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## PASSENGER SATISFACTION WITH MOBILE APP-BASED TAXI SERVICES: EVIDENCE FROM COLOMBO METROPOLITAN AREA, SRI LANKA

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**ABSTRACT:** Mobile app-based taxi services have revolutionized the transportation industry, offering passengers a convenient and efficient means of travel. This study examines passenger satisfaction with mobile app-based taxi services in the Colombo Metropolitan Area, Sri Lanka. A survey was conducted among a representative sample of taxi service users to assess their level of satisfaction with various aspects of the service, including booking process, driver behavior, vehicle cleanliness, and overall experience. The study also explores factors influencing passenger satisfaction, such as wait times, pricing, and customer service. The findings provide valuable insights into the strengths and weaknesses of mobile app-based taxi services in the Colombo Metropolitan Area and offer recommendations to enhance passenger satisfaction and improve the overall quality of service delivery.

**KEYWORDS:** Passenger satisfaction, mobile app-based taxi services, Colombo Metropolitan Area, Sri Lanka, transportation industry, booking process, driver behavior, vehicle cleanliness, customer service, pricing, wait times.

### INTRODUCTION

In recent years, the transportation industry has witnessed a significant transformation with the emergence of mobile app-based taxi services. These services offer passengers a convenient and user-friendly platform to book rides, providing efficient and reliable transportation options. In the Colombo Metropolitan Area of Sri Lanka, mobile app-based taxi services have gained popularity as an alternative mode of travel, offering convenience and ease of access to passengers. However, as these services become increasingly prevalent, it is essential to assess passenger satisfaction to ensure continuous improvement and meet customer expectations.

This study aims to explore passenger satisfaction with mobile app-based taxi services in the Colombo Metropolitan Area, Sri Lanka. By understanding the factors that influence passenger satisfaction and identifying areas for improvement, this research seeks to provide valuable insights to both service providers and policymakers, enabling them to enhance the overall quality of service delivery and ensure passenger loyalty and retention.

## METHOD

### Study Design:

This research adopts a cross-sectional survey design to assess passenger satisfaction with mobile app-based taxi services. The survey allows for the collection of real-time feedback from a representative sample of taxi service users.

### Sampling:

A stratified random sampling technique will be used to select participants from different areas within the Colombo Metropolitan Area. The sample will be chosen to ensure representation from various demographics, including age, gender, and frequency of app-based taxi usage.

### Data Collection:

A structured questionnaire will be developed to gather data on passenger satisfaction with various aspects of the service. The questionnaire will cover factors such as the ease of the booking process, driver behavior, vehicle cleanliness, wait times, pricing, and overall experience with the service. The survey will also include open-ended questions to allow participants to provide additional feedback and suggestions.

### Data Analysis:

Quantitative data from the survey will be analyzed using statistical software to determine passenger satisfaction levels and identify trends and patterns. Mean scores and percentages will be used to assess overall satisfaction and satisfaction with specific aspects of the service. Qualitative data from open-ended questions will be subjected to thematic analysis to extract key themes and insights.

### Ethical Considerations:

Ethical approval will be obtained from the relevant institutional review board to ensure participant confidentiality and data privacy. Informed consent will be obtained from all participants before the survey administration.

By examining passenger satisfaction with mobile app-based taxi services in the Colombo Metropolitan Area, this research aims to provide evidence-based recommendations to enhance the quality of service delivery. The findings will contribute to the understanding of passenger preferences and expectations, enabling service providers to make informed decisions to improve the overall passenger experience. Ultimately, the insights gained from this study will aid in fostering customer loyalty and ensuring the sustainability and success of mobile app-based taxi services in the transportation market of the Colombo Metropolitan Area, Sri Lanka.

## RESULTS

A total of [insert number] participants from various areas within the Colombo Metropolitan Area in Sri Lanka took part in the survey on passenger satisfaction with mobile app-based taxi services. The findings revealed that [insert percentage] of respondents reported being satisfied with the overall service experience. Specific aspects of the service that received high satisfaction ratings included the ease of the booking process (satisfaction rate: [insert percentage]), driver behavior (satisfaction rate: [insert percentage]), and vehicle cleanliness (satisfaction rate: [insert

percentage])). However, some areas received lower satisfaction ratings, such as wait times (satisfaction rate: [insert percentage]) and pricing (satisfaction rate: [insert percentage])).

DISCUSSION

The high overall satisfaction rate indicates that mobile app-based taxi services are generally meeting the expectations of passengers in the Colombo Metropolitan Area. The convenience of booking rides through the app, along with positive experiences with drivers and clean vehicles, contributes significantly to passenger satisfaction. These aspects align with the primary value propositions of mobile app-based taxi services, which are known for their efficiency and customer-centric approach.

However, the lower satisfaction rates for wait times and pricing suggest areas for improvement. Prolonged wait times can lead to passenger frustration and dissatisfaction, especially during peak hours or high-demand periods. Addressing this issue may require optimizing the supply of available drivers during peak times and improving traffic management strategies.

Pricing is another crucial factor affecting passenger satisfaction. While mobile app-based taxi services offer transparent pricing models, some passengers may perceive the fares as relatively high compared to traditional taxi services. This highlights the need for effective communication and transparency regarding pricing mechanisms to manage customer expectations better.

CONCLUSION

The results of this study demonstrate that mobile app-based taxi services have been successful in meeting the needs of passengers in the Colombo Metropolitan Area, with a majority reporting satisfaction with the overall service. Positive experiences with the booking process, driver behavior, and vehicle cleanliness contribute significantly to passenger satisfaction.

However, there are areas that require attention to further enhance passenger satisfaction. Addressing issues related to wait times and pricing can lead to improved customer experiences and increased loyalty to the service. Implementing strategies to optimize driver availability during peak times and transparently communicating pricing mechanisms can play a pivotal role in achieving this.

The insights gained from this research can guide service providers and policymakers in identifying areas for improvement and enhancing the overall quality of mobile app-based taxi services. By continuously addressing customer feedback and preferences, service providers can foster customer loyalty and maintain a competitive edge in the transportation market of the Colombo Metropolitan Area.

Overall, the study underscores the importance of focusing on passenger satisfaction as a key determinant of the success and sustainability of mobile app-based taxi services in the region. By continuously monitoring passenger feedback and incorporating necessary improvements, service providers can position themselves to thrive in the dynamic and evolving transportation industry of the Colombo Metropolitan Area, Sri Lanka.

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