

Influencing Factors of EV Ride-Hailing Adoption in Jakarta: A Case Study of GoRide Electric

A Audli Natakusuma¹, Utomo Sarjono Putro²

School of Business and Management, Institut Teknologi Bandung^{1,2}

*Email: audli_natakusuma@sbm-itb.ac.id

Abstract

The electrification of urban transport is critical to achieving global emissions reduction targets, particularly in emerging economies where motorcycle-dominated traffic significantly contributes to air pollution. Road transport accounts for nearly 46% of the city's total emissions in Jakarta, with motorcycles representing over 80% of private vehicles. As Indonesia's leading ride-hailing platform, Gojek launched GoRide Electric as part of its GoTo Net Zero Emission 2030 commitment. However, consumer adoption of this electric alternative remains limited, underscoring a gap between supply-side readiness and demand-side behavior. This study aims to identify and evaluate key consumer-level factors that influence the adoption of GoRide Electric in Jakarta. Using a mixed-method design, a literature synthesis of five peer-reviewed EV ride-hailing adoption studies was conducted to extract 15 sub-variables, which were consolidated into four theoretical constructs: Affordability, Reliability, Environmental Benefit, and Social Influence. These constructs were operationalized into a 15-item questionnaire and validated through a 4-point Likert-scale survey of 141 active Gojek users. The data underwent descriptive quantitative analysis using SPSS to rank variable importance. Results indicate that Environmental Benefit is the most influential factor ($M = 3.39$), followed by Reliability as the second most influential factor ($M = 3.35$). Affordability ranked third ($M = 3.15$), while Social Influence scored the lowest ($M = 2.78$), indicating weak peer-driven motivation. This study contributes to the literature on sustainable mobility by contextualizing EV adoption behavior in a Southeast Asian megacity and provides actionable insights for policymakers and platform operators to design consumer-centric interventions for EV ride-hailing uptake.

Keywords: EV Adoption, Consumer Behavior, Urban Emissions, GoRide Electric, Systematic Literature Synthesis, Emerging Markets

A. INTRODUCTION

The intensification of global climate change is no longer a matter of debate but a scientific certainty. The Intergovernmental Panel on Climate Change (IPCC, 2021) confirms that human activity has unequivocally warmed the atmosphere, ocean, and land, disrupting ecological balance and socio-economic systems worldwide. One of the primary anthropogenic sources of greenhouse gas (GHG) emissions is road transportation, contributing significantly to urban carbon footprints. According to NASA (2023), carbon dioxide (CO₂) levels have increased by over 50% in less than two centuries due to fossil fuel combustion. Urban centers, where demand for mobility is highest, are responsible for roughly 70% of global emissions (UNEP, 2024), positioning them as critical intervention points for sustainable transformation.

Jakarta, Indonesia's capital and a prototypical Southeast Asian megacity, exemplifies this urban dilemma. With over 10 million inhabitants and an extensive commuter belt, the city's transport emissions account for 46% of its total emissions profile. Notably, motorcycles dominate the mobility landscape, comprising 83% of private passenger vehicles (Korlantas Polri, 2025). Despite major investments in Mass Rapid Transit (MRT), Bus Rapid Transit (BRT), and rail connectivity, infrastructure coverage remains fragmented and often fails to meet the population's dynamic commuting needs (Pasha & Yeung, 2024). In this context, ride-hailing platforms have emerged as default mobility solutions, offering flexible, on-demand services that resonate with the public's need for speed and convenience (Aritenang, 2024). Gojek, the market leader, facilitates millions of trips daily and reportedly contributes to over 39.8 billion hours in annual time savings across Indonesia (Sunitiyoso et al., 2023).

* Corresponding author

Recognizing its strategic role in urban mobility, Gojek introduced GoRide Electric in 2022 as part of its decarbonization agenda under the GoTo Group's Net Zero Emission 2030 commitment. Electrifying its two-wheeled fleet was intended as a corporate sustainability initiative and a pivotal public transition toward low-carbon transport. However, initial adoption data reveal an underwhelming consumer response despite the growing availability of electric fleets. This suggests that supply-side interventions alone are insufficient and that adoption inertia may stem from unaddressed behavioral, perceptual, and experiential gaps on the demand side.

Although a growing body of literature has explored electric vehicle (EV) ride-hailing adoption, most studies remain concentrated in developed countries and emphasize ownership models, government incentives, or infrastructure barriers (Ly, 2025; Xu et al., 2024; Pezoa et al., 2025). In the context of emerging markets, scholarly attention remains sparse and fragmented. Some insights identify affordability, reliability, environmental attitudes, and social norms as critical adoption drivers (Christie & Primary, 2024; Sheldon & Dua, 2024), yet their relative importance and behavioral interdependencies vary across socio-cultural and urban contexts. Moreover, few studies employ an integrated consumer behavior framework in analyzing ride-hailing adoption at scale, especially for two-wheeled EVs, which dominate Southeast Asian transport ecosystems.

This study addresses the aforementioned research gap by adopting a two-stage approach: a literature synthesis to extract and consolidate adoption variables from five high-relevance EV ride-hailing studies, followed by an empirical validation through a structured survey of 141 active Gojek users in Jakarta. The variables—grouped into four key constructs—were operationalized and analyzed using descriptive quantitative methods: affordability, reliability, environmental benefit, and social influence. The aim is not merely to measure levels of agreement but to prioritize and rank behavioral drivers that can inform targeted interventions. This study contributes to the broader discourse on behavioral transitions in sustainable urban mobility by identifying which psychological and practical factors influence adoption decisions.

Furthermore, this research advances the literature by contextualizing EV ride-hailing adoption within the ride-hailing economy of a Southeast Asian megacity, a domain often overlooked in mainstream EV studies. It also offers pragmatic insights for platform operators, urban planners, and policymakers on how to recalibrate incentives, marketing, and infrastructure deployment to align with the actual motivations and expectations of urban consumers. The study reinforces that technological diffusion—especially in sustainability—requires infrastructural readiness and behavioral alignment with end-user realities.

B. METHODS

This study adopted a sequential exploratory mixed-method approach strategically designed to bridge theoretical constructs and empirical validation in understanding the behavioral determinants of electric ride-hailing adoption. The research process consisted of two interconnected stages: first, a literature review was conducted to identify, extract, and synthesize adoption variables from high-impact scholarly publications, and second, a quantitative survey was developed to validate the relevance of those variables among actual users of GoRide Electric in Jakarta. The literature review was grounded in a structured protocol to ensure comprehensiveness and conceptual rigor. A focused search was performed across major peer-reviewed journals in transportation, sustainability, and consumer behavior using keywords such as “EV adoption,” “ride-hailing,” “consumer intention,” “influencing factors,” and “emerging markets.” This search selected five studies based on their empirical depth, contextual relevance to Southeast Asia, and theoretical robustness. Each article was systematically coded to extract behavioral variables and sub-variables related to EV ride-hailing. A similarity matrix was constructed to eliminate conceptual redundancies and ensure operational clarity, consolidating 15 initial variables into four core behavioral constructs: Affordability, Reliability, Environmental Benefit, and Social Influence. These constructs and their associated 15 sub-variables were then used as the foundation for the survey instrument.

The second stage focused on empirically validating the synthesized constructs through a structured questionnaire distributed to a targeted sample of Gojek users using Google Forms as a data collection

tool. The questionnaire contained 15 items, each corresponding to a specific sub-variable identified during the literature review phase. To prevent central tendency, the questionnaire applied a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree). To ensure coherence, the instrument was tested on several small groups of respondents before full deployment. Respondents must fulfill three criteria to fill in the questionnaire by checking the boxes, such as: (1) having used Gojek services at least once in the past three months, (2) having previously used or expressed interest in using GoRide Electric, and (3) having seen GoRide Electric within Jakarta's operational areas. The final sample consists of 141 valid responses, encompassing a diverse demographic spread across age, gender, vehicle ownership, and domicile within the Greater Jakarta metropolitan area (Jabodetabek).

Data analysis was conducted using IBM SPSS Statistics 27 to obtain structured statistical validation. The construct validity was assessed using Pearson's product-moment correlation coefficients for each survey item, while the internal consistency was evaluated through Cronbach's alpha reliability test. Afterward, descriptive statistics (mean, mode, and standard deviation) were run to identify and rank the most influential sub-variables across the four constructs. This research design ensured conceptual depth by integrating theory-driven synthesis with robust statistical validation. It allowed for measuring user perceptions and provided strategic insights prioritization, laying the foundation for policy recommendations and ride-hailing platforms regarding the transition toward sustainable urban mobility EV ride-hailing.

To complement the description above, Figure 1 presents the visual framework of the study's sequential design. This conceptual diagram outlines the research flow, beginning with identifying adoption-related variables through literature synthesis (Objective 1), followed by their empirical validation and relevancy ranking through quantitative descriptive analysis (Objective 2). The right-hand side of the framework contextualizes these variables within the operational and strategic landscape of GoRide Electric in Jakarta, highlighting the alignment between consumer behavior insights and Gojek's dual focus on affordability and environmental benefit as part of its GoTo Zero Emission 2030 commitment.

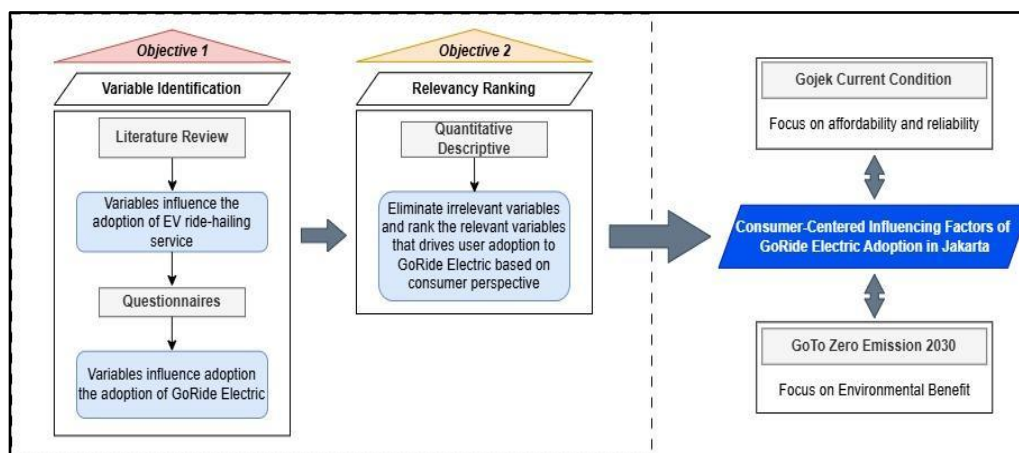


Figure 1. Conceptual Framework

Source: Researcher, 2025

C. RESULTS AND DISCUSSION

Literature Review Results

The literature review began with a focused screening of scholarly articles addressing behavioral drivers of electric vehicle (EV) ride-hailing adoption. Using predefined inclusion criteria, five empirical studies published between 2024 and 2025 were identified as the most methodologically robust and thematically relevant to the research objective. These studies cover diverse geographies and offer a range of insights into how consumers perceive, accept, and engage with electric mobility services, especially in ride-hailing contexts. The selected studies yielded 23 behavioral variables, which were further categorized into 15 sub-variables based on their similar definitions and operational interpretations. These sub-variables span psychological constructs (e.g., attitude, norms), functional concerns (e.g., service

reliability, cost-savings), and contextual influences (e.g., environmental awareness, lifestyle congruence). The summary of findings from each study is presented in Table 1, providing an overview of the variables and their relevance.

Table 1. Summary of Literature Sources, Variables, and Definitions

Source	Relevant Variables	Sub-Variables	Definition
Christie, Y., Primary, N. (2024)	Attitude towards use	Usefulness	Technology is perceived as enabling contributions to the green economy
		Performance expectancy	Expectations of reliable and efficient performance
		Hedonic motivation	Congruence with users' lifestyle or pleasure-seeking patterns
		Price Value	Value perception from service pricing
	Subjective norms	Social pressure	Pressure from peers or family
Ly, B. (2025)	Economic determinant	Control over the situation	Confidence in the ability to use EV ride-hailing
		Affordability	Perceived service affordability
	Technological determinant	Cost-savings	Economic benefit from reduced cost
		User-friendly service	Ease of booking and usage
	Convenience determinant	Reliable access	Availability of the service when needed
Pezoa et al. (2025)	Stickiness	Frequent ride-hailing user	Likelihood of adoption due to usage habit
	Financial resource	Higher fares	Willingness to pay more for a perceived premium EV experience
	Time resource	Waiting time	Willingness to wait for EV pickup
		Travel time	Willingness to travel longer via EV
	Environmental benefit	Trip distance	Preference for longer trips using EVs for emission savings
Xu et al. (2024)	Pricing models	EV option vs. regular	Pricing advantage via subsidies
	Environmental benefit	Consumer environmental awareness	Awareness of EV environmental impacts
		EV driver ratio	The ratio of EV to regular drivers in the fleet
Sheldon & Dua (2024)	Subjective norms	Curiosity	Desire to try EV based on novelty
	Environmental benefit	Good for the environment	Belief in EV's environmental contribution
	Pricing	Not willing to pay a premium	Sensitivity to high EV pricing
		Shorter trips for a low price	Cost-effective use for short distances
	Discounts	Discounts for longer trips	Expectation of price incentives for longer trips

Source: Research data, 2025

After compiling all relevant sub-variables, a similarity analysis was conducted using a 2x2 matrix framework to identify conceptual redundancies and overlaps across the selected studies. This process improved parsimony and strengthened theoretical coherence by ensuring that unique and significant constructs were retained for further analysis. The presence or absence of variables across the studies is summarized in Table 2.

Table 2. Similarity Matrix of Variables Across Studies

Variable	Christie & Primary	Ly	Pezoa et al.	Xu et al.	Sheldon & Dua
Attitude towards use	YES	NO	NO	NO	NO
Subjective norms	YES	NO	NO	NO	YES
Perceived Behavioral Control	YES	NO	NO	NO	NO
Technological determinant	NO	YES	NO	NO	NO
Stickiness	NO	NO	YES	NO	NO
Time resource	NO	NO	YES	NO	NO
Environmental benefit	NO	NO	YES	YES	YES
Pricing	YES	YES	YES	YES	YES
Discounts	NO	YES	NO	NO	YES
Supply	NO	YES	NO	YES	NO

Source: Research data, 2025

This matrix clearly illustrates that several variables—notably pricing and environmental benefit—appear consistently across all five studies, confirming their centrality in understanding EV adoption. While less widespread, other variables offer contextually valuable perspectives that warrant retention.

Following the matrix analysis, sub-variables were grouped into core dimensions by merging similar definitions. This categorization reduced the 23 initial sub-variables into 15 refined indicators, classified into four overarching constructs: Affordability, Environmental Benefit, Reliability, and Social Influence.

The definitions and sources of each finalized sub-variable are detailed in Table 3, ensuring transparency and academic rigor in construct development.

Table 3. Final Construct Grouping and Definitions

Construct	Sub-Variable	Merged From	Definition
Affordability	Value for Money	Cost-savings, Willingness to pay more	The perceived economic value of GoRide Electric
	Perceived Premiumness	Premium price willingness	Willingness to pay a premium for higher service quality
	Price Sensitivity	Affordability, EV price advantage	Motivation to choose EV due to lower pricing
	Distance-based Price Preference	Short trip price, Discounts	Preference for price variation by distance
Environmental Benefit	Green Awareness	Ecological awareness is good for the environment	Understanding EVs' positive impact on the environment
	Personal Contribution	Usefulness	Personal role in supporting the green transition
	Eco-strategic Behavior	Trip distance	Strategic choice of EV for longer trips to reduce emissions
Reliability	Service Availability	Reliable access, EV driver ratio	Perception of EV driver accessibility and ease
	Ease of Use	User-friendly service	Simplicity of the in-app journey
	Service Performance	Performance expectancy, Control over the situation	Trust in GoRide Electric's functionality
	Trip Flexibility	Waiting time, Travel time	Willingness to accommodate potential inconvenience
	User Stickiness	Frequent ride-hailing user	Openness to EV among habitual users
Social Influence	Social Pressure	Social pressure	Peer and family encouragement
	Hedonic Motivation	Hedonic motivation	Alignment with a personal lifestyle image
	Curiosity	Curiosity	Interest is driven by novelty and experimentation

Source: Research data, 2025

All 15 sub-variables were converted into Likert-scale items using a 4-point format (1 = strongly disagree to 4 = strongly agree). This choice was intended to minimize neutrality bias and sharpen respondent differentiation. Each construct was then assigned a specific number of items to ensure coverage and comparability: Affordability: 4 items; Reliability: 5 items; Environmental Benefit: 3 items; Social Influence: 3 items. Before distribution, the survey instrument was pre-screened to ensure that only relevant participants were included. The respondents' criteria included active use of Gojek within the past three months, prior use of or interest in GoRide Electric, and visual familiarity with GoRide Electric on the streets of Jakarta. This thorough literature-grounded process ensured that the survey instrument was methodologically robust and directly aligned with the cognitive, emotional, and contextual realities of the target user group in urban Indonesia.

Quantitative Results

Respondent Profile

The online survey was conducted from April 30 to May 7, 2025, and garnered 144 responses. However, only 141 responses were deemed valid for analysis after rigorous screening based on predefined criteria. The exclusion of three respondents was due to non-compliance with the screening requirements, which included having used Gojek in the past three months, having a prior interest in GoRide Electric,

and having seen GoRide Electric vehicles in Jakarta. Table 4 presents the demographic composition of the valid respondents. The sample was relatively balanced in age and education, with a strong representation of private employees (64.3%) and motorbike owners (46.8%), reflecting the urban commuting patterns in Greater Jakarta.

Table 4. Respondent Demographics (N = 141)

Demographic	Item	Frequency	Percentage (%)
Gender	Male	87	61.7
	Female	54	38.3
Age Group	18–26	40	28.4
	27–31	37	26.2
	32–40	37	26.2
	41–56	27	19.1
Education Level	School	56	39.2
	Diploma	11	7.7
	Bachelor's Degree	65	45.5
	Master's Degree	11	7.7
Occupation	Student	10	7.0
	Private Employee	92	64.3
	Government Employee	14	9.8
	Entrepreneur	4	2.8
	Freelancer	20	14.0
	Housewife	1	0.7
	Unemployed	2	1.4
Domicile	Jakarta	76	53.1
	Bogor	5	3.5
	Depok	7	4.9
	Tangerang	9	6.3
	Bekasi	37	25.9
	Others	9	6.3
Vehicle Ownership	No	11	7.8
	Yes	130	92.2
Vehicle Type	None	11	7.8
	Car	24	17.0
	Motorcycle	66	46.8
	Car & Motorcycle	40	28.4

Source: Research data, 2025

Before the descriptive analysis, the questionnaire items were subjected to Pearson product-moment correlation to test construct validity. As shown in Table 5, all items reported a correlation coefficient above the critical r-value of 0.2148 at the 0.01 significance level, indicating strong item validity. This statistical rigor ensured that each item reliably captured its intended construct.

Table 5. Pearson Validity Test

Variables	Item No	r value	0.01 for N=141	Sig	Validity Status
Affordability (AF)	AF.1	0.747544	0.2148	0.001	Valid
	AF.2	0.725956	0.2148	0.001	Valid
	AF.3	0.709467	0.2148	0.001	Valid
	AF.4	0.740325	0.2148	0.001	Valid
Reliability (RL)	RL.1	0.645506	0.2148	0.001	Valid
	RL.2	0.736375	0.2148	0.001	Valid
	RL.3	0.781292	0.2148	0.001	Valid
	RL.4	0.669636	0.2148	0.001	Valid
	RL.5	0.820411	0.2148	0.001	Valid
Environmental Benefit (EB)	EB.1	0.920317	0.2148	0.001	Valid
	EB.2	0.948834	0.2148	0.001	Valid
	EB.3	0.886574	0.2148	0.001	Valid
Social Influence (SI)	SI.1	0.844552	0.2148	0.001	Valid
	SI.2	0.823078	0.2148	0.001	Valid
	SI.3	0.773004	0.2148	0.001	Valid

Source: Research data, 2025

The internal consistency of the measurement model was evaluated using Cronbach's Alpha. As reported in Table 6, the alpha value reached 0.885 for the 15 items across all constructs, which exceeds the conventional threshold of 0.7, confirming excellent reliability.

Table 6. Cronbach's Reliability Test

Cronbach's Alpha	N of Items
0.885	15

Source: Research data, 2025

Descriptive statistics were computed to assess the central tendency and dispersion of each sub-variable, as summarized in Table 7. Among the 15 sub-variables tested, 13 met the threshold for relevance based on mean values and standard deviations, while two items—Trip Flexibility and Social Pressure—were found to be less influential and marked as irrelevant to the context. Sub-variables under the Environmental Benefit construct reported the highest mean scores, led by Environmental Awareness (M = 3.43) and Personal Contribution (M = 3.42). Ease of Use (M = 3.52) and Service Performance (M = 3.50) stood out as highly influential in the Reliability cluster. On the other hand, sub-variables under Social Influence, such as Social Pressure (M = 2.30) and Curiosity (M = 2.95), showed limited impact on user intention.

Table 7. Descriptive Quantitative Analysis

Variables	Sub-Variables	Label	N Valid	Mean	Mode	Std. Deviation	Status
Affordability	AF.1	Value for money	141	3.16	4	0.891	Relevant
	AF.2	Perceived premiumness	141	3.09	4	0.914	Relevant
	AF.3	Price sensitivity	141	3.29	4	0.883	Relevant
	AF.4	Distance-based price preference	141	3.18	4	0.968	Relevant
Reliability	RL.1	Service availability	141	3.43	4	0.777	Relevant
	RL.2	Ease of use	141	3.52	4	0.752	Relevant
	RL.3	Service performance	141	3.5	4	0.771	Relevant
	RL.4	Trip flexibility	141	2.3	1	1.132	Irrelevant
	RL.5	User stickiness	141	2.96	3	0.906	Relevant
Environmental Benefit	EB.1	Environmental awareness	141	3.43	4	0.864	Relevant
	EB.2	Personal contribution	141	3.42	4	0.812	Relevant
	EB.3	Eco-strategic behaviour	141	3.33	4	0.806	Relevant
Social Influence	SI.1	Social pressure	141	2.3	1	1.107	Irrelevant
	SI.2	Hedonic motivation	141	2.78	3	0.949	Relevant
	SI.3	Curiosity	141	2.95	4	1.030	Relevant

Source: Research data, 2025

A construct-level ranking based on the aggregated mean scores is presented in Table 8, allowing for a comparative view of the relative importance of each factor in influencing GoRide Electric adoption: Environmental Benefit (Mean = 3.39): The most influential construct, driven by ecological awareness and the desire for personal environmental contribution; Reliability (Mean = 3.35): Close behind, marked by user trust in service quality and accessibility; Affordability (Mean = 3.13): Moderately important, with price sensitivity and distance-based preferences as key considerations; and Social Influence (Mean = 2.78): The least influential, suggesting minimal reliance on social persuasion or lifestyle alignment in decision-making.

Table 8. Rank by Mean Score

Variables	Sub-Variables	Label	Mean	Variable Mean Score	Variable Rank
Environmental Benefit	EB.1	Environmental awareness	3.43	3.39	1
	EB.2	Personal contribution	3.42		
	EB.3	Eco-strategic behaviour	3.33		
Reliability	RL.2	Ease of use	3.52	3.35	2
	RL.3	Service performance	3.50		
	RL.1	Service availability	3.43		
	RL.5	User stickiness	2.96		
Affordability	AF.3	Price sensitivity	3.29	3.13	3
	AF.4	Distance-based price preference	3.18		
	AF.1	Value for money	3.16		
	AF.2	Perceived premiumness	3.09		
Social Influence	SI.3	Curiosity	2.95	2.78	4

Variables	Sub-Variables	Label	Mean	Variable Mean Score	Variable Rank
	SI.2	Hedonic motivation	2.78		

The top five sub-variables influencing adoption were RL.2: Ease of Use (M = 3.52); RL.3: Service Performance (M = 3.50); EB.1: Environmental Awareness (M = 3.43); RL.1: Service Availability (M = 3.43); EB.2: Personal Contribution (M = 3.42). In contrast, the bottom five were: AF.1: Value for Money (M = 3.16); AF.2: Perceived Premiumness (M = 3.09); RL.5: User Stickiness (M = 2.96); SI.3: Curiosity (M = 2.95); SI.2: Hedonic Motivation (M = 2.78). These findings show that Environmental Benefit and Reliability variables drive the key drivers to user adoption to GoRide Electric, while Affordability and Social Influence have less influence.

These results align with previous similar studies (Christie & Primary, 2024; Pezoa et al., 2025), which emphasized environmental awareness and service reliability as the dominant factors influencing EV ride-hailing adoption. In this study, the respondents tended to adopt GoRide Electric as long as it is reliable, easy to book, well-performing, and highly available, as they believed that GoRide Electric was a platform to create a positive environmental impact. Taking into account the behavioral transformation of Gojek users in Jakarta, we see that it is more value-driven than price-driven. This suggests that the acceleration of EV ride-hailing adoption in Indonesia should emphasize reliability and environmental awareness rather than rely solely on discount schemes or influencer marketing.

Discussion

The findings of this study reveal that internal motivation drives the influence of consumer adoption of electric vehicle (EV) ride-hailing services, with the case of GoRide Electric in Jakarta providing a valuable perspective. Among the four constructs tested, environmental benefit emerged as the most influential factor, driven primarily by users' environmental awareness and perceived personal contribution to urban environmental sustainability. This finding highlights that urban society is highly aware of environmental issues like pollution they emit when commuting in Jabodetabek, particularly among Millennials and Gen Z, who dominate the workforce. The ability to get reliable service and make a positive environmental impact plays a central role in shaping urban mass mobility choices. In contrast, the respondents in Jakarta consider that pricing and social influence less influencing their decision to adopt GoRide Electric compared to the previous research in other emerging markets (Ly, B. 2025). It may be influenced by the demographic and infrastructure differences between countries, yet the characteristics of Indonesia's urban society show that the adoption of EV ride-hailing is influenced by value-driven and environmentally conscious decision-making. The strong performance of reliability-related variables, especially ease of use, service performance, and availability of EV drivers—further supports the argument that users are primarily motivated by functionality and trust in service delivery. Reliability becomes a bare minimum experience as Jakarta's complex urban mobility landscape requires the users to get a service that can be trusted all the time to face congestion and unpredictable travel times. Consumers are unlikely to adopt EV ride-hailing if the service cannot ensure ease of booking and consistent supply.

On the other hand, affordability was not a primary constraint in this context. The moderate scores for affordability's sub-variables suggest that while pricing influences user consideration, it does not serve as the dominating influencing factor. Yet, Gojek may still consider dynamic pricing strategies such as lower fares for short distances or discounts for longer trips rather than seeking universally low prices as the respondents are still responding to pricing concerns. This shifts the pricing factors to lower the service price, which is a factor that solidifies user consideration when choosing the service. Then, the social influence had the weakest impact on adoption intention. Sub-variables such as social pressure, hedonic motivation, and curiosity scored significantly lower, suggesting that peer dynamics, lifestyle alignment, and novelty are not compelling to drive the adoption of GoRide Electric. Not to mention, social pressure is not a relevant influencing factor, leaving hedonic motivation and curiosity as the least influencing factors. Despite this, since Jakarta is the center of trend-following behaviors, social influence can be a reliable input for decision-making as the internet becomes a source of information. Thus, the advantage of social media in influencing the usage of GoRide Electric becomes a prominent influencing strategy for GoRide Electric's adoption.

Theoretically, this research contributes to the evolving discourse on sustainable urban mobility by demonstrating that consumer behavior in emerging urban markets such as the Greater Jakarta Area

(Jabodetabek) is no longer solely cost-sensitive or socially reactive. Instead, adoption is shaped by environmental goals and trust in the service systems. By synthesizing elements from the Theory of Planned Behavior, environmental psychology, and user experience research, this study offers a contextualized behavioral model that better reflects the adoption dynamics of EV ride-hailing in Southeast Asia, especially for a megapolitan type of city like Jakarta. The findings also hold important implications for ride-hailing platforms and policymakers. For service providers like Gojek, investment in EV fleet performance, consistent service quality, and environmental communication strategies will likely obtain higher adoption returns than short-term discounts or influencer marketing. Pricing should be dynamically personalized and functionally adjusted to real-life situations and should not be generally low. If combined with clear demonstrations of reliability and environmental messaging, pricing can become a powerful influencing factor. For policymakers, the results highlight the need for structural support, such as charging infrastructure expansion and green fleet incentives, aligned with users' growing eco-consciousness. The study illustrates environmentally engaged consumer profiles and focuses on operational credibility. Adopting GoRide Electric is not a matter of trend or cost alone; it reflects users' sustainability values and trust in Gojek's service. This reframes the pathway to EV ride-hailing adoption in Indonesia not as a race to lower prices but as a strategic effort to embed ecological purpose, service trust, and smart design into the mobility experience.

D. CONCLUSIONS

This study offers comprehensive and consumer-centric insights to influence the adoption of electric vehicle (EV) ride-hailing services in Jakarta, using GoRide Electric as a case study. By using a mixed-method approach by integrating a systematic literature review with empirical validation from 141 respondents, the research identifies four key constructs influencing adoption: Environmental Benefit, Reliability, Affordability, and Social Influence. The results show that environmental benefit and reliability emerged as the most influential factors, demonstrating that urban Indonesian consumers are increasingly motivated by environmental awareness and confidence in service performance. In contrast, affordability plays a supportive role in differentiating GoRide Electric from other services, while social influence is the least influencing factor in shaping user intention.

The findings challenge the conventional view that cost sensitivity and social conformity dominate technology adoption in emerging markets. Instead, this research highlights the decision-making behavior of Jakarta consumers, which is moving toward purpose-driven and trust-based decision-making for GoRide Electric. This marks a significant contribution to the theoretical expansion of technology acceptance and sustainable mobility models in Southeast Asia. For practitioners and policymakers, the study underlines the importance of focusing on user education around environmental impacts, ensuring consistent service quality, and adopting dynamic pricing strategies that reflect value rather than low-cost service. Strategic alignment between public sustainability goals and private mobility services will be critical to accelerating EV ride-hailing adoption at scale.

In closing, the adoption of GoRide Electric in Jakarta is not merely a function of economic incentives or peer behavior; it is a reflection of environmental consciousness and an expectation for operational excellence. Future research can explore the analysis using SEM analysis to find the strength of the relationship and prioritize the action items more accurately. Future research can also run regression analysis to find the correlation between socio-demographics and the relationship of the variables. Finally, this thesis shows that the success of green mobility in Indonesia will depend not only on infrastructure and policy but also on how well ride-hailing platforms like Gojek understand and activate consumer motivation.

REFERENCES

- Aritenang, A. F. (2024). The crucial role of motorcycle-based ride-hailing among commuters: The case of Jakarta and Bandung metropolitan areas. *Journal of Public Transportation*, 26, 100082. <https://doi.org/10.1016/j.jpubtr.2024.100082>
- Christie, Y. G. (2024, February 2). Strategy formulation to increase user intention to use electric ride hailing service in Indonesia. *Asian Journal of Engineering, Social, and Health*, 3(2).

- Intergovernmental Panel on Climate Change. (2021, January 31). Summary for policymakers (p. 32). <https://doi.org/10.1017/9781009157896.001>
- Korlantas Polri. (2025, April 18). Jumlah data kendaraan per polda. Electronic Registration Identification. Retrieved April 19, 2025, from <http://rc.korlantas.polri.go.id:8900/eri2017/laprekappolda.php>
- Ly, B. (2025). Evaluating the adoption of ride-hailing services in emerging markets. Research in Transportation Business & Management, 60, 101381. <https://doi.org/10.1016/j.rtbm.2025.101381>
- NASA. (2023, June 6). Carbon dioxide | Vital signs – Climate change: Vital signs of the planet. Climate Change. Retrieved April 19, 2025, from <https://climate.nasa.gov/vital-signs/carbon-dioxide/?intent=121>
- Pasha, R. F., & Yeung, K. (2024, November 8). Why are many Jakartans still hesitant to use public transport? Indonesia Expat. <https://indonesiaexpat.id/outreach/observations/why-are-many-jakartans-still-hesitant-to-use-public-transport/>
- Pezoa, R., Grange, L. d., & Troncoso, R. (2025). Paying to depollute: The case of electric ride-hailing. Resource and Energy Economics, 82, 101478. <https://doi.org/10.1016/j.reseneeco.2025.101478>
- Sheldon, T. L., & Dua, R. (2024, January 1). Consumer preferences for ride-hailing: Barriers to an autonomous, shared, and electric future. Journal of Cleaner Production, 434, 140251. <https://doi.org/10.1016/j.jclepro.2023.140251>
- Sunitiyoso, Y., Siallagan, M., & Novani, S. (2023, September 15). Ride hailing industry 2023.
- UNEP. (2024, October 2). Cities and climate change. United Nations Environment Programme. Retrieved April 19, 2025, from <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities-and-climate-change>
- Xu, Y., Ling, L., Wu, J., & Xu, S. (2024). On-demand ride-hailing platforms under green mobility: Pricing strategies and government regulation. Transportation Research Part E: Logistics and Transportation Review, 189, 103650. <https://doi.org/10.1016/j.tre.2024.103650>