

Adoption of Digital Payments for Bajaj Drivers: A Classic Three-Wheeled Motorized Vehicles of Jakarta

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KEYWORDS: Payment System, Digital Transformation, Jakarta, Bajaj, Culture

ABSTRACT

Bajaj in Jakarta is more than just transportation. It is a cultural icon. Bajaj has unique design and sound have shaped Jakarta; the capital city of Indonesia identified as a cultural treasure for decades. Bajaj plays a vital role in social interaction and offers unique tourism opportunities. Preserving the Bajaj is crucial for cultural heritage, driver livelihoods, and potential environmentally friendly transportation options. However, implementing digital payments for Bajaj drivers in Jakarta faces challenges. Many drivers lack technological literacy and access to smartphones. Concerns about transaction fees, the complexity of digital systems, and the strong preference for cash hinder adoption. Overcoming these requirements comprehensive solutions, including driver training, affordable smartphone access, user-friendly systems, and addressing concerns about fees and security. This can be achieved by the collaboration of public and private sector support and the willingness of the drivers to change their tolerance to adapt with the advancement of technology. By doing so, Jakarta can modernize Bajaj transportation while preserving its cultural significance.

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Publication Date: 22 Jan-2025

DOI: [10.55677/GJEFR/08-2025-Vol02E1](https://doi.org/10.55677/GJEFR/08-2025-Vol02E1)

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INTRODUCTION

Bajaj in Jakarta holds a unique charm, captivating both locals and tourists. Their distinctive design, reminiscent of old Jakarta, evokes a sense of nostalgia. Their maneuverability allows them to navigate narrow alleys, while their affordability makes them a budget-friendly option for short trips. Riding a Bajaj offers an authentic local experience, enabling interactions with drivers and glimpses into hidden corners of the city. Moreover, despite their traditional roots, Bajaj are adapting to modern designs and features. As a relatively low-emission option compared to private vehicles, they also contribute to a more environmentally friendly transportation system. Bajaj in Jakarta offers more than just transportation; they provide unique experiences. Bajaj racing events excite automotive enthusiasts with their thrilling action. Introducing the four-wheeled vehicle caters to those seeking a more comfortable and modern ride. In essence, Bajaj in Jakarta seamlessly blends nostalgia with contemporary adaptations, offering a distinctive and engaging transportation option that reflects the city's dynamic character (Damarjati, 2017).

A Brief History of Bajaj in Jakarta. Bajaj was first introduced to Jakarta in 1975 by then-Governor Ali Sadikin as an alternative mode of public transportation. Imported from India, the unique design and maneuverability of the Bajaj quickly made it popular, especially for reaching areas inaccessible to other vehicles. **Bajaj Development in Jakarta.** The popularity of Bajaj soared, driven by their affordability and accessibility. Many drivers customize their vehicles with various accessories to attract passengers. The DKI Jakarta government implemented regulations to govern Bajaj operations, including emission tests and passenger capacity limits (Oswaldo, 2024).

Challenges and Changes. Petrol-powered Bajaj contributed to air pollution in Jakarta. The emergence of modern transportation options like Transjakarta and online motorcycle taxis posed a significant challenge. To address pollution, the government is actively promoting the use of electric Bajaj, and several companies have introduced electric Bajaj models in the city. Bajaj as a Cultural Icon. For many people in Jakarta, the Bajaj is a potent symbol of nostalgia, evoking memories of the city's past. The distinctive engine sound and the unique sights associated with Bajaj rides hold a special place in their childhood memories. Riding

a Bajaj has become a popular tourist activity, offering an authentic Jakarta experience. Bajaj also serves as a source of inspiration for artists and photographers, frequently appearing in various artistic expressions depicting the city's landscape.

Bajaj Today. Despite facing numerous challenges, the Bajaj remains an integral part of Jakarta's urban fabric. It transcends its role as mere transportation, becoming an intrinsic element of the city's identity and culture. **The Future of Bajaj.** The future of the Bajaj in Jakarta remains uncertain. Competition from modern transportation and the imperative to reduce pollution pose ongoing challenges. However, with ongoing modernization efforts and innovative solutions, it is hoped that the Bajaj can continue to thrive and adapt to the evolving needs of the city. Indonesia boasts a rich tapestry of traditional public transport, reflecting the diverse cultures across its archipelago. Among the most iconic are the Becak, a human-powered three-wheeled rickshaw, and the Andong, a horse-drawn carriage, both offering a nostalgic and eco-friendly mode of travel. In some regions, you might encounter the Cidomo, a horse-drawn cart popular in Lombok, or the Delman, like the Andong but often found in coastal areas. There are also Oplet cars, Jukung Boat, Kora-kora, Rakit, Bemo, and Bentor. These traditional modes of transport not only provide a unique travel experience but also serve as a vital link to the past, preserving a significant part of Indonesian heritage (Anjani, 2021; Putri, 2023).

The evolution of Payment Systems has advanced and all the public transport in Jakarta is forced to adjust to the digital payment system to accommodate more than 11 million citizens of Jakarta. **Digital Payment Needs in Jakarta.** As the centre of Indonesia's economy and social activities, Jakarta has high population mobility and very diverse transactions. This makes the digital payment system very crucial. Digital payments offer higher efficiency, speed, and security compared to conventional payment methods. In addition, with the rapid growth of the digital economy, people are increasingly accustomed to making transactions online. To accommodate these needs, Jakarta needs to continue developing adequate digital payment infrastructure to support economic growth and improve the community's quality of life.

Jakarta is the Capital City and Center for Digital Payment Innovation. As the nation's capital, Jakarta has an important role in encouraging the adoption of digital payment technology throughout Indonesia. This city is a barometer for other regions in terms of innovation and application of financial technology. With a large and diverse population, Jakarta is a very attractive market for digital payment service providers. Therefore, Jakarta needs to continue to innovate and create an inclusive digital payment ecosystem, so that it can be enjoyed by all levels of society.

The Evolution of Payment Systems. Payment systems have undergone constant evolution, mirroring the development of money itself. Three key factors drive this evolution: technological advancements and innovative business models, community traditions and customs, and the policies and regulations set by authorities. The earliest form of payment was the barter system, where goods were directly exchanged. However, challenges arose when individuals desired to exchange goods but couldn't agree on their value or when one party had no need for the other's goods. To overcome these limitations, humans developed commodity money. Commodities, such as salt, tea, tobacco, grains, and livestock, were chosen as they were essential for most people.

Cash and Non-Cash Payment Systems. Broadly, payment systems can be categorized into two main types: cash and non-cash. The primary distinction lies in the instruments used. Cash payment systems utilize fiat money, consisting of banknotes and coins, as the medium of exchange. In contrast, non-cash payment systems employ various instruments like cards, checks, giro bills, debit notes, and electronic money (both card-based and server-based). **Risks and Concerns on virtual currencies,** such as cryptocurrencies, are digital currencies issued by entities other than monetary authorities. They are typically acquired through mining, purchasing, or receiving as gifts or rewards.

However, owning virtual currency entails significant risks due to several factors. Firstly, there is no official governing body for these currencies. Secondly, their value is not backed by any underlying asset, leading to extreme price volatility and the potential for speculative bubbles.

Furthermore, the lack of regulation makes them susceptible to abuse, such as money laundering and financing terrorism. These risks can destabilize the financial system and harm the broader community. Indonesia has five visions of SPI (Indonesian Payment System) 2025, namely First, supporting the integration of the national digital financial economy to guarantee the function of the central bank in the process of money circulation, monetary policy, and financial system stability, as well as supporting financial inclusion. Second, supporting the digitalization of banking as the main institution in the digital financial economy through open banking and the use of digital technology and data in the financial business. Third, ensuring the interlink between Fintech and banking to avoid the risk of shadow banking through digital technology regulations, business cooperation, and company ownership. Fourth, ensuring the balance between innovation and consumer protection, integrity and stability and healthy business competition through the implementation of Know Your Customer (KYC) & Anti-Money Laundering/Combating the Financing of Terrorism, the obligation of openness for public data/information/business, and the implementation of regulatory technology (RegTech) and supervisory technology (SupTech) in reporting, regulation and supervision obligations. Fifth, ensuring national interests in the digital financial economy between countries through the obligation to process all domestic transactions domestically and cooperation between foreign and domestic organizers, by paying attention to the principle of reciprocity.

LITERATURE REVIEW

Research related to this topic highlights modern ride-hailing services in big cities. This research provides insights into the factors influencing the continued use of ride-hailing apps in Indonesia. It highlights the importance of perceived utilitarian and hedonic value as full mediators between personal innovativeness and continuance intention. Furthermore, the study emphasizes that differences in consumer behavior between metro and non-metro areas should be a key consideration for ride-hailing service providers. Ultimately, companies should focus on both user experience and functional delivery to maximize user retention (Fauzi & Sheng, 2021). There is also research about the important insights into the realities of algorithmic management in the gig economy, specifically focusing on ride-hailing drivers in Nigeria. It highlights both the benefits of flexibility and autonomy and the challenges of precarity, algorithmic control, and lack of worker protection. The study calls for the need for a re-evaluation of how the platform economy is structured in emerging economies as well as highlighting the importance of government intervention in protecting the rights of workers. It also validates labour process theory as a tool for understanding these complex dynamics (Adekoya, Mordi, Ajonbadi, & Chen, 2023).

The more general topic tends to focus on innovation. Such as a study about critical insights into how innovation is legitimized through the political games of diverse stakeholders within the ride-hailing industry of emerging Asian markets. It emphasizes the importance of local context, strategic stakeholder management, and the interconnected nature of different forms of legitimacy. The research contributes to the institutional theory literature by highlighting the importance of political legitimacy and offering insights that can inform policymaking and managerial practices in this and other emerging sectors (Cheah & Koay, 2024).

The research about transportation in Indonesia provides valuable insights into the factors influencing the widespread adoption of ride-hailing services in Indonesia. It demonstrates the critical roles of perceived benefits (performance expectancy), social influence, and habitual usage. These results highlight that while ease of use and cost are factors, perceived effectiveness and social validation are more important to customer adoption once customers have had time to become familiar with the technology. This knowledge can be valuable for companies in the ride-hailing sector seeking to improve their services and strategies in Indonesia and similar developing markets (Almunawar, Anshari, & Ariff Lim, 2021).

Research provides a detailed, multi-faceted look at the complex regulatory journey of ride-hailing platforms in developing countries as follows. The use of the multi-level perspective is especially helpful in understanding the different factors at play, from macro trends to the interactions between different actors. The study makes it clear that regulations are not static but must constantly adapt to the unique dynamics and challenges of digital platforms (Verma, Ilavarasan, & Kar, 2024).

The study concludes about payment system, there is about domestic payment networks are a crucial component of a nation's financial infrastructure and that they play a crucial role in promoting financial inclusion, national sovereignty, and data privacy. Governments should recognize the strategic importance of these networks and invest in their development to mitigate their overreliance on multinational corporations. Through strategic partnerships and continuous innovation, domestic networks can contribute to a more balanced and secure global financial system (Aysan, Ozturk, & Selim, 2025). This study offers a significant contribution by creating a comprehensive and empirically derived framework for m-payment research. The framework provides a valuable tool for scholars and practitioners, helping them navigate the complexity of m-payment by offering a structured understanding of the key dimensions and a practical approach for future studies in the field. The work recognizes and integrates insights regarding changes in the m-payment space, including the impact of the COVID-19 pandemic (Leong, Hew, Wong, & Lin, 2022).

METHODOLOGY

Descriptive research methods that use data from interviews, observations, and FGDs are qualitative approaches that aim to describe a phenomenon or event in depth. This method is very useful for understanding the meaning, perceptions, and experiences of research subjects in more depth. In the interview stage, researchers directly interact with respondents to explore more detailed information. The questions asked can be open or closed, depending on the purpose of the study. Interviews allow researchers to explore a deeper understanding of the perspectives and experiences of the subjects. In the observation stage, the researchers involve direct observation of a phenomenon or behavior. Researchers can conduct observations in a participatory or non-participatory manner. Observation allows researchers to collect more objective data and see firsthand how the phenomenon occurs in the actual context (Sekaran & Bougie, 2016). In the Focus Group Discussion (FGD) researchers involved a small number of purposively selected participants that consisted of users of the Bajaj in Jakarta. In FGDs, researchers facilitate discussions to explore the opinions, perceptions, and experiences of the group on a particular topic (Hair, Pge, & Brunsveld, 2019). FGDs are very useful for understanding group dynamics and social interactions. This qualitative research collects meanings, focuses on concept or phenomenon, brings values to the study, validates information, interprets data, and proposes solution of a problem (Creswell & Creswell, 2023).

RESULTS AND DISCUSSION

Bajaj in Jakarta is more than just a means of transportation. It is a symbol of the city's identity, cultural heritage, and interesting tourism potential. Therefore, efforts to preserve Bajaj need to be continued so that future generations can continue to enjoy the uniqueness and charm of this legendary vehicle. Bajaj Jakarta is More Than Just Transportation. Bajaj in Jakarta is not just a means of transportation, but a cultural icon rich in history. Its unique design, distinctive engine sound, and flexibility in reaching narrow streets have been the hallmarks of this city for decades. Bajaj has become an inseparable part of the daily lives of the people of Jakarta, connecting various corners of the city and being a silent witness to the changing times.

Priceless Cultural Heritage. As a cultural heritage site, Bajaj has high historical and social value. The presence of Bajaj reminds us of Jakarta in the past when this city was still developing rapidly. In addition, Bajaj is also a unique means of social interaction. Passengers can interact directly with the driver, share stories, and feel the familiarity typical of the people of Jakarta. **Attractive Tourism Potential.** Bajaj also has great potential as a tourist attraction. Many foreign tourists are curious to try riding a Bajaj to feel the sensation of driving on the chaotic but lively streets of Jakarta. With a little creative touch, Bajaj can be used as a unique tourist facility, for example by providing special tourist routes or decorating Bajaj with Betawi ornaments. **Preservation for the Future.** Seeing the various values contained in it, preserving the Bajaj becomes very important. By preserving Bajaj, we not only preserve cultural heritage but also support the survival of Bajaj drivers. In addition, the existence of Bajaj can also be an environmentally friendly transportation alternative, especially if developed into an electric Bajaj.

Jakarta offers a variety of increasingly modern and integrated public transportation options. Some of the main modes of transportation that you can find in Jakarta include Transjakarta, MRT Jakarta, LRT Jakarta, KRL Commuterline, and Mikrotrans. Transjakarta is a double-decker bus that serves major routes in the city. MRT Jakarta and LRT Jakarta are fast trains that connect various strategic areas. KRL Commuterline serves medium-to-long-distance trips in the Jabodetabek area. Meanwhile, Mikrotrans is a smaller and more flexible urban public transportation. In addition, there are also other modes of transportation such as city buses, public transportation, and online taxis that complement the mobility options in Jakarta. With these various options, the people of Jakarta are increasingly easy and comfortable in their daily activities. Amid this increasingly tight competition, the existence of Bajaj as a traditional transportation faces significant challenges. Bajaj, which used to be the prima donna of public transportation, now must adapt to the changing times. Bajaj's advantage in reaching narrow roads and small alleys is starting to be eroded by the presence of more modern and efficient public transportation. **The Need for Adaptation and Innovation.** To remain relevant and competitive, Bajaj needs to make several adjustments. Some efforts that can be made include improving the quality of service. Bajaj needs to provide better services, such as vehicle cleanliness, passenger comfort, and friendly drivers.

Integration with other transportation systems, where Bajaj can work with other transportation operators to create a seamless integration system. This will make it easier for passengers to move from one mode of transportation to another. The use of technology is also needed, such as booking applications, digital payments, and GPS tracking can increase the efficiency and attractiveness of Bajaj in the eyes of passengers. As well as the development of special routes. As the integrated transportation systems in Jakarta, such as MRT, LRT, and TransJakarta use non-cash payment systems, the presence of Bajaj as a traditional mode of transportation is increasingly under pressure to adapt. Digital payments are no longer just an option, but a necessity so that Bajaj can compete and be relevant amidst the modernization of public transportation. Indonesia has experienced a significant shift from cash to non-cash transactions. Various digital payment methods are increasingly popular and make it easier for people to make transactions. Some non-cash payment systems that are commonly used in Indonesia. Debit and credit cards, the most common method where a physical card is used to make payments. E-wallet, digital wallet applications such as GoPay, OVO, and Dana allow users to store money digitally and make payments via smartphone. QRIS (Quick Response Code Indonesian Standard), a QR code standard for payments that can be used in various payment applications. Bank transfer, electronic transfer of funds between bank accounts. Virtual account, temporary account number used for online payments. The digital payment mechanism also varies from tam, swipe, and wireless method to make easier way compared to the cash payment.

Digital payment systems are still a challenge for the Bajaj driver in Jakarta. The reasons why Bajaj drivers in Jakarta hesitate in using digital payments are due to their limited technological literacy. Many drivers lack the necessary knowledge and skills to operate smartphones and utilize digital payment applications. This is compounded by the fact that many may not possess smartphones capable of supporting these applications. Furthermore, the perceived complexity of digital payments, including potential transaction fees, deters drivers who are accustomed to the simplicity and immediacy of cash transactions.

Fear and mistrust also play a role in the reluctance to adopt digital payments. Concerns about the security of digital transactions and the potential for fraud are prevalent among some drivers. Additionally, the habit of cash payments is deeply ingrained in the daily lives of both drivers and passengers. This entrenched preference for cash creates a strong resistance to change, making the transition to digital payments seem unnecessary and challenging. It does not mean that fraud cannot be avoided. Millennials, known for their investment enthusiasm, are particularly vulnerable to fraud. To safeguard this demographic, a collaborative effort between industry associations, regulatory bodies, and society is crucial. This involves proactive awareness of evolving fraud tactics, leveraging technological advancements to enhance security measures, and continuously assessing the possibility of reward

and punishment mechanisms of fintech services, ensuring appropriate rewards for legitimate investments while implementing strict penalties for fraudulent activities (Amelia & Amal, 2023).

Suggestions for Bajaj drivers in Jakarta who want to adopt digital payments are mentioned in appendix 1. Young Bajaj drivers are divided into the issue of digital payments, with some hesitant due to unfamiliarity with technology and concerns about technical difficulties. While they recognize the potential benefits of reduced errors and increased convenience, the requirement for minimum withdrawal amounts in digital payments is a deterrent. Older drivers, on the other hand, are generally less receptive to digital payments due to their limited technological literacy and lack of access to modern smartphones.

To encourage Bajaj drivers to adopt digital payments, it is recommended to highlight the various benefits, such as reduced calculation errors, faster transaction times, and easier income tracking. Additionally, emphasizing the potential to reach a wider customer base, particularly younger generations who prefer non-cash transactions, can be persuasive. Addressing concerns about familiarity with technology and technical difficulties through training and support can also help overcome resistance. Implementing digital payments on Bajaj transportation in Jakarta presents both challenges and opportunities. While it offers potential benefits like increased efficiency and transparency, significant hurdles remain. Many Bajaj drivers lack the technological literacy and access to smartphones necessary for utilizing digital platforms. Concerns about transaction fees, the perceived complexity of digital systems, and the established preference for cash transactions among both drivers and passengers pose significant barriers to adoption.

Overcoming these challenges requires a multifaceted approach. This includes targeted training programs to educate drivers on the benefits and usage of digital payment systems, ensuring affordable and accessible smartphone options for drivers, and simplifying the digital payment process to make it more user-friendly. Furthermore, addressing concerns about transaction fees and security through transparent and competitive pricing models is crucial. By addressing these issues and fostering a supportive environment for digital payment adoption, Jakarta can modernize its Bajaj transportation system and enhance the experience for both drivers and passengers.

CONCLUSION

Bajaj in Jakarta transcends its role as mere transportation, serving as a cultural icon deeply intertwined with the city's history. Its distinctive design, characteristic sound, and agility in navigating narrow lanes have been defining features of the urban landscape for generations. More than just a mode of transit, Bajaj has become an integral part of daily life, connecting neighbourhoods and bearing witness to the city's evolution. As a cultural heritage, the Bajaj carries significant historical and social value, reminding us of Jakarta's past and fostering unique social interactions between passengers and drivers. Recognizing its tourism potential, Bajaj can be creatively leveraged to offer unique experiences for visitors, such as themed routes or traditional Betawi decorations. To safeguard this asset, preserving Bajaj is crucial, not only for cultural heritage but also for the livelihoods of drivers and as a potential environmentally friendly transportation option, particularly through the development of electric Bajaj models.

The payment system in Indonesia is making massive progress with the availability of QR, tap, swipe, and payment that complete conventional banking service features. Bajaj driver's adaptation to digital payment systems is a transformation that requires support from various parties. Bajaj drivers, as one of the pillars of traditional transportation, need to be equipped with adequate knowledge and skills to operate various non-cash payment methods. This adaptation process involves not only drivers, but also the government, digital payment service providers, and the community using transportation services. The government needs to provide a comprehensive training program, while digital payment providers can provide the necessary tools and technical support. The community also plays an important role by being willing to use digital payment methods and making it easy for drivers to adapt. With good collaboration, it is hoped that all parties can work together to encourage the creation of a more modern, efficient, and inclusive transportation system.

ACKNOWLEDGEMENT

The author would like to thank Perbanas Institute and Palestine Technical University as our home University.

REFERENCES

1. Adekoya, O. D., Mordi, C., Ajonbadi, H. A., & Chen, W. (2023). Implications of algorithmic management on careers and employment relationships in the gig economy – a developing country perspective. *Information Technology & People, ahead-of-print*(ahead-of-print). doi:10.1108/ITP-01-2023-0064
2. Almunawar, M. N., Anshari, M., & Ariff Lim, S. (2021). Customer acceptance of ride-hailing in Indonesia. *Journal of Science and Technology Policy Management, 12*(3), 443-462. doi:10.1108/JSTPM-09-2019-0082
3. Amelia, T. N., & Amal, A. G. S. (2023). Investment trend on millennials and fintech fraud mitigation. *Global Business & Finance Review*.
4. Anjani, A. (2021). 6 Transportasi Tradisional Indonesia, Siswa Sudah Pernah Naik? *Detik*. Retrieved from <https://www.detik.com/edu/detikpedia/d-5872306/6-transportasi-tradisional-indonesia-siswa-sudah-pernah-naik>

5. Aysan, A. F., Ozturk, O., & Selim, N. H. (2025). Local power, global reach: the rise and impact of domestic payment networks in the financial landscape. *Journal of Science and Technology Policy Management*, 16(1), 143-162. doi:10.1108/JSTPM-12-2023-0227
6. Cheah, C. W., & Koay, K. Y. (2024). The political game of innovation: evidence from the ride-hailing service industry. *European Journal of Innovation Management*, 27(2), 572-588. doi:10.1108/EJIM-03-2022-0103
7. Creswell, J. W., & Creswell, J. D. (2023). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles: SAGE.
8. Damarjati, D. (2017). Laju Bajaj Roda Tiga, dari Hindustan hingga Menjadi Ikon Jakarta. *Detik*. Retrieved from <https://news.detik.com/berita/d-3546643/laju-bajaj-roda-tiga-dari-hindustan-hingga-menjadi-ikon-jakarta>
9. Fauzi, A. A., & Sheng, M. L. (2021). Ride-hailing apps' continuance intention among different consumer groups in Indonesia: the role of personal innovativeness and perceived utilitarian and hedonic value. *Asia Pacific Journal of Marketing and Logistics*, 33(5), 1195-1219. doi:10.1108/APJML-05-2019-0332
10. Hair, J., Pge, M., & Brunsveld, N. (2019). *Essentials of Business Research Methods*. New York: Routledge.
11. Leong, L.-Y., Hew, J.-J., Wong, L.-W., & Lin, B. (2022). The past and beyond of mobile payment research: a development of the mobile payment framework. *Internet Research*, 32(6), 1757-1782. doi:10.1108/INTR-06-2021-0348
12. Oswaldo, I. G. (2024). Nasib Bajaj di Ibu Kota, Rela Angkut Sayur-Kasur Demi Bertahan Hidup. *Detik*. Retrieved from <https://finance.detik.com/berita-ekonomi-bisnis/d-7427197/nasib-bajaj-di-ibu-kota-rela-angkut-sayur-kasur-demi-bertahan-hidup>
13. Putri, T. J. (2023). Inilah 12 Alat Transportasi Tradisional Darat dan Laut di Indonesia! Sudah Pernah Naik? *Akurat Travel*. Retrieved from <https://www.akurat.co/travel/1302404550/Inilah-12-Alat-Transportasi-Tradisional-Darat-dan-Laut-di-Indonesia-Sudah-Pernah-Naik?page=2>
14. Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. New York: Wiley.
15. Verma, R. K., Ilavarasan, P. V., & Kar, A. K. (2024). Evolution of ride-hailing platforms regulations in India: a multi-level perspective. *Digital Policy, Regulation and Governance*, 26(3), 337-356. doi:10.1108/DPRG-06-2023-0086

Appendix 1. Summary of Observation on Bajaj Driver in Jakarta

Question/ Response	Explain the reasons why Bajaj in Jakarta does not use digital payments.	Suggest to Bajaj drivers in Jakarta to use digital payment, explain the conveniences they will get, and then describe their response (reject, agree, or doubt).	In your general opinion, is there any hope to implement digital payment on Bajaj transportation mode in Jakarta? Explain the reasons.
1	1. Bajaj drivers will bear transaction costs when using digital payment services such as m-banking or E-wallet, so it will reduce their daily income. 2. Bajaj drivers usually get an uncertain daily income ranging from 100 thousand - 250 thousand in rupiah, so they only expect cash for daily needs. Digital payments that involve the process of withdrawing balances from digital payment services can slow down their income flow. 3. Many Bajaj drivers do not yet have access to or do not have smartphones (cell phones) that support digital payments. 4. Bajaj drivers are more comfortable using cash because it is simpler and instant without having to think about transaction costs or technical difficulties.	Doubtful	There are reasons: 1. Technology is growing rapidly from year to year, residents living in Jakarta are starting to get used to and comfortable using digital payment services. If Bajaj does not want to be abandoned by consumers or users, they must start using digital payment services in transacting with consumers. 2. Digital Payment is more practical and safer. Bajaj drivers do not need to worry about counterfeit money, lost cash and change for passengers.
2	Based on the information my group obtained, not all Bajaj drivers have smartphones to make digital payments considering their income is not that much, because the limited number of smartphones makes them not understand and less confident in using digital payments.	1. Young Bajaj drivers: Hesitant, between agreeing because it avoids counterfeit money fraud, and making it easier without having to bother with change and disagreeing because of the rules for withdrawing minimum money in digital payments. 2. Old Bajaj drivers: Less agree, because many old Bajaj drivers cannot keep up with technological developments and cannot use the internet. In addition, there are drivers who have limitations in having sophisticated mobile phones like today.	The hope is quite big, because more efficient transactions, and increasingly widespread technology can make digital payments easy to access in the future, getting support from the government in the form of encouraging non-cash transactions.

Question/ Response	Explain the reasons why Bajaj in Jakarta does not use digital payments.	Suggest to Bajaj drivers in Jakarta to use digital payment, explain the conveniences they will get, and then describe their response (reject, agree, or doubt).	In your general opinion, is there any hope to implement digital payment on Bajaj transportation mode in Jakarta? Explain the reasons.
3	<p>Many drivers do not yet have access or adequate knowledge of technology such as smartphones and payment applications, so they are more comfortable with cash payments which are more practical and simpler. The habit of cash payments is also deeply rooted in everyday life for both drivers and passengers. This makes the transition to digital payments feel more difficult and less urgent for most users. Lack of education and socialization on how to use digital payments is also an important factor in the transition to digital payments. Many drivers do not yet understand the benefits and how to operate this system.</p>	<p>We recommend that Bajaj drivers start considering using digital payments. With this system, they will feel various conveniences. Using digital payments can reduce the risk of errors in calculating changes, because all transactions are recorded automatically. In addition, drivers do not need to bother providing cash or change, which can speed up the transaction process and avoid minor conflicts with passengers regarding money. By using digital payments, they can also track daily income more easily and accurately, because transaction history is stored in the application. Digital payments also allow drivers to reach more passengers, especially among younger users who are used to non-cash transactions. Their response to digital payments is that they are worried that they are not familiar enough with technology or are afraid of experiencing technical difficulties when transacting. They may also consider the cash system simpler and are already used to the method. Drivers who are older or do not have smartphones that support digital payment applications may refuse on the grounds that they do not want to "bother learn new technology". They also think that the time spent on creating a digital payment system (QRIS) is better spent looking for customers.</p>	<p>We think there is still hoped to implement digital payments on Bajaj transportation in Jakarta, although it takes a lot of time and effort. With consumer behavior also starting to change, especially the younger generation who are more comfortable using non-cash payment methods because of their convenience, it can encourage drivers to adapt to the new system. With the support of various payment applications that offer promotions and incentives is also a positive factor, where drivers can gain more benefits by switching to digital payments. The government also has an important role in the digital payment process. By providing incentives such as subsidies or transaction fee relief for drivers who use digital payments can be an important step.</p>
4	<p>The reason is, because this Bajaj is not owned by the government but by individuals. So, there has been no order/direction to use digital payments. In addition, there is still minimal literacy in the use of technology. When I saw many drivers of this Bajaj, some did not have cellphones and were old. And finally, the Bajaj drivers are also accustomed to using cash payments and find it easier to negotiate prices</p>	<p>Drivers responded doubtfully, because the Bajaj is owned by individuals so that these drivers have a deposit/contract system so that drivers prefer to use cash because drivers think using digital payments is complicated. However, drivers do not rule out the possibility of using or wishing to if there is direction/order to use digital payments from their superiors.</p>	<p>There is certainly hope, where nowadays technological developments are increasingly advanced. Like it or not, we have to adapt to technology. And more and more people are using Bajaj like young people. However, there must be support from the government. In addition, teaching digital technology/payments to drivers</p>
5	<p>Because the Bajaj drivers themselves already have regular customers who always use cash for their payments. Bajaj drivers say that many Bajaj customers already assume that riding a Bajaj uses cash.</p>	<p>Bajaj drivers refused because they were used to paying in cash and Bajaj driver customers also understood that if they wanted to ride a Bajaj, they had to have cash.</p>	<p>Our group's expectation is that digital payments offer a number of significant advantages, especially in terms of security. By using a cashless payment system, Bajaj drivers no longer need to carry large amounts of cash, which can reduce the risk of losing money due to theft or pickpocketing. In addition, this system can also minimize the potential for errors in giving changes, which is often a source of confusion or inconvenience for passengers and drivers. On the other hand, in terms of efficiency, digital payments allow the transaction process to be faster and more practical. Passengers simply scan the QR code or use the digital wallet application they already have, without having to look for cash or wait for change. This not only makes it easier for passengers, but also saves drivers time, especially during peak hours. In the long term, this efficiency can increase the number of passengers who prefer Bajaj as a mode of transportation because the payment process is more modern and practical. In addition, drivers can also track their income more accurately because all transactions are recorded digitally. This helps them monitor their daily income without worrying about miscalculations, while providing better transparency if there are administrative needs in the future.</p>

Question/ Response	Explain the reasons why Bajaj in Jakarta does not use digital payments.	Suggest to Bajaj drivers in Jakarta to use digital payment, explain the conveniences they will get, and then describe their response (reject, agree, or doubt).	In your general opinion, is there any hope to implement digital payment on Bajaj transportation mode in Jakarta? Explain the reasons.
6	<p>1. Lack of Technological Understanding: Many Bajaj drivers may not be familiar with digital technology or feel uncomfortable using digital payment applications. 2. Lack of adequate mobile phones: Not all Bajaj drivers have smartphones that support digital payment applications. Some may only have basic mobile phones or mobile phones that do not support modern applications. 3. Transaction fees or admin fees: Some digital payment platforms may charge transaction fees. Bajaj drivers may feel that these fees reduce their income. 4. Prefer cash payments: Bajaj drivers prefer to receive cash payments because they are more accessible and can be used immediately, without having to wait for the process of disbursing funds from the digital application. And to avoid fraud by irresponsible people. 5. Lack of trust in the security of the payment system: Some drivers may be concerned about the security of digital transactions or fear losing access to their money if there is a technical problem with the application.</p>	<p>From the results of our group interviews, the Bajaj drivers are still hesitant and refuse to use digital payments because they are used to the cash payment system, on the grounds that the money can be used directly to buy food or just coffee and cigarettes without the hassle of going to an ATM to withdraw money from payments with the digital payment system, and there are no admin fee deductions used when they do not use digital payments.</p>	<p>According to our group, the hope to implement digital payment in Bajaj is very high, but it must be accompanied by intense socialization and direction about the many benefits that Bajaj drivers will get if they use digital payment as their Bajaj fare payment mode. As well as providing some equipment assistance to Bajaj drivers to support the implementation of this digital payment.</p>
7	<p>Drivers and passengers are more comfortable when transacting in cash because it is fast and efficient. and some drivers also don't have a bank account to store money digitally.</p>	<p>Driver Hesitation: There are also drivers who are hesitant because they are less familiar with technology or are concerned about the seemingly complicated process. They may take longer to get used to the change or worry about additional costs or technical difficulties.</p>	<p>In our opinion, the Jakarta government should educate Bajaj drivers to refer to the digital payment aspect in addition to being easier. It is hoped that Bajaj fares can be standardized according to the distance of the destination. And the fares can compete with other public transportation fares. In addition, drivers can think of digital payments as effective and practical transactions.</p>
8	<p>In my opinion, from the answers of the sources above, there are indeed many who do not understand today's technology, because many Bajaj drivers are old people, maybe even elderly, so they cannot use it, because the era is different and people's abilities are different, not all of them have cellphones, which makes it difficult for Bajaj drivers.</p>	<p>The source is hesitant, not refusing if for example it is made into digital payment, it is us Bajaj drivers who will lose, it is not enough to pay the Bajaj owner because our system is renting, the term is round trip but only paid once. Well, the deposit system is also leaving the workshop must deposit, I Bajaj 1 driver, depending on how hard the driver pulls. Depends on the workshop whether they want to work overtime or half a day, the point is they have to deposit in full.</p>	<p>of course there is, maybe with the existence of digital payments, users find it easier to transact because nowadays people are already making digital payments, it is rare to carry cash. Moreover, people who ride Bajaj usually just want to feel the sensation or atmosphere or maybe tourists are the target market because Bajaj itself is a traditional public transportation, so maybe tourists are interested and usually Bajaj is also only in certain places that might attract users. And in terms of security, it is also safer and more flexible, maybe for Bajaj drivers to be more familiar with existing technology and be able to understand the current era.</p>
9	<p>The drivers still feel afraid, because Bajaj are ostracized (considered to be poor people) and looked down upon.</p>	<p>Doubtful, because the Bajaj feels at a loss because it is not enough to give a deposit to the Bajaj owner (because here we use a Bajaj rental system, so there is someone who owns it, and they have to give a deposit).</p>	<p>Yes, because the digital era is increasingly developing, I think Bajaj transportation will eventually follow the digital transportation trend, with the existence of digital transportation, security and payments will be even better.</p>
10	<p>Because Bajaj drivers are afraid of being cheated because they think they are poor/less well-off.</p>	<p>Hesitation, because the Bajaj feels that it is at a loss because it is not enough to pay the deposit to the boss.</p>	<p>There is hoped to implement digital payments in Bajaj transportation in Jakarta. With government support for the digitalization of the transportation sector and the increasing number of easily accessible digital payment platforms, this implementation is becoming more realistic. However, challenges such as technological literacy for drivers and internet network stability must be overcome to ensure a smooth transition.</p>

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11	The factors that determine why Bajaj do not use digital payments are because of the policies of their superiors or bosses, a lack of understanding of digital payments and factors related to their daily needs.	After we advised on the benefits of digital payment, the Bajaj drivers refused digital payment, because if they use digital payment, for example QRIS, the income or money they get goes to the boss (the owner of the Bajaj). In addition, they also do not hold cash to fill up with fuel. Also, the income used to buy daily necessities does not always use digital payment, because remembering that Bajaj drivers are generally not young people.	In my opinion, Bajaj has great potential to use digital payments, because it provides convenience and security in payment transactions. However, because there is still a lack of understanding about digital payments, the bosses who have this Bajaj business must work with banks to hold direct training sessions on how to register and use QRIS to facilitate customer transactions because nowadays most people already use digital payment to facilitate payment transactions.
12	According to the information I also got, there used to be a government program for Bajaj to use digital payments with BJB bank, but Bajaj drivers felt that it was not easy because ATM centers were rarely available like other banks, then not all Bajaj drivers had cellphones and finally the Bajaj drivers decided to pay in cash only. But there are also some who use transfers by m banking.	We have given suggestions to Bajaj drivers, including 1. If you use digital payment, interest will likely increase. 2. If you use digital payment, you can find out how much your average daily income is, and it can motivate you to pursue your target (if you have a target) 3. If you use digital payment, you can save money, compared to when you hold cash. Then their response to some of the suggestions we gave, was that there was doubt because if later they transferred the digital transformation, there is a guarantee that what we suggested can be understood and carried out properly by all Bajaj drivers, and whether if we (Bajaj Drivers) use digital payment will be deducted by costs such as discounts and other price cuts that can trigger difficulties later, does not make it easier for Bajaj drivers.	In our opinion, there is hoped to implement digital payment in public transportation (BAJAJ), but it might be quite difficult to make a deal decision with Bajaj drivers because we have to provide solutions to several problems faced by Bajaj drivers, as we interviewed directly.
13	Lack of knowledge about the use of QRIS is also an obstacle. Some Bajaj drivers may not have received adequate socialization about the benefits and how to use this system. Without sufficient understanding, they may be hesitant to switch from the payment method they are already familiar with. Limited training or information from service providers can also worsen this situation.	Implementing QRIS payments because it is simpler and does not inconvenience either the passenger or the Bajaj driver.	Yes, because if not, Bajaj drivers will lose more customers because they only accept QRIS payments. While in this modern era, most people have started to be lazy to hold cash because of the existence of QRIS payments.
14	The average age of Bajaj drivers is old people who are far behind technological developments and are even reluctant to follow technological developments, which is the main reason why Bajaj does not use digital payments.	The driver's response was not to reject but not to fully agree, more precisely doubtful. They are accustomed to the type of cash payment that has indeed been the choice from year to year and do not feel hampered by the payment. In fact, digital payment is something new for them that makes them consider digital payment ineffective. And the bosses who until now have not given orders to use digital payments.	There is still hope if the education target is right on target, in our opinion, the first to be introduced to digital payments are Bajaj bosses, because as drivers who work for their bosses they will follow their superiors' orders. Digital payment is not a complicated thing that is difficult to implement for older drivers, if there is sufficient education, in our opinion, digital payment can be implemented in Bajaj transportation modes in Jakarta.