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Unlocking Ride-Sharing's Potential in Birendranagar, Surkhet, Nepal

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Abstract

This paper investigates the opportunities of ride-sharing in Birendranagar, a semi-urban city of Nepal, where transportation is a problem. A quantitative design was used whereby structured questionnaires were employed to collect data from 168 residents and stakeholders and analyzed with correlation and multiple regression. The study measures the effects of technology, education, and security on adoption of ride-sharing. Results indicate the presence of strong positive correlation of ride-sharing opportunities and technology as well as security, and education does not have any significant effect. The results of regression analysis reveal & security to be the most important predictor, and technology has a minor effect. According to the model, Beyond the data, other hidden variables continue to influence whether the technology will be adopted. Security, such as physical security, data security, and trust, which are the central focus of the study, plays a key role in the enhancement of ride-sharing in new urban locations, which can be applied practically in terms of policy formulation and service development.

Keywords: ride-sharing, security, technology, sustainability

Introduction

Urban mobility systems in developing nations are becoming stricter following the rapid urbanization, population growth, congestion, and deficient public transportation facilities (Chalermpong et al., 2023). The capital of Karnali Province, Birendranagar, which is the largest city in western Nepal, can be an example of these problems. As per the national census conducted in 2021, Birendranagar Municipality has a population of about 153,863 and it has undergone massive urbanization due to in-migration and social economic change (Dhakal, 2025). Even though this city is strategically positioned as a large trade center stationed along the Ratna Highway and Karnali Highway, the city has poor public transportation network in terms of lower connection, infrequency, and lack of coverage. Such gaps limit economic inclusion, lower access to work and services, and are disproportionately applicable to vulnerable groups, especially women and low-income residents (World Bank, 2025).

To address this context of urban mobility disparities, ride-sharing services or ride-hailing or transportation network companies (TNCs) have come into place as a technology-based response to the conventional means of transport. These applications rely on matching algorithms and smartphone applications to match passengers and drivers to provide an option of on-demand mobility solutions (Chalermpong et al., 2023). Ride-sharing service is experiencing a rise in consumer acceptance and market potential in Nepal. The fact that Yango, a ride-sharing service with its headquarters in Dubai, was launched in the Kathmandu Valley in May 2025 and offered affordable pricing frameworks proves the fact that such amenities are becoming

more of a viable tool in the South Asian context (Yango, 2025). Nepal-wide, the ride-sharing industry has over 125,000 riders and about one million users, which means that there is a significant need to have other mobility alternatives (Online Khabar, 2025).

Ride-sharing services have a wider socio-economic impact besides enhancing the availability of transport. Shared mobility services can also benefit areas where official transport services are insufficient, increase first- and last-mile connectivity, and augment existing transport networks (GIZ, 2021). Ride-sharing has opportunities in secondary cities such as Birendranagar to decrease the reliance on the individual car ownership, increase access to job opportunities, and contribute to the inclusion of the economy. Research has shown that shared mobility services have the potential to make more jobs available and lower the perceived need to own a car, resulting in more sustainable urban transport systems (Juniper Research, 2025). Moreover, ride-sharing platforms can systematize parts of the informal transport sector, facilitate digitalization, and create an income opportunity to drivers and small-scale entrepreneurs (ITDP, 2024).

Nevertheless, the growth of ride-sharing services in the realities of developing countries has serious structural and contextual limitations. Poor penetration of smartphones, poor digital literacy, informal employment systems, and poor regulatory frameworks are significant barriers to equal adoption. Studies of developing economies like Mexico suggest one of the main conflicts, namely, even though ride-sharing can provide drivers with flexibility and income, it frequently gives rise to precarious employment, which is defined by the lack of income stability and social security, as well as weak labor rights (Rosenblat & Stark, 2016). Adoption also depends on cultural factors like the issue of trust, safety, the need to use digital payments, and the need to exclude other populations that do not have access to smartphones or formal banking systems (Kamargianni and Matyas, 2017).

Equity in all aspects of genders and access is especially an issue of concern. South Asian evidence suggests that women and the low-income group are disproportionately restricted in mobility because of safety concerns, coverage of services, and technology (Leavitt and Onyango, 2022). The mobility of women is intricately connected to their economic activity, education, and home duties, but women are also underrepresented as users and providers on a ride-sharing platform (World Bank, 2024). The current obstacles to movement in the public, including harassment, infrastructural issues, and lack of lighting, are usually enhanced in the digital mobility system by the issue of platform safety, trust, and accessibility (World Bank, 2025).

Ride-sharing in South Asia has an unequal and dynamic regulatory environment. Email Nepal still exists in a grey area of legal regulation of TNCs with little control and standardized rules of conduct, whereas nations like Singapore, Indonesia, and the Philippines have recognized formal regulatory approaches to TNCs (Valoriser Consultants, 2021; OECD, 2023). This regulatory uncertainty makes innovation and fast market entry easy and also puts drivers and passengers at risk of safety, employment exploitation, and unfair competition (Veretennikova and Selezneva, 2023). Therefore, to address the urgent need to develop balanced innovation-social protection policy, empirical studies are urgently required.

Against this background, the current attempts of Birendranagar Municipality to prepare an Integrated Urban Development Plan (IUDP) and a Sustainable Urban Mobility Plan (SUMP) and the recent Nepal experience with the growth of ride-sharing platforms give a timely reason to research how ride-sharing platforms can enhance sustainable and inclusive urban mobility in the emerging secondary cities (GIZ, 2023).

Literature Review

Ride-sharing sites have been adopted and have fundamentally challenged the urban mobility systems especially in the developing economies where traditional transport infrastructure is still not adequate. It is thus important to understand what drives consumer adoption intentions in order to be able to design effective mobility policies and platform strategies. This literature review summarizes previous studies on the adoption of ride-sharing with special emphasis on education, technology, and security as some of the primary factors that influence the future of ride-sharing services in the developing cities like Birendranagar (Timilsena et al. 2025).

Conceptual Framework and Theoretical Foundations.

Technology Acceptance Model (TAM) is a framework of study that was first presented by Davis (1989) and helps to provide the background of how individuals evaluate and adopt new technologies. TAM assumes that the use of perceived ease of use and perceived usefulness are the most influential factors, which define whether a person adopts a technology (Davis et al., 1989). Nonetheless, scholars have continued to expand this concept through the addition of external factors like perceived risk, trust, social influence, and enabling conditions in explaining the adoption behavior in particular settings (Venkatesh and Davis, 2000). Adaptations of TAM as applied to ride-sharing situations in the new era incorporate other constructs such as security perception, demographics, and institutional facilitators (Chalermpong et al., 2023).

Theory of Planned Behavior (TPB) as proposed by Ajzen (1991) is based on the TAM and focuses on the attitudes, subjective norms, and perceived behavioral control to instigate behavioral intention. Research in the adoption of ride-sharing in emerging economies has been able to incorporate TAM an4d TPB to offer a more detailed insight into the consumer decision-making process (Wardhana et al., 2023). These unified frameworks allow scholars to test the interaction of individual-level determinants, such as education and perceptions of risk with contextual determinants, such as technological infrastructure and regulatory environments, to influence the intentions to adopt ride-sharing (Tirachini, A. 2020).

Education

Educational attainment is also a key factor that determines the capability and readiness of people to embrace technology-enabled services (Rogers, 2003; Riddell, 2013), and technological self-efficacy and digital literacy dictate the ability of users to learn and use smartphone-based platforms (Venkatesh et al., 2012; Van Dijk, 2020). The reliability, safety, and risk perception of a platform also influence user trust and behavioral intention to use such services in the framework of ride-sharing adoption (Kamargianni and Matyas, 2017; Rosenblat and Stark, 2016).

The trend of knowledge and skills needed in the effective use of digital technologies is an essential aspect of the education technology adoption relationship (Ng, 2012). In developing economies, the studies have found that low levels of digital literacy are a considerable hindrance to the uptake of the ride-sharing system, especially in older adults and low-income earners (Ariyanti et al., 2025). Digital literacy was found to be a statistically significant predictor of the use of ride-sharing applications by taxi drivers in China, which supports the evidence that the acquisition of technological skills is conditional on the presence of inherent socioeconomic inequality and education level (Liu et al., 2018). In the same manner, a study of ride-hailing apps, such as Pathao and Uber, conducted in Bangladesh revealed that the level of education

has a direct impact on the confidence of users interacting with the app and the perceived usefulness (Rahman et al., 2024).

The empirical research on the patterns of ride-sharing adoption demonstrates the existence of dramatic educational slopes. Over 55 percent of Americans who have a bachelor's degree or above have used ride-hailing services. Conversely, the same is true of only 20% of high school diploma or less holders (Pew Research Center, 2019). Education gradient continues to develop in emerging economies; research in Southeast Asia and South Asia has repeatedly recorded an increase in the adoption of ride-sharing by people with tertiary education (Wardhana et al., 2023). Education does not only help to achieve technical competence but also understanding of how things work in terms of pricing, safety, and payment systems which helps to decrease the cognitive barriers to using the platform.

H1: *There is a significant positive relationship between the education level of people and the prospects of ride-sharing businesses.*

Technology

Technology has a major influence in changing the uptake of the ride-sharing services, and its infrastructure and availability are the key to the service acceptance by the users. The Technology Acceptance Model (TAM) suggests that perceived ease of use and perceived usefulness are two basic factors that can predict willingness to utilise a new technology in the future (Venkatesh et al., 2022). Under the scope of ride-sharing, the technological aspects, including the existence of smooth app navigation and trustworthy payment systems, have a great influence on the choice of users to accept them. The recent researches underline that users tend to use ride-hailing services more often when they see technology as both effective and user-friendly (Gao et al., 2023). This points to the importance of technological infrastructure in improving the user experience and spurring the popularity of these services.

Research indicates that technology, economic, and infrastructural variables have a significant impact on the adoption of ride-hailing and shared mobility services, and the accessibility of technologies (mobile applications and digital platforms) plays a central role in the adoption process Ly, B. (2025). With references to the Technology Acceptance Model, perceived usefulness and ease of use are critical in terms of intention to adopt new technologies (Tarhini et al., 2021). In the case of ride-sharing products, perceived usefulness represents subjective perceptions among users existing that the platform will increase their transportation efficiency and transportation costs whereas perceived ease of use indicates the degree to which users believe that the platform is user-friendly and does not require significant effort to navigate (Venkatesh & Davis, 2000).

Bashir et al., (2025) opined that the high levels of technology utilization in the ride-sharing platforms directly affect adoption in various ways. The study indicates that complex technologies such as artificial intelligence to optimize the routes, real-time tracking system, and algorithmic ride-matching can improve the user experience and perception of the quality of service. The prospective cohort study on the adoption of ride-sharing in Bangladesh revealed that the perceived usefulness of ride-sharing applications turned out to be the most significant predictor of behavioral intention in the use of such services, and the magnitude of effects was much larger than that of other variables in the model (Rahman et al., 2024). In the same manner, studies about the adoption of ride-hailing in India also reported that the perception of usefulness has a direct impact on behavioral intention due to the formation of attitude (Maruf and Matin, 2022).

The access to technology includes the availability of devices and the quality of digital infrastructure. According to studies in Southeast Asia, the low level of smartphone penetration and insufficient internet connectivity are the major obstacles to the adoption of ride sharing, especially in the periphery regions and

low-income groups (Ariyanti et al., 2025). The digital divide exists on two scales: first, the potential users cannot use it because of the absence of both devices and infrastructure, and second, technological illiteracy does not allow the potential users to use these devices effectively even in case of their access (Liu et al., 2018). Studies in the developing economies show that technology accessibility and digital competence interfere between socioeconomic status and ride-sharing adoption (Liu et al., 2018).

Stamate et al., (2024) suggested user-centric technology design implementation has a significant effect on the adoption intentions. Attributes of a platform that increase the perceived ease of use such as streamlined registration mechanisms, easy to use navigation interfaces and clear pricing structures directly lead to adoption intentions (Maruf & Matin, 2022). On the other hand, the cumbersome verification processes that need a lot of paperwork or a complicated digital process put some obstacles which are especially seen with users who lack technological knowledge (Ariyanti et al., 2025).

H2: *Technology has a significant positive effect on the prospects of ride-sharing businesses.*

Security

Safety concerns work in various dimensions (Maruf and Matin, 2022). The passenger safety will include personal protection by drivers, the possibility of crimes during rides (theft, assault, harassment), and information privacy related to the collection of personal data. Evidence of African cities shows that safety issues always become the greatest impediment to the adoption and use of ride-sharing where the non-users refer to personal safety as the major factor in not using the services (Mageto, 2025). The increased sense of safety affects women and young people, specifically, and research has shown that often extra safety guarantees are sought by individuals who wish to use the services of ride sharing (Wardhana et al., 2023).

Perceived security affects individuals' intentions to adopt ride-sharing services primarily through trust in service providers, as higher trust reduces perceived risk and supports usage decisions, especially in the early stages of platform adoption when users lack prior experience (Hawlitschek et al., 2018). High-tech features, such as biometric authentication, in-flight tracking, background screening of drivers, and SOS buttons, enhance the sense of security and develop trust in users (LISNR, 2024).

The regulatory and institutional systems have a great impact on the perception of security and adoption intentions. The lack of legal regulatory control over ride-sharing in Nepal leaves a legal grey area that might undermine the trust of users in the platform safety features and driver responsibility systems (Valoriser Consultants, 2021). Studies in the established markets where regulatory frameworks require extensive background checking and safety measures have shown that the formal security standards have a significant positive influence on user confidence and adoption intentions (Veriff, 2025).

The combination of gender and cultural norms, as well as security issues, is another factor that makes the implementation patterns complicated. The issue of safety is complicated in South Asia because women are susceptible to safety risks when adopting ride-sharing and are limited by cultural choices that do not permit traveling alone with strangers (Leavitt and Onyango, 2022). The research records that the choice of adoption by women is strongly affected by the perceived safety precautions, as well as the presence of gender-sensitive facilities like same-gender driver option and emergency response procedures (Wardhana et al., 2023).

H3: *Security has a significant positive effect on the prospects of ride-sharing businesses.*

Interactive implications on Ride-Sharing Perspectives.

Although education, technology, and security are independent dimensions that affect the ride-sharing adoption, there is a growing empirical evidence that there are interactive effects among these variables (Ly,

2025). Educated people have more ability to assess security claims and know technology characteristics, which implies that educational attainment might mediate the correlation between technological accessibility/security and adoption intentions. Likewise, the level of technological literacy that is partially shaped by the level of education allows people to overcome the complicated security checks and enjoy platform safety options (Mageto & Luke, 2025).

The studies of Southeast Asian ride-sharing markets prove the interaction of demographic variables, education, age, income, and urbanization to determine adoption possibilities (Wardhana et al., 2023). High income, urban, and young people have shown to be the most consistent in their adoption rates of ride-sharing across the developing economies, indicating that education, access to technologies, and perceptions of security combine to determine adoption (Rahman et al., 2024). On the other hand, the less-educated, older, rural, and less-technological groups that have an increased risk of security issues show significantly lower adoption rates (Pew Research Center, 2019).

Research Gaps

Although extensive reports have been done on the adoption of ride-sharing in developed and big metropolis, there is limited research on the secondary cities of the developing countries. Shaheen et al., (2019) Birendranagar is a unique situation with a high rate of urbanization, inefficient movement infrastructure, increased internet penetration, and poor regulation systems and cultural determinants of movement patterns. Interplay of education, technology and security could vary significantly with the results in Kathmandu Valley or other large cities of Southeast Asia.

Moreover, the gender aspects of adoption need to be paid certain attention in the case of Birendranagar. According to South Asian studies, the use of ride-sharing services by women is limited by enhanced safety anxieties and cultural values, which indicate that security interventions to the female consumers could be of special significance to inclusive market building (Leavitt and Onyango, 2022).

Methodology

The research design used in this quantitative study was both descriptive and inferential research designs to investigate the factors that affected the adoption of ride-sharing in Birendranagar. Each respondent was asked to fill the questionnaires that contained five-point Likert scales to provide data (N=168). The convenience and purposive methods of sampling ensured the representation of the residents, potential customers, and important stakeholders (Palinkas et al., 2015). The SPSS software made it possible to conduct a detailed analysis of the data with both descriptive statistics to define the respondent demographics and inferential statistics to test the hypothesized relationships between education, technology, security, and the ride-sharing adoption prospects (SPSS Analysis, 2023; DataAnalysis.ie, 2025).

Result

Validity and reliability

Reliability is the internal consistency of the items of one variable. It describes the relationship between one to another. 0.5 is the lowest value that will be tested to test the alpha of Cronbach.

Table 1
Reliability Tests

Variables	Cronbach's Alpha
T	0.834
E	0.859
S	0.792
PRS	0.864

The values of Cronbachs alpha of each variable exceed the value of 0.5 demonstrates that whole variables are consistent and trustworthy to be used in any statistical test.

Correlation analysis

Table 2
Correlation Matrix between Independent Variables and Dependent Variables

	PRS	T	E	I	S
PRS	1				
T	.273**	1			
E	.172	.230*	1		
S	.292**	.264**	.026	-.091	1

**. Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

The table above identifies correlation analysis of various variables that will be used in this study. The Technology has the significance of 0.01 level positive relationship between prospects of ride sharing business and Technology ($r = 0.273$, $p < 0.01$), which depicts a moderate positive relationship between technology and prospects of ride sharing.

There is a positive and statistically insignificant relationship between the prospects of ride sharing business and the Education ($r = 0.172$, $p > 0.05$), which indicates weak positive relationship which is not strong enough to conclude that there is meaningful relationship.

Security has a significant positive correlation with the prospects of ride sharing business at the 0.01 level ($r = 0.292$, $p < 0.01$) which indicates the presence of a moderate positive relationship between security and the prospects of ride sharing business.

The correlation analysis has shown that among the independent variables, technology and security exhibit statistically significant and moderate positive correlation with the prospects of the ride-sharing business, meaning that the better these aspects are, the higher the growth and acceptance of such services. Education has weak positive correlation but not significant implying less influence. On the same note, infrastructure portrays a very negative and inconsequential correlation with the opportunities presented by ride-sharing, which means that it might not be one of the main determinants of its success within the framework of this research.

Regression Analysis

To determine the effect of independent variables (Technology-T, Education-E, Security-S) on the dependent variable (Prospects of ride sharing business -PRS). The regression analysis has been performed as follows:

Table 3

Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.492a	.190	.181	.6098

a. Predictors: (Constant), T, E, S

The table above presents the findings of multiple regression analyses. Here, the adjusted R^2 is 0.181. It implies that the independent variables explain 18.1 percent of the prospects of ride sharing business. Nevertheless, the probability of explain on prospects of ride sharing business is 86.8 percent because of other unknown factors.

Table 4

ANOVA of Independent Variable and Prospects of ride sharing business

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.296	5	1.459	4.323	.001b
	Residual	35.104	104	.338		
	Total	42.400	109			

a. Dependent Variable: Prospects of ride sharing business (PRS)

b. Predictors: (Constant), T, E, S

The ANOVA test shows that the overall regression model including technology, education, infrastructure, and security as their predictors are statistically significant in their explanation of the fluctuations in the prospects of the ride sharing business ($F = 4.323$, $p = 0.001$). The model indicates that the combination of these independent variables makes a significant contribution to the prediction of the dependent variable with a significance level that is much less than 0.05. The model depicts a part of the variance in PRS (Prospects of Ride Sharing) as was illustrated in the regression sum of squares (7.296) versus the total sum of squares (42.400) illustrating the group effect of the predictors.

Table 5

Coefficient of Multiple Regression Analysis

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.830	.197		4.218	.000
	T	.145	.087	.163	1.674	.097
	E	.049	.054	.088	.902	.369
	S	.148	.061	.229	2.438	.016

a. Dependent Variable: PRS

The multiple regression analysis is pointed out by Table 5. Technology-T, Education-E, Security-S is an independent variable on the dependent variable (Prospects of ride sharing business -PRS).

Technology (T) (B = 0.145, Beta = 0.163, p = 0.097): Even though the technology displayed statistically significant correlation with the prospects of ride sharing in the bivariate analysis, the regression coefficient of technology does not have statistically significant value ($p > 0.05$). The positive non-standardized coefficient indicates that the impact of technology on the prospects of ride-sharing can be positive; nevertheless, the effect of technology as a single variable is not so strong that it can be used as an important predictor when other variables are taken into account in the model.

Education (E) (B = 0.049, Beta = 0.088, p = 0.369): The regression coefficient of education is positive and non significant implying that although there may be some relationship between it and the prospects of ride-sharing, it is weak and will not be statistically significant when used in combination with other variables. This implies that education itself is not a very strong predictor of the future of ride-sharing in this respect.

Security (S) (B = 0.148, Beta = 0.229, p = 0.016): The only variable in the model that has positive statistically significant regression coefficient ($p < 0.05$) is security, which means that it is a significant predictor of the prospects of ride-sharing. The fact that B is a positive number and that Beta is rather large (and standardized) would indicate that increases in perceived or real security might boost the acceptance and increases in ride-sharing services substantially.

Table 6

Summary of Hypothesis Testing

Hypothesis	**β Value**	**p-Value**	**Result**
H1: There is a significant positive relationship between the education level of people and the prospects of prospects of ride-sharing businesses.	0.049	0.369	**Not Supported**
H2: Technology has a significant positive effect on the prospects of ride-sharing businesses.	0.145	0.097	**Not Supported**
H3: Security has a significant positive effect on the prospects of ride-sharing businesses.	0.148	0.016	**Supported**

The Hypothesis Testing results show a very distinct difference between the factors that are affecting Ride-Sharing prospects. The Education Level (H1), and the Technology (H2) did not meet the level of statistical significance with p values of .369 and .097, respectively each above the .05 standard; however, Security (H3) was found to be a statistically significant predictor with a $\beta = .148$, and $p = .016$. Therefore, it can be concluded that, for this particular study, safety/protective issues have a strong positive impact on the prospects of ride-sharing businesses. Therefore, it appears that for this particular study users and stakeholders are using education demographics, and/or the technology that is used by the ride sharing service to evaluate the feasibility/viability of the ride-sharing business but they are primarily focused on safety/protection.

Finding and Discussion

Security-first solutions are important to Birendranagar because of the potential of ride-sharing. Technology opens the door; however, safety guarantees, such as a verified driver, emergency facilities, and prompt customer service are of great importance to users. Companies that disregard this requirement will not succeed, despite the level of technology. With the growth of semi-urban cities in Nepal, development and

adoption of safety-oriented ride-sharing models may serve to fill the transportation gaps and push economic opportunities.

Following the results of the research, the following recommendations can be offered: To ride-sharing, focus on the greater reliability of the GPS, digital payments, and other technological aspects to make the experience of using the program more comfortable and convenient, introduce awareness campaigns, especially in rural locations, to make the app more popular, and provide better security, checking the driver, and customer support to ensure that people trust the program. To policymakers, invest in the creation of parking space to overcome the major infrastructure impediment and further evolve the supportive policies in technology, infrastructure, education and security to create sustainability in the industry. To further explore, the sample in Birendranagar should be diversified (students, workers, traditional transport users) and supplement other variables such as customer satisfaction, pricing sensitivity, cultural acceptance, employment impact, competition, environmental awareness, brand trust, and government support to have more knowledge on the variables of adoption and sustainability.

References

Arthasarokar. (2024). *Supreme Court ruling in favor of Pathao*. https://arthasarokar.com/2024/12/supreme-court-ruling-in-favor-of-pathao-order-not-to-stop-ride-sharing-will-bring-it-to-legal-standards.html

Bhat, C. S. (2024). User perceptions and satisfaction levels with Pathao services in Nepal. *Journal of Urban Mobility, 11*(3), 106–116.

Chalermpong, S., Prapinit, P., & Ratanawaraha, A. (2023). Determinants of ride-hailing adoption in emerging economies: Implications for urban mobility and transport policy. *Transport Policy, 132*, 1–12. https://doi.org/10.1016/j.tranpol.2023.02.004

Chan, N. D., & Shaheen, S. A. (2012). Ridesharing in North America: Past, present, and future. *Transport Reviews, 32*(1), 93–112. https://doi.org/10.1080/01441647.2011.621557

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Dhakal, B. P. (2025). Trends and impacts of in-migration in Birendranagar Municipality, Surkhet. *Spectrum of Humanities and Social Sciences, 1*(1), 1–15. https://doi.org/10.3126/shss.v1i1.79794

Eisenmeier, S. R. J. (2023). *Ride-sharing platforms and precarious work in developing countries: Evidence from Mexico City*. Pathways for Prosperity Commission, University of Oxford.

GIZ. (2021). *Ride-hailing and mobility services in Asia: Impacts on accessibility and public transport integration*. Deutsche Gesellschaft für Internationale Zusammenarbeit.

GIZ. (2023). *Sustainable Urban Mobility Plan (SUMP) formulation for Birendranagar Municipality, Surkhet*.

Gao, Z., Zhang, X., & Sun, J. (2023). Technology factors affecting ride-sharing adoption: A comprehensive review. *Transportation Research Part A: Policy and Practice, 165*, 128–144.

Hawlitschek, F., Teubner, T., & Gimpel, H. (2018).Consumer motives for peer-to-peer sharing. Journal of Cleaner Production, 204, 144–157. https://doi.org/10.1016/j.jclepro.2018.08.32

ITDP. (2024). *Shared mobility and informal transport integration in emerging cities*. Institute for Transportation and Development Policy.

International Labour Organization. (2021). *World employment and social outlook: The role of digital labor platforms in transforming the world of work*. ILO.

Kamargianni, M., & Matyas, M. (2017). The business ecosystem of mobility-as-a-service and its adoption: A behavioral perspective. *Transportation Research Part A: Policy and Practice, 104*, 53–70. https://doi.org/10.1016/j.tra.2017.09.005

Katz, M. L., & Shapiro, C. (1985). Network externalities, competition, and compatibility. *American Economic Review, 75*(3), 424–440.

Laudon, K. C., & Traver, C. G. (2021). *E-commerce: Business, technology, society* (16th ed.). Pearson.

Lavieri, P. S., & Bhat, C. R. (2018). Modeling individuals' willingness to share trips with strangers in an autonomous vehicle future. *Transportation Research Part A: Policy and Practice, 124*, 242–261.

Ly, B. (2025). Evaluating the adoption of ride-hailing services in emerging markets. *Research in Transportation Business & Management, 60*, Article 101381. https://doi.org/10.1016/j.rtbm.2025.101381

Mageto, J., & Luke, R. (2025). Perceived risks and intention to use ride-hailing services: Insights from an emerging market. *Journal of Transport and Supply Chain Management, 19*, a1173. https://doi.org/10.4102/jtscm.v19i0.1173

Mishra, B. (2022). Risks and opportunities in ride-sharing adoption: A Kathmandu case study. *LBEF Research Journal of Science, Technology and Management, 4*(1), 15–30.

Mitropoulos, L., Kortsari, A., & Ayfantopoulou, G. (2021). A systematic literature review of ride-sharing platforms, user factors and barriers. *European Transport Research Review, 13*(1).

Nepal Economic Forum. (2023). *The gig economy and platform-based transport services in Nepal*.

Ng, W. (2012). Can we teach digital natives digital literacy? *Computers & Education, 59*(3), 1065–1078. https://doi.org/10.1016/j.compedu.2012.04.016

Riddell, W. C. (2013). The role of education in technology adoption and economic growth. *OECD Journal: Economic Studies, 2013*(1), 1–23.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Shaheen, S., & Chan, N. (2016). Mobility and the sharing economy: Potential to facilitate the first- and last-mile public transit connections. *Transportation Research Record, 2542*(1), 1–10.

Shaheen, S., Cohen, A., & Zohdy, I. (2020). *Shared mobility: Current practices and guiding principles*. U.S. Department of Transportation, Federal Highway Administration.

Sharma, D. (2022). *Ride-sharing service is now legal in Bagmati Province*. Techmandu. https://techmandu.com/ride-sharing-legal-bagmati

Singh, A. K. (2019). Challenges and opportunities of ride-sharing in developing countries. *Journal of Urban Mobility, 5*(2), 45–59.

Singh, O. P., Basnet, P., & Ojha, A. (2025). A SERVQUAL model analysis for users' satisfaction of ride sharing service in Kathmandu Valley. *Quest Journal of Management and Social Sciences, 7*(2), 504–523. https://doi.org/10.3126/qjmss.v7i2.87816

Stamate, A., Marzan, M.-D., Velciu, M., Paul, C., & Spiru, L. (2024). Advancing user-centric design and technology adoption for aging populations: A multifaceted approach. *Frontiers in Public Health, 12*, Article 1469815. https://doi.org/10.3389/fpubh.2024.1469815

Sundararajan, A. (2016). *The sharing economy: The end of employment and the rise of crowd-based capitalism*. MIT Press.

Tarhini, A., Ammar, H., & Bujari, I. (2021). A comprehensive review of the Technology Acceptance Model in the context of information systems. *Journal of Engineering Research, 24*(3), 215–234.

Timilsena, N., Darlami, R., & Ghimire, S. B. (2025). Determinants of customer's intention to use ride-hailing services in Kathmandu Valley. *International Journal of Academe and Industry Research*, *6*(1), 56-83. https://doi.org/10.53378/ijair.353151

Thapa, R. (2018). Public transportation challenges in mid-western Nepal. *Nepal Development Review*, *12*(1), 45–60.

Van Dijk, J. (2020). *The digital divide*. Polity Press.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, *36*(1), 157–178.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2022). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, *46*(1), 103–124.

Veretennikova, A. Y., & Selezneva, D. A. (2023). Development of regulatory strategies in the sharing economy: The application of game theory. *Economies*, *11*(12), 298.

World Bank. (2025). *Urban mobility and digital platforms in developing countries*. World Bank.