

# King of the road: The adjustments of public utility jeepney drivers towards modernization

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## Abstract

This study examined the lived experiences and adaptive strategies of Public Utility Jeepney (PUJ) drivers in Padada, Davao del Sur, on the implementation of the Public Utility Vehicle Modernization Program (PUVMP) in the Philippines. Using a descriptive-phenomenological approach, in-depth interviews were conducted with selected PUJ drivers who are members of accredited transport cooperatives and have extensive experience driving both traditional and modernized jeepneys. Four major themes were identified through thematic analysis: pathway to progress, burdened by change, resilience in transition, and inclusive transport development. Drivers cited strengths in terms of sustainability, efficiency, and comfort, but experienced high costs, decreased earnings, and socio-cultural effects. In the face of adversity, the majority of drivers showed resilience by embracing economic changes and supporting cooperative-based operations. The findings underscored that modernization, although unavoidable, must be directed through policies that ensure inclusivity, affordability, and the preservation of the traditional nature of public transport. Moreover, the research highlighted the necessity of inclusive policies that balance the welfare of drivers with sustainable transport to deliver equitable and prosperous change to contemporary public transport systems. Furthermore, the government implementation would provide executive guidelines, which would result in sufficient impacts on several sectors.

*Keywords:* descriptive-phenomenological; public utility jeepney drivers; public utility vehicle modernization program; sustainable transport; thematic analysis

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The Public Utility Vehicle Modernization Program (PUVMP) is considered one of the most eminent programs for ensuring a sustainable and more efficient public transportation system in the Philippines. However, such implementation poses significant difficulties for jeepney drivers, notably in rural areas like Padada, Davao del Sur. This qualitative research highlights the human dimension of modernization so that the voices of those affected are heard in the quest for advancement. To ensure continuous readability and clarity for international readers, the core operational frameworks, state agencies, and localized socio-economic transport systems utilized across this text are indexed below.

## Nomenclature

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| <p>A. DOTr – Department of Transportation; the primary executive agency oversight body steering public fleet upgrades.</p> <p>B. LTFRB – Land Transportation Franchising and Regulatory Board; the state regulatory unit governing franchise compliance and cooperative mandates.</p> <p>C. PUJ – Public Utility Jeepney; the traditional combustion-engine vehicle serving as the cultural and</p> |
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functional backbone of domestic public transit.

- D. PUVMP – Public Utility Vehicle Modernization Program; the comprehensive national policy enforcing transport fleet consolidation and vehicle electrification.
- E. Boundary System – The traditional vehicle-rental mechanism where drivers pay a fixed daily fee to operators, keeping residual fare revenues as variable personal income.
- F. Consolidation – The compulsory pooling of individual transport franchises into state-accredited transport cooperatives or corporations.
- G. Fixed Wage Regime – The standardized daily wage distribution system managed under accredited cooperatives, displacing traditional commission-based earnings.

## 1. Introduction

The Public Utility Vehicle Modernization Program (PUVMP) is considered one of the most eminent programs for ensuring a sustainable and more efficient public transportation system in the Philippines. However, such implementation poses significant difficulties for jeepney drivers, notably in rural areas like Padada, Davao del Sur. The initiative has sparked far-reaching debate in numerous sectors, and particularly in the most impacted sectors, like the Public Utility Jeepney (PUJ) drivers (Jamir et al., 2024). The requirement of the program for operators to convert to electric vehicles has brought dire financial implications to jeepney drivers, who are usually vulnerable and cannot afford to comply (Bienvenido et al., 2023). Other fears come from alterations in livelihood, such as income decrease, loss of employment, and heightened competition (Mendoza, 2021). Therefore, the current study sought to investigate the changes experienced by the PUJ drivers with the socioeconomic effects triggered by modernization.

As the world economy moves towards a net-zero carbon target, transport electrification is making rapid progress, such as for rail, buses, and private cars (Jelti et al., 2023). Electric vehicles (EVs) are designed to replace combustion engine vehicles by reducing air pollution, greenhouse gas emissions, and reliance on fossil fuels. This transition is mainly occurring in developed nations that finance EV purchases, offer tax incentives, and invest in charging systems (El-Bany, 2021). Furthermore, developed countries are likely to push for the adoption of electric public transportation systems in developing countries globally. However, this global shift has substantial consequences for public transport drivers, particularly in low- and middle-income countries that continue to rely on traditional transport systems (Agaton et al., 2019). Transport drivers faced many issues, including employment security, vehicle financing, and state subsidies (Shaaban et al., 2021). Where informal driving is the primary means of livelihood, modernization of transport can very quickly result in the marginalization of the same people who drive transport systems.

According to the Development Bank of the Philippines as cited by Andalecio et al. (2020), while the expansion of transportation in the Philippines may be helpful to, the rapid growth of urbanization throughout the nation brought forth a vast increase in PUVs and private vehicles, thus indicating a whole host of issues that range from poor air quality to frequent traffic congestion in cities. The Philippine agency formally began compelling jeepney operators to comply with the Public Utility Vehicle Modernization Program (PUVMP), which requires them to consolidate into cooperatives before receiving subsidies from the government and modernizing their fleets with electric-powered units; those who failed to comply would be strictly punished through impoundment, fine, and suspension of licenses following repeated deadline extensions (Andres, 2024).

Despite the incentives provided by the PUVMP, electronic public utility vehicles (e-PUVs) are still not widely adopted by transport stakeholders due to high investment costs, a lack of technical and policy support, skepticism about the implementation of such programs, and public acceptance issues (Guno et al., 2021). It has resulted in a range of disadvantages for PUVMP, including insufficient funding and unrelated coordination between government agencies and those of stakeholders in different areas of the Philippines. With these underlying implications, resistance among traditionalists would continue to rally to maintain the status quo.

The increase in fuel prices in Padada, Davao del Sur, presented several challenges to the transportation sector, affecting the livelihoods of drivers while deterring passengers due to concerns over affordability (Conchas & Apas, 2024). Rising fuel prices—combined with the outdated and inefficient nature of traditional jeepneys—amplify the issue of pollution within rural areas, pressing a shift towards more environmentally friendly transport options that consider both the environmental issues and economic considerations for jeepney operators and drivers in the Philippines (Gatarin, 2023). It calls for the modernization of jeepneys that consume less fuel and are eco-friendly, thereby reducing greenhouse gas emissions and making a positive environmental impact. Such a shift can intensify the efficiency and resilience of local public transport amid continuously soaring global oil prices (Dimalanta et al., 2023). The controversy surrounding the preservation of traditional jeepneys' cultural identity and the shift to modern jeepneys raises several pressing concerns about identity and sustainability issues. While preserving cultural heritage is a noble objective in terms of community identity, embracing modernity is crucial for ensuring environmental sustainability, economic viability, and enhanced safety in the Philippines' transportation system (Cartojano, 2023).

This research held significant importance for the locality of Padada, Davao del Sur, and its stakeholders in the public transportation sector, particularly in relation to efforts aimed at modernization. It shed light on the challenges and transformations faced by Public Utility Jeepney (PUJ) drivers, providing insights to inform jeepney operators about the challenges and needs of drivers, which would aid them in making informed decisions regarding fleet management and support systems. It also helped policymakers and Local Government Units (LGUs) in formulating and developing plans and policies that would take into consideration the socioeconomic and environmental implications of modernization. More importantly, it aimed to raise commuters' awareness about how such transformations improve the quality of public transport. Additionally, it would be of use to subsequent researchers as a source of reference that offers the local perspective on national policy and the evolving situation of local participants, and also as a contribution to comparative studies of modernization in other environments. The research included the human dimension of modernization so that the voices of those affected were heard in the quest for advancement.

### *1.1 Theoretical framework*

The paper was based on the Sustainable Development Theory, which Gro Harlem Brundtland suggested to the World Commission on Environment and Development in 1987 (Jarvie, 2016). The theory sought to meet the needs of current generations without compromising the ability of future generations to satisfy their own needs, with its efforts concentrated on three areas of integration: economic, social, and environmental (Van Niekerk, 2020). Therefore, this study utilized the Sustainable Development Theory in analyzing whether modernization via the implementation of e-jeepneys can be a strategy towards realizing the objective of sustainable development. In this sense, it explored the environmental concerns, economic viability, and social

equity that characterize the impact of such policy changes on the long-term trajectory of public transportation systems (Bibri et al., 2020). Hence, the framework offered a picture of examining how, in modernization initiatives, short-term stakeholder needs are coordinated and harmonized with long-term strategy in creating sustainable urban mobility.

### *1.2 Research questions*

This study examined the adjustments of public utility jeepney drivers towards modernization. Specifically, it sought to answer the following questions:

1. What are the perceptions of jeepney drivers towards the modernization of jeepneys?
2. What challenges do jeepney drivers encounter regarding the modernization program?
3. What adjustments do jeepney drivers employ to manage the transition to modernization?
4. How do jeepney drivers envision the future of public transportation in their community?

## **2. Method**

### *2.1. Participants*

The participants of this study were five (5) male Public Utility Jeepney drivers with corresponding ages of 50 years old and above. They were identified through purposive sampling, which allowed effortless collection of needed data from participants who were readily available and accessible to the researchers (Rahi, as cited by Golzar et al., 2022). The inclusion criteria involved in choosing the participants of this study were the following: (1) must be a duly licensed Public Utility Jeepney (PUJ) driver who is currently residing in Padada, Davao del Sur; (2) have at least 10 years of experience in driving both Traditional Jeepney and Modernized units. Experienced drivers navigate roads more efficiently despite different types of vehicles they use (Lu et al., 2020); (3) a member of any transport cooperatives accredited and recognized by the Land Transportation Franchising and Regulatory Board (LTFRB); and (4) an individual who is a jeepney operator and at the same time a jeepney driver of their unit. The study excluded jeepney operators who do not fit the criteria mentioned above.

### *2.2. Instrument*

The research study employed an open-ended questionnaire, along with in-depth interviews, as its primary research instrument. Open-ended questions encourage participants to provide detailed and thoughtful answers (Baburajan et al., 2020). The questionnaire was composed of four (4) main questions: (1) the first question was about the personal background of the jeepney drivers; (2) the second explored the jeepney driver's perception towards jeepney modernization; (3) the third was to ask what changes have they made or are likely to make because of modernization, like pattern in work and money management or simple lifestyle; and (4) the fourth was trying to hear the vision they have concerning public transport's future in the community and how they would like it to look like in their part in the larger system.

### *2.3. Design and procedure*

The researchers used a qualitative research method in this study. It can be used to gain a thorough

understanding of a subject or to generate new research ideas. Qualitative research was employed to gain insight into people's worldviews. While qualitative research approaches vary, they all focus on preserving rich meaning when analyzing data (Bhandari, 2020).

The researchers utilized phenomenological research. It is a type of research design that focuses on discovering the essence of human experiences and understanding the meaning people attribute to those experiences. It strives to convey the underlying formations and essential elements of such an experience without preconceived theories or interpretations (Ho & Limpaecher, 2022). This approach enabled researchers to delve deeply into the unique realities of a group of PUJ drivers as they confront the challenges and opportunities presented by modernization initiatives, such as series consolidation, the adoption of modernized units, and more stringent regulatory requirements. Through interviews, researchers were able to document how PUJ drivers tailor modernization, whether it evokes feelings of hope, resistance, anxiety, or a mix of emotions. Hence, this uncovered their personal stories, motivations, and struggles in adapting to these changes.

Once the letter of permission was approved, the researchers approached each participant and explained the purpose of the study to them. After the orientation, a letter of consent was distributed to the participants, requesting their voluntary participation in the IDI, which they were asked to sign and return. When the participant gave their consent, the in-depth interview commenced immediately. An audio recorder was utilized in order to guarantee the participant's answer was recorded in complete confidentiality. A note writer also accompanied the researcher to ensure that everything happening and observed during the study's conduct, especially during the IDI, was recorded correctly. After conducting the in-depth interview, the data from the recorded audio were transcribed into written words for further analysis. Statements that relate to the topic were separated into core ideas that reflect specific thoughts. After transcribing the interview, the researchers set another appointment with the participants to present the gathered data and transcriptions of their responses to the questions raised during the discussion. This meeting ensured the validity and reliability of the participants' responses before the transcripts were finalized. After their approval, the data were ready for data analysis.

Qualitative data analysis is the process of gathering, organizing, and interpreting non-numerical data to uncover patterns, themes, and insights. It helps businesses and researchers make sense of open-ended responses, interviews, and other unstructured data sources (Caulfield, 2023). In this study, the generated codes were organized through the six phases of thematic analysis. According to Yanto (2023), thematic analysis steps are as follows: The initial step: Data Familiarization, comprising several elements of data collection and production, such as familiarizing oneself with the data through processes like conducting and transcribing in-depth interviews and focus groups, and reading survey answers, story completion exercises, and vignette studies. The second step is to Generate Codes, which has to do with managing the data more systematically and stringently than in the previous step. The third step is to Generate Initial Themes, which involves grouping codes into possible topics and collecting all relevant data for each topic.

In addition, the fourth phase is building and revising the Identified Themes, which includes building and piloting the prototype themes against the data and revising them as required. Define and Label the Themes is the fifth phase, which focuses on refining each theme's characteristics and the overall story that the analysis tells, resulting in clear definitions and names for each. The sixth and final phase is Writing the Final Report, which requires conducting a comprehensive analysis of selected extracts and situating the study within the sociocultural and academic context by incorporating relevant literature.

#### 2.4. Ethical considerations

This study was conducted with strong compliance with the ethical standards and guidelines established by the UM Digos College Research and Publication Center. Before conducting the study, the researchers secured from key school officials the necessary approval and authorization to ensure its proper and ethical execution. To ensure the information gathered is authentic, valid, and free from errors, the researchers exercised diligence in data collection so that the findings would best represent the lived experiences of the Public Utility Jeepney (PUJ) driver participants. Proper authorization and consent are also obtained from the sample of the study, in which they are assured that all their rights and privacy were given utmost protection, specifically in handling the data, such as, but not limited to:

- **Voluntary Participation.** A significant value the researchers upheld while gathering data was the understanding of the participants' participation and self-direction. No forms of coercion or compulsion were perpetrated on the survey participants. The study ensured that it would not force the Public Utility Jeepney (PUJ) driver participants to share their experiences and perspectives on the subject matter and that they had the right to withdraw their statements without facing any repercussions.
- **Privacy and Confidentiality.** The data collected on the effects of modernization on the well-being of Public Utility Jeepney (PUJ) driver participants were protected and accessible only to the researchers and other authorized persons involved in this research.
- **Informed Consent Process.** The participants were first given an overview of the research questions and the study's intent, which was to investigate the impact of modernization on Public Utility Jeepney (PUJ) drivers, before explicitly consenting to participate in the interview.
- **Risks.** This research involved emotional reactions and apprehensions regarding the financial security of the PUJ drivers, as they were given a platform to share their perspectives on sensitive issues like income insecurity, job displacement, and issues that modernization presented to them via new modes of transport and policies that impacted their livelihood.
- **Benefits.** This study provided Public Utility Jeepney (PUJ) drivers with an opportunity to share their stories, which allowed them to feel heard and validated. This study likely revealed the consequences of their mode of livelihood, including economic, social, and psychological impacts that modernization brought to them, as well as their ways of coping with such changes.
- **Plagiarism.** Plagiarism occurs when one takes the work or ideas from another person without proper authorization. Throughout this research, the authors acknowledged the actual authors of any ideas and information used in their work.
- **Fabrication.** All the results and findings were clearly shown truthfully and honestly, as they represented the actual outcome of this study on how modernization affected the livelihood and welfare of Public Utility Jeepney (PUJ) drivers, including the challenges, benefits, and realities that came out from the attempt to modernize.
- **Falsification.** This research adhered to the rules outlined in the APA 7<sup>th</sup> edition citation format. Thus, no misrepresentation of work or alterations of any data gathered in the study. The researchers kept detailed records of all information, including original data and any modifications during the research process.

- **Conflict of Interest.** The researchers conducted the study without any secondary interests, such as academic or financial gains. They did not impose preconditions that compromised the participants' welfare and privacy, despite these secondary interests.
- **Deceit.** Detailed information about the study was provided to each participant by the researchers to obtain written informed consent and explain the purpose of the research, as well as the rights of participants in the process.
- **Permission from the Organization/Location.** The researchers conducted the study after obtaining formal approval from the assigned research adviser and the University of Mindanao's Research Production and Publication Center, which had also fully adhered to the ethical standards set by the University of Mindanao Ethics Committee.
- **Authorship.** The concept and framework of the study were developed in collaboration with the guidance and contributions of the research adviser. Data collection, interpretation, and conclusion were carried out collectively by the researchers and the research adviser.

### 3. Results and Discussion

This section outlines the qualitative research methods conducted, including in-depth interviews (IDIs), to gather thoughtful data from participants. While identifying themes in this research, the researchers were predominantly focused on the central clauses and phrases that emerged in the interview transcripts. Four (4) emergent themes were developed: *Pathway to Progress* which reflected the perceptions of jeepney drivers toward modernization, *Burdened by Change* which captured the challenges drivers encountered during the transition, *Resilience in Transition* which referred to the adaptive strategies drivers employed, and *Inclusive Transport Development* which highlighted drivers' aspirations for a reliable, secure, and sustainable public transportation system in their community.

Table 1. Identified emergent themes and clustered themes

| Emergent Themes                 | Clustered Themes               |
|---------------------------------|--------------------------------|
| Pathway to Progress             | Organizational Efficiency      |
|                                 | Environmental Benefits         |
|                                 | Improved Comfort and Safety    |
| Burdened by Change              | Competing Tensions in Services |
|                                 | High Cost of Modern Units      |
|                                 | Commuter Misbehavior           |
|                                 | Daily Minimum Wage             |
| Resilience in Transition        | Support for Government Program |
|                                 | Embracing Modernization        |
|                                 | Financial Adaptation           |
| Inclusive Transport Development | Reliable Travel Time           |

|  |                         |
|--|-------------------------|
|  | Ensured Security        |
|  | Sustainable Development |

### 3.1. The perceptions towards the modernization program

As the government implemented the Public Utility Vehicle Modernization Program (PUVMP), some of the jeepney drivers showed receptiveness and acknowledgment of what it aimed to bring about. These were informed by ideals of progress but also by the possible advantages they saw or expected from their daily lives. Drivers pointed out how modernization could bring about better—organized operations, cleaner and safer rides with greater comfort, and environmental conservation. From these findings, three (3) clustered themes emerged, with the resultant emergent theme: Pathway to Progress.

### 3.2. Theme: pathway to progress

The first theme that was identified was the pathway to progress, or the advantages that jeepney drivers experienced from adopting the modernization program. The notable positive impact of the program was the enhancement of organizational effectiveness by the development of cooperative-based enterprises, which provided standardized systems for earnings distribution, maintenance assistance, and operating schedules. An additional value-added aspect was the reduction of environmental costs when switching to newer, fuel-efficient, and lower-emitting vehicles. The program achieved improved comfort and security for passengers and drivers by using up-to-date units with better ventilation, secure seating, and improved structural design. The theme, therefore, emphasized favourable effects, which contributed to the success of the modernization program.



Fig. 1. The perceptions of jeepney drivers towards the modernization program

**Organizational efficiency.** Organizational efficiency is the capability to attain operational objectives in a cost-efficient, well-organized, and well-coordinated manner, leading to a superior overall performance. Findings revealed that organizational efficiency was a significant benefit of the modernization program. The participants noted that their daily income was stable because they received fixed wages from their cooperatives. Although quite large at 2.8 million, at an interest rate of 6% per year and a repayment period of 7 years for the purchase of modernized units, this provided financial assistance, such as cooperative coverage of maintenance expenses, such as tire replacements and repairs, meals from breakfast to dinner, and access to financing mechanisms. It has also ensured the comfort of the participants regarding long-term income, as the new units had comparatively stable operations with lower maintenance costs compared to the older vehicles.

The modernization program has significantly transformed the operational organization of public transportation, enabling stakeholders to deliver organized and economical services. Mateo-Babiano et al. (2020) asserted that the shift to new jeepneys not only produced less detrimental emissions but also allowed for guaranteed long-term cost control and better fleet management with the replacement of mature technology with cleaner, newer, and more efficient technologies. This operational change resulted in a more consistent maintenance cycle and improved fuel efficiency, ultimately enhancing overall system integration. In addition, Siy (2021) claimed that modernization programs aligned with global sustainable development goals present an opportunity for internal restructuring in transport cooperatives and operators, enabling improvements in scheduling and fleet coordination. According to House Speaker Martin Romualdez, as cited by Cervantes (2024), organizational efficiency is one of the primary considerations for public transportation. Other projects provide a guaranteed source of fixed income, including social security benefits such as SSS, PhilHealth, and Pag-IBIG, as well as cooperative assistance with guaranteed financial capability at the time of implementing the modernization program to mitigate related risks associated with aging vehicles. It illustrates the significance of organizational effectiveness in the transport system and industry, which serves to advance the interests of different stakeholders, such as drivers, passengers, the environment, and the broader world. Without public acceptance and proper service integration, the socioeconomic advantages of modernization can be impeded.

**Environmental benefits.** Environmental benefits mean positive impacts on the natural environment brought by reduced pollution, cleaner air, and the implementation of cleaner, more efficient technology. According to all participants, modernized jeepneys were noted to be more environmentally friendly because they did not produce toxic smoke, unlike the traditional jeepney, which produced pollution emissions. Additionally, for the participants, modern jeepneys consumed less fuel, which increased fuel efficiency by reducing carbon emissions. For this reason, fuel efficiency was not only financially beneficial for the driver but also attainable through sustainable development. Thereby proving to be an environmentally friendly alternative to the conventional jeepneys.

Kaenzig et al. (2020) asserted that the transition reduced environmental, health, and economic impacts, such as less air pollution, cleaner urban air, and greater fuel efficiency. It upholds the idea that the modernization program can promote a clean and sustainable urban environment, shaping public health and providing benefits to both current and future generations. Janice et al. (2024) conducted a study on environmental and sustainable modernization, identifying a modern approach to upgrading established practices in line with a global transition toward low-carbon mobility. This approach has significantly improved the acceptability and support for this modernization program. It has resulted in more efficient energy use in transportation and environmental adaptability, making modern transport relevant and timely on an international level. However, according to Zulueta et al. (2024), the social and behavioral support for the transformation into modern jeepneys is required if it is to realize the environmental obligations of the program. Their work highlighted that trust among commuters and commuter statements about wanting to modernize are fundamental to realizing long-term positive ecological and social effects.

**Improved comfort and safety.** Improved comfort and safety mean enhancing physical ease, convenience, and security from harm or danger in a particular setting or activity. The participants revealed that modernized jeepneys promote improved comfort and safety, as they noted the comfort provided by driving modernized jeepneys and the safety in terms of secure and comfortable rides for passengers, especially since

they are air-conditioned units with spacious and secure interiors. For this reason, jeepney drivers were relieved, as reducing complaints from passengers was one of their priorities. The increase in the number of passengers would, in turn, enhance their working conditions.

Improved comfort and security make the basis for facilitating the quality of daily life, especially in environments such as transport. As noted by Tumsekcali et al. (2021) in their study of the same case of Istanbul public transport service quality in Turkey, customer satisfaction was one of the most significant factors used for evaluating the quality of public transport services since improved service quality would cause maximum use and reduce accidents. According to the Land Transportation Office (2023), modern units are equipped with CCTV cameras, GPS tracking, speed governors, and fare counting devices—all of which contribute to improved security, efficient monitoring, and an orderly ride. These not only bring passengers comfort but also meet international standards of safe and dependable public transport. This innovation brings about increased comfort in public transport while also showing the efforts of the government towards standardized public transport security features and procedures throughout the whole system (Bautista, 2023). By requiring modern jeepneys to meet predetermined vehicle specifications, the program makes safety a standard operating condition instead of an element of variability.

### *3.3. The challenges encountered during the transition*

While others accepted parts of modernization, others experienced it as a cause of stress, worry, and adversity. The stories of jeepney drivers confirmed hardships regarding the cost of modernizing units, increasing tensions in transport operations, and difficulties in sustaining earnings under the increased charges. The added burden of commuter misconduct further compounded the struggle of coping with daily routes. These lived experiences highlighted the unequal effects of modernization on marginalized drivers. Four (4) clustered themes were derived from these accounts that resulted in the emergent theme: Burdened by Change.

### *3.4. Theme: burdened by change*

The second identified theme was burdened by change, which captured the negative attitudes of jeepney drivers regarding the program implementation. Competing tensions arose in services, where the conversion to cooperative-based operations restricted the freedom of drivers and infringed on their customary traditions. It was supplemented by the high cost of modern units, which most drivers deemed economically unaffordable. Adding to the problem was the misbehavior of commuters, including fare evasion and disrespect, which added to everyday stress. Ultimately, the minimum daily wage was insufficient to cover drivers' basic needs, which further added pressure on them as they consolidated modern units. The theme, therefore, encompassed issues that predisposed the drivers against the program.

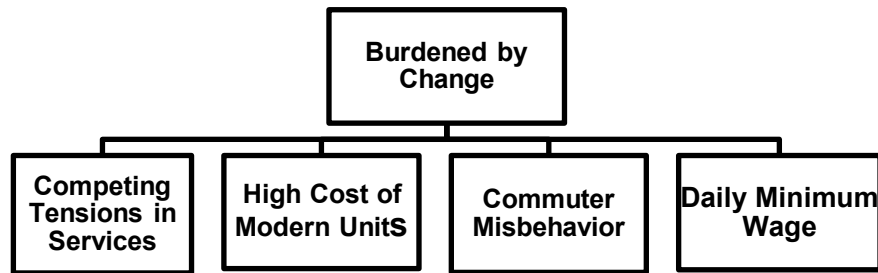


Fig. 2. The challenges encountered by jeepney drivers during the modernization program

**Competing tensions in services.** Competing tensions in services arise from contradictory demands, interests, or expectations among a service system that prevent it from satisfying all stakeholders simultaneously. Findings revealed that jeepney drivers still faced difficulties in their collaboration with the conventional jeepney drivers. The participants noted that policy modernization was eliminating conventional jeepneys, which created tension between pro-modernization drivers and anti-modernization drivers. Some participants said that they had encountered difficulties because their fellow co-op members who ran conventional units competed with them. As a result, tensions in services led to operational conflicts that undermine cooperation and impact the income stability of drivers.

Merging the operators into cooperatives would also facilitate corporate firms' ability to buy them out, reducing the independence of jeepney drivers and, thus, likely leading to fare hikes to achieve corporate profitability (De Santos, 2023). It has made traditional jeepney operators feel deprived of their competitive advantage. One factor that leads to conflict between modern and conventional jeepney drivers within a single cooperative stems from the concept of undermining tradition. France-Presse (2024) found that the compelled phasing out of classic jeepneys in place of environmentally sustainable, cooperative-owned jeepneys has disrupted the almost century-long boundary system. According to Landayan et al. (2024), operators struggle to align with the new system, resulting in conflicts between the old and modern jeepneys, as well as protests over job security, financial burdens, and the corporatization of public transport. It raises the weight of sacrifice, forcing them to weigh what is better and what to preserve. As a result, compelling jeepney operators to consolidate remains a substantial concern.

**High cost of modern units.** High cost of modern units refers to the expensive price of new, government-mandated jeepney models, which often exceeds what most drivers can afford. Findings revealed that the high cost of modern units was a significant burden in acquiring modern jeepneys, for it ranged from 2.8 million pesos cash and reached as high as 6 to 7million pesos over seven years, given installment plans, with the majority being apprehensive about the high interest that required a considerable amount of money to pay monthly. The participants also claimed that although rebates were offered for early payment, the debt remained unmanageable, and they suffered its effects. Therefore, despite government subsidies, the economic burden remained significant. It was both a financial shift and a cultural shock for drivers.

According to the Department of Transportation (DOTr), as cited by Bautista and Moya (2023), modern jeepneys would be costly, depending on the unit, which is a concern for drivers who fear incurring the loan they would have to take to comply with the policy. It has discouraged many from pursuing modernization due to uncertainty about repayment. The transition heavily burdens most drivers, as the enormous costs of obtaining a modern jeepney are too much to handle, particularly given that government loans are often accompanied by

interest rates and conditions that are challenging for drivers with low daily incomes to repay (Encabo, 2023). As a result, drivers are placed into deeper financial strain instead of improving their livelihood. While designed to enhance transport systems, the program has been criticized for having insufficient transition mechanisms, leaving many traditional drivers marginalized and stranded (Atos et al., 2021). In the absence of a comprehensive design among the various agencies and stakeholders, the gaps would undermine operational consolidation, which is counter to the very organizational efficiency that modernization seeks to enhance, thereby highlighting the need for further focus on what needs to be improved.

**Commuter misbehavior.** Commuter misbehavior refers to the inappropriate or disrespectful behavior exhibited by travelers that interferes with transportation operations or affects drivers, such as fare evasion or verbal abuse. Findings revealed that dealing with the misbehavior of commuters was a considerable problem they experienced daily. Participants shared examples of passengers' inattentiveness or carelessness, such as focusing on their cell phones and eventually blaming the driver for minor inconveniences that happened. Participants even admitted to instances in which passengers took to social media to publicly condemn them, raising stress levels among them as a daily occurrence in their operations.

The modernized jeepneys have altered commuter behavior, as there is reduced flexibility in boarding due to the strict policies governing boarding and seating arrangements (Ong et al., 2023). Traditional jeepneys made boarding easier, but modernized units create more difficulty and strict rules, such as designated standing areas, which have led to passenger complaints. Velasco (2024) stated that the modernization program has added pressure on drivers, who not only have to change their operational methods but also endure increasing passenger discontent and public criticism. The misbehavior of passengers, therefore, places a significant burden on jeepney drivers, who are working with the law to earn a living, creating a tendency for them to give up their work. According to Baltazar et al. (2024), commuter misbehavior, although less prevalent, can compromise the overall security and comfort that modernization promises to provide. Hence, despite the improved qualities of modernized jeepneys, instances of misconduct among passengers continue to occur from time to time, placing modern jeepney drivers in challenging situations.

**Daily minimum wage.** The daily minimum wage refers to the minimum amount of money that a worker is entitled to receive for a day's work under the law. Findings revealed the struggles of jeepney drivers caused by the daily minimum wage. Some participants preferred the traditional boundary system, where earnings depended on the number of passengers. Under the fixed wage system, they felt limited, as their income remained the same regardless of the number of trips they completed. It has made them reluctant to consolidate their fleets into modernized units, as all of them fall under the marginalized sector. Participants, therefore, were worried that this would reduce their motivation to exert maximum effort.

The modernization program promises a fixed income, but the system does not account for the regional minimum wage, and jeepney drivers mostly end up earning less than what is required to survive, particularly when the fixed wages are lower than what they would receive under the boundary system. Recuenco (2024) argued that the transition to a fixed wage regime under the modernization program is intended to provide drivers with a stable source of income; however, this stability is achieved at the expense of a daily minimum wage that is still insufficient to cover the drivers' expenses. According to Yolanda and Rachmawati (2020), the fixed wage system is far from the boundary system, where drivers have the possibility of earning more money during peak hours, despite their income varying. Hence, under the fixed wage system of the modernization program, this

positions jeepney drivers in a worse financial state than their counterparts in the boundary system. The Land Transportation Office (2023) favors the fixed wage system because it has the potential to meet minimum wage requirements. However, it has been criticized for not adequately addressing the real cost of living, and drivers remained dissatisfied with wages that fell below expectations.

### 3.5. The adjustments to the transition

During the structural changes in the transport sector, jeepney drivers have employed various strategies to survive. Despite the challenges they encountered, they remained optimistic about what the modernization program offered to them. The adaptive strategy revealed how drivers on the ground actively interpreted policy changes impacting their livelihoods. Out of these coping strategies, three (3) clustered themes were formulated, demonstrating the practical and affective coping measures employed by the drivers during their transition to modernization. From the clustered themes, an emergent theme was also formulated: Resilience in Transition.

### 3.6. Theme: resilience in transition

The third theme discovered was resilience in transition, which emphasized how jeepney drivers adapted and responded to the challenges of modernization. While drivers faced difficulties, they were supportive of the government's initiative to modernize and turn to cooperatives. Others embraced modernization by viewing its long-term advantages, including increased efficiency and lower maintenance costs. Cooperatives assisted in the transition by providing services, formal wages, benefits, or insurance, giving drivers greater stability. For others, modernization symbolized a transition towards efficiency and lower maintenance costs. This theme exemplified the drivers' support for the program, embracing modernization and financial adaptation, while further demonstrating their capacity to endure and adapt through systemic change.

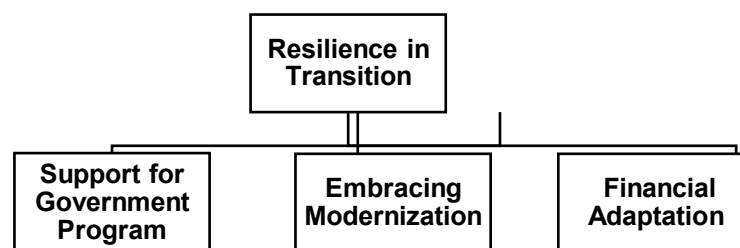


Fig. 3. The adjustments of jeepney drivers during the transition period

**Support for government program.** Support for a government program refers to the act of accepting or supporting a government-initiated policy or program. The participants of this study supported the government initiative to equip public transportation. Although the process was complex, the participants still believed in the purpose of the government's project. They claimed that the program would provide safer, more comfortable, and environmentally friendly transportation for commuters. They also believed that the consolidation could make routes more efficient, give drivers a steady salary and social security benefits, and allow them to pool funds to afford modern jeepneys.

The Public Utility Vehicle (PUV) Modernization Program is an initiative to replace traditional jeepneys with jeepney units following environmental guidelines to minimize pollution in urban areas. Casucian (2023) indicated that Rommel Juan, President of the Electric Vehicle Association of the Philippines, stated that political will from the Duterte administration was necessary to continue the aim of reducing air pollution on the roads of the Philippines. Yu (2023) asserted that several transport groups expressed support for the program, including the Federation of Jeepney Operators and Drivers Association (FEJODAP) and the Alliance of Transport Operators and Drivers Association of the Philippines (ALTODAP). By addressing safety, comfort, environmental guidelines, and routes, transport groups supported consolidation because it could allow drivers to receive a regular salary with benefits, support collective purchasing of units, and access programs such as social security coverage. Critically, concerns over the socioeconomic effects of the program led to an extension of the consolidation deadline, as resistance was detected from sectors affected by displacement and small operators, hindering the transition. De Leon (2023) stated that President Marcos extended the implementation date of phasing out traditional jeepneys until December 31, 2023, to ease the transition of the Philippine transport system to a global level of safety, reliability, and environmental sustainability.

**Embracing modernization.** Embracing Modernization refers to the willingness to accept and adopt new technologies or systems to enhance existing practices. Findings revealed that jeepney drivers acknowledged gradual change as the most effective approach to deal with the Public Utility Vehicle Modernization Program. Participants acknowledged that their units were old, and they believed that such a program would help them acquire modernized units with specific designs, including air conditioning, which would bring ease to passengers from scorching weather. As a result, the thought of embracing the modernization program was to believe in an ensured financial stability, as well as a promised sustainable future.

To maintain a competitive advantage in a global society, the public transportation industry should modernize through government initiatives that demonstrate the value of modernization, but also address the negative considerations. Amburgey (2024) stated that the adoption of modernized systems generally indicated low upkeep costs and greater operational capabilities, especially for PUJs. Therefore, it is established that even with high upfront investment, modernization enabled sustained cost savings and overall improved service performance for transport operators. Moreover, Zulueta et al. (2024) claimed that modernization increases international competitiveness. As other countries around the globe began utilizing advanced technologies in public transport, the Philippines needed to remain competitive to ensure efficient and quality service is delivered. Andelecio et al. (2020) noted that manufacturers recognized the country's preparedness for modernization, as partnerships were established with both private and foreign sectors that had been prepared through groundwork laid by the Duterte administration. The groundwork positioned drivers and operators for active participation in achieving a time-limited modernization program.

**Financial adaptation.** Financial adaptation refers to the adjustment of income patterns in response to changes in income or economic needs. Findings revealed that jeepney drivers have learned to adapt financially to the modernization program, as their daily income has been sustained. Participants exclaimed that traditional jeepney drivers were owned by franchise holders, who provided operators and drivers with limited income. It was because all their expenses, such as meals, wages, rent, and fuel, were deducted directly from their gross income. Unlike them, as modern jeepney drivers, they received a daily minimum wage and incentives if the quota was reached, since e-jeepneys were managed by their cooperative. The cooperative established a human

resources office dedicated to ensuring that drivers were paid fairly and consistently. This setup extended to compensating drivers for additional round trips, ensuring they were compensated for overtime work.

Panti (2023) stated that the government provides financial assistance, such as loans, to facilitate drivers and operators in taking on the modernization program. Drivers must repay any loans made to them by state banks, such as the Land Bank, once they have received their modern units. On the other hand, organizations like Pinagkaisang Samahang mga Tsuwera ng Operators Nationwide (PISTON) continue to undertake pro-subsidy campaigns, retrofitting campaigns, and campaigns for justice for drivers (Lago, 2024). Their advocacy regarding subsidies, retrofitting options, and just transition emphasizes the importance of equity-based perspectives and inclusive participation in the transport reform. The Philippines also has deep income inequalities that heighten its burden. Most drivers are still below a living wage, and they need to support a family while covering the costs of living to comply with the consolidation. Gaspay and Salison (2024) argued that the rationalization of fiscal practices under the program would help achieve better income than the prior boundary system and would provide a vehicle operator with better support for their everyday, family-related expenses. It suggests that the program offers drivers more income security than the compulsion of the boundary system to meet their own and their family's financial needs.

### *3.7. The future visions of public transportation*

As the modernization of public transportation continued to advance, jeepney drivers offered grounded perceptions of the future. They did not simply construct their futures out of present experiences but were also shaped by reliability, hope, and sustainability. Based on their forward-looking thinking, three (3) clustered themes were developed that revealed how they perceive the future mobility and public service in their communities. From the clustered themes, an emergent theme was also formulated: Inclusive Transport Development.

### *3.8. Theme: inclusive transport development*

The fourth theme derived was inclusive transport development that mirrored how jeepney drivers envisioned future public transport under modernization. Most drivers imagined having a reliable travel time, where established, regular routes and timing schedules minimized traffic congestion and maximized commuting efficiency. Security was also guaranteed in this dream, as modern units provided safe comforts to drivers and riders like GPS coordinates, CCTV cameras, and improved unit conditions. Drivers also aspired to sustainable development, as green operations and reduced emissions were guaranteed. The theme, therefore, encompassed reliable travel time, ensured security, and sustainable development, driving the dreams of drivers for an efficient, secure, and future-proof transport system.

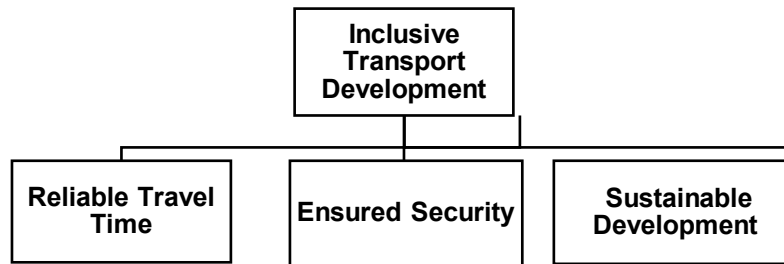


Fig. 4. The visions of jeepney drivers towards public transportation in padada, davao del sur

**Reliable travel time.** Reliable travel time refers to the regular and consistent time spent on a routine journey, typically measured by efficiency and punctuality. Findings revealed that jeepney drivers envisioned favorable impacts of PUJ modernization on public transport. They believed that reliable travel time was exceptionally advantageous for passengers, drivers, and operators. It existed because modernized units offered a reliable travel time. Participants clarified that without constant traffic congestion and faster unit speeds, journeys were more productive. It ensured that travel time was more reliable, facilitating improved scheduling planning.

Caplis (2024), in his study on the Local Public Transport Route Plan (LPTRP), argued that the implementation of the LPTRP and PUVMP would increase commuting speed, thus providing commuters with time savings. It emphasized the importance of travel time reliability—it increased the operational efficiency, saved and reduced commuter time and anxiety, and maximized the transport system. According to Agpaoa et al. (2024), the jeepney modernization program is expected to significantly reduce urban traffic congestion, as it enables a shift to safer and more efficient means of transportation. Modernized jeepneys are made to operate more efficiently, likely decreasing travel time and improving the overall commuting experience (Bienvenido et al., 2023). It has significant impacts on both the drivers and commuters. Commuters would find convenience, while drivers would reach their quota and increase their income.

**Ensured security.** Ensuring security involves providing physical, technical, and procedural means to protect passengers, drivers, and assets from harm, such as crime, accidents, or violence, within a transport system. Participants envisioned that the future of public transport would witness an ongoing focus on ensuring security. The interior of e-jeepneys features covered cabins, secure seats, and a standing area, all of which were designed to minimize the risks of overloading, falling, and theft. Meanwhile, the exterior featured double-tire support and a stable, effective engine system to prevent mechanical breakdown and reduce the risk of road accidents. Participants stated that these vehicles offered better protection from outside attacks and road hazards, while others appreciated the additional safety provided by new technologies.

Ganituen et al. (2023) conducted a study that showed traditional jeepneys pose a greater risk to passengers due to their exposed sides, the absence of protective barriers, and crowded interiors. In contrast, modernized vehicles provide a safer ride with improved structural features, including closed doors, lockable windows, and a stronger frame. These features help prevent falls and injuries and reduce vulnerability to external hazards during transit. Cartojano (2023) argued that this shift is likely to decrease traffic accidents and fatalities as improved transport infrastructure is developed with passenger safety as a priority. It supports the idea that modernization makes mass transportation safer and more reliable. According to the Asia Pacific Foundation of Canada (2023), passengers today feel much safer in modern jeepneys. With the introduction of contemporary units, they offer better protection from external threats and road dangers. Hence, the new

technologies create a path toward a more reliable and secure future, aligning with the goals of sustainable cities and communities.

**Sustainable development.** Sustainable development refers to a development strategy that meets the needs of the current generation without compromising the capacity of future generations to meet their own needs, balancing economic growth, environmental preservation, and social fairness. Participants envisioned sustainable development under PUJ modernization, thereby promoting sustainable cities and communities. The primary purpose of this government program was to reduce carbon emissions and promote an eco-friendly environment, further strengthening the sustainable development promises it offers. Participants claimed that it was possible to foster progress for sustainable communities without hampering the environment. The theme suggests that the modernization program is a step toward promoting sustainability worldwide, ensuring that environmental issues are addressed.

The modern jeepney, according to Gajitos (2023), is a lithium-ion battery-electric version of the traditional jeepney that emits zero emissions and operates efficiently. It complements broader efforts to reduce the carbon footprint of the urban transportation network. Transportation Secretary Jaime Bautista, as quoted by Bajo (2023), described the CASA project—Convenient, Accessible, Safe, Secure, and Affordable—as generating prospects for drivers, operators, dispatchers, and administrative personnel through jeepney modernization. This aspect aligns the goals of sustainability and inclusive economic growth. According to Tilly et al. (2024), transitioning to electric-powered, low-emission vehicles is a path towards advancing sustainability, protecting public health, and building sustainable communities. Their vision is not just a technological innovation, but also a pursuit of a cleaner, safer, and more equitable public transportation system that benefits humanity while maintaining respect for the natural world.

#### 4. Conclusion

In this research, the determinants influencing Public Utility Jeepney (PUJ) drivers were meticulously examined and analyzed on the basis of their working environment. Padada, Davao del Sur, was studied within the framework of the Philippine government's Public Utility Vehicle Modernization Program (PUVMP), which seeks to phase out aging jeepneys and replace them with modern, eco-friendly units. Using a descriptive-phenomenological approach, which focuses on the examination of lived experiences, the researchers identified four crucial themes: pathway to progress, burdened by change, resilience in transition, and inclusive transport development. Drivers recognized improvements in vehicle comfort and safety, stable income through cooperatives, and reduced environmental impact. At the same time, they faced serious challenges such as the high cost of new units, low wage levels, commuter misconduct, and conflicts between old and new systems. Despite these challenges, the majority of drivers demonstrated resilience by means of adjustment mechanisms for finance, program support, and responsiveness to long-term benefits of the program. In the context of Sustainable Development Theory and Sustainable Development Goal 11, the research highlighted the importance of uniform and interfacing modernization policies that address economic, social, and cultural problems while pushing forward people-oriented, sustainable transportation systems.

#### 5. Implications

Positive attitudes among drivers and operators indicate willingness for change, particularly in the

recognition of enhanced vehicle quality, safety, environmental benefits, and comfort. However, barriers in the shape of the unaffordability of new vehicles, economic exposure, and cultural conservatism remain barriers to increased levels of acceptance. It is thus essential that the government and other actors extend continuous support, financing, and technical aid, as well as implement a comprehensive policy initiative, and give room for small-scale players to engage in the program of modernization. Mass information campaigns emphasizing the environmental and security benefits of the program can help solidify public trust, while fair enforcement of rules and incentives can minimize opposition. Finally, situating the program in broader sustainability, social justice, and people-oriented governance—particularly Sustainable Development Goal 11—perspectives can assist in reframing the public transportation system as not only technologically upgraded and efficient but also inclusive, equitable, and driver as well as commuter responsive.

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### References

- Agaton, C. B., Guno, C. S., Villanueva, R. O., & Villanueva, R. O. (2019). Diesel or electric jeepney? A case study of transport investment in the Philippines using the real options approach. *World Electric Vehicle Journal*, 10(3), 51. <https://doi.org/10.3390/wevj10030051>
- Agpaoa, B. F. C., Gallevo, H. M. U., Lasco, R. S. M., Roma, P. A. G., Tan, B. Y., & Vallespin, M. R. D. (2024). Steering towards sustainable mobility: A holistic examination of Public Utility Vehicle Modernization Program impact on commuting public and private school students in the University Belt, Manila, Philippines. *International Journal of Current Science Research and Review*, 7(5). <https://doi.org/10.47191/ijcsrr/V7-i5-12>
- Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 2(1), 1–4. Science Direct. <https://doi.org/10.1016/j.glmedi.2024.100051>

- Amburgey, T. (2024, April 4). *Embracing IT modernization in state & local government agencies*. American City and County. <https://www.americancityandcounty.com/government-technology/embracing-it-modernization-in-state-local-government-agencies>
- Andalecio, A. B. P., Aquino, K. E. C., Cruz, C. F. A., Guzman, A. D., & Kiong, N. T. C. (2020). Implementation, challenges, and stakeholders' perception of modernized jeepneys in Metro Manila. *Journal of Physics: Conference Series*, 1529(3), 032067. <https://doi.org/10.1088/1742-6596/1529/3/032067>
- Andres, A. (2024, May). *Philippine car prices, news, and reviews*. Top Gear Philippines. <https://www.topgear.com.ph/news/motoring-news/unconsolidated-jeepneys-face-apprehension-ltfrb-a5100-20240520>
- Asia Pacific Foundation of Canada. (2023, March 8). *Jeepneys, backbone of public transport in Philippines, face modernization by government*. Asia Pacific Foundation of Canada. <https://www.asiapacific.ca/publication/jeepneys-backbone-public-transport-philippines-face>
- Atos, M. S., Cabe, K. H., Gomez, C. J., Manantan, K. D., & Padupad, C. L. (2021, April 29). *Modernized tradition: Transformation of public transport*. Animo Repository. [https://animorepository.dlsu.edu.ph/cgi/viewcontent.cgi?article=1704&context=conf\\_shsrescon](https://animorepository.dlsu.edu.ph/cgi/viewcontent.cgi?article=1704&context=conf_shsrescon)
- Baburajan, V., Silva, J. D. A., & Pereira, F. C. (2020). Open-ended versus closed-ended responses: a comparison study using topic modeling and factor analysis. *IEEE Transactions on Intelligent Transportation Systems*, 22(4), 2123–2132. <https://doi.org/10.1109/TITS.2020.3040904>
- Bajo, A. F. (2023). *Bautista says PUV modernization program to stay*. GMA Integrated News, Retrieved from: <https://www.gmanetwork.com>
- Baltazar, M. E., Jama Paolo Sariol, Panuncillon, C. C., Raguindin, W. R., & Hydellou Baunsit. (2024). The lived experiences of jeepney drivers in the Philippines: A phenomenological study. *Vox Humana Journal of Social Affairs*, 3(2), 2–6. <https://doi.org/10.56183/vox.v3i2.643>
- Bautista, J. (2023, March 7). *Modern jeepney prototype gets approval of LTFRB*. Inquirer.net. <https://newsinfo.inquirer.net/1739211/modern-jeepney-prototype-gets-approval-of-ltfrb>
- Bautista, P. N., & Moya, R. N. (2023, September 3). *Jeepney Modernization Program: Drivers have a steep price to pay*. PhilStar. <https://www.philstar.com/headlines/2023/09/03/2293549/jeepney-modernization-program-drivers-have-steep-price-pay>
- Bhandari, P. (2020) *What is qualitative research? Methods & examples*. Scribbr. <https://www.scribbr.com/methodology/qualitative-research>
- Bibri, S. E., Krogstie, J., & Kärrholm, M. (2020). Compact city planning and development: Emerging practices and strategies for achieving the goals of sustainable development. *Developments in the Built Environment*, 4, 100021. <https://doi.org/10.1016/j.dibe.2020.100021>
- Bienvenido, J. B. M., Biona, M. J., Lopez, N. S., Hecita, I. J., Martin, M. J., & Vivo, J. J. (2023). *Re-calibrating the Jeepney Modernization Program: Policy issues and recommendations* (Policy Brief No. PB 2023-11). Jesse M. Robredo Institute of Governance, De La Salle University. <https://static1.squarespace.com/static/58ff0e1fa5790aa37e3fa35a/t/6573e30e1699a85076b2e893/1702093603206/Recalibrating+the+Jeepney+Modernization+Program.pdf>
- Caplis, R. M. P. (2024). *A cost-benefit analysis of the proposed modernization and route rationalization of jeepneys: a regional city case*. SSRN. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4865180](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4865180)
- Cartojano, A. (2023, March 8). *Modernizing the jeepney fleet in the Philippines: Balancing safety, environmental, and social concerns*. LinkedIn. <https://www.linkedin.com/pulse/modernizing-jeepney-fleet-philippines-balancing-safety-cartojano>
- Casucian, J. (2023, November 24). *PUV Modernization leads to loss of income - jeepney drivers*. GMA News Online. <https://www.gmanetwork.com/news/topstories/nation/889389/puv-modernization-leads-to-loss-of-income-jeepney-drivers/story/>
- Caulfield, J. (2023, June 22). *How to do thematic analysis | step-by-step guide & examples*. Scribbr. <https://www.scribbr.com/methodology/thematic-analysis/>
- Cervantes, F. M. (2024). *Measures to support livelihood of jeepney drivers eyed* | Philippine News Agency. Pna.gov.ph. <https://www.pna.gov.ph/articles/1216387>
- Conchas, C. A., & Apas, R. (2024). *Fuel price increase: Unveiling the torments and agonies of the transportation sector — basis for policy formation*. Journal of Interdisciplinary Perspectives. <https://www.jippublication.com/fuelprice-increase-unveiling-the-torments-and-agonies-of-the-Transportation-sector-basis-for-policy-formation>
- De Leon, D. (2023, December 12). *Marcos: No extension of December 31 consolidation deadline for jeepney drivers*. Rappler. <https://www.rappler.com/philippines/marcos-no-extension-consolidation-deadline-jeepney-drivers-december-2023/>
- De Santos, J. (2023, April 2). *UP paper: Jeepney “modernization” risks corporate takeover of transport sector*. Philstar.com. <https://www.philstar.com/headlines/2023/04/02/2256307/paper-jeepney-modernization->

- must-be-participative-recognize-transport-public-good
- Dimalanta, R., Marvi, J., & Samonte, A. (2023). *Putting transport workers and commuters first: The route to just transition in public transport modernization*. <https://cids.up.edu.ph/wp-content/uploads/2023/03/Putting-Transport-Workers-and-Commuters-First-The-Route-to-Just-Transition-in-Public-Transport-Modernization.pdf>
- El-Bany, M. E.-S. (2021). *Sustainable transportation: An overview and fusion for the last decade*. Dntb.gov.ua. <https://ouci.dntb.gov.ua/en/works/ID6EPVo7/>
- Encabo, L. (2023, December 29). *Forcing jeepney operators into cooperatives could lead to the corporatization of public transport in the Philippines*. The Defiant. <https://thedefiant.net/forcing-jeepney-operators-into-cooperatives-could-lead-to-the-corporatization-of-public-transport-in-the-philippines/>
- France-Presse, A. (2024, April 26). *End of the road? Jeepneys face uncertain future*. Inquirer.net. <https://newsinfo.inquirer.net/1933972/end-of-the-road-jeepneys-face-uncertain-future>
- Gajitos, T. (2023, March 10). *DOST offers e-jeeps, LPG-powered jeeps as alternatives vs PUV modernization*. The Filipino Times. <https://filipinotimes.net/latest-news/2023/03/10/dost-offers-e-jeeps-lpg-powered-jeeps-as-alternatives-vs-puv-modernization/>
- Ganituen, Z. R., Cabatingan, M. M., Ko, M. D., & Amorsolo, D. M. (2023). *Traditional and modernized jeepneys: An assessment on comfort, ease of use and safety*. DLSU Senior High School Research Congress. [https://animorepository.dlsu.edu.ph/conf\\_shsrescon/2023/poster\\_see/5](https://animorepository.dlsu.edu.ph/conf_shsrescon/2023/poster_see/5)
- Gaspay, S., Arse, A., & Salison, J. (2024). *Business models, enabling factors, and current challenges*. [https://icsc.ngo/wp-content/uploads/2024/03/ICSC\\_Report-1.2\\_The-Economics-of-EJeepney-Transport-Operations\\_14Mar24.pdf](https://icsc.ngo/wp-content/uploads/2024/03/ICSC_Report-1.2_The-Economics-of-EJeepney-Transport-Operations_14Mar24.pdf)
- Gatarin, G. R. (2023). Modernising the “king of the road”: Pathways for just transitions for the Filipino jeepney. *Urban Governance*, 4(1). <https://doi.org/10.1016/j.ugj.2023.11.002>
- Golzar, J., Noor, S., & Tajik, O. (2022). Convenience Sampling. *International Journal of Education & Language Studies*, 1(2), 72–77. <https://doi.org/10.22034/ijels.2022.162981>
- Guno, C. S., Collera, A. A., & Agaton, C. B. (2021). Barriers and drivers of transition to sustainable public transport in the Philippines. *World Electric Vehicle Journal*, 12(1), 46. <https://doi.org/10.3390/wevj12010046>
- Ho, L., & Limpacher, A. (2022, March 17). *What is phenomenological research design? Essential guide to coding qualitative data*. Delve. <https://delvetool.com/blog/phenomenology>
- Jamir, J., Gonzales, G. V., Justinia, G., Faye, E., Chew, A. S., Bonoan, M. D., & Ginger Erin Swa. (2024). Climate injustice: Lessons from the Philippines’ jeepney modernisation programme. *The Lancet Planetary Health*, 8(11). [https://doi.org/10.1016/s2542-5196\(24\)00235-3](https://doi.org/10.1016/s2542-5196(24)00235-3)
- Janice, Ma., Dayne, E., Nathaniel, J., James, A., Miguel, J., Urbina, B., Mascariola, M. M., & Kester, A. (2024). Factors influencing the adoption of electric jeepneys: A Philippine perspective. *World Electric Vehicle Journal*, 15(7), 284–284. <https://doi.org/10.3390/wevj15070284>
- Jarvie, M. E. (2016). Brundtland Report | publication by World commission on environment and development. *Encyclopædia Britannica*. <https://www.britannica.com/topic/Brundtland-Report>
- Jelti, F., Allouhi, A., & Aoul, K. A. T. (2023). Transition paths towards a sustainable transportation system: A literature review. *Sustainability, Journal of Education & Language Studies*. 15(21), 15457. <https://doi.org/10.3390/su152115457>
- Kaenzig, R., Mettke, C., & Mariano, P. (2020). *Philippine Urban Mobility Programme: Towards people-first cities empowered by efficient, dignified, and sustainable mobility*. In the Philippine Urban Mobility Programme. Deutsche Gesellschaft Für. [https://changing-transport.org/wp-content/uploads/2020\\_Philippine\\_Urban\\_Mobility\\_Programme.pdf](https://changing-transport.org/wp-content/uploads/2020_Philippine_Urban_Mobility_Programme.pdf)
- Lago, T. (2024, May 10). *The jeepney phaseout is hurting the real drivers of change*. Green Network Asia. <https://greennetwork.asia/opinion/the-jeepney-phaseout-is-hurting-the-real-drivers-of-change/>
- Land Transportation Office. (2023, January 22). *PUVMP: Public Utility Vehicle Modernization Program Philippines*. LTO Portal PH. <https://ltoportal.ph/puvmp-public-utility-vehicle-modernization-program/>
- Landayan, S. A. M., Magtanong, A. P. B., Palma, A. M. L., Rait, M. J. D., Ramos, J. C. M., Villar, A. J. B., & Vallespin, M. R. (2024). From routes to resilience: Exploring Manila jeepney drivers’ demographics and perspectives on proposed Public Utility Vehicle Modernization Program (PUVMP) through thematic analysis. *International Journal of Current Science Research and Review*, 07(05). <https://doi.org/10.47191/ijcsrr/V7-i5-10>
- Lu, P., Shigeyuki Hamori, Sun, L., & Tian, S. (2024). Does the electric vehicle industry help achieve Sustainable Development Goals?—Evidence from China. *Frontiers in Environmental Science*, 11. <https://doi.org/10.3389/fenvs.2023.1276382>
- Lu, Y., Fu, X., Lu, C., Guo, E., Tang, F., Zhu, J., & Li, H. (2020). Effects of route familiarity on drivers’ psychological conditions: Based on driving behaviour and driving environment. *Transportation Research Part F: Traffic Psychology and Behaviour*, 75, 37–54.

- <https://doi.org/10.3389/fenvs.2023.1276382>
- Mateo-Babiano, I., Recio, R. B., Ashmore, D. P., Guillen, M. D., & Gaspay, S. M. (2020). Formalising the jeepney industry in the Philippines – A confirmatory thematic analysis of key transitional issues. *Research in Transportation Economics*, 83, 100839. <https://doi.org/10.1016/j.retrec.2020.100839>
- Mendoza, T. (2021). *Addressing the “blind side” of the government’s jeepney “modernization” program*. <https://cids.up.edu.ph/wp-content/uploads/2022/02/UP-CIDS-Discussion-Paper-2021-02.pdf>
- Ong, A. K. S., Prasetyo, Y. T., Estefanio, A., Tan, A. S., Videña, J. C., Villanueva, R. A., Chuenyindee, T., Thana, K., Persada, S. F., & Nadlifatin, R. (2023). Determining factors affecting passenger satisfaction of “jeepney” in the Philippine urban areas: The role of service quality in sustainable urban transportation system. *Sustainability*, 15(2), 1223. <https://doi.org/10.3390/su15021223>
- Panti, L. (2023, November 13). *LTFRB, banks urged to simplify loan process for PUV modernization*. GMA News Online. <https://www.gmanetwork.com/news/money/economy/888964/ltfrb-banks-urged-to-simplify-loan-process-for-puv-modernization/story/>
- Recuenco, A. (2024, January 15). *DOTr: Jeepney drivers to have fixed salary, enjoy benefits of regular employees under PUVMP*. Manila Bulletin. <https://mb.com.ph/2024/1/15/do-tr-jeepney-drivers-to-have-fixed-salary-enjoy-benefits-of-regular-employees-under-puvmp>
- Shaaban, K., Elamin, M., & Alsoub, M. (2021). Intelligent transportation systems in a developing country: Benefits and challenges of implementation. *Transportation Research Procedia*, 55, 1373–1380. <https://doi.org/10.1016/j.trpro.2021.07.122>
- Siy, R. (2021, February 13). *Moving ahead with Public Utility Vehicle Modernization*. The Manila Times. <https://www.manilatimes.net/2021/02/13/business/columnists-business/moving-ahead-with-public-utility-vehicle-modernization/840268>
- Tilly, N., Yigitcanlar, T., Degirmenci, K., & Paz, A. (2024). How sustainable is electric vehicle adoption? Insights from a PRISMA review. *Sustainable Cities and Society*, 117(1), 1–22. <https://doi.org/10.1016/j.scs.2024.105950>
- Tumsekcali, E., Ayyildiz, E., & Taskin, A. (2021). Interval valued intuitionistic fuzzy AHP-WASPAS based public transportation service quality evaluation by a new extension of SERVQUAL Model: P-SERVQUAL 4.0. *Expert Systems with Applications*, 186, 115757. <https://doi.org/10.1016/j.eswa.2021.115757>
- Van Niekerk, A. J. (2020). Inclusive economic sustainability: SDGs and global inequality. *Sustainability*, 12(13), 5427. <https://www.mdpi.com/2071-1050/12/13/5427>
- Velasco, B. B. (2024, September 25). *Constraints and potentials for just transition in the Jeepney Modernization Program*. ResearchGate. [https://www.researchgate.net/publication/384769061\\_Constraints\\_and\\_Potentials\\_for\\_Just\\_Transition\\_in\\_the\\_Jeepney\\_Modernization\\_Program](https://www.researchgate.net/publication/384769061_Constraints_and_Potentials_for_Just_Transition_in_the_Jeepney_Modernization_Program)
- Yanto, E. S. (2023). The what and how of essential thematic analysis. *The Qualitative Report*, 28(11), 3120–3131. <https://doi.org/10.46743/2160-3715/2023.6744>
- Yolanda, Y., & Rachmawati, D. (2020). The role of boundary systems and diagnostic control in controlling achievement of performance targets. *International Journal of Management, Accounting and Economics*, 7(4), 230–242. [https://www.ijmae.com/article\\_115013\\_0f16129e7813f2ee08565aeb8bca8c8.pdf](https://www.ijmae.com/article_115013_0f16129e7813f2ee08565aeb8bca8c8.pdf)
- Yu, L. S. (2023, February 27). *Marcos’ broken promise: Why jeepney drivers protest modernization*. Rappler. <https://www.rappler.com/business/marcos-jr-broken-promise-why-jeepney-drivers-protest-modernization-program/>
- Zulueta, T. M. T., Ong, A. K. S., German, J. D., Gumasing, M. J. J., & Chico, J. C. D. (2024). Implications of the progression to sustainable public transportation: An insight into modern jeepney shift from the Philippines. *Sustainability*, 16(10), 3912. <https://doi.org/10.3390/su16103912>

**Appendix.A. Interview guide questions****KING OF THE ROAD: THE ADJUSTMENTS OF PUBLIC UTILITY JEEPNEY DRIVERS TOWARDS MODERNIZATION**

Researchers: Castillo, Christine Kate M., Macarandan Louise Bernard F., & Semera, March Junle P.

|     | PRE-VALIDATION QUESTIONS                                                                                                                                                                         | YES | NO |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|
| PQ1 | <b>Are you currently a licensed Public Utility Jeepney (PUJ) driver who is residing in Padada, Davao del Sur?</b> (Ikaw ba usa ka lisensyadong PUJ driver nga nagpuyo sa Padada, Davao del Sur?) |     |    |
| PQ2 | <b>Do you have at least 10 years of experience in driving a jeepney?</b> (Aduna ba ka'y 10 ka tuig nga kasinatian sa pagdrayb og jeepney?)                                                       |     |    |
| PQ3 | <b>Are you a member of any transport cooperatives accredited and recognized by LTFRB?</b> (Miyembro ba ka sa bisan unsang transport cooperative nga akreditado og giila sa LTFRB?)               |     |    |
| PQ4 | <b>Are you a jeepney operator who also drives his own unit?</b> (Ikaw ba usa ka operator sa jeep nga ikaw mismo ang nagadrayb sa imong unit?)                                                    |     |    |

*Note: If all of the 3 Pre-validation questions were answered "YES", then He/She will be considered as an official participant/s of the research study. If He/She answers some questions with "NO", He/She will not be considered as an official research participant/s.*

## Appendix.A.1. Interview guide questions

## RESEARCH QUESTIONS AND INTERVIEW GUIDE QUESTIONS

| RESEARCH QUESTIONS                                                                                                                                                                                                                        | INTERVIEW GUIDE QUESTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. What are your thoughts on the modernization of jeepneys?</b><br><i>(Unsa imong hunahuna bahin sa modernisasyon sa mga jeepney?)</i>                                                                                                 | <b>1.1. What do you see as the potential benefits of modernization for jeepney drivers?</b><br><i>(Unsa imong nakitang mga posible nga benepisyo sa modernisasyon para sa mga jeepney drivers?)</i><br><br><b>1.2. What are your concerns or worries about the modernization process?</b><br><i>(Unsay mga kabalaka o kahadlok nimo bahin sa proseso sa modernisasyon?)</i><br><br><b>1.3. Do you believe modernization will negatively impact your livelihood? If so, in what ways?</b><br><i>(Nagtuo ka ba nga ang modernisasyon makaapekto ug negatibo sa imong</i> |
|                                                                                                                                                                                                                                           | <i>panginabuhian? Kung oo, sa unsa nga paagi?)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>2. What adjustments have you made or are you considering making to adapt to the modernization of jeepneys?</b><br><i>(Unsa nga mga pagbag-o ang imong gibuhat o ginaplano buhaton aron makaangay sa modernisasyon sa mga jeepney?)</i> | <b>2.1. How does these adjustments affected your daily routine and work-life balance?</b><br><i>(Giunsa niining mga pagbag-o nga imong gibuhat nakaapekto sa imong pang adlaw-adlaw nga buluhaton og balanse sa trabaho og kinabuhi?)</i>                                                                                                                                                                                                                                                                                                                              |

|                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                      | <p><b>2.2.</b></p> <p><b>Have you encountered any challenges in the adjustment process? If so, what were they?</b><br/> <i>(Nakasugat ka ba ug mga hagit o kalisod sa proseso sa pag-angay? Kung oo, unsa kini?)</i></p> <p><b>2.3.</b></p> <p><b>What support or resources would you find helpful in your transition to modernization?</b><br/> <i>(Unsa nga mga suporta o kapanguhaan ang imong tan-aw nga makatabang kanimo sa pagbag-o padulong sa modernisasyon?)</i></p> |
| <p><b>3. How do you envision the future of public transportation in your community?</b><br/> <i>(Unsa ang imong panglantaw sa kaugmaon sa pampublikong transportasyon sa imohang komunidad?)</i></p> | <p><b>3.1.</b></p> <p><b>What role do you see yourself playing in the evolving landscape of public transportation?</b><br/> <i>(Unsa ang imong tan-aw nga papel nga imong gampanan sa nag-uswag nga larawan sa pampublikong transportasyon?)</i></p> <p><b>3.1.</b></p> <p><b>What are your hopes and aspirations for the future of jeepney driving?</b><br/> <i>(Unsa ang imong mga paglaum ug tinguha alang sa kaugmaon sa pag-drive og jeepney?)</i></p>                    |

### INTERVIEW SCRIPT

(The researchers will be welcoming the participants by greeting them and giving them the background and the purpose of the study.)

**Researcher 1:** Good day, everyone, especially to our dear respondents of the study.

Before we start our interview, we would like to introduce first ourselves, I am Louise Bernard F. Macarandan

**Researcher 2:** I am March Junle P. Semera, and

**Research 3:** I am Christine Kate M. Castillo, and we are the students of Bachelor of Arts in Political Science at

the University of Mindanao Digos College.

**Researcher 1:** We, the researchers, are so happy because you will be part of our qualitative study as our participants and we are so honored to have you. Our study is entitled, “KING OF THE ROAD: THE ADJUSTMENTS OF PUBLIC UTILITY JEEPNEY DRIVERS TOWARDS MODERNIZATION”. As researchers, the main purpose of our study is to determine your adjustments as a jeepney driver in terms of the Public Utility Jeepney (PUJ) Modernization Program here in Padada, Davao del Sur.

**Researcher 2:** So, prior to setting this interview, we already gave you the informed consent, and as your researchers, we promised to secure you and protect you from any harm. In our study, we are strictly following the ethical considerations set by the University of Mindanao Digos College, hence, we will assure your anonymity and confidentiality. You are also given enough time to answer the questions and will be treated equally with utmost respect. In addition, every time you feel uncomfortable when you answer our questions, you will always be given the opportunity to withdraw your answer and participate in the research.

**Researcher 3:** So, I believe that everything is now on set, so for the information of our participants, the researchers will be asking three (3) preliminary questions then after that, if you passed our pre-assessment, you will now be qualified as our official participant. Let us start.

**a. Are you currently a licensed Public Utility Jeepney (PUJ) driver?**

*(Ikaw ba usa ka lisensyadong PUJ driver?)*

Participant:.....

**b. Are you a jeepney driver residing in Padada, Davao del Sur?**

*(Usa ba ka nga jeepney driver nga nagpuyo sa Padada, Davao del Sur?)*

Participant:.....

**c. Do you have experience driving both traditional and modernized jeepney units?**

*(Naa ba kay kasinatian sa pag-drive sa tradisyonal ug modernized nga mga jeepney?)*

Participant:.....

**Researcher 2:** Congratulations! You have answered all the preliminary questions and based on your answers, you are now our official participant. Now, we will proceed to the actual interviews. In this interview, we would like to learn about your personal background and experiences as a jeepney driver, specifically learning these three (3) important domains regarding your (1) perceptions of modernization, (2) how you have adjusted to it, (3) and your thoughts on the future of public transportation in your community. The data that we will be gathering from you will help us to distinguish whether the research question was answered. We prepared 11 questions for you and this will help us, the researchers, to attain the desired data. Now, let us begin on the research question No. 1:

**1. What are your thoughts on the modernization of jeepneys? (Unsa imong hunahuna bahin sa modernisasyon sa mga jeepney?)**

Participant:.....

**a. What do you see as the potential benefits of modernization for jeepney drivers? (Unsa imong nakitang mga posible nga benepisyo sa modernisasyon para sa mga jeepney drivers?)**

Participant:.....

**b. What are your concerns or worries about the modernization process? (Unsay mga kabalaka o kahadlok nimo bahin sa proseso sa modernisasyon?)**

Participant:.....

- C. Do you believe modernization will negatively impact your livelihood? If so, in what ways?** (*Nagtuo ka ba nga ang modernisasyon makaapekto ug negatibo sa imong panginabuhian? Kung oo, sa unsa nga paagi?*)

Participant:.....

**Researcher 1:**

- 2. What adjustments have you made or are you considering making to adapt to the modernization of jeepneys?** (*Unsa nga mga pagbag-o ang imong gibuhat o ginaplano buhaton aron makaangay sa modernisasyon sa mga jeepney?*)

Participant:.....

- a. How does these adjustments affected your daily routine and work-life balance?** (*Giunsa niining mga pagbag-o nga imong gibuhat nakaapekto sa imong pang adlaw-adlaw nga buluhaton og balanse sa trabaho og kinabuhi?*)

Participant:.....

- b. Have you encountered any challenges in the adjustment process?**

**If so, what were they?** (*Nakasugat ka ba ug mga hagit o kalisod saproseso sa pag-angay? Kung oo, unsa kini?*)

Participant:.....

- C. What support or resources would you find helpful in your transition to modernization?** (*Unsa nga mga suporta o kapanguhaan ang imong tan-aw nga makatabang kanimo sa pagbag-o padulong sa modernisasyon?*)

Participant:.....

**Researcher 3:**

- 3. How do you envision the future of public transportation in your community?** (*Unsa ang imong panglantaw sa kaugmaon sa pampublikong transportasyon sa imohang komunidad?*)

Participant:.....

- a. What role do you see yourself playing in the evolving landscape of public transportation?** (*Unsa ang imong tan-aw nga papel nga imong gampanan sa nag-uswag nga larawan sa pampublikong transportasyon?*)

Participant:.....

- b. What are your hopes and aspirations for the future of jeepney driving?** (*Unsa ang imong mga paglaum ug tinguha alang sa kaugmaon sa pag-drive og jeepney?*)

Participant:.....

**Researcher 3:** That ends our interview. Thank you so much (name of the participant) for being part of our study. Rest assured that all the data that we gathered from you will be retrieved with confidentiality.

**Researcher 1:** Thank you for lending us your precious time and we really appreciate your effort in answering all the questions. May God bless you always, and have a good day.