

Measuring Customer Satisfaction in the Taxi and Ride-Hailing Industry

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Abstract

The emergence of ride-hailing application like Uber and Bolt has changed the foundational basis of the transport industry, confronting the position of the traditional taxi services. This progression has made customer satisfaction a prominent contributor to the key performance metric although satisfaction is conceptualised and measured inconsistently in the two systems. The objective of this dissertation is to critically analyse the definition, measurement and the experience of customer satisfaction when using traditional taxi and app based ride-hailing services. The study is based on three major questions: What affects customer satisfaction in each model? What is the measuring of satisfaction in the existing literature? And what relative lessons can be learnt in the two types of services?

Based on a secondary, qualitative, and inductive research design, the research employs an archival research strategy and thematic analysis of the peer-reviewed literature, industry reports, and policy documents published between 2017 and 2024.

The results have shown that both services are focused on the fundamental aspects, including reliability, cost and driver behaviour, but ride-hailing services are more rewarding in terms of technological experience and user empowerment, and the traditional taxis are more rewarding in terms of regulatory trust and a greater availability. Satisfaction is proved to be context-specific and geographically dissimilar. The findings of the study provide practical suggestions to service providers, policy-makers, and researchers that would design more inclusive, transparent, and balanced urban mobility systems.

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Chapter 1: Introduction

1.1 Context and Background

The world transport environment has experienced a paradigm shift over the last ten years, which was mainly triggered by the development of ride-hailing apps like Uber, Bolt, Lyft, and DiDi. These services are based on apps, which have transformed the mobility of cities and towns by providing more efficient, open, and even cheaper options to traditional taxi services (Shaheen and Cohen, 2019). Ride-hailing apps not only have changed the dynamics of the market, but also transformed consumer demands in such cities as London, Lagos, or New York in terms of convenience, control, and quality of services provided (PwC, 2021). Real-time tracking, cashless payment, and ratings of drivers are only some of the features that make these platforms central competitive differentiators and have boosted customer satisfaction to the top of the competitive list (Chen, Ma & Zhong, 2020). To both traditional and digital providers, satisfaction is not merely a performance indicator anymore yet a user retention factor, app store rating, word-of-the-mouth promotion, or a survival in the market that is getting increasingly saturated (McKinsey and Company, 2022).

1.2 Problem Statement

The issue of customer satisfaction in the taxi and ride-hailing industries is not well standardised and measured, despite being a strategic issue. Although ride-hailing apps seem to be data-driven and customer-centred, their satisfaction scales differ greatly, and they do not make much sense in academic terms. Conventional taxi services, conversely, often do not have formal systems to measure the level of satisfaction other than complaints or anecdotal feedback (Narteh, Mahmoud & Amoh, 2020). This absence of a single framework constrains the comparative analysis and undermines service improvement and policymaking.

1.3 Research Aim and Objectives

This dissertation aims to critically evaluate how customer satisfaction is defined, measured, and compared across traditional taxi services and ride-hailing platforms. The research has four main objectives:

- Identify key drivers of customer satisfaction in both service models.
- Examine the methods used to assess satisfaction across the literature.
- Compare and contrast customer experiences across traditional and app-based services.
- Recommend improvements in satisfaction measurement and service design based on current insights.

1.4 Research Questions

To achieve these aims, the research is guided by the following questions:

1. What factors influence customer satisfaction in the taxi and ride-hailing industry?
2. How is satisfaction currently measured in academic and industry contexts?
3. What similarities and differences exist between satisfaction levels and experiences in traditional taxis versus ride-hailing platforms?

1.5 Rationale

The implications of achieving customer satisfaction in the urban transport industry are paramount in service design, competition and regulation. In the case with ride-hailing companies, sophisticated satisfaction measures can be applied to support smarter platforms, whereas the traditional taxi operators could use the same to modernise the services and stay relevant. At the policy level, comparative data could be used to inform rules concerning safety, price, and standards of drivers (Edelman and Geradin, 2018). In terms of academic contribution, the study addresses a literature gap by combining fragmented information between sectors, discovering the points of convergence and divergence between measurement tools, and providing a conceptual gap between the traditional service models of the old and emerging digital platforms (de Souza Silva, Oliveira and Haddad, 2020).

1.6 Structure of Dissertation

In this dissertation, there are five main chapters. Chapter 2 provides the review of the relevant theories and literature following this introduction. Chapter 3 describes the methodology, such as the research design and sources of data. The findings and discussion are discussed in chapter 4. The chapter 5 will end with some recommendations, limitations and contributions to the industry and academia.

Chapter 2 - Literature Review

2.1 Chapter Introduction

The chapter is a critical review of the academic and industry literature present on customer satisfaction in the traditional taxi services, as well as ride-hailing platforms. It commences with a description of three fundamental theoretical perspectives, namely SERVQUAL, Customer Satisfaction Index (CSI), and Expectation-Confirmation Theory (ECT) that underlie the conceptual foundation of this study. The review goes further to examine major satisfaction drivers in each of the service models, major gaps in the literature and syntheses

findings to justify the approach taken in the study. This chapter preconditions the methodology and the analysis by determining what is known, what is missing and where the dissertation can contribute.

2.2 Theoretical Frameworks

The conceptual framework on customer satisfaction in the transport industry needs to be based on service quality and consumer expectation models. This study will be based on three frameworks: SERVQUAL, Customer Satisfaction Index (CSI), and Expectation-Confirmation Theory (ECT).

SERVQUAL by Parasuraman et al. (1988) is a five-dimensional measure used to determine the quality of services based on five dimensions, which are tangibles, reliability, responsiveness, assurance, and empathy. The concept was originally used in the traditional service sectors such as hospitality and banking, but it is extensively used in transport applications (Brady & Cronin, 2001). Interestingly, in the taxi business, SERVQUAL has been employed to measure tangible aspects of the vehicle conditions, as well as intangible ones including the courtesy of the drivers (Yap and Tan, 2019). Critics, however, believe that the static nature of the model might not be a good fit to the dynamic/tech-enabled interactions, especially in the case of app-based services (Narteh et al., 2020).

The Customer Satisfaction Index (CSI) is more quantitative. It combines various variables such as expectations, perceived quality, perceived value and loyalty to make up a composite satisfaction score (Fornell et al., 1996). CSI is beneficial in terms of industry and geographical benchmarking, so it can be used to compare conventional taxis and ride-hailing applications. Nevertheless, its generic pointers can overlook subtle drivers like user experience (UX), application dependability, or pricing algorithms that are applicable in ride-hailing environments (Zhao, Xia and Zhang, 2021).

The Expectation-Confirmation Theory (ECT) is a psychological focus. It assumes that post-use performance matches or surpasses pre-use expectations, which brings about satisfaction (Oliver, 1980). This theory applies in transport because the users would be satisfied not only when a service is objectively good, but when it fits their previous assumptions. Say, a cheap taxi whose service is of a mediocre quality might still meet the expectations in case they were low. ECT is particularly applied in the transport case of apps where it is dynamic pricing, wait times, and app-design that influence expectation and confirmation cycles (Nikitas, Wallgren and Rexfelt, 2020).

These frameworks allow this dissertation to examine the satisfaction in both the traditional and the digital models conceptually.

2.3 Traditional Taxi Satisfaction

Research on conventional taxi services tends to point out practical, physical elements that determine customer satisfaction. These involve professionalism of the drivers, fare pricing, and the physical state of the vehicles. A study in Kuala Lumpur, among others, has been able to establish that driver courtesy and punctuality were major predictors of customer satisfaction, whereas unclear fares and lack of consistency in maintenance of vehicles were sources of complaint (Yap and Tan, 2019). Following this, Lee and Shin (2018) have also observed that predictability and safety were appreciated by the passengers and were associated with visible licensing and driver behaviour.

Legal systems contribute to the perception of the users. Cities in most countries have stringent schedules of taxis prices, and also inspect the vehicles of taxi drivers and showcase their qualifications. Although these requirements provide consistency, they can be inflexible or less responsive than the customers are increasingly demanding (Cetin & Deakin, 2017). A consistent problem is that in conventional taxi services there are no real time feedback mechanisms. Taxi services, in contrast to ride-hailing platforms, where drivers receive ratings and reviews, use ineffective or passive methods of complaints. This restricts a chance to improve the services and undermines accountability. In this way, though conventional taxis may be able to fulfill the minimum level of satisfaction by being professional and reliable, they are often lacking in terms of engaging the user and responding to the changing demands of the clients.

2.4 Ride-Hailing Satisfaction

Uber, Bolt and Lyft ride-hailing platforms have also re-mediated the service encounter by integrating the technology into the core of the customer experience. The aspects, which contribute to satisfaction in this model, include the usability of apps, surge pricing, real-time tracking, and the system reliability (Shaheen and Cohen, 2019).

The usability of the apps in terms of booking, available payment methods, and tracking the trip has been observed to have a strong influence on customer retention (Kooti et al., 2017). The digital interface is usually the initial service touchpoint, and therefore, the delay, bug, or bad-designed aspect may decrease satisfaction even after a successful ride in person.

Surge pricing is the other major problem, and this is considered unpredictable or unfair to many users. Dynamic pricing algorithms maximise availability of drivers, but they may ruin

trust when viewed as money grabbers (Oei & Ring, 2020). This forms a paradox: platforms are scalable and efficient, yet unjustified at times.

The reliability is also very important. Short wait time and proper estimated times of arrival (ETA) is often expected by the users. Once these are broken, the level of dissatisfaction goes high, despite the remaining part of the service satisfying satisfactorily (Chen, Ma & Zhong, 2020). In addition, the rating of drivers and the post-trip feedback loops also contribute to a feeling of control and empowerment and indirectly to satisfaction.

2.5 Literature Gaps and Limitations

Although a growing cope of research on customer satisfaction in transport has been established, there are still a number of critical gaps.

To begin with, the industry does not have standardised measurement tools. Although SERVQUAL and CSI are regularly applied, they are not always consistent or applied directly or uninterrupted. Research usually develops ad-hoc indicators or relies on a company-specific data such as Uber, which restricts cross-study generalisation and undermines the generation of generalisable understandings (Narteh et al., 2020).

Secondly, the available literature is geographically biased and it comprises mostly of North America, Europe and some growing regions of Asia. Empirical investigations of satisfaction in African or Latin American settings are relatively few, yet the adoption of ride-hailing is fast in such cities as Lagos, Nairobi, or even São Paulo (Barufi & Haddad, 2017). This restricts the generalizability of the results around the world and does not reflect the influence of infrastructure issues, cultural anticipation and informal transport networks on satisfaction.

The third weakness is the absence of intersectional analysis. There are some demographics that are not thoroughly explored, including gender, income level, age and disability status. Studies indicate that older customers might be difficult to use on app-based systems, and women and disabled customers might have different views on safety and comfort (de Souza Silva, Oliveira & Haddad, 2020). Such omission of these variables means that the current research may deliver overgeneralised or non-inclusive knowledge.

Lastly, not many studies have incorporated both traditional taxi and ride-hailing in a single framework, making the bodies of knowledge parallel but unrelated. This dissertation seeks to fill this gap by way of comparative synthesis.

2.6 Synthesis and Critical Insights

The synthesis of the reviewed literature is based on both obvious understandings and significant gaps. In both the traditional taxis and the ride-hailing services, reliability,

reasonable price and professionalism are appreciated everywhere. Nevertheless, the manner of delivery of these services as well as the perception of the customer vary significantly according to service model.

As an illustration, when traditional taxis are statically regulated and in-person quality of service, ride-hailing service uses technology to dynamically manage its satisfaction. The option to follow rides, rate drivers, and support in-app places power into the hands of the users and enhances demand of the system, yet, increases expectations. Even minor failures can bring the dissatisfaction of this “expectation inflation” (Taylor, Chin and Voulgaris, 2021).

Another finding in the literature is that although a lot of studies have investigated individual variables of satisfaction (e.g. pricing or driver behaviour), the studies have not combined these variables into a holistic or comparative model. This isolated thinking restricts our awareness of the way the combined influences of various factors play out in determining the overall customer experience. Also, in most cases, measurement tools are context specific and not comparable across studies (Zhao, Xia and Zhang, 2021).

This dissertation also adds value to the field through a comparative understanding of satisfaction in both models through a thematic analysis and critical review of a large amount of secondary literature. It responds to the lack of cohesion in existing studies, especially by highlighting unexplored areas and population sub-groups. Finally, it suggests a framework that can be adopted by service providers and policymakers to make urban mobility more inclusive, consistent, and effective measures and treatment of customer satisfaction.

2.7 Chapter Summary

The chapter has examined the theoretical grounds, and the existing literature on customer satisfaction in taxi and ride hailing business. Although the two types of services have certain fundamental satisfaction variables like reliability and fair pricing, the way they are offered and their perception varies greatly. Other significant gaps exposed in the review included: inconsistent measurement instruments, underrepresentation in regions, and a lack of focus on intersectional demographics. Those results guide the introduction of the next chapter that describes the research methodology selected to discuss these themes with a systematic review of secondary sources.

Chapter 3 - Methodology

3.1 Chapter Introduction

The chapter describes the research design and methodology decisions on which this dissertation is based, through the Research Onion framework (Saunders et al., 2019). It supports the interpretivist philosophy, inductive reasoning, and qualitative mono-method approach, which is implemented to answer the research questions. The chapter also outlines the strategy of data collection which is archival, coding process based on themes and selection of data to be used to guarantee the credibility and relevance of the secondary data. Ethical implications and constraints are taken into consideration. Such methodological structure offers a clear and logical underlying of the analysis in the following chapter.

3.2 Research Philosophy – Interpretivism

The dissertation has taken an interpretivist research philosophy, which is in line with the subjective and experience-oriented nature of customer satisfaction. Interpretivism believes in the social construction of reality, which is a situational matter especially in the context of examining individual perceptions and meanings instead of facts (Saunders, Lewis and Thornhill, 2019). As customer satisfaction is determined by individual expectations, cultural norms, and experiences of the user, it cannot be perceived in quantifiable or generalised terms only.

Here, satisfaction is not considered a determination but rather an active reaction to service experiences depending on the variables of pricing equity, the usefulness of apps, or the interaction between humans and drivers. The interpretivist paradigm is capable of delivering a fine analysis to understand how these aspects are understood and perceived in different ways by the users in different types of services and geographies (Creswell and Poth, 2018). The philosophy will help the dissertation, which seeks to synthesise the existing literature to create meaning and not to test a specific hypothesis or subject an objective measure.

3.3 Research Approach – Inductive

This dissertation has utilized an inductive approach to investigate the definition, measurement and differentiation of customer satisfaction on traditional taxis and ride-hailing apps. Inductive reasoning starts with evidence and observations and flows toward finding patterns, themes or conceptual models (Bryman, 2016). This is unlike the deductive approach which begins by making a hypothesis and clears it with facts.

Since the available research on satisfaction is rather fragmented, inductive approach enables the development of new knowledge and comparative knowledge of different service models. The analysis is based on the emerging themes in academic literature, industry reports, and regulatory publications instead of using predefined variables.

This method comes in handy especially in the process of synthesising secondary sources and addressing gaps in standardisation and inclusiveness as established in the literature review. This is aimed at letting the data speak out by itself and creating conceptual clarity out of the material instead of adding an external framework.

3.4 Strategy – Archival Research

The research strategy employed in this study is an archival research, as it uses solely secondary data, i.e., academic literature and policy documents, company white papers, and industry reports. Archival research is also suitable when the data collected should be rich and relevant data already, and the researcher seeks to interpret and synthesise the information instead of collecting new primary data (Saunders et al., 2019).

The archival strategy helps to justify the attention of the dissertation to the time interval 2017-2024 as the time frame to trace the changes in the satisfaction measurement during one of the crucial periods in the development of ride-hailing technologies. It also allows incorporating the various views, such as the user view, company view, and the regulator view. The databases (including JSTOR, ScienceDirect, Emerald Insight, and Google Scholar) and institutional repositories and official reports (e.g. UK Department for Transport, McKinsey and Company) were used to select the sources. Such an approach guaranteed the variety of evidence and allowed conducting a balanced discussion of both traditional and digital mobility models through customer satisfaction.

3.5 Methodological Choice – Mono-method Qualitative

The approach that will be chosen with reference to this study is a mono-method qualitative design, where thematic analysis will be employed in the process of evaluating and interpreting the secondary data. It is appropriate in research questions that concern human perceptions, values, and experience, and where statistical generalisability is not as pertinent as is understandable depth (Flick, 2018).

Because the goal is to critically analyse the conceptualisation and measurement of satisfaction, a qualitative lens will provide more room to investigate such subjective variables as trust, fairness, and user empowerment. Contrary to mixed-methods or quantitative studies,

which could be interested in frequency or correlations, this qualitative strategy is interested in context and meaning-making.

The mono-method option also deals with practicality, such as the presence of good quality secondary data, lack of financial support to carry out primary data, and ethical issues. It is also effective in the comparative analysis of taxi and ride-hailing services in particular to make guided yet subtle observations of different sources.

3.6 Time Horizon – Cross-sectional

The research presented in this dissertation considers a cross-sectional time horizon, i.e., data published in 2017-2024. The decision to do this is explained by the desire to record a modern perception of customer satisfaction at a decisive stage of the development of ride-hailing platforms.

In contrast to longitudinal research, which involves following the changes over time, cross-sectional research enables obtaining a snapshot of the level of current satisfaction, emerging themes, and user experiences (Bell, Bryman and Harley, 2019). In the context of an exceptionally dynamic environment of urban mobility, particularly in the COVID-19 context and the, consequently, recovery efforts, a cross-sectional vision is not only timely but also strategically useful in pinpointing the existing gaps and informing about the directions of the future.

3.7 Data Collection and Inclusion Criteria

This dissertation data were gathered using publicly available secondary sources in English language which had stringent relevancy and credibility criteria. Sources included:

- Books and academic journals (e.g. Journal of Transport Geography, Transportation Research)
- Government and regulatory literature (e.g. reports of the UK Department for Transport)
- Whitepaper of the industry (e.g. McKinsey and Company, PwC) and consulting wisdom.
- Company reports (e.g. Uber, Lyft, Bolt annual reports or case studies)

The inclusion criteria were:

- This element: the publication date is 2017-2024 so that it is relevant to modern technologies and user expectations.

- Written using the English language since the researcher has limited understanding of non-English language.
- Directly dealt with the satisfaction of customers with transport services, especially with either traditional taxis or apps-based ride-hailing services.
- Has empirical, analytical or theoretical basis pertinent to the research questions.

The exclusion criteria were:

- Sources of lack of methodological transparency.
- Blogs or unestablished sites.
- Algorithms or ad hoc commentary.
- Redundant studies or very old studies.

The selection was systematic and included search using a keyword (e.g. customer satisfaction AND ride-hailing, SERVQUAL AND taxis) in academic databases and grey literature. Full-text reviews were done after pre-screening in terms of title and abstract to make sure that the studies were in line with the scope and depth of the study. Some 35 40 good sources were chosen to have the final analysis.

3.8 Data Analysis – Thematic Coding

Data were coded thematically which is a qualitative tool of identifying, organizing, and interpreting patterns (themes) in a data set (Braun and Clarke, 2006). The method has been chosen due to its flexibility in examining different types of text-based secondary data as well as its conformity to the inductive and interpretivist methodology used in this dissertation.

A manual and iterative coding was applied:

1. Preliminary reading of all the chosen sources to get acquainted with them.
2. Production of codes around recurring ideas that included, pricing fairness, apps usability, driver conduct, system reliability, and perceived control.
3. Themes grounded on clustering the codes:
 - Operation considerations (e.g. promptness, driving professionalism)
 - Technological interface (e.g. app design, feedback systems)
 - Emotional trust and control (e.g. safety perception, user control)

The themes were subsequently cross-mapped on old taxis and the ride-hailing apps so that they could be compared. The analysis was open-ended which meant that new subthemes would be identified in the coding process like regional variation or digital literacy.

Thematic coding offered a profound synthesis of information and offered the framework of the Findings and Discussion chapter whereby the concepts of various kinds of secondary sources are allowed a deep interpretation of the concepts, without losing interpretive richness.

3.9 Ethics and Limitations

Even though no primary data was gathered, this dissertation was written within the boundaries of ethical behaviour. Every source was referred to as Harvard referencing, so the sources are adequately referenced without plagiarism. All material used was openly available and open access or licensed by the institution, which removed the possibility of copyright infringement.

The primary constraint is the reliance on secondary data that serves as a limitation to the possibility of getting real-time user sentiment or context-driven feedback. In addition, only English-language sources were selected, which could omit the possible studies in non-English-speaking areas. However, the heterogeneity and reliability of the sources used in the article also contribute to overcoming these issues and make the results applicable and informative.

3.10 Chapter Summary

This chapter has described philosophical and methodological orientation of this dissertation such as philosophical position of the interpretivist lens, inductive reasoning and thematic analysis of secondary sources. The research will be able to critically evaluate satisfaction in terms of transport models by using a cross-sectional, archival research strategy and strict inclusion criteria. Recurring patterns in customer satisfaction will be extracted, compared and interpreted using thematic coding process. The next chapter will contain the main findings and discuss them within the frames of the literature and research questions.

Chapter 4: Findings and Discussion

4.1 Chapter Introduction

The findings of the thematic analysis of secondary data are given and interpreted in this chapter according to the approach described in Chapter 4. It is organized in five major themes that have been determined throughout the literature: service quality dimensions, technological experience, trust and transparency, user empowerment and demographic access. Both the traditional taxi and ride-hailing models investigate how the customer satisfaction is developed and how they overlap and differ, where there are intersection points and departure

points. The chapter ends by summarising the findings and outlining its implications to the service providers, policymakers, and future research.

4.2 Service Quality Dimensions

Both the traditional taxi services and ride-hailing services are rated on the basic service quality dimensions, i.e., tangibles, reliability, empathy, and assurance, which were initially defined in the SERVQUAL model (Parasuraman et al., 1988).

Tangibles, including the condition of vehicles, are more supervised in the conventional cabs because of taxes and licensing. Customers of taxi services tend to see cleanliness and safety as a guarantee of trustworthiness (Lee and Shin, 2018). Being newer, ride-hailing services have a wide range of different vehicle standards since drivers drive their personal cars. Nevertheless, visual presentation can be imposed with the help of the application rules and customer feedback (Shaheen and Cohen, 2019).

The levels of reliability vary drastically between the models. Taxi is not as likely to perform better in this aspect than ride-hailing platforms because of GPS location and ETAs (Chen, Ma and Zhong, 2020). The conventional taxi continues to depend on hailing off the street or bookings by phone, which brings along some delays and uncertainty.

The perceived care by the service provider, empathy, is more prevalent in taxi services in which the passengers actually interact with drivers, and this interaction is more personal in nature. Conversely, the experience in ride-hailing transactions is depicted as depersonalised on the back of being transactional and app-mediated (Zhao, Xia & Zhang, 2021).

Confidence is concerned with professionalism and safety. Taxis are traditionally characterized by the regulated verification of drivers, whereas ride-hailing businesses use crowd-sourced ratings of drivers. Even though such ratings are transparent, they are reactive and may be inconsistent (Nikitas et al., 2020).

To conclude, in spite of the fact that both models consider the basic service quality expectations, ride-hailing beats traditional cabs at speed and predictability, whereas the latter are still strong in terms of regulation and personalised service.

4.3 Technological Experience

One of the clear differences between the traditional taxis and the ride-hailing services is the technological interface. In the case of ride-hailing, the app is the key element of the user experience that includes the booking, pricing, tracking, and payment (Kooti et al., 2017). On the contrary, taxis work mostly in an off-line format with some digital enhancement through dispatch systems.

Flexibility to book is a significant source of satisfaction in ride-hailing. With apps, a customer can request a ride in a matter of seconds, select the type of vehicle, and see the rating of the drivers. Conversely, taxis usually have to be hailed via phone or in the streets, which creates friction (Yap and Tan, 2019).

Ride-hailing also has a huge advantage in the area of payment integration. The post-ride features such as card payments, digital wallets, and automatic receipts are added to the experience. The cash or simple card readers that are used by traditional taxis do not provide any digital transparency (Edelman and Geradin, 2018).

Perceived control and satisfaction directly depend on the design of the app interface. There are also intuitive UI/UX, ETA visibility, and notification systems that support a smooth experience (Zhao et al., 2021). On the other hand, taxis will not have a single digital system particularly those cities where there is no centralised taxi control.

Technological dependence also brings about exclusion, however. The limitedly digitalized users who have no access to a smartphone are essentially barred into ride-hailing systems (de Souza Silva et al., 2020). Any technical glitch, crash in the app or the error of the surge pricing can severely hurt the user confidence.

Overall, technology can facilitate operational efficiency and satisfaction of ride-hailing but also will create new obstacles to certain consumer groups. The traditional taxis are not as innovative but are more available to those who are not digitized.

4.4 Trust and Transparency

In both of the transport models, trust and transparency play a central role in determining satisfaction. In the case of taxis, trust may be based on licensing, visibility of fares and face to face interactions, whereas in the scenarios of ride-hailing, it is based on digital transparency and algorithmic responsibility.

In conventional taxi, price transparency is normally under the control of the local government where fare is shown in real time on meters. Even though this brings base trust, there is the occasional manipulation of drivers or a lack of fare estimates prior to boarding that creates friction (Ahmed, Saeed & Khan, 2020).

Ride-hailing applications show the cost estimates on the first page, which encourages cost visibility. Trust, however, in most cases is destroyed by surge pricing whereby fares change erratically during peak periods or high traffic (Oei & Ring, 2020). Although the algorithm is created to drive the equilibrium between supply and demand, it seems to be exploitative to many users.

The process of complaint handling is different. Taxi companies do not always have organized feedback, and their complaints are directed to slow municipal procedures. On the contrary, ride-hailing services provide in-app reporting and often respond in minutes, which makes them seem more responsive (Chen et al., 2020).

The driver ratings are important in ride-hailing. They provide a feeling of responsibility but are likely to discriminate, especially towards women, minorities, or non-native speakers (Taylor, Chin & Voulgaris, 2021). Poor performers will not be safeguarded by the taxi taxis that do not have equivalent real time feedback loops.

In general, ride-hailing applications provide greater data-driven transparency and present new risks of algorithmic fairness and perception. Taxis have controlled trust formation but are not responsive and accountable. To achieve better trust results, a mixed strategy, which includes the implementation of digital feedback and controlled monitoring, can be explored.

4.5 User Empowerment vs Traditional Control

One of the most fundamental sources of satisfaction in ride-hailing is the feeling of user empowerment, or the feeling of control over the ride. This is done by vehicle selection, route tracking, fare visibility and feedback. Conversely, the conventional cabs are run more of an operator-controlled system, with less control on the ride by the passengers.

Such features as ETA notifications, driver selection, and route sharing are helpful to ride-hailing users and contribute to their sense of autonomy and safety (Shaheen and Cohen, 2019). The possibility to rate drivers and visit their profiles before making a booking generates a perceived power balance between a customer and a provider.

On the contrary, users of taxis are usually disempowered because of information deficiency. They might be unaware of the name of the driver, when he/she is expected, and the best fare. In the car, there is no real-time track normally and this minimizes the transparency (Cetin & Deakin, 2017).

There are however trade-offs to empowerment. The sense of control generated by ride-hailing may even work against it when there are crashes or price hikes or cancellations by the drivers. The customers will anticipate fluid control, and any inconvenience will cause adverse dissatisfaction compared to when using a taxi and expectations are less high (Zhao et al., 2021).

In addition, too much dependence on feedback systems will make users responsible in overseeing the systems. Ratings can be play-acted, and most users do not understand how complaints are addressed or whether a response to feedback is taken (Nikitas et al., 2020).

To conclude, ride-hailing services encourage empowerment due to its digital features, whereas traditional taxis have less control but more predictable designs. The key point of satisfaction can be found in the compromise between user autonomy and institutional reliability and fairness.

4.6 Demographics, Digital Divide, and Access

Customer satisfaction does not cut across the board but is very diverse when it comes to age, income level and location. Although technologically progressive, ride-hailing is not always available to all groups because of the digital divide, and taxis are more accessible but less accommodating.

The old customers find apps-based systems complex because of the lack of smartphone use or because they are not comfortable with e-payment (de Souza Silva et al., 2020). On the contrary, taxis can be availed directly in person without the use of technology, and this fact makes them more available to the elderly.

Low-income users are better price-sensitive and often use more conventional taxis, particularly in the areas where ride-hailing rates fluctuate as a result of a surge pricing. Nonetheless, other ride-hailing offer pool options or other discounts and appeal to users with limited budgets, although their reliability is lower (PwC, 2021).

Access is also determined by the urban vs rural divide. The ride-hailing business excels in heavily populated cities with a high number of drivers and infrastructure that can facilitate real-time connectivity. Taxi services (viable or not formal) still prevail in the rural or peri-urban context because of the low density of digital coverage and driver density within applications (Barufi & Haddad, 2017).

Moreover, the women, those with disabilities, and non-native language speakers experience the varying levels of satisfaction. Models based on apps will be able to provide safety (e.g., GPS positioning, emergency switches), yet it will have the downside of bias, neutral service, or irresponsible driving (Taylor et al., 2021). Taxis are more intimate, but they might not be protectionist and responsible.

Alternatively, in conclusion, there is an unequal distribution of satisfaction by demographic lines. Ride-hailing provides access to more people but leaves some out due to both technological and economic impediments. The classic cabs is more inclusive in a way, yet it is limited due to the traditional systems.

4.7 Chapter Summary and Implications

The chapter has discussed five major themes that define customer satisfaction in conventional taxi services and ride-hailing services. The results indicate that there is a multifaceted, multidimensional terrain with all features of service quality, technology, trust, empowerment, and access interacting in a complementary manner as well as contradictory manner.

Ride-hailing applications are the best in terms of technology, user empowerment, and responsiveness. Their systems, which are based on apps, are transparent, controlled, and efficient, which are the major drivers of modern satisfaction. Nonetheless, the listed strengths have some downsides: they depend on access to digital networks, their algorithms are opaque, and some classes of users are excluded. The perception of the control may also increase disappointment on the failure of not meeting expectations.

Conventional cabs, however, have a positive aspect of regulation, face-to-face communication, and inclusion. Their service model continues to be important to the population of the elderly, low-income, or digitally excluded. However, taxis have disadvantages of old systems, lack of transparency, and are unable to compete with the speed and convenience of electronic substitutes.

Each of the models is able to learn off the other. The ride-hailing services might also consider implementing stricter fare regulation and driver vetting, which is conducted by the traditional taxis. Taxi might also consider adding application-based booking and feedback services to enhance the interaction with the users and their responsibility. Hybrids that combine digital innovation and consumer protection are getting more acceptable to regulators.

More importantly, satisfaction cannot be condensed to one variable. Service structure, user expectations and social context co-produce it. The insights in this chapter indicate that the most efficient models will be the ones that will strike a balance between efficiency and fairness, autonomy versus accountability, and innovation versus accessibility.

These implications will be used to inform the final chapter that will summarize the overall conclusions of the dissertation, limitations and give recommendations to service providers and future research.

Chapter 5 - Conclusion, Limitations and Recommendations

5.1 Chapter Introduction

This chapter summarizes the major findings of the dissertation and compiles on its contributions, limitations, and implications. The study focused on testing the definition, measurement, and comparison of customer satisfaction of traditional taxis and ride-hailing apps. The chapter concludes the presentation of how the research questions were answered, the original contributions of the study, methodological limitations and practical suggestions that can be made to service providers, policymakers and researchers with the aim of improving the level of satisfaction in the new world of urban mobility.

5.2 Summary of Findings

This study set out to explore the definition and measurement of customer satisfaction across traditional taxi services and ride-hailing platforms. It aimed to answer three core research questions:

1. What factors influence customer satisfaction in the taxi and ride-hailing industry?
2. How is satisfaction currently measured in academic and industry contexts?
3. What similarities and differences exist between satisfaction levels and experiences in the two models?

The results indicate that satisfaction is motivated by the common dimensions, including reliability, fairness of the prices and driver behaviour, which are offered in a different way across models. Taxi has an advantage over ride-hailing platforms in terms of regulatory trusted feelings and accessibility; meanwhile, the latter have an edge in the technological experience, responsiveness, and control by users. Nevertheless, the two models have uncertainties related to transparency, demographic inclusivity, and quality of service delivery. Satisfaction is a context-driven phenomenon and not alone with service delivery but also user expectations, online availability, and social principles. More balanced and hybrid approach is suggested.

5.3 Original Contribution

This dissertation presents a distinct overview of disseminated literature on customer satisfaction in urban transport sector, closing the gap between conventional and online model of service. Although the past studies were inclined to concentrate on a single model or a geographic region, the present study critically compares the two on a thematic basis founded

on the existing theory and implemented on the worldwide sources. The results are both it has an impact on academic knowledge and the industry practice, and it provides practical recommendations to operators and regulators. Specifically, the study has identified algorithms fairness, digital exclusion, and standardised satisfaction measures across transport modes as some of the neglected challenges.

5.4 Research Limitations

The main weakness of this research is that it is based on secondary data only. The results will be limited to the interpretation of already published research without primary interviews or surveys, which might miss the latest or emerging experience of users. This restricts the research capacity to represent current time sentiment or region-based changes in satisfaction, especially those related to urban mobility in the aftermath of the pandemic.

The second limitation is the possibility of bias or incompleteness of sources. North America, Europe, and Asia are the main concentrators of many academic studies, thus likelihood that insights in Latin America and Africa do not feature is possible. Further, although the study used rigid inclusion criteria, some industry white papers can also be biased towards commercial interests as opposed to the unbiased analysis.

Finally, the inclusion of English-language sources only is deprived of the potentially useful non-English research. The limitations do not negate the fact that thematic congruity of various credible sources gives confidence in the final findings of the study.

5.5 Recommendations

For ride-hailing platforms:

Those operators, such as Uber and Bolt, should invest into mitigating price volatility, especially in the area of surge pricing, which destroys the trust of users. They could make fairness more perceived by implementing more transparent communication regarding the fare structure or providing a price cap in times of crisis. Moreover, they should enhance the driver consistency and professionalism with the help of mandatory trainings and regular assessments not only based on user reviews.

For traditional taxi services:

In order to stay competitive, taxi providers need to invest in the simple digital infrastructure, i.e. app-based booking and GPS tracking and contactless payment. Such changes may enhance transparency and convenience of services without deteriorating regulatory strengths. There should also be pricing transparency, which should be addressed by having upfront fare estimates, as well as enhancing communication in relation to fare policies.

For future research and policy:

The researchers must work on mixed-methods that involve synthesis of secondary data with primary data (e.g., surveys, interviews) to obtain lived experiences. It is also necessary to carry out comparative case studies in underrepresented regions, i.e., Africa and Latin America. Finally, policymakers must contemplate creating hybrid regulatory frameworks that incorporate the elasticity of ride-hailing with the responsibility of the conventional systems so that satisfaction would be inclusive, standardised, and adaptable to various urban realities.

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8. Appendices

Table comparing taxi vs ride-hailing satisfaction factors

Satisfaction Factor	Traditional Taxi	Ride-Hailing Platform
Vehicle Condition	Moderate (regulated inspections)	Variable (private vehicles, app-enforced standards)
Driver Professionalism	Generally high (licensed and trained)	Variable (user-rated, less oversight)
Booking Convenience	Low (street hailing or phone calls)	High (app-based, real-time)

Fare Transparency	Moderate (regulated meters)	High (fare estimates shown upfront)
Payment Options	Limited (cash or basic card readers)	High (integrated digital payments)
Complaint Resolution	Weak (manual, slow systems)	Strong (in-app and fast)
User Empowerment	Low (passenger has little control)	High (ETA, choice, feedback)
Real-time Tracking	Not available	Available and expected
Safety Perception	Moderate (trusted regulatory framework)	Mixed (depends on driver and tech)
Technology Accessibility	High (no tech required)	Low (smartphone & internet required)

Codebook

Theme	Sub-Themes	Definition
Service Quality	Tangibles, reliability, empathy, assurance	How users perceive service delivery through reliability, physical assets, personal interaction, and professionalism.
Technological Experience	App usability, booking ease, payment integration	User interaction with apps including ease of use, transaction flow, and feature accessibility.
Trust & Transparency	Pricing fairness, complaint handling, ratings	The degree to which services are open, fair, and accountable through data and user feedback.
User Empowerment	Control perception, feedback loops, choice	Extent to which users feel in control of their experience, including ability to select, rate, and influence service.
Demographics & Access	Elderly access, income level, digital literacy	Differences in satisfaction experiences based on age, location, income, and digital access.

Gantt chart

Stage	Start Date	End Date
Topic Selection & Proposal Approval	Nov 1, 2025	Nov 15, 2025
Initial Literature Review	Nov 16, 2025	Dec 15, 2025
Methodology Planning	Dec 16, 2025	Jan 15, 2026
Data Collection (Secondary)	Jan 16, 2026	Feb 5, 2026
Data Analysis & Coding	Feb 6, 2026	Feb 28, 2026
Drafting Findings & Discussion	Mar 1, 2026	Mar 31, 2026
Writing Intro & Conclusion	Apr 1, 2026	Apr 15, 2026
Referencing & Appendices	Apr 16, 2026	Apr 25, 2026
Final Proofreading & Submission	Apr 26, 2026	Apr 30, 2026

