to understanding service quality is to differentiate it from customer satisfaction. Service quality and customer satisfaction are both regarded as a function of a comparative process between customer expectations and perceptions (Oliver, 1981; Parasuraman et al., 1985; Tuncer, Unusan & Cobanoglu, 2021). There is consensus that service quality and customer satisfaction are empirically overlapping but conceptually distinct constructs (Parasuraman et al., 1988; Cronin & Taylor, 1992; Hoffman & Bateson, 2023). To be more specific, service quality is a long-term cognitive evaluation (similar to an attitude) of the overall excellence of an organisation's service performance (Parasuraman et al., 1988; Zeithaml, 1988; Zhang et al., 2023). Customer satisfaction, in contrast, is a short-term emotional response (pleasurable level of consumption-related fulfilment) to a single (transaction-specific) consumption experience (Oliver, 1981; Parasuraman et al., 1988). Schneider & White (2004) propose that service quality is descriptive and factual, representing a consumer's assessment of the service itself. Conversely, satisfaction is more evaluative, representing a consumer's assessment of how the service impacts them emotionally. A further conceptual distinction between service quality and customer satisfaction is that service quality is evaluated according to specific criteria (dimensions) that concentrate on the service component. Service quality only represents one of the factors that drive customer satisfaction, which is a far broader concept that may be influenced by numerous other sacrifice-related factors such as price (Kandampully et al., 2001; Schneider & White, 2004). Over and above the conceptual differences between service quality and customer satisfaction, is the debate regarding the order of causality between the two constructs (Cronin & Taylor, 1992). Recent literature supports the

view that perceptions of service quality are followed by perceptions of satisfaction or dissatisfaction with the service and, therefore, perceived service quality is an antecedent to customer satisfaction (Cronin & Taylor, 1992; Parasuraman et al., 1994; Schneider & White, 2004; Grönroos, 2015). A final distinction between service quality and customer satisfaction concerns the separate types of expectation (standards of reference against which service performance is compared) that are used in the evaluation and measurement of the two constructs (Schneider & White, 2004). Service quality evaluations are based on normative expectations, that is, what the customer *should* expect from a service, whereas customer satisfaction evaluations are based on predictive expectations, that is, what the customer *would* expect from a service (Churchill & Suprenant, 1982; Parasuraman et al., 1994; Oliver, 1997; Schneider & White, 2004).

Regardless of how service quality is conceptualised, it is undeniably more complex than quality of physical products, where objective criteria play a significantly more pertinent role in determining what qualifies as quality than when dealing with an intangible entity such as a service (Berndt & Boshoff, 2022). The challenge associated with delineating and conceptualising service quality has spurred scholars in the realm of service marketing to construct models that offer a more profound comprehension of this phenomenon (Martínez & Martínez, 2010).

2.3.5 Review of selected service quality models

Grönroos (1984) was among the first researchers to develop a conceptual model of service quality. The author used the disconfirmation paradigm from customer satisfaction literature to contend that perceived service quality is a function of the discrepancy between expected service and perceived service. The model is illustrated in Figure 2.1 below.

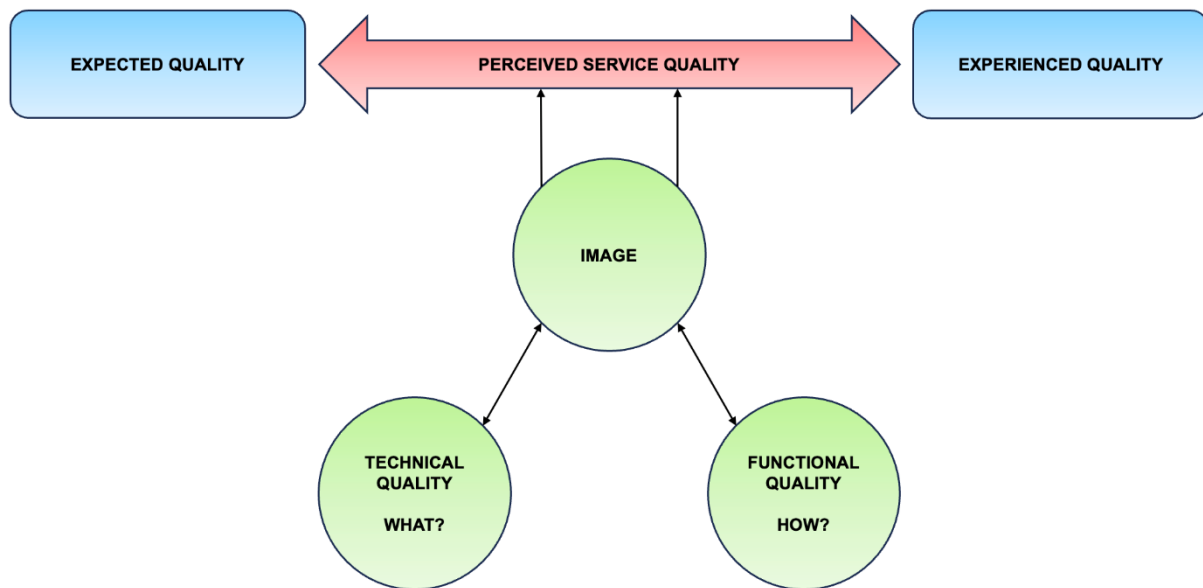


Figure 2.1: The service quality model of Grönroos

Source: Grönroos (1984: 12)

In Figure 2.1, Grönroos (1984) proposes that service quality performance is assessed along two main dimensions. The first dimension is technical quality, which refers to the outcome of the service or what the customer acquires during the service interaction. The second dimension is functional quality, which refers to the process of service delivery or the subjective perception of the customer as to how the service is delivered. Grönroos (1984) further claims that there are circumstances in which the firm's corporate image can operate as an additional service quality dimension. However, Martínez and Martínez (2010) note that the image of the firm primarily serves as a moderating variable in the associations between the two principal quality dimensions (technical and functional dimensions) and the perception of service quality. The Grönroos model evaluates service quality by assessing performance ratings, and considers the challenges associated with measuring consumers' expectations independently (Grönroos, 1984).

The work of Grönroos (1984) and others was expanded upon in later years by Parasuraman et al. (1985). In their initial work, Parasuraman et al. (1985) performed an exploratory study to investigate service quality. The authors conducted in-depth interviews with executives and consumer focus groups in four distinct service industries, the outcomes of which supported the notion that consumers evaluate service quality by comparing expectations of service with perceptions of service. Parasuraman et al. (1985) therefore used the expectancy-disconfirmation paradigm as a conceptual framework to define service quality as the degree

and direction of discrepancy between customer expectations and perceptions of the service performance.

Parasuraman et al. (1985) further ascertain that critical discrepancies or gaps existed between management and consumer perceptions of service quality. These discrepancies or gaps were highlighted as significant potential impediments to providing a service that consumers would perceive as high quality (Parasuraman et al., 1985). These findings led to the development of the gaps model of service quality illustrated in Figure 2.2 below.

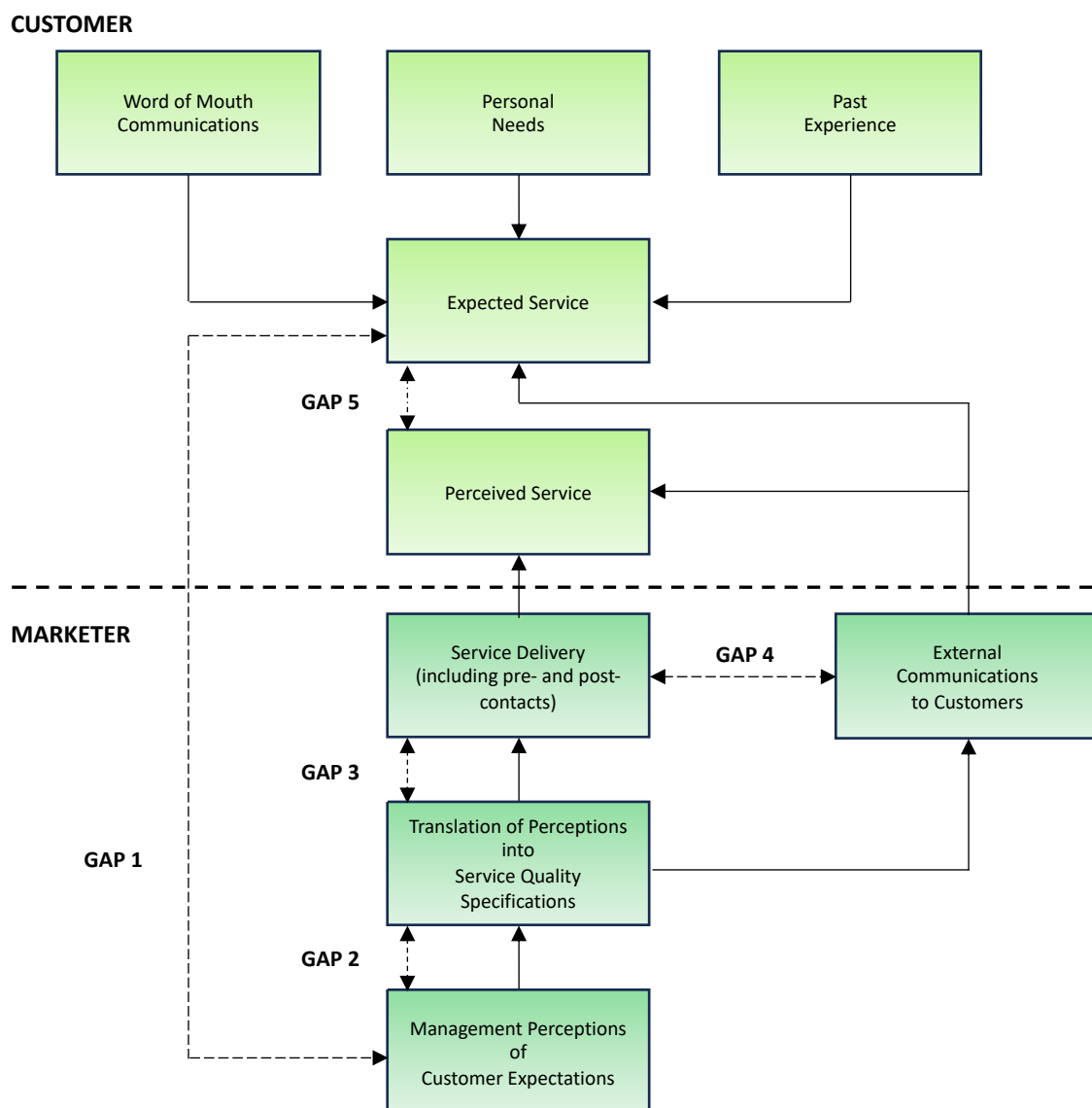


Figure 2.2: The gaps model

Source: Parasuraman et al. (1985: 44)

The gaps model (see Figure 2.2 above) identifies the five discrepancies or gaps influencing customer perceptions of service quality (Parasuraman et al., 1985). The five gaps are:

1. **Gap 1:** The discrepancy between customer expectations and management perceptions of those expectations (Parasuraman et al., 1985).
2. **Gap 2:** The discrepancy between management perceptions of customer expectations and the service quality criteria specified by the organisation (Parasuraman et al., 1985).
3. **Gap 3:** The discrepancy between the firm's service quality specifications and the adherence to these specifications (Parasuraman et al., 1985).
4. **Gap 4:** The discrepancy between the actual service delivery and how these services are portrayed through external customer communications (Parasuraman et al., 1985).
5. **Gap 5:** While the first four gaps represent discrepancies that may occur in the design, marketing and delivery of services, the fifth gap may be considered as a function of the first four gaps, and it represents the discrepancy between customer expectations and perceptions of the service (Parasuraman et al., 1985).

To gain a deeper understanding of how a company can enhance its service quality, it is valuable to analyse the service quality process in relation to the five gaps that exist between expectations and perceptions among management, employees and customers (Hoffman & Bateson, 2023).

According to Parasuraman et al. (1985), an important finding of their research was that regardless of the kind of service, customers generally used a consistent set of criteria or dimensions to evaluate service quality. Initially, Parasuraman et al. (1985) identified ten broad characteristics or determinants of service quality, namely reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding and tangibles, which are shown in Figure 2.3 below.

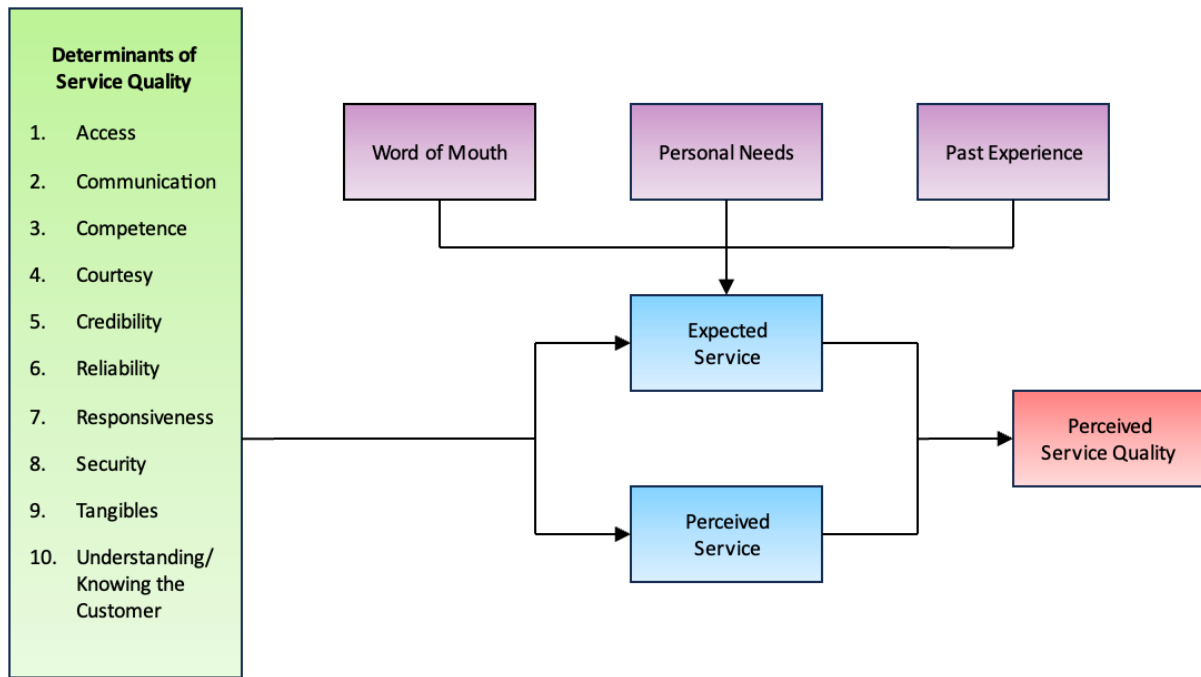


Figure 2.3: Determinants of perceived service quality

Source: Parasuraman et al. (1985: 48)

Consequently, Parasuraman et al. (1985) concluded that, although the assessment of expected and perceived service corresponds to the evaluation conducted by consumers when assessing tangible products, the distinguishing factor in services is the inherent characteristics or dimensions upon which they are assessed. Following comprehensive data collection and analysis procedures, the ten service quality dimensions were reduced to five (Parasuraman et al., 1988). The refined dimensions of service quality are briefly discussed below.

1. **The Reliability Dimension:** The reliability dimension focuses on the firm's ability to deliver the promised service dependably and accurately. It includes the punctuality of staff to provide services within agreed-upon timeframes, their dedication to meeting deadlines, and the company's capacity to consistently supply services accurately on the first attempt. Furthermore, it highlights the need of the organisation to demonstrate authentic concern in dealing with and resolving customer concerns, and to keep thorough and precise documentation of all transactions and client engagements (Parasuraman et al., 1988; Hoffman & Bateson, 2023).
2. **The Assurance Dimension:** The assurance dimension refers to the ability of the firm's employees to inspire trust and confidence through their knowledge and courtesy. It includes employees exhibiting trustworthiness and consistently displaying courteous behaviour, and

it underscores the importance of staff having the requisite knowledge and expertise to proficiently handle and resolve client inquiries and problems. It further highlights the customer's perception of security and trustworthiness in their interactions with the organisation (Parasuraman et al., 1988; Hoffman & Bateson, 2023).

3. **The Tangibles Dimension:** The tangibles dimension relates to the condition and appearance of the physical aspects of the service, such as the physical facilities, equipment, communication materials and the appearance of personnel. It includes the professional appearance of employees, who should be well-dressed and appear neat, and the physical elements of the service being modern and aesthetically appealing, while also being appropriate and pertinent to the particular type of service rendered (Parasuraman et al., 1988; Hoffman & Bateson, 2023).
4. **The Empathy Dimension:** The empathy dimension addresses the firm's ability to provide caring, individualised attention to its customers. It includes the company's dedication to putting the needs of its clients first, providing convenient operating hours, and providing each client with specialised and personalised service (Parasuraman et al., 1988; Hoffman & Bateson, 2023).
5. **The Responsiveness Dimension:** The responsiveness dimension refers to the firm's willingness to assist customers and provide prompt service. It includes the employees always being available and eager to assist customers, responding to customers inquiries with speed and efficiency, and making sure customers are provided with the times that the service will be rendered (Parasuraman et al., 1988; Hoffman & Bateson, 2023).

Therefore, offering superior service that meets or exceeds customers' expectations for service quality on the five dimensions of service quality, and doing so more consistently than competitors, is the key to understanding service quality as a differentiation variable and, consequently, as a competitive advantage (Berndt & Boshoff, 2022).

Rust and Oliver (1994) developed the three-component model illustrated in Figure 2.4 below.

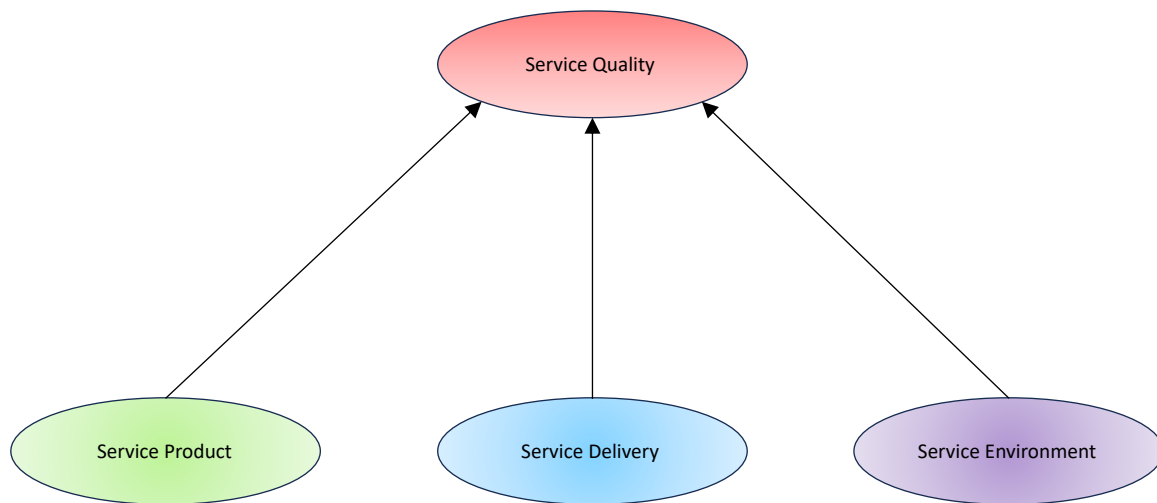


Figure 2.4: The three-component model

Source: Rust and Oliver (1994)

In Figure 2.4, Rust and Oliver (1994) propose that perceived service quality is evaluated along three dimensions:

1. **The service product:** The outcome of the service or what the customer obtains during the service interaction (similar to technical quality) (Rust & Oliver, 1994).
2. **The service delivery:** The process of service delivery or the subjective perception of the manner in which the service is delivered (similar to functional quality) (Rust & Oliver, 1994).
3. **The service environment:** The physical atmosphere of the service setting (Rust & Oliver, 1994).

Rust and Oliver (1994) did not test their conceptualisation, but there is evidence of similar models being successful in retail banking (Martínez & Martínez, 2010; Khader & Madhavi, 2017).

2.3.6 Measuring service quality

Building on their exploratory research, Parasuraman et al. (1988) developed the SERVQUAL instrument to measure customer-perceived service quality, that is, the degree and direction of the gap between customer-expected and customer-perceived service along the five dimensions of service quality. This gap corresponds with the fifth and most important gap of the gaps model

discussed earlier (Parasuraman et al., 1985, 1988). The SERVQUAL framework developed by Parasuraman et al. (1988) is illustrated in Figure 2.4 below.

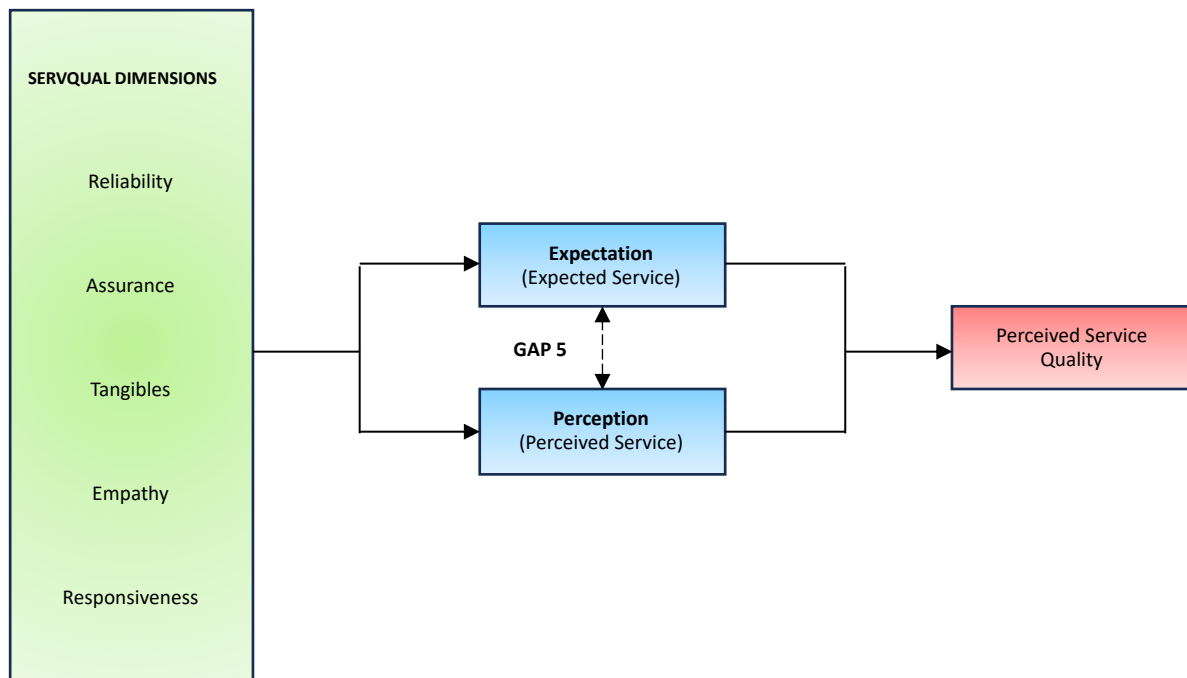


Figure 2.5: The SERVQUAL framework

Source: Parasuraman et al. (1988: 12-40)

SERVQUAL is a multi-dimensional research instrument that measures customer perceptions of service quality by capturing customer expectations and perceptions along the five dimensions of service quality (Parasuraman et al., 1988). The instrument is traditionally administered as a survey questionnaire comprising 22 paired items that capture the five service quality dimensions. Each item has an expectation score (E) and a perception score (P) that is rated by the respondent on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The expectation scores (E) are subtracted from the perception scores (P) to measure the size and direction between the paired items, known as the 'gap' score. A positive gap occurs when perceptions exceed expectations and indicate high perceived service quality. A zero gap occurs when perceptions meet expectations and indicate satisfactory perceived service quality. A negative gap occurs when perceptions are lower than expectations, indicating low perceived service quality (Parasuraman et al., 1988). SERVQUAL facilitates organisations' understanding of the perceptions of value held by customers and the degree to which the organisation is meeting the needs and requirements of customers (Berndt & Boshoff, 2022).

Cronin and Taylor (1992) concur with the conceptualisation of service quality as the gap between customer expectations and perceptions, but they propose a distinct approach for measuring these perceptions. The authors argue that the disconfirmation approach used by the SERVQUAL model was flawed, and they subsequently developed the SERVPERF (performance-only) service quality framework, illustrated in Figure 2.6 below.

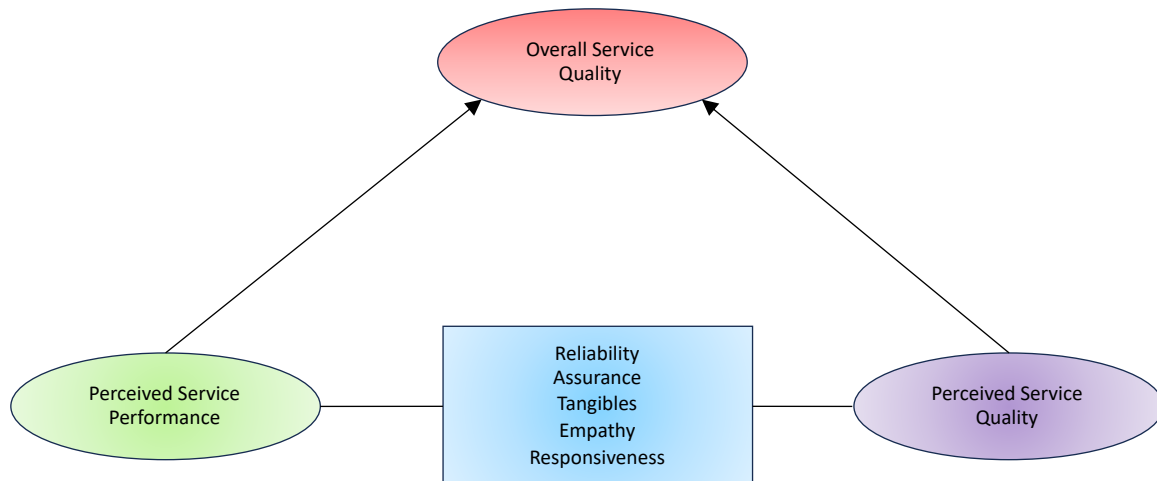


Figure 2.6: The SERVPERF framework

Source: Cronin and Taylor (1992)

SERVPERF (see Figure 2.6 above) adopts the five service quality dimensions from SERVQUAL but eliminates the measure of perceived expectations, as the authors argue that expectations are inherently incorporated into customer perceptions of perceived performance (Cronin & Taylor, 1992). The performance-only measure demonstrated a superior service quality assessment in terms of construct validity and operational efficacy. Its performance items explained a greater amount of the variance in an overall measure of service quality compared to SERVQUAL (Martínez & Martínez, 2010; Khader & Madhavi, 2017).

2.4 SERVICE QUALITY IN THE TRANSPORTATION INDUSTRY

This study focused on the five dimensions of service quality – reliability, assurance, tangibles, empathy and responsiveness – that were identified in the SERVQUAL model by Parasuraman et al. (1988). Table 2.1 shows that these five dimensions have been found to be important across different modes of land-based public transport, in various countries and regions, over a period of ten years, and in both the pre- and post-pandemic times.

Table 2.1: Dimensions of service quality in land-based transportation services

Author/s	Region & Country	Transport Mode	Service Quality Dimensions	Findings
Mikhaylov, Gumenuk and Mikhaylova (2015)	Kaliningrad Russia	Bus Tram Trolleybus	SERVQUAL	All five dimensions were perceived as significantly Important
Sam, Hamidu and Daniels (2018)	Kumasi Ghana	Bus	SERVQUAL	All five dimensions were perceived as significantly Important
Yao and Ding (2011)	Hangzhou China	Taxi	SERVQUAL	All five dimensions were perceived as significantly Important
Mphahlele (2018)	Gauteng South Africa	Train	SERVQUAL	All five dimensions were perceived as significantly Important
Ruamchart (2021)	Bangkok Thailand	E-hailing	SERVQUAL	All five dimensions were perceived as significantly Important

Source: Researcher's own construction

Since the concept of service quality tends to be context-bound and service-type-dependent (Zhang et al., 2023), it is essential for local e-hailing companies to examine and understand the unique service quality expectations of consumers for e-hailing services within the context of South Africa in order to distribute their resources and target their service quality improvement strategies towards those attributes particularly valued by their customers (Wirtz & Lovelock, 2022; Zhang et al., 2023). This is supported by Hamzah, Lee and Moghavvemi (2017) who state that expectations of individuals can be drastically influenced by their culture, socio-economic status and the purpose for using the service. In addition, prior experience, personal traits and the contextual environment influence the service quality expectations of customers (Parasuraman et al., 1985; Berndt & Boshoff, 2022; Wirtz & Lovelock, 2022; Hoffman & Bateson, 2023).

2.5 HYPOTHESIS DEVELOPMENT

2.5.1 The importance of reliability in the choice of e-hailing service provider

The reliability dimension focuses on the firm's ability to deliver the promised service dependably and accurately (Parasuraman et al., 1988). In the context of e-hailing, reliability involves drivers picking customers up and dropping customers off at the promised time. It further involves the organisation as a whole, including drivers, customer service representatives and other employees, performing their services correctly the first time, demonstrating a sincere interest in resolving customers' problems and concerns, and maintaining detailed and accurate records of customer accounts, transactions, ratings and reviews (Parasuraman et al., 1988; Azudin, Norhashim & Nachiappan, 2018; Ziyad, Batool & Khan, 2020; Ruamchart, 2021).

Reliability has been shown to have a significant positive effect on e-hailing users' customer satisfaction (Ziyad et al., 2020) and perceptions of service quality (Azudin et al., 2018). Hence, the hypothesis is as follows:

H¹: Reliability is important to students when they select an e-hailing service provider.

2.5.2 The importance of assurance in the choice of e-hailing service provider

The assurance dimension refers to the ability of the firm's employees to inspire trust and confidence through their knowledge and courtesy (Parasuraman et al., 1988). In the context of e-hailing, assurance involves drivers being trustworthy and customers feeling safe when using the service. It further involves drivers being friendly and respectful towards customers and having the knowledge and expertise to address their questions and concerns (Parasuraman et al., 1988; Azudin et al., 2018; Ziyad et al., 2020; Ruamchart, 2021).

Assurance has been shown to have a significant positive effect on e-hailing users' customer satisfaction (Ziyad et al., 2020) and perceptions of service quality (Azudin et al., 2018). Thus, the hypothesis is as follows:

H²: Assurance is important to students when they select an e-hailing service provider.

2.5.3 The importance of tangibles in the choice of e-hailing service provider

The tangibles dimension relates to the condition and appearance of the physical aspects of the service, such as the physical facilities, equipment, communication materials and the appearance of personnel (Parasuraman et al., 1988). In the context of e-hailing, tangibles involve the professional appearance of drivers and modern, attractive and appropriate vehicles, equipment and mobile applications (Parasuraman et al., 1988; Azudin et al., 2018; Ziyad et al., 2020; Ruamchart, 2021).

Tangibles has been shown to have a significant positive effect on e-hailing users' customer satisfaction (Ziyad et al., 2020) and perceptions of service quality (Azudin et al., 2018). Therefore, the hypothesis is as follows:

H³: Tangibles is important to students when they select an e-hailing service provider.

2.5.4 The importance of empathy in the choice of e-hailing service provider

The empathy dimension addresses the firm's ability to provide caring, individualised attention to its customers (Parasuraman et al., 1988). In the context of e-hailing, empathy involves

drivers' understanding of particular client requirements, personalised attention, convenient operating hours and customised service offerings (Parasuraman et al., 1988; Azudin et al., 2018; Ziyad et al., 2020; Ruamchart, 2021).

Empathy has been shown to have a significant positive effect on e-hailing users' customer satisfaction (Ziyad et al., 2020) and perceptions of service quality (Azudin et al., 2018). Hence, the hypothesis is as follows:

H⁴: Empathy is important to students when they select an e-hailing service provider.

2.5.5 The importance of responsiveness in the choice of e-hailing service provider

The responsiveness dimension refers to the firm's willingness to assist customers and provide prompt service (Parasuraman et al., 1988). In the context of e-hailing, responsiveness involves the commitment and readiness to provide the service, including employee willingness and availability to always assist, prompt and efficient response to requests, and provision of accurate service times (Parasuraman et al., 1988; Azudin et al., 2018; Ziyad et al., 2020; Ruamchart, 2021).

Responsiveness has been shown to have a significant positive effect on e-hailing users' customer satisfaction (Ziyad et al., 2020) and perceptions of service quality (Azudin et al., 2018). Thus, the hypothesis is as follows:

H⁵: Responsiveness is important to students when they select an e-hailing service provider.

In line with the hypotheses above, the independent variables for the study are identified as the five dimensions of service quality, and the dependent variable is identified as students' choice of e-hailing service provider.

2.6 CONCLUSION

In conclusion, this chapter explained the concept and evolution of e-hailing services, from both a global and local perspective, explored the theoretical foundation of service quality, synthesising the fundamental concepts and frameworks from existing research into service quality, and examined the importance of service quality to consumers in land-based transportation, notably e-hailing. The literature indicates that e-hailing services are peer-to-peer networking platforms that link drivers and customers through online-enabled mobile applications. E-hailing services have enabled more convenient and flexible transport services and revolutionised global transportation. In South Africa, e-hailing services have elicited varied

responses, offering consumer benefits, employment and popularity among the young urbanites for short occasional trips, while also facing challenges. Despite complementing public transport, these services grapple with regulatory issues, market competition, poor working conditions, unclear employment classifications, service quality concerns, violence and criminal activity. It was further revealed that the intensely competitive industry favours international firms, leading to the closure of many local start-ups and the struggle of others despite financial losses. The literature revealed that service quality drives competitive advantage and financial performance through customer satisfaction and customer loyalty. Service quality is viewed as a global judgement or attitude of an organisation's overall superiority or excellence and represents the outcome of a subjective evaluation between customers' expectations and perceptions of service performance. It was argued that the level of service quality, as perceived by customers, depends on the degree to which an organisation meets or exceeds customers' expectations of service quality. The literature underscores the fact that, due to the intangible and multifaceted nature of services, consumers compare their expectations and perceptions of service performance to a different set of characteristics than those used for physical products, which are typically referred to as dimensions of service quality. The SERVQUAL model is the most widely used framework for measuring customer perceptions of service quality, and it identifies five service quality dimensions, namely reliability, assurance, tangibles, empathy and responsiveness. The literature further found the five SERVQUAL dimensions to be important across different modes of land-based public transport (including e-hailing), in various countries and regions, over a period of ten years, and in both the pre-pandemic and post-pandemic times. E-hailing is a relatively new phenomenon in the country, and there appears to be scant research that has examined e-hailing in the specific contexts of service quality and in South Africa.

The next chapter focuses on the methods and techniques used for collecting and analysing the data in this study.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter provides a comprehensive description of how the research problem was addressed. This includes specific references to the methods used to gather the data employed as well as a description of the statistical analysis methods used in analysing the captured data. The chapter commences with a discussion of the philosophical underpinning of the study to provide a foundation for the rest of the methodology.

3.2 RESEARCH PHILOSOPHY

A research philosophy refers to the system of beliefs and assumptions about the development of knowledge and the nature of that knowledge (Saunders, Lewis & Thornhill, 2012). The research philosophy guides the choice of research design and methodology that will be used to complete the research (Tuli, 2010). The primary research philosophies include positivism, realism, interpretivism and pragmatism (Saunders et al., 2012).

This study identifies with the positivist philosophy as it assumes that the perceptions of students are an objective social reality that can be determined through empirical observation and measurement from which law-like generalisations can be made (Tuli, 2010; Leedy & Ormrod, 2021). Positivism typically uses the quantitative approach in which data can be statistically analysed to enable objectivity, generalisability and replicability of the findings (Gill & Johnson, 2002).

3.3 RESEARCH DESIGN

A research design is the framework, outline, or plan guiding the researcher through the data collection and analysis process to achieve the research objectives (Wiid & Diggines, 2015; Creswell & Creswell, 2018). Several researchers demarcate different types of research design as descriptive, correlative, experimental and quasi-experimental (Gill & Johnson, 2002; Babbie, 2016; Leedy & Ormrod, 2021).

Descriptive research designs involve identifying, observing and measuring variables of interest to characterise the general nature of an observed phenomenon or reveal possible associations among two or more phenomena (Leedy & Ormrod, 2021). Accordingly, descriptive research accurately and thoroughly seeks to describe a situation as it is (Wiid & Diggines, 2015).

The research for this study followed a descriptive design as it aimed to describe students' perceptions of e-hailing services in South Africa (Salkind, 2012). Descriptive research designs may be cross-sectional or longitudinal (Leedy & Ormrod, 2021). This study was cross-sectional as it collected data from a sample of students at a single point in time to establish a synopsis of their perceptions of e-hailing services in a specific context as they existed at the time (Salkind, 2012; Leedy & Ormrod, 2021).

3.4 RESEARCH APPROACH

A research approach refers to the process or specific manner in which the data for a study are collected, analysed and interpreted (Williams, 2007). The most popular and well-known research approaches are classified into three categories: quantitative, qualitative or mixed method approaches (Williams, 2007; Creswell & Creswell, 2018). The decision as to which approach is the most appropriate is governed by the study's research philosophy and research design (Leedy & Ormrod, 2021).

Quantitative research involves collecting and analysing numerical data (Quinlan, Babin, Carr, Griffin & Zikmund, 2019). It primarily involves measuring variables to test objective theories and hypotheses from which deductions can be made that lead to the verification and extension of theories (Wiid & Diggins, 2015; Creswell & Creswell, 2018). Qualitative research, conversely, is the process of collecting non-numerical data through interpretive procedures that require subjective judgements. It is primarily used to discover new meanings of and insights into the phenomenon being studied (Quinlan et al., 2019). The mixed-methods approach incorporates both quantitative and qualitative approaches for collecting and analysing data in a single research study (Williams, 2007). The mixed-methods approach maximises the strengths associated with the quantitative and qualitative methods while minimising their respective weaknesses (Williams, 2007; Quinlan et al., 2019).

This study used the quantitative approach. The primary objective of this research was to determine the dimensions of service quality that students of a selected private higher education in South Africa perceive to be the most important when they select an e-hailing service provider. The quantitative approach was deemed the most appropriate for the following reasons. Firstly, positivism advocates using valid and reliable research methods to describe and explain phenomena, given that the truth can only be found by verifying and replicating observable discoveries. The quantitative approach supports the positivist philosophy as it uses structured and validated research instruments to collect data objectively, thereby improving the

reliability and replicability of the research (Gill & Johnson, 2002; Wiid & Diggines, 2015). Secondly, descriptive research designs describe a large population's characteristics (Leedy & Ormrod, 2021). The quantitative approach supports the descriptive research design as it collects data from large representative samples. The outcomes may be described, explained and generalised to the broader target population (Wiid & Diggines, 2015; Creswell & Creswell, 2018). Thirdly, as the current study aimed to describe the perceptions of students using variables from an existing theoretical model, the quantitative approach was deemed the most appropriate as it assigns numerical values to variables that can be measured, quantified and statistically analysed to make deductive conclusions (Creswell & Creswell, 2018; Quinlan et al., 2019).

3.5 RESEARCH STRATEGY

Research strategies include survey, experimental, action research, case study, grounded theory and ethnography (Saunders et al., 2012; Quinlan et al., 2019). Survey research involves collecting information from a sample of people by capturing their responses to a set of questions (Ponto, 2015). Surveys are situated within a framework of positivism and are primarily associated with the quantitative approach (Saunders et al., 2012; Quinlan et al., 2019). An experimental research strategy is a scientific approach to research that involves the manipulation of independent variables to test a predictive relationship between the dependent and independent variables (Saunders et al., 2012). A case study entails a comprehensive examination of a particular individual, programme or occurrence by using several forms of evidence throughout a designated timeframe with the potential to concentrate on either single or multiple cases (Saunders et al., 2012; Leedy & Ormrod, 2021). Ethnography is a research strategy that focuses on studying a specific group characterised by a shared culture. Its primary objective is to identify cultural traits within a natural environment, often over an extended duration (Quinlan et al., 2019; Leedy & Ormrod, 2021). Action research is a dynamic and repetitive investigative process that generates solutions to actual organisational issues by employing a participatory and collaborative approach and drawing upon diverse forms of knowledge (Saunders et al., 2012). Grounded theory is a research strategy concerned with systematic data collection and analysis to generate theories that explain social interactions and processes (Noble & Mitchell, 2016).

Consistent with the descriptive research design and the quantitative research approach, this study used the survey strategy to collect the primary data from the sample population (Saunders

et al., 2012). The survey strategy is well-suited to collecting data from a large sample to draw statistically significant conclusions that can be generalised to the broader population, in keeping with the intent of this study (Ponto, 2015; Leedy & Ormrod, 2021). In descriptive quantitative research, the survey research strategy is normally conducted through structured questionnaires with predefined questions and responses that facilitate the quantification of data (Saunders et al., 2012; Quinlan et al., 2019). A further substantiation for using the survey strategy is that it is a cost-effective and efficient strategy for collecting data from many respondents (Leedy & Ormrod, 2021). Surveys are commonly used in business and social science research to describe a population's perceptions, attitudes or opinions by surveying a sample of that population (Singleton & Straits, 2009).

The following section describes and explains the sampling strategy adopted for this study.

3.6 POPULATION AND SAMPLING

The next step in describing the methodology best suited for this study is to explain the sampling strategy that was followed. A sampling strategy involves defining the target population, selecting the appropriate sampling method and determining the minimum required sample size (Zikmund & Babin, 2013).

3.6.1 Target population

The target population is the complete group of specific elements that the research seeks to understand and to whom or to which the research results may be generalised (Babbie, 2016). The target population consists of the entire collection of people or things that share some common characteristics that apply to the study. It is the source from which information can be obtained and from which conclusions can be drawn to achieve the research objectives (Gill & Johnson, 2002; Quinlan et al., 2019).

This study was based on a selected private higher education institution in South Africa, which, according to the latest available data, has 49 341 registered students who were the target population of this study. The target population's choice was justified because it represents a vital consumer segment constituting current and future consumers who are influential to other consumer segments in the consumption of e-hailing services. It was therefore envisioned that their perceptions could assist in shedding more light on the dimensions of service quality that e-hailing service providers should focus on for differentiation and competitive advantage.

3.6.2 Sampling techniques

Sampling is the systematic procedure of identifying and selecting a subset of elements from the target population. Sampling enables the researcher to use a portion of the population to make conclusions about the whole population (Quinlan et al., 2019).

To identify and select the participants for this study from the target population, a combination of two non-probability sampling techniques was used. A purposive sampling technique was chosen because it focuses on a population's characteristics based on the study's objective; in this case, students registered at the selected private higher education institution in South Africa (Leedy & Ormrod, 2021). Furthermore, a convenience sampling technique was employed based on the specific participant selection criteria to select participants that were the most accessible to the researcher (Babbie, 2016).

3.6.3 Sample size

A sample is a section of the population chosen for the study (Quinlan et al., 2019). The sample needs to be large enough to produce a relatively accurate estimate of the population values, that is, the sample needs to be representative so that the study results can be generalised to the population (Wiid & Diggines, 2015).

Krejcie and Morgan (1970) recommend the formula in Figure 3.1 below to determine the required sample size for quantitative research.

$$s = X^2 NP(1 - P) \div d^2(N - 1) + X^2 P(1 - P)$$

where:

s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

Figure 3.1: Formula for required sample size

Source: Krejcie and Morgan (1970: 607)

Given a target population size of 49 241, a sample size of 381 respondents was required to achieve the research objectives (Krejcie & Morgan, 1970).

3.7 DATA COLLECTION

The data collection process refers to how the data relevant to addressing the empirical objectives of a study are collected from the sampling elements (Quinlan et al., 2019).

3.7.1 Data collection instrument

Consistent with the survey method, the primary data of the study were collected using an online, self-administered questionnaire (Leedy & Ormrod, 2021). The development of the research instrument was based on the original SERVQUAL model developed by Parasuraman et al. (1988). Minor modifications to the wording were made to ensure the questions were tailored specifically for the e-hailing industry, following the authors' recommendations (Parasuraman et al., 1988). The questionnaire consisted of 22 closed-ended questions that measured respondents' perceived importance of the service quality dimensions when selecting an e-hailing service provider. The items were measured using a 5-point Likert scale ranging from 1 (Very Unimportant) to 5 (Very Important).

3.7.2 Execution of the study

Data were collected at three campuses of the selected private higher education institution in South Africa during July 2023. The management of these campuses, who have the right to communicate with the students using the contact details in their database, emailed the link to the online survey to the registered students on behalf of the researcher. The link to the online questionnaire was generated using the 'anonymous respondent' option to ensure that the identity of the participants remained anonymous.

3.8 DATA ANALYSIS

To achieve the objectives of this study, quantitative data were captured in an electronic spreadsheet and subsequently imported into a statistical software package for analysis. Several statistical techniques were applied. The data analysis commenced with descriptive statistics reporting on the measures of central tendency and frequency to describe the raw data (Wiid & Diggines, 2015). Confirmatory factor analysis was performed to confirm the factor structures of the SERVQUAL model. Confirmatory factor analysis is a multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs (Leedy & Ormrod, 2021). This was followed by applying the Cronbach alpha test to ensure adequate reliability of each factor (Quinlan et al., 2019). To achieve the primary objective of the study, the factor scores were obtained and compared to determine their relative importance through

statistical ranking, which involved paired sample t-tests and one sample t-tests (Wiid & Diggines, 2015).

3.9 RELIABILITY AND VALIDITY

3.9.1 Reliability

Reliability refers to an instrument's ability to yield consistent results in repeated tests (Quinlan et al., 2019). The Cronbach alpha test was used to ensure the reliability of the research instrument (Leedy & Ormrod, 2021).

3.9.2 Validity

Validity is the degree of accurate measurement of concepts in quantitative studies. The research is regarded as valid if the measurement method is accurate and measures what is intended to be measured (Quinlan et al., 2019). The study used validated scales that have been tested to observe service quality in different industries and populations (Parasuraman et al., 1994). The construct validity of the factors was confirmed using a confirmatory factor analysis (Leedy & Ormrod, 2021).

3.10 ETHICAL CONSIDERATIONS

The study adhered to the following academic research ethical guidelines stipulated by the Independent Institute of Education's Ethics Committee:

- The necessary ethical clearances and approvals were obtained from the Independent Institution of Education's Ethics Committee before the data collection phase commenced.
- The questionnaire included a cover letter explaining the nature and scope of the study.
- The respondents were informed that they could withdraw from the study, without any negative consequences, at any point during the survey.
- Participation in the study was entirely voluntary, and informed consent of voluntary participation was obtained.
- The anonymity of respondent information was assured, and the information received from the respondents was always handled confidentially.
- The research did not involve vulnerable groups, and the instrument did not extract sensitive information from the respondents.

- All respondents were provided with the researcher's and supervisor's contact details in the event of any concerns or questions arising.
- It was ensured that the study would cause no harm to any person, entity or society.

3.11 CONCLUSION

This chapter has outlined the methods and techniques for collecting and analysing data relating to the dimensions of service quality that students from a selected private higher education institution in South Africa perceive to be the most important when selecting an e-hailing service provider. A quantitative research approach, using a descriptive single cross-sectional design and structured questionnaires, was employed for this study because it was regarded as the most appropriate for addressing the objectives set out in Chapter 1. This approach identifies well with the positivist philosophy as it predominantly uses empirical data that are obtained objectively and statistically interpreted. In addition, the sampling strategy was explained with specific reference to the target population, sampling techniques and sample size. The design of the research instrument was explained and the data collection process was stipulated. The quantitative data analysis involved descriptive and inferential statistics to determine the factors that are the most important to students from a selected private higher education institution in South Africa when selecting an e-hailing service provider.

The next chapter presents and discusses the results of the study.

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

Chapter 1 introduced the research problem that concentrates on the fierce competition between local and international e-hailing operators in the South African e-hailing industry. The study focuses on how students in private tertiary institutions in South Africa perceive the quality of e-hailing services to determine the service quality dimensions that local e-hailing service providers may need to pay attention to for differentiation and competitive advantage. Chapter 2 reviewed literature relating to e-hailing services and service quality, while the previous chapter described the methods and techniques used to collect and analyse data to address the research problem. In this chapter, the findings obtained from the analysis of the data are presented and discussed.

4.2 PRESENTATION AND DISCUSSION OF RESULTS

4.2.1 Response rate

The required sample size for the study was 384 respondents and 420 respondents completed the questionnaires. However, during the data cleaning process, a number of duplicates were removed for the integrity of the data, and a final sample size of 305 was used for data analysis, which was more than enough to run the required statistical tests (Brown, 2015; Hair, Black, Babin & Anderson, 2019).

4.2.2 Descriptive statistics

Descriptive statistics are a set of techniques used to summarise and describe the main features of a dataset or a sample of data. Descriptive statistics are essential for gaining initial insights into a dataset. They help researchers understand the central tendency, spread and shape of the data distribution, which enables them to make informed decisions, identify outliers and choose appropriate statistical techniques for further analysis (Duignan, 2014).

The analysis of frequencies is a fundamental part of descriptive statistics and is used to summarise categorical data. Frequencies refer to the count or number of times a particular value or category occurs in a dataset (Duignan, 2014). The following sub-sections make use of frequencies to illustrate the distribution of responses for the questions related to each of the five specific factors adopted for the study.

4.2.2.1 Reliability dimension response distribution

The dimension of reliability reflects the consistency and dependability of a firm's performance. It involves the following variables: (a) drivers picking customers up at the promised time, (b) drivers dropping customers off at the promised time, (c) the organisation as a whole (drivers, customer service representatives and other employees) consistently performing the services correctly the first time, (d) the organisation as a whole demonstrating a sincere interest in resolving customers' problems and concerns, and (e) the organisation as a whole maintaining detailed and accurate records of customer accounts, transactions, ratings and reviews.

The distribution of responses to the reliability dimension questions can be seen in the stacked graph (Figure 4.1) below.

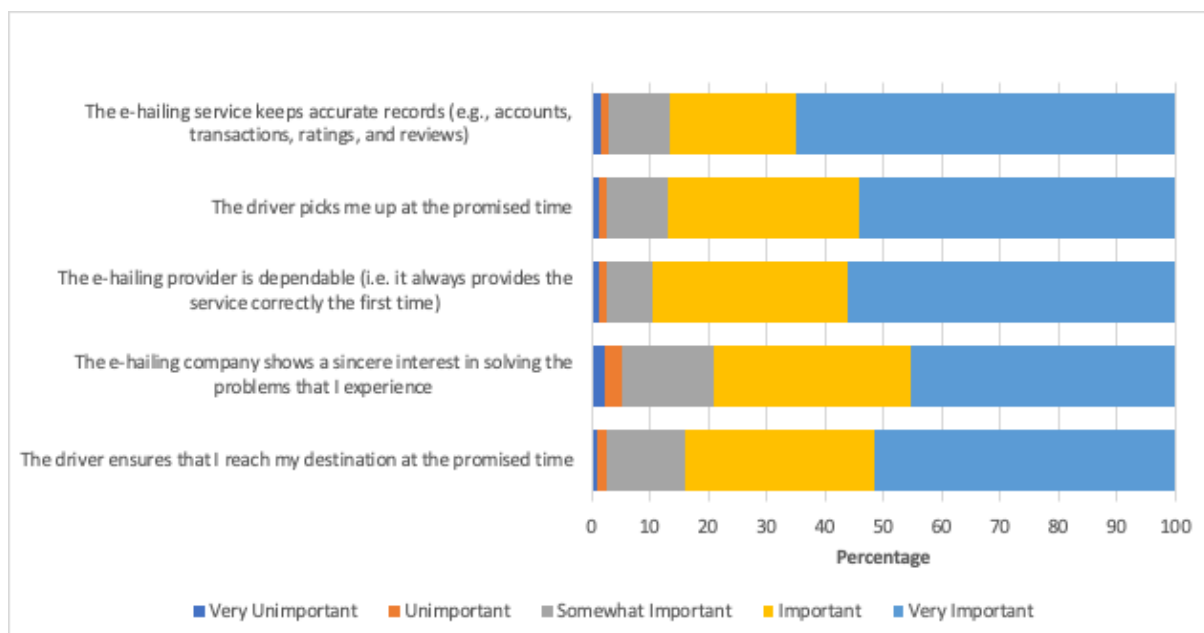


Figure 4.1: Reliability dimension response distribution

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from the graph in Figure 4.1, the majority of the responses to each of the reliability dimension questions indicated Importance (response Important and Very Important), with the remainder of the responses being Somewhat Important, Unimportant and Very Unimportant. Therefore, the respondents generally indicated the overall importance of the reliability dimension questions.

4.2.2.2 Assurance dimension response distribution

The assurance dimension addresses the competence of the firm, the courtesy it extends to its customers and the security of its operations. It involves the following variables: (a) drivers being trustworthy, (b) drivers being friendly and respectful towards customers, (c) drivers having the knowledge and expertise to address customer questions and concerns, and (d) customers feeling safe when using the service.

The distribution of responses to the assurance dimension questions is presented in the stacked graph below (Figure 4.2).

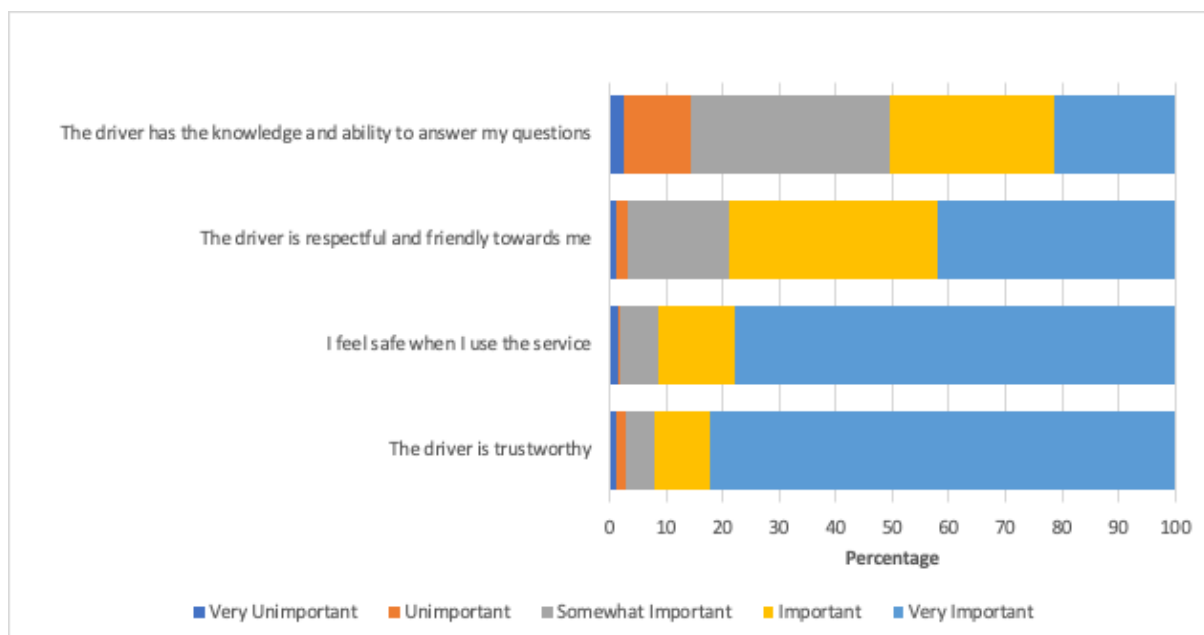


Figure 4.2: Assurance dimension response distribution

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from the graph in Figure 4.2, the majority of the responses to each of the assurance dimension questions indicated Importance (response Important and Very Important), with the remainder of the responses being Somewhat Important, Unimportant and Very Unimportant. Therefore, the respondents generally confirmed the overall importance of the assurance dimension questions.

4.2.2.3 Tangibles dimension response distribution

The tangibles dimension relates to the condition and appearance of the physical aspects of the service, such as the physical facilities, equipment, communication materials and the appearance of personnel. It includes the following variables: (a) drivers being well-dressed and appearing

neat, (b) the physical elements of the service (vehicle, equipment and smartphone application) being modern and up-to-date, (c) the physical elements of the service being visually appealing, and (d) the physical elements of the service having the attributes that are appropriate for the type of service.

The distribution of responses to the tangibles dimension questions is presented in the stacked graph below (Figure 4.3).

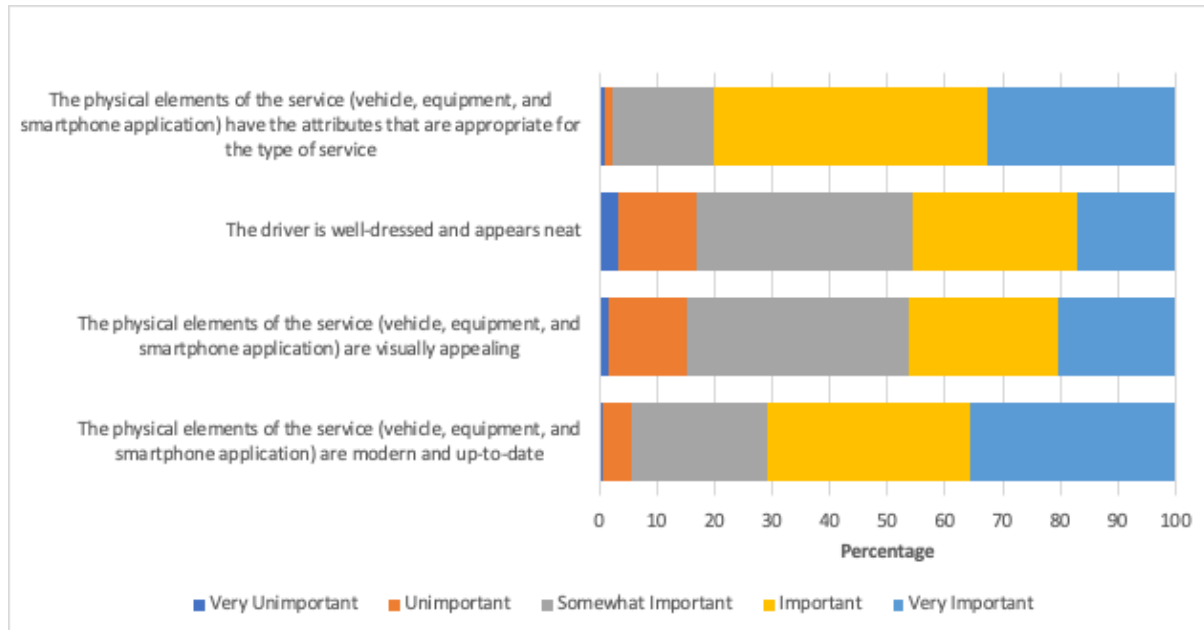


Figure 4.3: Tangibles dimension response distribution

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from the graph in Figure 4.3, the majority of the responses to two of the four tangibles dimension items, namely ‘the physical elements of the service (vehicle, equipment and smartphone application) have the attributes that are appropriate for the type of service’ and ‘the physical elements of the service (vehicle, equipment, smartphone) are modern and up-to-date’, indicated Importance (response Important and Very Important) with the remainder of the responses being Somewhat Important, Unimportant, and Very Unimportant. The majority of the responses to the other two tangibles dimension items, namely ‘the driver is well-dressed and appears neat’ and ‘the physical elements of the service (vehicle, equipment and smartphone application) are visually appealing’, indicated lower importance (majority response Somewhat Important). Therefore, the respondents generally indicated an overall importance related to the tangibles dimension questions.

4.2.2.4 Empathy dimension response distribution

The empathy dimension addresses the firm's ability to provide caring, individualised attention to its customers. It involves the following variables: (a) customers perceiving the organisation to have their best interest at heart, (b) drivers understanding the specific needs of customers, (c) drivers giving customers personalised attention (for example, doing something extra for the customer when required), (d) the organisation providing convenient operating hours, and (d) the organisation providing individualised attention (for example, offering different types of vehicles and prices that suit customers' preferences).

The distribution of responses to the empathy dimension questions can be seen in the stacked graph below (Figure 4.4).

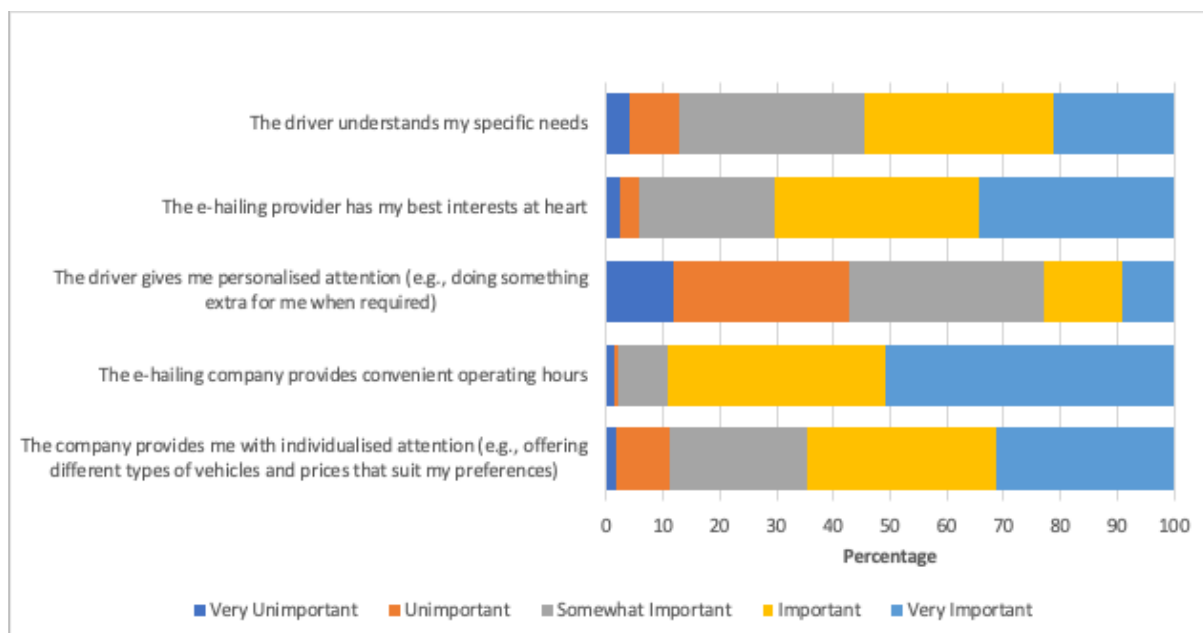


Figure 4.4: Empathy dimension response distribution

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from the graph, the majority of the responses to four of the five empathy dimension questions indicated Importance (response Important and Very Important). The majority of the responses to the remaining empathy dimension item, namely 'the driver gives me personalised attention (e.g., doing something extra for me when required)', indicated Unimportance (the majority of responses Unimportant and Very Unimportant). Therefore, the respondents generally indicated the overall importance of the majority (80%) of the empathy dimension questions.

4.2.2.5 Responsiveness dimension response distribution

The responsiveness dimension reflects a service firm's commitment and preparedness to provide the service. It involves the following variables: (a) the organisation's employees (drivers, customer service representatives and other employees) always being willing to help customers, (b) the organisation's employees never being too busy to respond to customer requests (for example, never too busy to reject or cancel bookings), (c) the operators responding to customer requests with speed and efficiency, and (d) customers being provided with the times that the service will be rendered (for example, estimated times of departure and arrival, and notifications of any delays).

The distribution of responses to the responsiveness dimension questions can be seen in the stacked graph below (Figure 4.5).

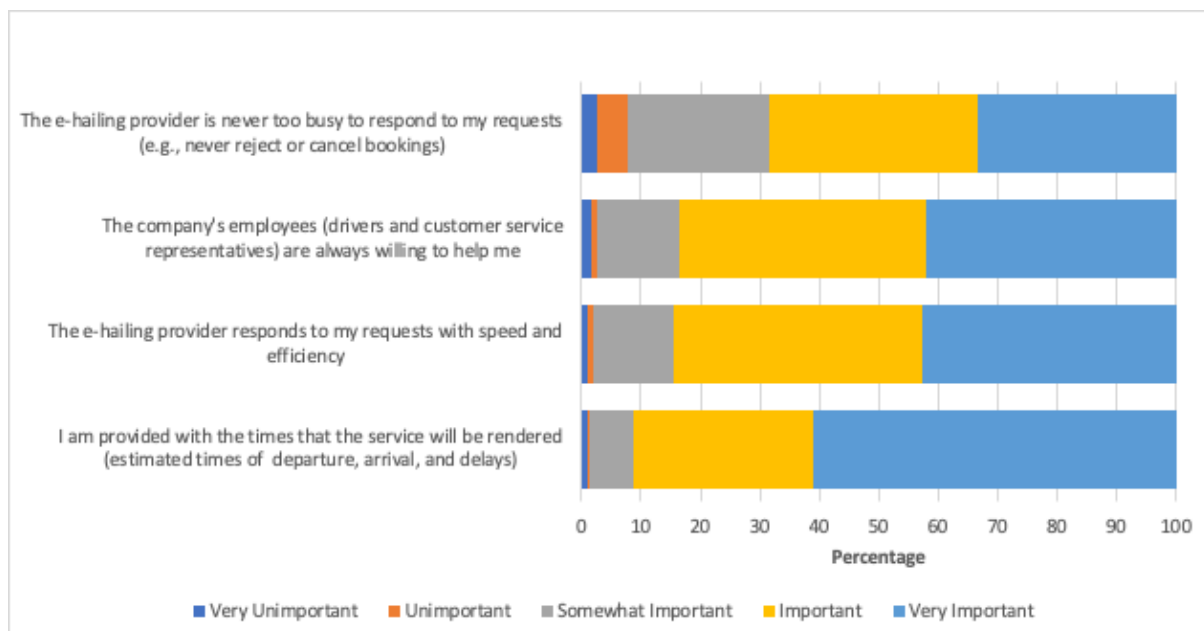


Figure 4.5: Responsiveness dimension response distribution

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from the graph, the majority of the responses for the responsiveness dimension questions indicated Importance (response Important and Very Important), with the remainder of the responses being Somewhat Important, Unimportant and Very Unimportant. Therefore, the respondents generally indicated the overall importance related to the responsiveness dimension questions.

Overall, the responses to most of the items across all five of the factors show a high degree of importance. Respondents, therefore, generally indicated overall importance for each of the five factors.

While the descriptive statistics provided initial insight that described the main features of the data collected from the sample, the remainder of this chapter focuses on inferential statistical techniques to draw inferences about the target population (Leedy & Ormrod, 2021). Accordingly, the following section will commence with the results obtained from the confirmatory factor analysis.

4.2.3 Confirmatory factor analysis

Confirmatory factor analysis is a multivariate statistical technique that is used to test how well the measured variables represent the number of constructs (factors) in a measurement model (Leedy & Ormrod, 2021). When using confirmatory factor analysis to test model validity, there are two areas that need to be investigated. Firstly, it needs to be ensured that all the parameter estimates are statistically significant ($p\text{-value} < 0.05$). If all of the parameter estimates are statistically significant, then the model fit is assessed (Brown, 2015; Hair et al., 2019). The model fit is assessed through a combination of goodness-of-fit indices. The results of the confirmatory factor analysis are presented in Table 4.1 below.

Table 4.1: Confirmatory factor analysis

Factor	Parameters	CMIN/df	SRMR	GFI	CFI	RMSEA
	p-value < 0.05	< 3.00	< 0.08	> 0.90	> 0.90	< 0.1
Reliability	All significant	2.589	0.0263	0.987	0.981	0.072
Assurance	All significant	0.378	0.0043	0.999	1.000	0.000
Tangibles	All significant	2.383	0.0133	0.996	0.996	0.067
Empathy	All significant	2.057	0.0298	0.987	0.984	0.059
Responsiveness	All significant	0.46	0.0073	0.999	1.000	0.000

Source: Statistical Package for the Social Sciences Output (2023)

As can be seen from Table 4.1 above, the parameter estimates and goodness-of-fit indices for each of the factors were achieved. Accordingly, the results of the confirmatory factor analysis show good validity of the factor structures (Hair et al., 2019).

4.2.4 Cronbach alpha

Reliability, as measured by Cronbach's alpha, is a statistical concept used to assess the internal consistency or the degree to which a set of items or questions in a research instrument (such as a questionnaire) consistently measures the same underlying construct or concept (Cronbach & Meehl, 1955; Leedy & Ormrod, 2021). Cronbach's alpha is a coefficient that ranges from 0 to 1, with higher values indicating greater reliability. Typically, a value of 0.70 or higher is considered acceptable for most research purposes (Duignan, 2014). The Cronbach alpha for each of the service quality dimension constructs is displayed in Table 4.2 below.

Table 4.2: Cronbach alpha

Research Construct		Descriptive Statistics		Cronbach Test		Standardised Factor Loading
		Mean	SD	Item-total	α	
Reliability	Q1	4.32	0.839	0.444	0.753	0.576
	Q2	4.17	0.954	0.502		0.565
	Q3	4.42	0.799	0.586		0.683
	Q4	4.37	0.825	0.605		0.725
	Q5	4.47	0.858	0.471		0.608
Assurance	Q6	4.70	0.752	0.616	0.759	0.9
	Q7	4.66	0.758	0.628		0.555
	Q8	4.16	0.877	0.649		0.898
	Q9	3.55	1.035	0.402		0.274
Tangibles	Q10	4.00	0.923	0.605	0.785	0.731
	Q11	3.50	1.013	0.643		0.811
	Q12	3.43	1.027	0.608		0.638
	Q13	4.10	0.799	0.526		0.519
Empathy	Q14	3.83	1.030	0.505	0.759	0.567
	Q15	4.37	0.780	0.422		0.479
	Q16	2.78	1.113	0.525		0.615
	Q17	3.97	0.966	0.585		0.705
	Q18	3.59	1.042	0.611		0.745
Responsiveness	Q19	4.50	0.735	0.577	0.771	0.756
	Q20	4.24	0.795	0.686		0.791
	Q21	4.21	0.837	0.566		0.639
	Q22	3.91	1.006	0.503		0.641

Source: Statistical Package for the Social Sciences Output (2023)

From Table 4.2 above, it can be seen that each of the factors produced a Cronbach alpha greater than 0.70. Accordingly, the reliability of the measuring instrument was confirmed (Duignan, 2014).

4.2.5 Factor scores

Once the factor structures had been validated through the confirmatory factor analysis and found to be reliable using the Cronbach alpha values, the factor scores were calculated, and descriptive statistics were obtained for the factor scores. The factor scores in Table 4.3 below provide a summary statistic to summarise the average level of agreement with the items that make up each factor.

Table 4.3: Factor scores

FACTOR SCORES					
Factor	N	Minimum	Maximum	Mean	Std Deviation
Reliability	305	1.00	5.00	4.3482	0.60747
Assurance	305	1.00	5.00	4.2680	0.65745
Tangibles	305	1.00	5.00	3.7557	0.73712
Empathy	305	1.00	5.00	3.7069	0.70840
Responsiveness	305	1.00	5.00	4.2172	0.65405
Valid N (listwise)	305				

Source: Statistical Package for the Social Sciences Output (2023)

Each factor score was then categorised according to the five levels of importance within the study: Very Unimportant [1–1.8), Unimportant [1.8–2.6), Somewhat Important [2.6–3.4], Important (3.4–4.2], and Very Important (4.2–5]. The frequencies of these categories were summarised and are presented in the stacked graph below (Figure 4.6).

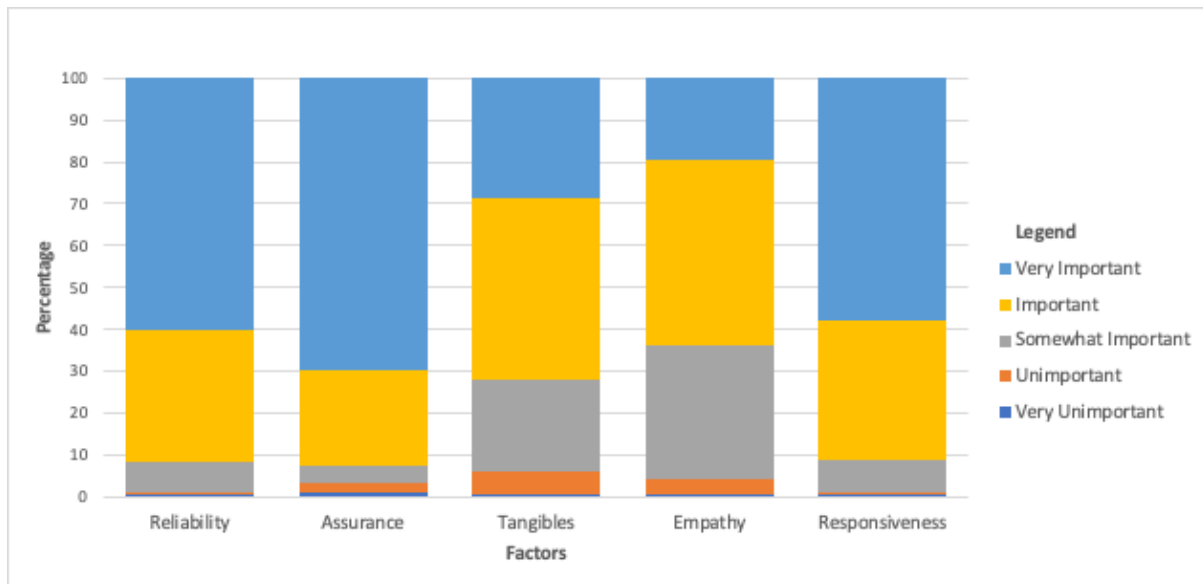


Figure 4.6: Categorical factor response distribution

Source: Statistical Package for the Social Sciences Output (2023)

It can be seen from the graph that the reliability factor had 60% Very Important and 31.5% Important, with the remaining 8.5% comprising Somewhat Important, Unimportant and Very Unimportant. The assurance factor had 69.5% Very Important and 23% Important, with the remaining 7.5% comprising Somewhat Important, Unimportant and Very Unimportant. The tangibles factor had 28.9% Very Important and 43% Important, with the remaining 28.3% comprising Somewhat Important, Unimportant and Very Unimportant. The empathy factor had 19.3% Very Important and 44.6% Important, with the remaining 36.1% comprising Somewhat Important, Unimportant and Very Unimportant. The responsiveness factor had 57.7% Very Important and 33.1% Important, with the remaining 9.2% comprising Somewhat Important, Unimportant and Very Unimportant.

Overall, the factor scores show that the reliability, assurance and responsiveness factors had the greatest overall percentage of Important and Very Important, whereas the tangibles and empathy had a greater level of Somewhat Important.

4.2.6 Statistical ranking

In order to determine which of the factors were the most important to the respondents, a two-step process was undertaken. Firstly, to ensure the significance of the rankings, each pair of factors was compared using paired sample t-tests to ascertain whether there was a significant difference in the mean scores for the factors. Secondly, once the factors were compared, the

one sample t-test was used to determine the classification of each factor (Brown, 2015; Hair et al., 2019).

Step 1: Paired sample t-test

Table 4.4: Paired sample t-test

PAIRED SAMPLE T-TEST FOR SIGNIFICANT DIFFERENCES						
Factors	Difference		Inferential Statistics			Statistically Significant
	Mean	SD	t-value	p-value	Cohen's d	
Reliability & Assurance	0.0802	0.532	2.634	0.009	0.151	Yes
Assurance & Responsiveness	0.0508	0.528	1.681	0.094	0.096	No
Assurance & Tangibles	0.5123	0.619	14.459	< 0.001	0.828	Yes
Responsiveness & Tangibles	0.4615	0.692	11.645	< 0.001	0.667	Yes
Assurance & Empathy	0.5612	0.651	15.054	< 0.001	0.862	Yes
Responsiveness & Empathy	0.5103	0.623	14.301	< 0.001	0.819	Yes
Tangibles & Empathy	0.0489	0.632	1.351	0.178	0.077	No

Source: Statistical Package for the Social Sciences Output (2023)

The results of the paired sample t-test indicate that there was a significant difference between the factor with the highest mean score (reliability) and the factor with the second-highest mean score (assurance) ($\mu_{\text{difference}} = 0.0802, SD = 0.532, t = 2.634, p = 0.009$). This indicates that the factor reliability was significantly higher than assurance. The next two highest factors (assurance and responsiveness) were then assessed, and it was found that there was no significant difference in the mean scores ($\mu_{\text{difference}} = 0.0508, SD = 0.528, t = 1.681, p = 0.094$). Assurance was then compared to tangibles, and it was found that there was a significant difference in the mean scores ($\mu_{\text{difference}} = 0.5123, SD = 0.619, t = 14.459, p < 0.001$). It was also found that assurance was significantly different to empathy ($\mu_{\text{difference}} = 0.5612, SD = 0.651, t = 15.054, p < 0.001$). Responsiveness was compared to tangibles and empathy. It was found that there was a significant difference between responsiveness and tangibles ($\mu_{\text{difference}} = 0.4615, SD = 0.692, t = 11.645, p < 0.001$) as well as between

responsiveness and empathy ($\mu_{difference} = 0.5103, SD = 0.623, t = 14.301, p < 0.001$). Finally, tangibles and empathy were compared to determine whether they were significantly different to one another. It was found that there was no significant difference between tangibles and empathy ($\mu_{difference} = 0.0489, SD = 0.632, t = 1.351, p = 0.178$).

Step 2: One sample t-test

Each factor was compared to the hypothesised value of 3.4 to determine whether the factors were classified as being significantly Important. The outcome of the one sample t-test found each of the five factors to be classified as significantly Important.

A summary of the results from the two-step statistical ranking process is displayed in Table 4.5 below.

Table 4.5: Statistical ranking

STATISTICAL RANKING									
Factors	Descriptive		One sample t-Test Classification					Hypotheses	Inferential Ranking
	Mean	SD	H1	t-value	p-value	Cohen's d	Category	Accepted or Rejected	Rank
Reliability	4.348	0.607	$\mu \neq 3.4$	4.261	< 0.001	0.244	Important	Accepted	1
Assurance	4.268	0.657	$\mu \neq 3.4$	23.058	< 0.001	1.32	Important	Accepted	2
Responsiveness	4.217	0.654	$\mu \neq 3.4$	21.821	< 0.001	1.249	Important	Accepted	2
Tangibles	3.756	0.737	$\mu \neq 3.4$	8.428	< 0.001	0.483	Important	Accepted	3
Empathy	3.707	0.708	$\mu \neq 3.4$	7.566	< 0.001	0.433	Important	Accepted	3

Source: Statistical Package for the Social Sciences Output (2023)

4.3 THE OVERALL ANALYSIS OF THE FINDINGS

The overall analysis of the results from the statistical tests affirms the primary hypothesis that the service quality dimensions of reliability, assurance, tangibles, empathy and responsiveness are indeed important to students from a selected private higher education institution in South Africa when they select an e-hailing service provider.

This corresponds to the studies listed in Table 4.6 below which have found the five dimensions of service quality to be important across different modes of land-based public transport

(including e-hailing), in various countries and regions, over a period of ten years, in both the pre-pandemic and post-pandemic times.

Table 4.6: Comparison of findings (number one)

Author/s	Region & Country	Transport Mode	Service Quality Dimensions	Findings
Current Study	South Africa	E-hailing	SERVQUAL	All five dimensions were perceived as significantly Important
Mikhaylov et al. (2015)	Kaliningrad Russia	Bus Tram Trolleybus	SERVQUAL	All five dimensions were perceived as significantly Important
Sam et al. (2018)	Kumasi Ghana	Bus	SERVQUAL	All five dimensions were perceived as significantly Important
Yao and Ding (2011)	Hangzhou China	Taxi	SERVQUAL	All five dimensions were perceived as significantly Important
Mphahlele (2018)	Gauteng South Africa	Train	SERVQUAL	All five dimensions were perceived as significantly Important
Ruamchart (2021)	Bangkok Thailand	E-hailing	SERVQUAL	All five dimensions were perceived as significantly Important

Source: Researcher's own construction

The overall analysis of the statistical ranking results further revealed varying degrees of importance attributed to each of the five service quality dimensions. Table 4.7 shows the results of the importance ranking of the five service quality dimensions for this study and contrasts them with the importance ranking of the five service quality dimensions for the same studies identified in the previous table.

Table 4.7: Comparison of findings (number two)

AUTHOR/S	REGION & COUNTRY	TRANSPORT MODE	SERVQUAL DIMENSION RANK Most Important (1) to Least Important (5)				
			Reliability	Assurance	Tangibles	Empathy	Responsiveness
Current Study	South Africa	E-hailing	1	2	3	3	2
Mikhaylov et al. (2015)	Kaliningrad (Russia)	Bus Tram Trolleybus	2	1	3	5	4
Sam et al. (2018)	Kumasi (Ghana)	Bus	1	3	4	2	5
Yao and Ding (2011)	Hangzhou (China)	Taxi	1	2	4	5	3
Mphahlele (2018)	Gauteng (South Africa)	Train	3	2	5	1	4
Ruamchart (2021)	Bangkok (Thailand)	E-hailing	2	3	1	1	4

Source: Researcher's own construction

From Table 4.7 it can be seen that this study found the reliability dimension to be the most important to students from a selected private higher education institution in South Africa when they chose an e-hailing service provider (that is, consistent and dependable performance including timely pickups and drop-offs by drivers, accurate and first-time service execution by all staff, genuine problem-solving efforts, and meticulous record-keeping of customer details, transactions and feedback). Scholars contend that the majority of studies over the past few decades have consistently found reliability to be the most important dimension of service quality because little else matters to consumers if the service is unreliable (Hoffman & Bateson, 2023). From Table 4.7 it can be seen that the reliability dimension was also found to be the most important for users of taxi services in China (Yao and Ding, 2011) and users of bus services in Ghana (Sam et al., 2018), while being the second most important dimension for users of e-hailing services in Thailand (Ruamchart, 2021).

From Table 4.7 above, it can be seen that this study found the assurance dimension (that is, customers feeling safe when using the service, and drivers being trustworthy, courteous and capable of effectively addressing customer inquiries) and the responsiveness dimension (commitment and readiness to provide the service including employee willingness and availability to always assist, prompt and efficient response to requests, provision of accurate service times) to equally be the second most important dimensions to students from a selected private higher education institution in South Africa when they chose an e-hailing service provider. From Table 4.7 above it can be seen that the assurance dimension was also found to be the second most important dimension for users of taxi services in China (Yao and Ding, 2011) and users of train services in South Africa (Mphahlele, 2018), while Mikhaylov et al. (2015) found it to be the most important dimension of service quality for users of buses, trams and trolleybuses in Russia. The responsiveness dimension seems to be of much greater importance in this study than in all of the other studies in which responsiveness was between the third and fifth most important dimension of service quality. It is also worthy to note that this study represents the only case where the assurance and responsiveness dimensions were of equal importance to users.

From Table 4.7 above it can be seen that this study found the tangibles dimension (that is, professional appearance of drivers and modern, attractive and appropriate vehicles, equipment and mobile application) and the empathy dimension (that is, drivers' understanding of particular client requirements, personalised attention, convenient operating hours and customised service offerings) to equally be the third most important dimensions to students from a selected private

higher education institution in South Africa when they chose an e-hailing service provider. From Table 4.7 it can be seen that the majority of studies found the tangibles dimension to be between the third and fifth most important dimension, barring the study by Ruamchart (2021) which found it to be the most important dimension to users of e-hailing services in Thailand. The importance placed on the empathy dimension seems to vary considerably between the different studies in Table 4.7 above. While train users in South Africa (Mphahlele, 2018) and e-hailing users in Thailand (Ruamchart 2021) value the empathy dimension the most, users of buses, trams and trolleybuses in Russia (Mikhaylov et al., 2015) and users of taxi services in China (Yao & Ding, 2011) value the empathy the dimension the least. Users of bus services in Ghana (Sam et al., 2018), conversely, find empathy to be the second most important dimension of service quality. It is also worthy to note that this study represents the only case where the tangibles and empathy dimensions were found to be of equal importance to users.

Based on the comparison of the findings above, it can be seen that this study found varying degrees of importance attributed to the five dimensions of service quality, and that the varying degrees of importance possess both similarities and differences when compared to the studies identified for comparison. These findings are supported by several authors (for example, Hamzah et al., 2017 and Zhang et al., 2023) who contend that the expectations of individuals can be drastically influenced by their culture, socio-economic status and purpose for using the service and, therefore, the concept of service quality tends to be context-bound and service-type-dependent. The findings are, therefore, particularly significant for local e-hailing companies given that achieving a competitive advantage through service quality requires firms to understand, deliver and promote a higher level of service performance on those attributes particularly valued by their target customers (Wirtz & Lovelock, 2022; Zhang et al., 2023).

4.4 CONCLUSION

This chapter presented and discussed the findings that were obtained from the quantitative data analysis to address the research objectives and hypotheses. Descriptive statistics provided an overview that described the main features of the data obtained from the sample and revealed that students generally indicated overall importance for each of the five service quality dimensions. The descriptive statistics were followed by inferential statistical techniques to address the objectives and hypotheses and draw conclusions about the target population. The results from the confirmatory factor analysis confirmed the factor structures and validity of the adapted measurement model, while the Cronbach alpha test confirmed its reliability. To achieve

the primary objective of the study, the factor scores were obtained and compared to determine their relative importance through statistical ranking. The main findings affirm the primary hypothesis that the service quality dimensions of reliability, assurance, tangibles, empathy and responsiveness are indeed important to students from a selected private higher education institution in South Africa when they select an e-hailing service provider. These findings were compared to the literature and found to be consistent with several studies which have found the five dimensions of service quality to be important across different modes of land-based public transport (including e-hailing), in various countries and regions, over a period of ten years, in both the pre-pandemic and post-pandemic times. The reliability dimension emerged as the most crucial factor, indicating that students prioritise consistent and dependable service. The assurance and responsiveness dimensions were tied as the second most critical factors, suggesting that students equally valued e-hailing firms' ability to inspire trust and confidence through their knowledge, courtesy and the safety and security of its operations, as well the firm's commitment and preparedness to provide the service. Finally, the tangibles and empathy dimensions were tied as the third most important factors, suggesting that students equally valued the physical aspects of the service, and the degree of care and individual attention they received from e-hailing service providers. The relative importance of the five service quality dimensions, or order of importance, was compared to that of several studies across different modes of land-based public transport (including e-hailing), in various countries and regions, and were found to have both similarities and differences. Based on the results presented and discussed in this chapter, the next chapter presents key findings, conclusions and recommendations.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarises the key findings of the study, presents conclusions and makes recommendations based on the outcomes. The chapter further delineates the limitations of the study and proposes potential avenues for future investigation. It commences by providing an overview of the study, emphasising the research problem and the research objectives.

5.2 OVERVIEW OF THE RESEARCH PROBLEM AND OBJECTIVES

The South African e-hailing industry is characterised by fierce competition between local and international e-hailing operators, and local organisations are searching for strategies to distinguish themselves and secure a viable market position. This study focused on how students in private tertiary institutions in South Africa perceive the quality of e-hailing services and identified the service quality dimensions that local e-hailing service providers may need to pay attention to for differentiation and competitive advantage.

Primary objective: The primary objective of the study was to determine the dimensions of service quality that students from a selected private higher education institution in South Africa perceive to be the most important when they select an e-hailing service provider.

In order to achieve the primary research objective, the following sub-objectives were formulated:

- **Sub-objective 1:** To determine how important reliability is to students when they select an e-hailing service provider.
- **Sub-objective 2:** To determine how important assurance is to students when they select an e-hailing service provider.
- **Sub-objective 3:** To determine how important tangibility is to students when they select an e-hailing service provider.
- **Sub-objective 4:** To determine how important empathy is to students when they select an e-hailing service provider.
- **Sub-objective 5:** To determine how important responsiveness is to students when they select an e-hailing service provider.

In addition to the objectives of the study, the following research hypotheses were formulated:

Primary hypothesis: The service quality dimensions of reliability, assurance, tangibles, empathy and responsiveness are important to the students from a selected private higher education institution in South Africa when they select an e-hailing service provider.

To test the primary hypothesis, the following sub-hypotheses were formulated for the study:

- **H¹:** Reliability is important to students when they select an e-hailing service provider.
- **H²:** Assurance is important to students when they select an e-hailing service provider.
- **H³:** Tangibles is important to students when they select an e-hailing service provider.
- **H⁴:** Empathy is important to students when they select an e-hailing service provider.
- **H⁵:** Responsiveness is important to students when they select an e-hailing service provider.

The next section presents a summary of the key findings related to the aforementioned research problem and objectives.

5.3 THE MAIN FINDINGS OF THE STUDY

5.3.1 Main findings from the literature review

5.3.1.1 E-hailing services

The literature explained the concept and evolution of e-hailing services, from both global and local perspectives. The main findings indicate the transformation of global transportation through the emergence of e-hailing services. These platforms, which facilitate a direct connection between drivers and consumers through mobile applications, have significantly altered the dynamics of urban mobility by providing enhanced convenience, speed and flexibility. In the context of South Africa, these services have received a mixed reception, but have provided benefits and employment opportunities to users and have attracted a primarily young, urban demographic for occasional short journeys. However, they also encounter numerous hurdles including regulatory challenges, competitive pressures, workplace environment issues and concerns over service quality, safety and criminal activity. The competitive landscape is particularly tough, with international entities often overshadowing local ventures, leading to the shutdown of many domestic start-ups and ongoing financial struggles for others.

5.3.1.2 Service quality

The literature review explored the theoretical foundation of service quality, synthesising the fundamental concepts and frameworks from existing research into service quality. The main findings highlight that a focus on delivering exceptional service quality leads to a strong competitive advantage and improved financial performance through customer satisfaction and loyalty. Service quality is viewed as a global judgement or attitude of an organisation's overall superiority or excellence and represents the outcome of a subjective evaluation between customers' expectations and perceptions of service performance. It was thus contended that the level of service quality, as perceived by customers, is contingent upon the degree to which an organisation meets or exceeds customers' expectations of service quality. The literature highlights the fact that, due to the unique nature of services, consumers evaluate service performance on a different set of characteristics than that of physical products, and that these characteristics are commonly known as dimensions of service quality. The SERVQUAL model is the most widely used framework for measuring customer perceptions of service quality. It identifies five service quality dimensions, namely reliability, assurance, tangibles, empathy and responsiveness.

5.3.1.3 Service quality in the transportation industry

The literature examined the importance of service quality to consumers in land-based transportation, notably e-hailing. The main findings indicate that the five SERVQUAL dimensions have been found to be important across different modes of land-based public transport (including e-hailing), in various countries and regions, over a period of ten years, in both the pre-pandemic and post-pandemic times. In addition, e-hailing is a relatively recent development in the country, with limited research conducted on specific aspects of service quality in the context of South Africa.

5.3.2 Main findings from the primary data

The main findings from the primary data conclusively support the primary hypothesis that for students at a private higher education institution in South Africa, the five service quality dimensions of reliability, assurance, tangibles, empathy and responsiveness are important when choosing an e-hailing service provider. This aligns with research conducted across various transport modes, regions and countries, showing consistent significance of these dimensions over a period of a decade, in both pre- and post-pandemic times. Although these findings resonate with global studies, the specific ranking of these dimensions revealed both similarities

and differences that reflect unique regional perceptions. The dimension of reliability was identified as the most important factor, indicating students' preference for consistent and dependable service. The dimensions of assurance and responsiveness were equally ranked as the second most important factors, indicating that students placed equal importance on e-hailing firms' ability to inspire trust and confidence through their knowledge, courtesy and the safety and security of its operations, alongside the firm's commitment and preparedness to provide the service. The tangibles and empathy dimensions were equally ranked as the third most important dimensions, indicating that students placed equal importance on the physical components of the service and the level of care and individual attention provided by e-hailing service providers.

5.4 RECOMMENDATIONS

In light of the above-mentioned conclusions, the study makes the following recommendations with respect to service quality in the South African e-hailing industry:

5.4.1 Recommendations for e-hailing service providers

- Given that all of the five service quality dimensions identified in this study are significantly important to consumers of e-hailing services, local e-hailing companies should ensure that they carefully consider, understand and improve upon each of the respective service quality dimensions. The five service quality dimensions, including their components and how they can be improved upon, are described below:
 - **The Reliability Dimension:** The reliability dimension reflects the consistency and dependability of a firm's performance. The drivers of local e-hailing companies, as the primary point of contact, need to prioritise punctuality, ensuring they pick customers up and drop customers off at the promised time. The organisation as a whole, including drivers, customer service representatives and other employees, should perform their services correctly the first time, demonstrate a sincere interest in resolving customers' problems and concerns, and maintain detailed and accurate records of customer accounts, transactions, ratings and reviews. To enhance service quality along these areas of the reliability dimension, organisations might consider using various geographical tracking systems to monitor driver performance and adherence to schedules and provide incentives for consistent and dependable performance. Organisations may also benefit from investing in secure and reliable software solutions to maintain detailed and dependable records.

- **The Assurance Dimension:** The assurance dimension addresses the competence of the firm, the courtesy it extends to its customers and the security of its operations. Local e-hailing companies should ensure that drivers are trustworthy and that customers feel safe when using the service. The drivers should also be friendly and respectful towards customers, while having the knowledge and expertise to address their questions and concerns. To enhance service quality along these areas of the assurance dimension, organisations may consider conducting comprehensive background checks on drivers, implementing regular training courses for all employees focusing on customer service, local area knowledge and safety procedures, and embracing customer feedback to further amend employee and operational rules, policies and practices. Service quality along the assurance dimension may further be improved by investing in data security solutions, passenger and driver safety measures, such as mobile panic buttons, location sharing and low-crime route allocation, and driver behaviour tracking, including regular substance control tests and adherence to speed limits.

- **The Tangibles Dimension:** The tangibles dimension relates to the condition and appearance of the physical aspects of the service, such as the physical facilities, equipment, communication materials and the appearance of personnel. The drivers of local e-hailing companies should be well-dressed and appear neat. The organisation needs to ensure that the physical elements of the service, such as the vehicle, equipment and smartphone application, are modern and up-to-date, visually appealing and have the attributes that are appropriate for the type of service. To enhance service quality along these areas of the tangibles dimension, organisations may consider establishing specific standards for the condition, appearance and maintenance of vehicles, and performing intermittent vehicle inspections to ensure that these standards are adhered to. Organisations may benefit from continuous mobile application and in-vehicle technology development and updates to enhance their ease of use, visual appeal and functional performance. Service quality along the tangibles dimension may further be improved by the implementation of a driver dress code so that drivers appear neat and professional.

- **The Empathy Dimension:** The empathy dimension addresses the firm's ability to provide caring individualised attention to its customers. The customers of local e-hailing operators expect these organisations to have their best interests at heart. The drivers need to understand the specific needs of customers and provide them with

personalised attention (for example, doing something extra for the customer when required). The organisation should aim to provide convenient operating hours and individualised attention (such as offering different types of vehicles and prices that suit customers' preferences). To enhance service quality along these areas of the empathy dimension, organisations may consider offering different types of vehicles, schedules and prices that suit customers' preferences, and investing in the training and development of employee soft skills to help them understand and respond to customer requirements.

- **The Responsiveness Dimension:** The responsiveness dimension reflects a service firm's commitment and preparedness to provide the service. The employees of local e-hailing organisations, including drivers, customer service representatives and other employees, should always be willing to help customers and should never be too busy to respond to customer requests (for example, should never reject or cancel bookings). The operators need to respond to customer requests with speed and efficiency and ensure that customers are provided with the times that the service will be rendered, including estimated times of departure and arrival, and notifications of any delays. To enhance service quality along these areas of the responsiveness dimension, organisations may consider surge pricing or other incentives to ensure that driver supply is able to adapt to and meet customer demand. Organisations may further benefit by investing and leveraging technology to create faster and more efficient driver–passenger matching that reduces passenger waiting time. Service quality along the responsiveness dimension may further be improved by establishing an easily accessible and well-trained customer support system that facilitates the fast and efficient resolution of customer concerns and enquiries.
- To improve competitive advantage, firms need to release more value while simultaneously reducing their costs. It is therefore recommended that local e-hailing companies distribute more of their resources and strategic efforts towards improving the most important service quality dimensions, and less of their resources and strategic efforts towards improving the service quality dimensions that are the least important. To this effect, local e-hailing companies should direct most of their attention to improving the reliability dimension, followed by the assurance and responsiveness dimensions, and then the empathy and tangibles dimensions.

- To maximise on competitive advantage even further, it is recommended that local e-hailing companies perform a gap analysis. While it is valuable to know which dimensions are the most important to consumers, local e-hailing companies should also measure the degree to which customers perceive that the firm is performing along these dimensions. It may be the case that a firm is indeed already perceived to be performing exceptionally well on the most important dimension, in which case less resources and strategic efforts could be focused on these areas, and more towards the dimensions where large gaps or discrepancies exist between the relative perceived importance and actual perceived performance of the service quality dimensions. This could enable local e-hailing companies to release more value to consumers while reducing costs even further, thereby freeing up resources that could be used to improve their competitive advantage in areas other than service quality, for example, advertising and promotional activities or by offering lower prices to consumers.
- The literature strongly emphasises that customer expectations and perceptions of service performance are very dynamic. It is, therefore, highly recommended that local e-hailing companies measure these expectations and perceptions on a regular basis to ensure that they are continuously focusing their resources and strategic efforts on the areas that do indeed improve service quality perceptions. In the same vein, a regular gap analysis can be used as a benchmark to monitor the company's progress and evaluate whether their service quality improvement strategies are indeed producing the desired results.
- It is only when employees' needs are satisfied that they are able to provide services that will satisfy the needs of customers, and only once the needs of both internal and external customers (employees and customers) are met, will the foundation be laid for a mutually beneficial long-term relationship with customers. Satisfied and committed employees are more inclined go above and beyond to meet the requirements of customers and foster a culture of service excellence. Enhancing service quality necessitates that local e-hailing companies thoroughly understand and meet their employees' needs and expectations. Investing in employee satisfaction and engagement is essential for developing a motivated and capable workforce dedicated to providing superior service. This involves providing adequate training, fair compensation, opportunities for advancement and a supportive workplace environment.

5.4.2 Recommendations for industry experts, government and policymakers

- Establish and enforce a regulatory framework for the operations of e-hailing services to guarantee healthy competition between local and international e-hailing companies and circumvent market monopolisation.
- Introduce and monitor stringent quality, safety and operational requirements for all e-hailing services for the protection of consumers and the promotion of a high standard of service.
- Incorporate policies and allocate resources to support local e-hailing companies and enhance their competitive edge, such as subsidies, training initiatives and innovation grants.
- Ensure that e-hailing organisations adhere to rigorous data privacy laws to protect consumer information from misuse or unauthorised access.

5.5 LIMITATIONS

- The study employed non-probability sampling techniques, which could restrict the generalisability of the findings to the broader population of tertiary students from private higher education institutions in South Africa.
- The study used a purely quantitative approach, which might have overlooked the in-depth knowledge that qualitative data could provide about the reasons underlying students' perceptions.
- The study's sole focus on students from private higher education institutions might not capture the perceptions of consumers from different demographic groups.
- The study examines five essential dimensions of service quality but there may be more factors or dimensions that influence consumer perceptions of service quality.
- The study's use of a cross-sectional strategy only captures a snapshot of consumer perceptions at a given point in time and does not account for changes in perceptions over an extended period of time.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCH

- Potential avenues for improving the representativeness and generalisability of the findings in future research include using probability sampling techniques or extending the geographic and demographic scope of the study.
- Incorporating qualitative research could provide deeper insights into consumer perceptions of service quality.
- Longitudinal research could be used to monitor how consumer perceptions of service quality dimensions vary over time, particularly in reaction to shifts in the market or developments in technology.
- Research efforts could examine the effects of external variables on consumer perceptions and the competitive environment of the e-hailing market, including changes in regulations, technological developments and economic conditions.
- Future studies could investigate and validate other potential dimensions of service quality.
- A more thorough understanding of how cultural and economic settings affect perceptions of the service quality of e-hailing services could be obtained through comparative studies conducted in various regions and countries.

5.7 SUMMARY OF THE STUDY

This study focused on how students in private tertiary institutions in South Africa perceive the quality of e-hailing services and identified the service quality dimensions that local e-hailing service providers may need to pay attention to for differentiation and competitive advantage. The study used a quantitative approach involving the use of questionnaires. It found that all five dimensions of service quality, namely reliability, assurance, tangibles, empathy and responsiveness, were important to students when choosing an e-hailing service provider. The study further revealed that the dimension of reliability was the most important to students, followed by the assurance and responsiveness dimensions, and then the empathy and tangibles dimensions. The study recommends that local e-hailing organisations should ensure that they carefully consider, understand and improve upon each of the respective service quality dimensions, but direct most of their attention and resources to improving the reliability dimension, followed by the assurance and responsiveness dimensions, and then the empathy and tangibles dimensions.

REFERENCES

- Adetokunbo, A.M. and Edioye, O.P. 2020. Response of economic growth to the dynamics of service sector in Nigeria. *Future Business Journal*, 6(27): 1–10. [Online]. Available at: <https://doi.org/10.1186/s43093-020-00018-9> [Accessed 13 May 2023].
- Ahmed, S., Al Asheq, A., Ahmed, E., Chowdhury, U.Y., Sufi, T. and Mostofa, M.G. 2023. The intricate relationships of consumers' loyalty and their perceptions of service quality, price and satisfaction in restaurant service. *The TQM Journal*, 35(2): 519–539. [Online]. Available at: <https://doi.org/10.1108/TQM-06-2021-0158> [Accessed 07 August 2023].
- Ali, J., Jusoh, A., Idris, N., Nor, K.M., Wan, Y., Abbas, A.F. and Alsharif, A.H. 2023. Applicability of healthcare service quality models and dimensions: Future research directions. *The TQM Journal*, 35(6): 1378–1393. [Online]. Available at: <https://doi.org/10.1108/TQM-12-2021-0358> [Accessed 12 September 2023].
- Ann, D.Y.H. and Shafi, M.A., 2022. Factors influencing consumer satisfaction towards e-hailing service among Malaysian. *Research in Management of Technology and Business*, 3(2): 72–84. [Online]. Available at: <https://publisher.uthm.edu.my/periodicals/index.php/rmtb/article/view/9621> [Accessed 22 March 2023].
- Ayo-Adewale, B. 2023. Uber under fire in South Africa as passengers remain targets of late-night attacks. *Technext*, 13 August 2023. [Online]. Available at: <https://technext24.com/2023/08/07/uber-south-africa-late-night-attacks/> [Accessed 16 August 2023].
- Azudin, N., Norhashim, M. and Nachiappan, G. 2018. Service quality of Uber in a small city: A case study of Ipoh Uber drivers. *Journal of Advanced Research in Business, Marketing, and Supply Chain Management*, 2(1): 19–25. [Online]. Available at: <http://dx.doi.org/10.1018/j.jarims.2018.10.018> [Accessed 24 February 2023].
- Babbie, E. 2016. *The practice of social research*. 14th ed. Boston: Cengage.
- Berndt, A. and Boshoff, C. eds. 2022. *Services marketing*. Cape Town: Juta.

- Berndt, A., Pretorius, A. and Blaauw, D. 2021. The intention of South Africans to engage in collaborative consumption: The case of Uber. *Acta Commercii*, 21(1): 1–11. [Online]. Available at: <http://dx.doi.org/10.4102/ac.v21i1.961> [Accessed 24 February 2023].
- Berry, L.L., Seiders, K. and Grewal, D. 2002. Understanding service convenience. *Journal of Marketing*, 66(3): 1–17. [Online]. Available at: <https://doi.org/10.1509/jmkg.66.3.1.18505> [Accessed 17 August 2023].
- Brown, T.A. 2015. *Confirmatory factor analysis for applied research*. 2nd ed. New York: The Guilford Press.
- Cetin, T. and Deakin, E. 2019. Regulation of taxis and the rise of ridesharing. *Transport Policy*, 76(0): 149–158. [Online]. Available at: <https://doi.org/10.1016/j.tranpol.2017.09.002> [Accessed 22 April 2023].
- Churchill Jr., G.A. and Surprenant, C. 1982. An investigation into the determinants of customer satisfaction. *Journal of Marketing Research (JMR)*, 19(4): 491–504. [Online]. Available at: <https://doi.org/10.2307/3151722> [Accessed 18 August 2023].
- Clemes, M.D., Dean, D.L. and Thitiya, T. 2020. Modelling the behavioural intentions of day spa customers. *Asia Pacific Journal of Marketing and Logistics*, 32(8): 1699–1716. [Online]. Available at: <https://doi.org/10.1108/APJML-04-2019-0258> [Accessed 19 May 2023].
- Competition Commission. 2021. Market inquiry into land based public passenger transport sector. [Online]. Available at: <http://www.compcom.co.za/wp-content/uploads/2021/04/PTMI-Non-Confidential.pdf> [Accessed 09 March 2023].
- Creswell, J.W. and Creswell, J.D. 2018. *Research design: Qualitative, quantitative, and mixed methods approaches*. 5th ed. Thousand Oaks: Sage.
- Cronbach, L. J. and Meehl, P. E. 1955. Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281–302. [Online]. Available at: <https://psycnet.apa.org/doi/10.1037/h0040957> [Accessed 15 April 2023].
- Cronin, J.J. and Taylor, S.A. 1992. Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56(3): 55–68. [Online]. Available at: <https://doi.org/10.1177/002224299205600304> [Accessed 17 February 2023].

- Daily Investor. 2023. Uber collapse in South Africa. *Daily Investor*, 17 August 2023 [Online]. Available at: <https://dailyinvestor.com/south-africa/27750/uber-collapse-in-south-africa/#:~:text=Many%20passengers%20complain%20about%20Uber,t%20follow%20the%20road%20rules> [Accessed 19 August 2023].
- Davlembayeva, D. and Papagiannidis, S. 2023. Platform-provider relationship dynamics in the sharing economy: Challenges and implications. *Industrial Marketing Management*, 111(0): 242–256. [Online]. Available at: <https://doi.org/10.1016/j.indmarman.2023.04.010> [Accessed 04 August 2023].
- Deloitte, 2019. The rise of the platform economy. [Online]. Available at: <https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/humancapital/deloitte-nl-hc-the-rise-of-the-platform-economy-report.pdf> [Accessed 07 March 2023].
- Department of Transport. 2020. Taxi industry regulation. [Online]. Available at: https://www.transport.gov.za/documents/11623/189609/regulation_discussion_Sep2020.pdf/786c1d7f-65e3-4932-8563-0415d27b8b99 [Accessed 8 March 2023].
- Development Bank of Southern Africa. 2023. How transportation is a key catalyst for economic growth in SA. [Online]. Available at: <https://www.dbsa.org/article/how-transportation-key-catalyst-economic-growth-sa> [Accessed 24 February 2023].
- Diko, Y. 2022. Uber and e-hailing companies need a new business model. *Eyewitness News*, 19 April 2022. [Online]. Available at: <https://ewn.co.za/2022/04/19/yonela-diko-uber-and-e-hailing-companies-need-a-new-business-model> [Accessed 23 April 2023].
- Duignan, J. 2014. *Quantitative methods for business research using Microsoft Excel*. Andover: Cengage.
- Fenton, A., Wafer, A. and Fitchett, J.M. 2020. Youth mobility in a post-apartheid city: An analysis of the use of e-hailing by students in Johannesburg, South Africa. *Urban Forum*, 31(0): 255–272. [Online]. Available at: <https://doi.org/10.1007/s12132-019-09384-2> [Accessed 24 July 2023].
- Flores, O. and Rayle., L. 2017. How cities use regulation for innovation: The case of Uber, Lyft and Sidecar in San Francisco. *Transportation Research Procedia*, 25(0): 3756–3768. [Online]. Available at: <https://doi.org/10.1016/j.trpro.2017.05.232> [Accessed 21 May 2023].

- Gan, Y., Fan, H., Jiao, W. and Sun, M. 2021. Exploring the influence of e-hailing applications on the taxi industry-from the perspective of the drivers. *International Journal of Geo-Information*, 10(2): 1–19. [Online]. Available at: <https://doi.org/10.3390/ijgi10020077> [Accessed 12 August 2023].
- Giddy, J.K. 2019. The influence of e-hailing apps on urban mobilities in South Africa. *African Geographical Review*, 38(3): 227–239. [Online]. Available at: <https://doi.org/10.1080/19376812.2019.1589732> [Accessed 24 March 2023].
- Gill, J. and Johnson, P. 2002. *Research methods for managers*. 3rd ed. Thousand Oaks: SAGE.
- Govender, K.K. 2016. Exploring public transport service quality: The case of mini-bus taxi service in South Africa. *Eurasian Business Review*, 6(1): 101–116. [Online]. Available at: <https://doi.org/10.1007/s40821-015-0036-y> [Accessed 19 February 2023].
- Grönroos C. 1982. An applied service marketing theory. *European Journal of Marketing*, 16(0): 30–41. [Online]. Available at: <https://doi.org/10.1108/EUM00000000004859> [Accessed 17 February 2023].
- Grönroos, C. 1984. A service quality model and its marketing implications. *European Journal of Marketing*, 18(4): 36–44. [Online]. Available at: <https://doi.org/10.1108/EUM00000000004784> [Accessed 18 February 2023].
- Grönroos, C. 2015. *Service management and marketing: Managing the service profit logic*. 4th ed. West Sussex: Wiley.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. 2019. *Multivariate data analysis*. 8th ed. Boston: Cengage.
- Hall, J. V. and Krueger, A. B. 2018. An analysis of the labor market for Uber’s driver-partners in the United States. *ILR Review*, 71(3), 705–732. [Online]. Available at: <https://doi.org/10.1177/0019793917717222> [Accessed 23 April 2023].
- Hamzah, Z.L. Lee, S.P. Moghavvemi, S. 2017. Elucidating perceived overall service quality in retail banking. *International Journal of Bank Marketing*, 35(5): 781–804. [Online]. Available at: <https://doi.org/10.1108/IJBM-12-2015-0204> [Accessed 08 April 2023].
- Henama, U.S. and Sifolo, P.P.S. 2017. Uber: The South African experience. *African Journal of Hospitality, Tourism, and Leisure*, 6(2): 1–10. [Online]. Available at:

https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_39_vol_6_2_2017.pdf
[Accessed 22 March 2023].

- Heyns, G.J. and Kilbourn, P.J. 2022. Online shopping behaviour and service quality perceptions of young people in South Africa: A COVID-19 perspective. *Journal of Transport and Supply Chain Management*, 16(0): 1–13. [Online]. Available at: <https://doi.org/10.4102/jtscm.v16i0.777> [Accessed 14 May 2023].
- Hill, C.W.L. 2021. *International business: Competing in the global marketplace*. 13th ed. New York: McGraw-Hill.
- Hoffman, K.D. and Bateson, J.E.G. 2023. *Services marketing: Concepts, strategies, & cases*. 6th ed. Mason: Cengage.
- Kandampully, J., Mok, C. and Sparks, B. 2001. *Service quality management in hospitality, tourism, and leisure*. Haworth Hospitality Press: New York.
- Kankam, G. 2023. Service quality and business performance: The mediating role of innovation. *Discover Analytics*, 1(6): 1–11. [Online]. Available at: <https://doi.org/10.1007/s44257-023-00006-7> [Accessed 17 September 2023].
- Khader, A. and Madhavi, C. 2017. Progression of service quality concepts. *Global Journal of Management and Business Research*, 17(6): 17–27. [Online]. Available at: <https://journalofbusiness.org/index.php/GJMBR/article/view/2288> [Accessed 17 March 2023].
- Kotler, P. and Keller, K.L. 2021. *Marketing management*. 16th ed. Harlow: Pearson.
- Krejcie, R.V. and Morgan, D.W. 1970. Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3): 607–610. [Online]. Available at: <https://doi.org/10.1177/001316447003000308> [Accessed 17 March 2023].
- Kgwedi, M.R. 2022. *The economic and time impact of poor access to public transport in South African metropolitan areas*. MCom dissertation. University of Stellenbosch.
- Lee, Z.W.Y., Chan, T.K.H., Balaji, M.S. and Chong, A.Y.L. 2018. Why people participate in the sharing economy: An empirical investigation of Uber. *Internet Research*, 28(3): 829–850. [Online]. Available at: <https://doi.org/10.1108/IntR-01-2017-0037> [Accessed 28 April 2023].

- Leedy, P.D. and Ormrod, J.E. 2021. *Practical research: Planning and design*. 12th ed. Essex: Pearson.
- Le Roux. 2021. Uber is getting worse and worse, listeners complain. The company responds. *CapeTalk*, 14 October 2021. [Online]. Available at: <https://www.capetalk.co.za/articles/429733/uber-is-getting-worse-and-worse-listeners-complain-the-company-responds> [Accessed 27 February 2023].
- Limna, P. and Kraiwanit, T. 2022. Service quality and its effect on customer satisfaction and customer loyalty: A qualitative study of Muang Thai Insurance Company in Krabi, Thailand. *Journal for Strategy and Enterprise Competitiveness*, 1(2): 1–16. [Online]. Available at: <https://so07.tci-thaijo.org/index.php/STECOJournal/article/view/912> [Accessed 27 August 2023].
- Luhlongwane, Z.S. 2022. *Assessing work organization strategies of Johannesburg based e-hailing drivers*. MCom dissertation. University of KwaZulu-Natal.
- Luke, R. and Heyns, G.J. 2020. An analysis of the quality of public transport in Johannesburg, South Africa using an adapted SERVQUAL model. *Transportation Research Procedia*, 48(1): 3562–3576. [Online]. Available at: <https://doi.org/10.1016/j.trpro.2020.08.095> [Accessed 25 February 2023].
- Malinga, S. 2023. Exclusive: Another e-hailing firm shuts its doors in SA. *ITWeb*, 29 July 2022. [Online]. Available at: <https://www.itweb.co.za/content/o1Jr5qxPE1VqKdWL> [Accessed 07 February 2023].
- Martínez, J.A. and Martínez, L. 2010. Some insights on conceptualizing and measuring service quality. *Journal of Retailing & Consumer Services*, 17(1): 29–42. [Online]. Available at: <https://doi.org/10.1016/j.jretconser.2009.09.002> [Accessed 05 March 2023].
- Mezulánik, J., Durda, L., Civelek, M. and Malec, L. 2020. Ride-hailing vs. taxi services: A survey-based comparison. *Journal of Tourism & Services*, 20(11): 170–186. [Online]. Available at: <https://doi.org/10.29036/jots.v11i20.155> [Accessed 07 March 2023].
- Mikhaylov, A.S., Gumenuk, I.S. and Mikhaylova, A.A. 2015. The SERVQUAL model in measuring service quality of public transportation: Evidence from Russia. *Calitatea*, 16(144): 78–83. [Online]. Available at: <https://www.researchgate.net/profile/Andrey->

Mikhaylov-

2/publication/274835389_The_SERVQUAL_model_in_measuring_service_quality_o
f_public_transportation_evidence_from_Russia/links/56043fb408ae5e8e3f2fd63c/The
-SERVQUAL-model-in-measuring-service-quality-of-public-transportation-evidence-
from-Russia.pdf [Accessed 16 April 2023].

Mphahlele, L.M. 2018. *Investigating service quality of passenger trains in Gauteng*. MPhil dissertation. University of Johannesburg.

Nawaz, F. 2022. Impact of service quality on customer satisfaction and customer loyalty: A case of banking sector of Pakistan. *Journal of Applied Research and Multidisciplinary Studies*, 2(2): 63–82. [Online]. Available at: <https://doi.org/10.32350/jarms.22.04> [Accessed 26 June 2023].

Noble, H. and Mitchell, G. 2016. What is grounded theory? *Evidence-Based Nursing*, 19(2): 34–35. [Online]. Available at: <https://pubmed.ncbi.nlm.nih.gov/26872777/> [Accessed 23 August 2023].

Nor, M.N., Sabri., S. and. Mat Isa., N.F. 2021. E-hailing service satisfaction: A case study of students in a higher education institution in Perlis, Malaysia. *Jurnal Intelek*, 16(2): 138–150. [Online]. Available at: <https://myjms.mohe.gov.my/index.php/intelek/article/view/16002> [Accessed 13 March 2023].

Olayode, I.O., Severino, A., Alex, F.J. Macioszek, E. and Tartibu, E.K. 2023. Systematic review on the evaluation of the effects of ride-hailing services on public road transportation. *Transportation Research Interdisciplinary Perspectives*, 22(0): 1–17. [Online]. Available at: <https://doi.org/10.1016/j.trip.2023.100943> [Accessed 20 December 2023].

Oliver, R.L. 1981. Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(3): 25–48. [Online]. Available at: <https://ezproxy.iielearn.ac.za/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=4669056&site=ehost-live&scope=site> [Accessed 27 February 2023].

Oliver, R.L. 1997. *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw Hill.

- Pahwa, A. 2023. Uber business model: How does Uber make money. *Feedough*, 21 February 2023. [Online]. Available at: <https://www.feedough.com/uber-business-model/> [Accessed 07 February 2023].
- Pandey, A. and Sahu, R. 2020. Modeling the relationship between service quality, destination attachment and eWOM intention in heritage tourism. *International Journal of Tourism Cities*, 6(4): 769–784. [Online]. Available at: <https://doi.org/10.1108/IJTC-08-2019-0125> [Accessed 23 April 2023].
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. 1985. A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4): 41–50. [Online]. Available at: <https://doi.org/10.2307/1251430> [Accessed 03 March 2023].
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1): 12–40. [Online]. Available at: <https://api.semanticscholar.org/CorpusID:56252870> [Accessed 04 March 2023].
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. 1994. Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing*, 58(1): 111–124. [Online]. Available at: <https://doi.org/10.2307/1252255> [Accessed 03 March 2023].
- Ponto, J. 2015. Understanding and evaluating survey research. *Journal of the Advanced Practitioner in Oncology*, 6(2): 168–171. [Online]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/> [Accessed 19 July 2023].
- Potjanajaruwit, P. 2023. The effect of e-service quality on the competitive advantages of tourism and hotel businesses in Thailand. *GeoJournal of Tourism and Geosites*, 47(2): 363–369. [Online]. Available at: <https://doi.org/10.30892/gtg.47201-1033> [Accessed 19 August 2023].
- Quinlan, C., Babin, B., Carr, J., Griffin, M. and Zikmund, W. 2019. *Business research methods*. 2nd ed. Andover: Cengage.
- Rayle, L., Dai, D., Chan, N., Cervero, R. and Shaheen, S. 2016. Just a better taxi? A survey-based comparison of taxis, transit, and ridesourcing services in San Francisco.

- Transport Policy*, 45(0): 168–178. [Online]. Available at: <https://doi.org/10.1016/j.tranpol.2015.10.004> [Accessed 21 February 2023].
- Ravichandran, K., Mani, B.T. and Prabhakaran, S. 2010. Influence of service quality on customer satisfaction. *International Journal of Business Management*, 5(4): 117–124. [Online]. Available at: <https://doi.org/10.5539/ijbm.v5n4p117> [Accessed 27 June 2023].
- Research and Markets. 2023. South Africa E-hailing Market – Forecasts from 2022 to 2027. [Online]. Available at: <https://www.researchandmarkets.com/reports/5768719/south-africa-e-hailing-market-forecasts> [Accessed 17 May 2023].
- Ruamchart, B. 2021. Evaluating service quality of ride-hailing service in Bangkok. *Academy of Entrepreneurship Journal*, 27(3): 1–9. [Online]. Available at: <https://www.abacademies.org/articles/Evaluating-service-quality-of-ride-hailing-service-in-bangkok-1528-2686-27-S3-467.pdf> [Accessed 08 February 2023].
- Rust, R.T. and Oliver, R.L. 1994. Service quality: Insights and managerial implications from the frontier. In: Rust, R.T. and Oliver, R.L. eds. 1994. *Service quality: New directions in theory and practice*. Thousand Oaks: Sage.
- Salkind, N.J. 2012. *Exploring research*. 8th ed. New Jersey: Pearson.
- Sam, E.F., Hamidu, O. and Daniels, S. 2018. SERVQUAL analysis of public bus transport services in Kumasi metropolis, Ghana: Core user perspectives. *Case studies on Transport Policy*, 6(1): 25–31. [Online]. Available at: <https://doi.org/10.1016/j.cstp.2017.12.004> [Accessed 19 April 2023].
- Saunders, M., Lewis, P. and Thornhill, A. 2012. *Research methods for business students*. 6th ed. Harlow: Pearson.
- Schneider, B. and White, S. 2004. *Service quality: Research perspectives*. Thousand Oaks: Sage.
- Shah, T.R. 2021. Service quality dimensions of ride-sourcing services in Indian context. *Benchmarking: An International Journal*, 28(1): 249–266. [Online]. Available at: <https://doi.org/10.1108/BIJ-03-2020-0106> [Accessed 20 March 2023].
- Shen, H., Zou, B., Lin, J. and Liu, P. 2020. Modeling travel mode choice of young people with differentiated E-hailing ride services in Nanjing China. *Transportation Research*

- Part D: Transport and Environment*, 78(0): 1–41. [Online]. Available at: <https://doi.org/10.1016/j.trd.2019.102216> [Accessed 19 July 2023].
- Smichowski, B.C. 2018. Is ride-hailing doomed to monopoly? Theory and evidence from the main U.S. markets. *Revue D'économie Industrielle*, 162(0): 43–72. [Online]. Available at: <https://doi.org/10.4000/rei.6987> [Accessed 29 August 2023].
- Smith, L.T. 2021. *Assessing the adoption and utilisation of e-hailing services: The case of Cape Town, South Africa*. MCom dissertation. University of Stellenbosch.
- Singleton, R. A. and Straits, B.C. 2009. *Approaches to social research*. 5th ed. New York: Oxford University Press.
- Slack, N.J. and Singh, G. 2020. The effect of service quality on customer satisfaction and loyalty and the mediating role of customer satisfaction: Supermarkets in Fiji. *The TQM Journal*, 32(3): 543–558. [Online]. Available at: <https://doi.org/10.1108/TQM-07-2019-0187> [Accessed 24 February 2023].
- Statistics South Africa. 2020. National household travel survey. [Online]. Available at: <https://www.statssa.gov.za/publications/P0320/P03202020.pdf> [Accessed 17 February 2023].
- Teeroovengadum, 2022. Service quality dimensions as predictors of customer satisfaction and loyalty in the banking industry: Moderating effects of gender. *European Business Review*, 34(1): 1–19. [Online]. Available at: <https://doi.org/10.1108/EBR-10-2019-0270> [Accessed 19 May 2023].
- Tuli, F. 2010. The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological perspectives. *Ethiopian Journal of Education & Sciences*, 6(1): 97–108. [Online]. Available at: <https://www.ajol.info/index.php/ejesc/article/view/65384> [Accessed 27 August 2023].
- Tuncer, I., Unusan, C. and Cobanoglu, C. 2021. Service quality, perceived value and customer satisfaction on behavioral intention in restaurants: An integrated structural model. *Journal of Quality Assurance in Hospitality & Tourism*, 22(4): 447–475. [Online]. Available at: <https://doi.org/10.1080/1528008X.2020.1802390> [Accessed 18 May 2023].

- Vilakazi, A.M. 2013. *Evaluating service quality in the South African public road transportation industry: A case study of Johannesburg*. DBA dissertation. University of KwaZulu-Natal.
- Wiid, J. and Diggins, C. 2015. *Marketing research*. 3rd ed. Cape Town: Juta.
- Williams, C. 2007. Research methods. *Journal of Business & Economics Research*, 5(3): 65–72. [Online]. Available at: <https://doi.org/10.19030/jber.v5i3.2532> [Accessed 17 July 2023].
- Wilmans, G. and Rashied, N. 2021. Self-employment through ride-hailing: Drivers' experiences in Johannesburg, South Africa. *Acta Commercii*, 21(0): 1–9. [Online]. Available at: <https://doi.org/10.4102/ac.v21i1.926> [Accessed 07 March 2023].
- Wirtz, J. and Lovelock, C. 2022. *Services marketing: People, technology, strategy*. 9th ed. New Jersey: World Scientific Publishing.
- Yao, Z. and Ding, X.D. 2011. Measuring passenger's perceptions of taxi service quality with weighted SERVPERF: A case of Hangzhou, China. *Applied Mechanics and Materials*, 97(0): 1181–1184. [Online]. Available at: <https://doi.org/10.4028/www.scientific.net/AMM.97-98.1181> [Accessed 19 June 2023].
- Young, M. and Farber, S. 2019. The who, why, and when of Uber and other ride-hailing trips: An examination of a large sample household travel survey. *Transportation Research Part A: Policy and Practice*, 119(0): 383–392. [Online]. Available at: <https://doi.org/10.1016/j.tra.2018.11.018> [Accessed 17 March 2023].
- Zeithaml, V.A. 1988. Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3): 2–22. [Online]. Available at: <https://doi.org/10.2307/1251446> [Accessed 27 June 2023].
- Zhang, R., Jun, M. and Palacios, S. 2023. M-shopping service quality dimensions and their effects on customer trust and loyalty: An empirical study. *International Journal of Quality & Reliability Management*, 40(1): 169–191. [Online]. Available at: <https://doi.org/10.1108/IJQRM-11-2020-0374> [Accessed 17 April 2023].
- Zikmund, W.G. and Babin, B.J. 2013. *Essentials of marketing research*. 5th ed. Boston: Cengage.

Ziyad, A., Rehman, Z., Batool, Z. and Khan, A. Influence of service excellence on consumer satisfaction of ridesharing. 2020. *International Journal for Traffic and Transport Engineering*, 10(4): 468–481. [Online]. Available at: [http://dx.doi.org/10.7708/ijtte.2020.10\(4\).06](http://dx.doi.org/10.7708/ijtte.2020.10(4).06) [Accessed 26 April 2023].

APPENDIX A: QUESTIONNAIRE

INFORMED CONSENT

My name is Michael Schoeman, and I am a student at The IIE's MSA. I am conducting research to fulfil the requirements for my Degree of Master of International Business under the supervision of Dr Takesure Zhoua.

I shall be very grateful if you complete the following short questionnaire regarding the aspects of service quality that are important to students from private higher education institutions when they select an e-hailing service provider in South Africa.

Please Note - E-hailing is a mode of transportation. It is the process of requesting a lift from a driver using an application on a smartphone

The findings of my study are intended to provide insights that local e-hailing companies can use to improve their competitiveness in the South African e-hailing industry.

Participation in the Study

The survey will take about 5 minutes to complete. Your participation in the study is completely voluntary, and you may withdraw from the study at any time during the survey without any negative consequences.

Your personal information and responses to the survey will be protected by completing the questionnaire anonymously. You are, therefore, not required to provide your name or contact details anywhere.

The results of this research will be used purely for theoretical and academic purposes and will be summarised and presented in the aggregate in my final research report. If you are interested in the study's outcome, you may ask me to send you a research summary.

Whether or not you decide to participate in this research, there will be no negative impact on you, the Independent Institute of Education, or the relationship between you and the Independent Institute of Education.

The study will not cause any harm to any person, entity or society, and there are no direct risks or benefits to you if you participate in this study.

Please feel free to contact me or my supervisor should you have any questions or concerns about this research:

Michael Schoeman: 0726074915 (st10086039@imconnect.edu.za)

Dr Takesure Zhoua: 0658357254 (zhowat@gmail.com)

1.

I confirm that I have read and understood the information provided on this page and voluntarily consent to participate in this online survey

☐ Yes

☐ No

Survey

Instructions

E-hailing is a mode of transportation. It is the process of requesting a lift from a driver using an application on a smartphone. **Please indicate how important the following service quality attributes are to you when you select an e-hailing service provider:**

1. The driver ensures that I reach my destination at the promised time

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

2. The e-hailing company shows a sincere interest in solving the problems that I experience

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

3. The e-hailing provider is dependable (i.e., it always provides the service correctly the first time)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

4. The driver picks me up at the promised time

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

5. The e-hailing service keeps accurate records (e.g., accounts, transactions, ratings, and reviews)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

6. The driver is trustworthy

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

7. I feel safe when I use the service

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

8. The driver is respectful and friendly towards me

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

9. The driver has the knowledge and ability to answer my questions

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

10. The physical elements of the service (vehicle, equipment and smartphone application) are modern and up-to-date

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

11. The physical elements of the service (vehicle, equipment and smartphone application) are visually appealing

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

12. The driver is well-dressed and appears neat

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

13. The physical elements of the service (vehicle, equipment and smartphone application) have the attributes that are appropriate for the type of service

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

14. The company provides me with individualised attention (e.g., offering different types of vehicles and prices that suit my preferences)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

15. The e-hailing company provides convenient operating hours

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

16. The driver gives me personalised attention (e.g., doing something extra for me when required)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

17. The e-hailing provider has my best interests at heart

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

18. The driver understands my specific needs

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

19. I am provided with the times that the service will be rendered (estimated times of departure, arrival, and delays)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

20. The e-hailing provider responds to my requests with speed and efficiency

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

21. The company's employees (drivers and customer service representatives) are always willing to help me

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

22. The e-hailing provider is never too busy to respond to my requests (e.g., never reject or cancel bookings)

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
☐	☐	☐	☐	☐

APPENDIX B: ETHICAL CLEARANCE







Our Ref: M.430623
Enquiries: research@iie.ac.za

23 June 2023

Outcome of Ethics Clearance Application for Master of International Business

Student Name: Michael Schoeman
Student number: [REDACTED]
Brand and campus: IIEMSA

Dear Michael

Thank you for submitting the ethics clearance application for the study:
The Dimensions of Service Quality and Customer Choice of E-hailing Service Providers: Perceptions of Students from a Private Higher Education Institution in Gauteng, South Africa.

We are pleased to inform you that the IIE's Higher Degrees Committee considered and granted ethics clearance. This means that you may proceed with data collection. If you are collecting data from a specific organisation, ensure that you have a gatekeeper's letter that confirms their approval of the data collection being done.

You are reminded that any changes made to the research methodology or title of the research study must be signed off by the IIE's Higher Degrees Committee. Kindly ensure that all ethical considerations are duly applied whilst collecting, analysing and interpreting the data for the completion of your research.

If you have any questions, please feel free to contact your programme team or supervisor directly.

All the best with your research.

[REDACTED]

Dr WH Engelbrecht
Chair: Higher Degrees Committee

ADvTECH House: Inanda Greens, 54 Wierda Rd West, Wierda Valley 2196
P.O. Box 2369, Randburg 2125
Directors: RJ Douglas (UK), JDR Oesch, MD Aitken, SCD Lurie
Group Company Secretary: CB Crouse

The Independent Institute of Education (Pty) Ltd is registered with the Department of Higher Education and Training as a private education institution under the Higher Education Act, 1997 (reg. no. 2007/HE07/002). Company registration number: 1987/004754/07.



APPENDIX C: CERTIFICATE OF EDITING



Alexis Grewan

BA (Social Work) Honrs

Clean copy, on time, makes sense.

www.alexisgrewan.co.za

Certificate of Editing

This serves to confirm that copy-editing and proofreading services were rendered to **Michael Schoeman** for **The Dimensions of Service Quality and Customer Choice of E-hailing Service Providers: Perceptions of Students from a Private Higher Education Institution in Gauteng, South Africa** with final word count of **23 291** on **18 January 2024**.

I am a full member of the Professional Editors' Guild (member number GRE007), PEG Accredited Text Editor and PEG national chairperson. I commit to the following codes of practice (among other codes):

- *I have completed the work independently and did not sub-contract it out*
- *I kept to the agreed deadlines and/or communicated changes within reasonable time frames*
- *I treated all work as confidential and maintained objectivity in editing*
- *I did not accept work that could be considered unlawful, dishonest or contrary to public interest*

I uphold the following editing standards:

- *proofreading for mechanical errors such as spelling, punctuation, grammar*
- *copy-editing that includes commenting on, but not correcting, structure, organisation and logical flow of content; basic formatting (font, typeface, headings, page numbers); eliminating unnecessary repetition*
- *checking citation style is correct, punctuating as needed and flagging missing or incorrect references*
- *commenting on suspected plagiarism and missing sources*
- *returning the document with track changes for the author to accept*

I confirm that I have met the above standards of editing and professional ethical practice. The content of the work edited remains that of the student.

Note: I am not accountable for any changes made to this document by the author or any other party subsequent to my edit.

Alexis Grewan

Cell: 081 430 9954 Email: alexisgrewan@gmail.com

Registered with the South African Council for Social Service Professions (10-17519)
Membership: Professional Editors' Guild (PEG Accredited Text Editor and Full Member)