



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 13 Issue: V Month of publication: May 2025

DOI: https://doi.org/10.22214/ijraset.2025.70221

www.ijraset.com

Call: © 08813907089 E-mail ID: ijraset@gmail.com

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538

Volume 13 Issue V May 2025- Available at www.ijraset.com

### **Drive On - A Ride Hailing Application**

Nirdesh Kumar<sup>1</sup>, Nivesh Chaudhary<sup>2</sup>, Shivam Kumar<sup>3</sup>, Vishal Pal<sup>4</sup>, Ms. Arti Attri<sup>5</sup>, Dr. Abdul Alim<sup>6</sup>, Dr. Sureshwati<sup>7</sup>

1, 2, 3, 4 Department of Computer application, Greater Noida Institute of Technology (Engg. Institute), Greater Noida, India

5, 6, 7 Assistant Professor, Department of Computer Application, Greater Noida Institute of Technology (Engg. Institute), Greater Noida, India

Abstract: Ride-hailing services have become an essential part of urban mobility. "Drive On" aims to offer an efficient, safe, and cost-effective transportation solution, similar to Rapido, catering to daily commuters. This research paper discusses the app's development, key features, market potential, challenges, and future prospects. The rise of ride-hailing platforms such as Uber, Lyft, and Ola have revolutionized urban mobility, offering flexible work opportunities to millions of drivers worldwide. This review paper explores the economic, social, and technological aspects of driving on ride-hailing apps, focusing on driver earnings, working conditions, algorithmic management, and regulatory challenges. It examines the impact of gig work on labour markets, driver job satisfaction, and financial sustainability.

Furthermore, the study analyses how ridehailing affects urban congestion, traffic patterns, and environmental sustainability. The paper also highlights the evolving role of artificial intelligence (AI) and data-driven decision-making in ride-matching, surge pricing, and driver performance evaluation. While ride-hailing offers flexibility and income opportunities, concerns regarding job security, income volatility, and regulatory compliance remain prominent. The review concludes by discussing future directions for research and policy interventions that can improve driver welfare and ensure the long-term sustainability of the ride-hailing ecosystem.

Keywords: Ride-hailing, Gig Economy, Driver Experience, Algorithmic Management, Urban Mobility, Platform Economy

#### I. INTRODUCTION

With urbanization and increasing traffic congestion, ride-hailing apps provide an alternative to traditional transport services. "Drive On" is a mobile-based application designed to connect riders with nearby drivers for affordable and quick transportation. The platform will primarily focus on bike taxis, offering an economical and time-saving mode of travel. **Drive** On is a cutting-edge ride-hailing app designed to provide fast, affordable, and convenient transportation at your fingertips. Whether you need a quick bike ride through traffic, an auto for short distances, or a comfortable car for longer journeys, Drive On has you covered.

With a user-friendly interface, real-time tracking, and secure payment options, Drive ensures a seamless travel experience. Our fleet of verified drivers is committed to safety, reliability, and efficiency, making every day commuting effortless.

Join thousands of satisfied riders and experience hassle-free travel with **Drive On** – where every ride is smooth, safe, and budget-friendly!

#### II. METHODOLOGY

- 1) Technology Stack: Android/iOS development using Flutter, Firebase for backend, and Google Maps API for navigation.
- 2) Data Collection: Market surveys, user feedback, and competitive analysis.
- 3) Development Process: Agile methodology to ensure iterative development and usercentric enhancements.

#### III. FEATURES OF DRIVE ON

- 1) User-Friendly Interface: Easy booking and payment options.
- 2) Real-Time Tracking: GPS-based location tracking for security.
- 3) Fare Estimation: Transparent pricing based on distance and demand.
- 4) Ride Safety Measures: SOS button, ride-sharing details with emergency contacts.
- 5) Driver Verification: Background checks and rating systems.
- 6) In-App Wallet & Multiple Payment Modes: Digital transactions for seamless payment.



#### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue V May 2025- Available at www.ijraset.com

#### IV. MARKET POTENTIAL

The demand for bike taxis in congested urban areas is growing due to affordability and time efficiency. By targeting tier-1 and tier-2 cities, Drive On can capture a significant market share.

#### V. CHALLENGES & SOLUTIONS

- 1) Regulatory Hurdles: Compliance with transport laws and securing government approvals.
- 2) Competition: Offering competitive pricing and superior service to establish market presence.
- 3) Safety & Trust: Implementing stringent driver verification and real-time ride monitoring.
- 4) User Acquisition: Strategic marketing campaigns, referral bonuses, and promotional offers.

#### VI. FUTURE SCOPE

Expansion to electric bike fleets to promote sustainability.

Integration of AI for predictive demand analysis.

Collaboration with local businesses for ride discounts.

Implementation of multilingual support for diverse user accessibility.

#### VII. CONCLUSION

"Drive On" is a promising solution for urban transportation, inspired by Rapido. By focusing on affordability, safety, and technology-driven services, the app has the potential to redefine the ride-hailing industry. With **Drive On**, commuting has never been easier, safer, or more affordable. Whether you're rushing to work, heading out for leisure, or need a reliable ride at any time of the day, we've got you covered. Our seamless booking, real-time tracking, and secure payment options ensure a stress-free journey every time.

Join the **Drive On** community today and redefine the way you travel. Wherever you go, we'll take you there—quickly, safely, and affordably. **Your ride, your way** .

#### REFERENCES

- [1] Gig Economy and Ride-Hailing
- [2] Smith, A. (2016). "Gig Work, Online Selling and Home Sharing." Pew Research Center.
- [3] Zwick, A. (2018). "Welcome to the Gig Economy: Neoliberal Industrial Relations and the Case of Uber." Geojournal, 83(4), 679-691.
- [4] Driver Earnings & Working Conditions
- [5] Hall, J. V., & 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.
- [6] Chen, M. K., Chevalier, J. A., Rossi, P. E., & Oehlsen, E. (2019). "The Value of Flexible Work: Evidence from Uber Drivers." Journal of Political Economy, 127(6), 2735-2794.
- [7] Impact of Ride-Hailing on Traffic & Environment
- [8] Henao, A., & Marshall, W. E. (2019). "The Impact of Ride-Hailing on Vehicle Miles Traveled." Transportation, 46(6), 2173–2194.
- [9] Erhardt, G. D., Roy, S., Cooper, D., et al. (2019). "Do Transportation Network Companies Decrease or Increase Congestion?" Science Advances, 5(5), eaau2670.
- [10] Uber, Lyft, and Other Ride-Hailing Studies
- [11] Uber. (2021). "A Better Deal: How Uber's Driver Compensation Works." [Uber Official Website]
- [12] Lyft. (2020). Lyft Economic Impact Report.
- [13] McKinsey & Company. (2019). The Future of Mobility: How RideSharing is Transforming Transportation. The New York Times, Wired, and he Guardian often publish insightful articles on ride-hailing platforms and driver experiences.
- [14] Bloomberg & Harvard Business Review (HBR) cover financial and labor aspects of ride-hailing.
- [15] Case Study AnalysisSundararajan, A. (2017). The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism.
- [16] Schor, J. (2020). After the Gig: How the Sharing Economy Got Hijacked and How to Win It Back.





10.22214/IJRASET



45.98



IMPACT FACTOR: 7.129



IMPACT FACTOR: 7.429



## INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call: 08813907089 🕓 (24\*7 Support on Whatsapp)