

**LITERATURE REVIEW: THE IMPACT OF TECHNOPRENEURSHIP
COMPANIES ON THE INCOME OF MECHANIZED RICKSHAW DRIVERS**

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Abstract

This research examines the impact of the emergence of technopreneurship companies, such as Grab and Gojek, on the livelihoods of motorized pedicab drivers in the transportation sector. Using a literature review method, this research concludes that the increase in the use of online transportation services has caused a decrease in customers and income for motorized pedicab drivers. Suggested strategies to overcome this challenge include training and support for pedicab drivers to switch to online services, increasing digital skills, as well as collaboration between relevant stakeholders. Apart from that, pedicab drivers also adopt a strategy of restraint by not setting fixed rates. The wife's role can also be strengthened in supporting the continuity of family income. Further research and more sustainable strategies are needed to maintain the welfare of motorized pedicab drivers amidst technological changes in the transportation industry.

Keywords : Technopreneurship, Motorized Rickshaw Driver, Online Transportation, Income, Economic Impact

INTRODUCTION

Transportation is one of the means of supporting economic growth and population mobility in a country. Developed and developing countries always need transportation services at international, national and regional levels. Various types of transportation are involved in economic growth, such as planes, ships, trains, buses and even motorized rickshaws. The function of transportation itself is a development supporting sector and as a service providing sector. Due to the great importance of transportation, some people consider that transportation is the lifeblood of a country. Dependence on transportation is proof that every country is obliged to have safe and comfortable transportation. On the other hand, the large number of public transportation in a city makes the city increasingly crowded and often causes traffic jams. But this has become a normal thing in a country. In an area there is a very large population with a capacity of tens of millions to hundreds of millions of people living in an area. With a high population capacity in an area, more and more transportation services are used in that country. Every government always provides many transportation services so that it is easy for residents to carry out activities or work.

Various sophisticated transportation always appears every year in a country making things easier and more difficult for residents with the costs offered. The

problem occurs in short-distance transportation such as motorized rickshaws. As we know, the term Becak Machine is a three-wheeled vehicle. The vehicle, which was originally a two-wheeled vehicle, was added with a rickshaw cart beside it and operated like a normal train. The only difference is that with the cart, the road section will be bigger. The normal capacity of a rickshaw is two passengers and one driver. Becak driver is a job that is very easy to do and can be done by all groups from teenagers to adults because the job of a pedicab driver does not have to follow any rules. As long as he can drive the rickshaw, it won't be a problem. With just one rickshaw you can operate around looking for passengers. Previously, pedicab drivers were a very popular form of public transportation. Where at that time the only public transport was pedicab drivers and labi-labi, they could find them at every street corner, both crossroads and roads on the outskirts of the city. Rickshaw driving was an easy and fun job at that time. Amidst the efforts of pedicab drivers to make ends meet, technopreneurship companies have now emerged (Farhan, 2021).

Technopreneur is a combination of two words, namely technology and entrepreneur. Which means, technopreneur means how to use technology that is developing rapidly to become a business opportunity. According to the Oxford dictionary (especially in South and SE Asia), the definition of technopreneur is *A person who sets up a business concerned with computers or similar technology* (Nova, 2015). So, it can be concluded that technopreneurship is a process of formation and collaboration between business fields and the application of technology as a supporting instrument and as the basis of the business itself, both in processes, systems and stakeholders. Technopreneur is an entrepreneur who can optimize various potential developments in technology that is currently developing. Examples of companies that implement technopreneurship in the transportation industry sector are Grab and Gojek.

Every Grab and Gojek transportation user can use a cellphone with a special application to access it. Grab and Gojek are considered alternative transportation because they are more easily accessible to every Indonesian. No longer need to walk to wait for a pedicab or look for a pedicab stand and only need time to wait for Grab and Gojek to approach the location where they are. Apart from that, Grab and Gojek allow potential passengers to interact with drivers. This can make it easier for prospective passengers to tell their location to the driver who is delivering the prospective passenger. Grab and Gojek also provide several services that passengers can use, starting from delivering goods, transporting people, ordering food, shopping. All online motorcycle taxi transportation facilities have received a lot of praise from the public for making everything feel easy. Therefore, the income of pedicab drivers becomes unstable because many people or consumers turn away from using this advanced technology, thus causing pedicab drivers to lose customers and potentially their income (Lailan, et al, 2023).

Income is all receipts in the form of money or goods originating from other parties as well as industrial products which are valued on the basis of the amount of money from assets in effect at that time. Income is a person's source of income to meet daily needs and is very important for a person's survival and livelihood, directly or indirectly (Suroto 2000:26).

In this context, a deep understanding of the impact of technopreneurship on the income of motorized rickshaw drivers is very important. Research that focuses on empirical data will provide clearer insights into the dynamics of change in the transport industry and its implications for vulnerable groups of workers such as motorized rickshaw drivers. With a better understanding of this problem, it is hoped that sustainable and inclusive strategies can be found to protect the existence and livelihoods of motorized pedicab drivers in the era of modern technology.

METHODOLOGY

This article uses the literature review method to discuss topic studied. Literature review is intended to solve a problem that exists basically relies on a critical and in-depth study of library materials relevant. Literature review is carried out by collecting data or information from various sources library sources that are needed as a source of ideas to explore thoughts or idea new as basic material for making deductions from existing knowledge, so a new theoretical framework can be developed, or as a basis for problem solving. The library sources studied in this paper are: books, research results, journals, and other scientific articles.

The steps for creating a literature review are described as follows following: (a) determine sources for literature review materials that are appropriate to the topic study of this writing; (b) evaluate the content contained in the literature study sources set; This section can contain matters relating to basic assumptions or facts that are considered true without verification and limitations, namely certain aspects that are used as a framework for thinking; this analysis is necessary for plotting thinking in solving problems; (c) make a summary of the contents of the study sources References; (d) explore new thoughts and ideas on the topic being studied to determine the positioning of the concept as material for subsequent research.

RESULTS AND DISCUSSION

The Impact of the Existence of Technopreneurship Companies on the Income of Machine Rickshaw Drivers

The income of motorized trishaw drivers has become unstable due to the emergence of technopreneurship companies such as Grab and Gojek, which has resulted in a loss of customers and potential income. Increased use of Grab and Gojek services has affected the livelihoods of motorbike taxi drivers, with some experiencing a decline in customers and income. With the presence of Grab and Gojek, the

informant has to earn additional income by dropping off elementary school children who have been rented by their parents every day except holidays. The informant has been in this profession for more than 10 years, the informant usually goes to work in the morning and comes home at night (Lailan, et al, 2023). All pedicab drivers feel disappointed when they experience pressure in their work. This disappointment arises because they do not earn income, there are no passengers, and they feel that they have previously experienced the satisfaction of being a pedicab driver, which ultimately makes them feel disappointed (Andini, et al, 2023).

Their daily income before the existence of Grab and Gojek, on average they earned was ± IDR 100,000/day and after the presence of Grab and Gojek, their income decreased by 60% (Furqan & Nurlaili, 2020). In another study, the decline in income of motorized pedicab drivers after the existence of Grab and Gojek reached 75% (Azizah, et al, 2021). Next there are motorized pedicab drivers who, after the introduction of Grab and Gojek, earn <Rp. 1,000,000 then earn between Rp. 1,000,000 – Rp. 1,500,000 and those with income > Rp. 1,500,000. Mechanized pedicab drivers have a normal daily wage of IDR 20,000 to IDR 50,000. From these data it can be interpreted that the majority of motorized pedicab drivers' income is still below the minimum wage, namely Rp. 2,250,000, which means it is still below decent living requirements (KHL) as stated or written in Minister of Manpower and Transmigration Regulation No. 7 of 2013 concerning Minimum Wages in Chapter 2 Article 3. And Government Regulation no. 78, Chapter 2 Article 3 Concerning Wage Policy (Mauliya, et al, 2020).

Strategies that can be used by motorized pedicab drivers towards the emergence of technopreneurship companies in the transportation industry

One strategy to overcome the challenges faced by pedicab drivers is to provide training and support for them to switch to online transportation services. This can help them adapt to changing market dynamics and safeguard their livelihoods. Improving the skills and knowledge of pedicab drivers in utilizing technology can also help them compete in the growing transportation industry. This can involve digital literacy training and support to improve understanding and use of online platforms. Collaborative efforts between relevant stakeholders, such as government agencies, transportation companies, and community organizations, can be key in developing sustainable solutions to support pedicab drivers and reduce the negative impacts of online transportation (Lailan, et al, 2023). To increase competitiveness, a mature strategy is needed so that businesses can compete in the market. The most influential strategy indicators are training, promotion, product quality and market prospects (Dalimunthe R, 2019).

The strategy of self-restraint is also carried out by motorized pedicab drivers by not determining the passenger fare mechanism and avoiding conflicts with various existing online transportation services. Determining passenger fares is only based on

the bargaining process between pedicab drivers and passengers without providing benchmark fares for passengers. Considerations for determining passenger fares are based on the load and distance traveled. This is because to maintain price competition, pedicab drivers carry out strategies to adjust fares to passengers. This strategy of restraint by adjusting price rates was carried out to maintain tariff competition with online transportation services which are much cheaper compared to pedicab transportation (Azizah Lin, et al, 2021).

The wife's role can be empowered to achieve a solid and stable income level. With the husband's income as a motorbike taxi driver unstable and affected by competition with Grab and Gojek, the wife may be encouraged to take a more active role in the family's financial responsibilities. They may need to find additional sources of income or manage family finances more carefully to ensure the family's basic needs are met (Amaliah & Handayani, 2022). Becoming women entrepreneurs can not only help their husbands meet their family's needs, they can also create jobs and manage local economic potential, contributing to national economic growth and social prosperity throughout the world (Dalimunthe R, et al, 2023).

CONCLUSION

Transportation is a crucial element in supporting economic growth and population mobility in a country, with various types of transportation playing an important role in development and service delivery. The emergence of technopreneurship in the transportation sector, especially through companies such as Grab and Gojek, has changed the transportation landscape by offering more accessible and more efficient services. However, the impact on the livelihoods of motorized rickshaw drivers has been significant, with a decline in customers and income resulting in financial instability for them.

To face this challenge, the recommended strategies include training and support for pedicab drivers to switch to online transportation services, improving digital skills, as well as collaboration between relevant stakeholders. Pedicab drivers also adopt a strategy of restraint by not setting fixed rates and avoiding conflicts with online transportation services. The wife's role can also be strengthened in supporting the continuity of family income, both by finding additional sources of income and managing family finances wisely. There are real challenges in maintaining the well-being of motorized rickshaw drivers amidst technological change, and more sustainable research and strategies need to be implemented to respond to this problem more effectively.

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