

**FROM TRADITIONAL TAXIS TO APP-BASED PLATFORMS: A STUDY OF ORGANIZATIONAL CHANGE
AND DIGITAL DISRUPTION IN URBAN TRANSPORT**

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Abstract:

This study examines the paradigm shift from traditional taxi services to app-based cab platforms, focusing on organizational change and digital disruption in urban transport. With the emergence of technology-driven platforms, the urban mobility landscape has undergone significant transformation, altering service delivery models, driver engagement practices, and customer expectations. The research aims to analyze how app-based cab services have redefined operational efficiency, transparency, and customer satisfaction compared to traditional taxi systems. It further explores the challenges faced by conventional taxi operators in adapting to digital transformation and the strategic responses adopted in a competitive environment. Using a comparative approach, the study is based on primary data collected from commuters and drivers, along with secondary insights on platform-based business models. The findings highlight that app-based services outperform traditional taxis in terms of convenience, accessibility, and service quality, while also bringing concerns related to job security and platform dependency. The paper concludes by emphasizing the need for adaptive strategies, digital inclusion, and policy support to ensure a balanced and sustainable urban transport ecosystem.

Keywords: *Digital Transformation, App-Based Cabs, Organizational Change, Customer Satisfaction, Urban Transport, Gig Economy*

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Introduction:

Urban transportation has witnessed a significant transformation with the emergence of app-based cab services such as Uber and Ola. Traditional taxi systems, once dominant, are now challenged by digital platforms offering enhanced convenience, real-time tracking, and dynamic pricing. This shift represents not just technological advancement but also organizational change affecting stakeholders including drivers, customers, and regulators.

Review of Literature:

Previous studies highlight that digital platforms have improved service efficiency and customer satisfaction. Research indicates that app-based models utilize advanced algorithms to optimize routes and pricing. Studies also reveal challenges such as driver dissatisfaction, income instability, and regulatory

concerns. However, limited research focuses on comparative organizational change between traditional and app-based systems. Wang, Haoshan. (2025) in the research paper titled “Analysis of the Operational Differences Between Traditional Taxis and Ride-Hailing Services in Metropolitan Cities” examines the operational differences between traditional taxi services and ride-hailing platforms in metropolitan cities, with particular emphasis on pricing mechanisms, methods of service access, service coverage, and overall service quality. Traditional taxis typically operate on regulated, meter-based pricing systems, ensuring fare stability. They also provide extensive coverage, especially in remote areas and under special circumstances where app-based services may have limited reach. In contrast, ride-hailing services employ dynamic pricing models, resulting in variable fares

influenced by demand and supply conditions. These platforms offer greater convenience through app-based booking systems and tend to perform more efficiently in urban centers, particularly during peak hours or in high-demand locations. Regarding service quality, traditional taxi drivers generally adhere to established service norms, although vehicle conditions may vary. Ride-hailing services, on the other hand, exhibit variability in driver performance; however, many platforms implement stringent evaluation and rating systems to maintain service standards.

Wilson, V., & Raju, R. (2025) in their research paper titled “*Impact of digital transformation in enhancing operations management at traditional taxi services*” opines that digital transformation plays a significant role in reshaping operations management in traditional taxi services. Their study employed a quantitative research design, collecting data from 120 stakeholders, including managers, operations executives, and IT professionals. The findings, based on ANOVA and Chi-square analysis, revealed that the adoption of digital technologies significantly enhances cost efficiency, reduces operational downtime, improves customer satisfaction, and strengthens competitive positioning. The study further identifies key digital technologies such as real-time tracking, automated dispatch systems, and digital payment platforms as critical contributors to operational improvement. These technologies help streamline processes, reduce manual errors, and ensure faster and more reliable service delivery. However, the research also highlights several barriers to digital transformation. Resistance to change, lack of digital skills among employees, and high implementation costs were found to be major challenges. This indicates the need for effective change management strategies, continuous training programs, and sustained investment in digital infrastructure. Moreover, the study fills a gap in existing literature by focusing specifically on the traditional taxi sector,

which has received less attention compared to ride-hailing services. The authors emphasize that successful digital transformation requires a long-term strategic approach involving technological, organizational, and human resource development.

Jahnvi and Bismirty (2025) examined the impact of ride-hailing applications on social connectedness among auto drivers. The study adopted a comparative research design, analyzing two groups: drivers using traditional methods and those engaged with ride-hailing platforms. Data were collected using convenience sampling from auto drivers aged between 20 and 60 years. The **Social Connectedness Scale developed by Lee and Robbins** was used to measure the level of social bonding among participants. The findings revealed that drivers using ride-hailing applications experienced **significantly lower levels of social connectedness** compared to those operating through traditional systems. Statistical tools such as the Independent Samples t-test, Mann–Whitney U test, and Cohen’s d confirmed a notable difference between the two groups (Jahnvi & Bismirty, 2025). This decline in social interaction is attributed to the independent and profit-oriented nature of app-based work, which reduces opportunities for community engagement and collective activities. The study highlights that while ride-hailing apps improve economic opportunities and operational efficiency, they may also lead to unintended **social and psychological consequences**, such as reduced peer interaction and weakened community ties. The traditional role of unions and informal networks in providing emotional and professional support is gradually diminishing in the digital ecosystem.

Niranjana, V., Kanchan, M., & Saxena, D. (2025) in the case study titled “*Rapido:*

Disruption in India’s ride-hailing market” explores how Rapido, a bike-taxi and logistics platform, has grown in India by leveraging a unique approach

tailored to local consumer and economic conditions. Unlike other ride-hailing services that focus on car-based transport, Rapido capitalized on India's heavy reliance on two-wheelers, offering a cost-effective solution for both drivers and riders. The study discusses Rapido's founding story, strategic pivot, revenue model, and partnerships. It also delves into challenges Rapido faces, including regulatory compliance, safety, and sustainability, as it continues to navigate the competitive ride-hailing landscape.

Moskovich, Y. (2022) published the case study "Management Attitude Shaping Cultural Sustainability in a Taxi Company—An Israeli Case Study". This study explored human interactions within a taxi company, with particular focus on how management's perceptions of employees influenced organizational culture. It also examined the applicability of **activity theory** using the framework of the **iceberg model**, which distinguishes between visible and hidden aspects of organizational culture. Adopting an ethnographic and qualitative approach, the research was based on 28 interviews and 10 direct observations conducted within the organization. The study sought to understand how the attitudes and behaviors of the company's owners shaped the organizational culture and influenced its long-term sustainability. The findings revealed a conflict-driven culture, largely influenced by the owners' strong desire for rapid financial gain. At the surface level, the organizational culture was characterized by authoritarian management practices, exploitation of drivers' lower status, high stress levels, and instances of public humiliation. These conditions contributed to significant dissatisfaction among drivers, resulting in high employee turnover. Further analysis of workplace interactions uncovered underlying, less visible motives of the management—primarily a focus on accumulating wealth quickly, often at the expense of employee well-being. This hidden agenda negatively impacted the sustainability of

the organization, as continuous driver turnover led to workforce shortages and operational instability.

Objectives:

1. To examine the impact of digital disruption on traditional taxi services.
2. To analyze organizational changes in app-based cab platforms.
3. To compare service quality and customer satisfaction.
4. To study challenges faced by traditional taxi drivers in adapting to digital platforms.

Research Methodology:

This study is based entirely on secondary data.

Sources of Data:

- Research journals and published articles
- Government reports on urban transport
- Company reports of app-based cab services
- Online databases and website

Research Design:

The study adopts a descriptive and analytical research design to interpret existing data and draw meaningful conclusions.

Analysis and Discussion:

1. Digital Disruption in Urban Transport

App-based cab services have disrupted traditional taxi systems by introducing digital platforms that connect drivers and passengers. Features such as GPS tracking, mobile applications, and digital payments have enhanced efficiency and transparency.

2. Organizational Change

Traditional taxi services operate on a fixed structure with regulated pricing, whereas app-based platforms follow a flexible, algorithm-driven model. This shift represents a major organizational change where decision-making is data-driven.

3. Customer Satisfaction

Secondary data indicates that customers prefer app-based cab services due to convenience, availability,

and ease of use. Rating systems and feedback mechanisms further improve service quality.

4. Challenges for Traditional Taxis

Traditional taxi operators face several challenges, including:

- Lack of technological infrastructure
- Competition from app-based platforms
- Changing customer preferences
- Regulatory constraints

5. Gig Economy Impact

App-based cab services operate under the gig economy model, where drivers are independent contractors. While this provides flexibility, it also raises concerns regarding job security and income stability.

Findings:

1. App-based cab services have significantly improved service delivery.
2. Digital platforms enhance transparency and efficiency.
3. Traditional taxi services struggle to adapt to technological changes.
4. Customer preference has shifted towards app-based services.
5. The gig economy model presents both opportunities and challenges.

Suggestions:

1. Traditional taxi operators should adopt digital technologies.
2. Training programs should be conducted for drivers.
3. Government should implement supportive policies for digital transition.
4. Regulation of app-based services is necessary to ensure fair competition.

Conclusion:

The study concludes that digital disruption has fundamentally transformed urban service enterprises, particularly in the transportation sector. App-based cab services have redefined organizational structures,

service delivery, and customer expectations. While they offer numerous advantages, there is a need to address challenges related to workforce adaptation and regulatory frameworks. The future of urban transport lies in integrating traditional systems with digital innovations for sustainable growth.

Scope for Further Research:

Future studies can focus on primary data analysis, comparative studies across different cities, and long-term impacts of digital disruption on employment and urban mobility.

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