GoHume: Understanding the Problem

by GoHuMe

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Overview

Public transportation in the Philippines is an essential part of life in the city. The system primarily comprises jeepneys, buses, tricycles, taxis, and trains. Jeepneys are the most iconic and widely used form of transportation due to their affordability and extensive network.

With public transportation being a crucial part of the Philippine society, the public transportation system faces several challenges that impact commuters' daily lives that delays and inconveniences the everyday commuter.

Commuters often experience long wait times due to the unpredictable arrival and departure of jeepneys and taxis. This unreliability can result in missed appointments, work delays, and general frustration. Major cities like Metro Manila suffer from severe traffic congestion, further inconveniences the commuter, and increases inefficiency of public transportation.

Users' Characteristics

Potential users of public transportation in the Philippines are predominantly urban residents who rely heavily on these services for their daily commutes. They include a diverse range of individuals such as office workers, students, and small business owners. These users often have tight schedules and depend on public transport to reach their destinations on time. Affordability is a crucial factor for them, as many come from middle to lower-income brackets, making cost-effective transportation options like jeepneys and tricycles essential.

They value improvements that can enhance their commuting experience, such as real-time updates on vehicle arrivals and departures, more efficient route planning, and better infrastructure to reduce traffic delays. Safety and comfort are also significant concerns, as crowded and poorly maintained vehicles can impact their overall well-being and productivity.

Task Analysis

Tasks Performed by Users

Users engage in tasks requiring efficient navigation, route optimization, and safety verification, emphasizing the need for intuitive interfaces and real-time information access.

The Task Environment

The task environment involves dynamic mobility needs, varied transportation options, and safety considerations, highlighting the importance of reliable connectivity and accurate location tracking for seamless commuting experiences.

Structured Task Analysis for Passenger

Task: Utilize the commute app to navigate and manage transportation options for commute.

Subtask 1: Find Nearby Vehicles
- Input current location and destination.
- View real-time location of nearby jeepneys or taxis.
- Choose preferred mode of transportation.

Subtask 2: Optimize Route Selection
- Input destination and preferred mode of transportation.
- Receive route suggestions (considering traffic conditions and estimated arrival times)
- Select route based on provided options.

Subtask 3: Ensure Safety and Verification
- Access driver and vehicle information for safety verification.
- Provide feedback and ratings after the ride.

Structured Task Analysis for Driver

Task: Utilize the commute app to provide transportation services to passengers.

Subtask 1: Offer Rides
- Activate availability status to accept passenger requests.
- Receive notifications of nearby passenger hotspots.
- Navigate to pick-up locations using route optimization.

Subtask 2: Ensure Passenger Safety and Satisfaction
- Display accurate driver and vehicle information for passenger verification.
- Option to communicate with passengers regarding pick-up details and estimated arrival times.

Subtask 3: Manage Operations and Feedback
- Access passenger ratings and feedback to improve service quality.
- Maintain app functionality and update personal information for smooth operation.

Existing Systems

System 1: Grab

PROS	CONS
Grab's services fits local (great understanding of users' needs and preferences)	Occasional technical glitches or server issues could disrupt the user experience
Grab offers various services such as food delivery and package delivery	During peak hours or high-demand periods, Grab often implements surge pricing
Grab has a simple and intuitive interface	Availability may be limited in remote or less populated areas
Grab accepts various payment methods	

System 2: Uber

PROS	CONS
Includes features like real-time tracking, cashless payments, and driver ratings	Occasional disruptions due to technical issues or driver availability
Various incentives and bonuses to drivers, such as surge pricing and flexible working hours	Uber has faced criticism and controversy related to issues such as workplace culture and safety standards
Uber integrates with public transit for seamless multimodal transportation options	Pricing can sometimes be complex
Offers accessibility options for users with disabilities	

The Larger Social and Technical System

The public transportation system in the Philippines operates within a complex socio-technical ecosystem characterized by diverse urban landscapes, socioeconomic disparities, and infrastructural challenges. While jeepneys, buses, tricycles, taxis, and trains form the backbone of this system, their efficiency is hindered by factors such as traffic congestion, unreliable schedules, and inadequate infrastructure. Moreover, the reliance of millions of commuters on these services underscores the critical role they play in shaping daily life and economic activities across major cities like Davao City. Any design intervention aimed at improving this system must navigate these multifaceted dynamics to effectively address the needs and challenges of commuters while considering broader societal and technological influences.

Usability Criteria

The team's criteria for judging the success of the application is based on how it meets the following conditions:

1. **Learnability and Navigation:** Users should be able to quickly learn how to use the app and navigate its features without encountering significant hurdles.
2. **Efficiency Improvement:** The app should demonstrably reduce wait times and enhance the overall efficiency of commuting for users.
3. **User-Centric Design:** The design of the app should prioritize user experience, ensuring that it is intuitive, visually appealing, and does not distract users from their primary tasks.
4. **Real-Time Tracking and Notifications:** Users should receive reliable real-time updates on vehicle locations and accurate notifications of passenger hotspots to aid in their commuting decisions.
5. **Comparable Convenience and Reliability:** The app should offer a level of convenience and reliability that matches or exceeds that of other transportation apps such as Grab or Uber, ensuring it competes effectively in the market.

Discussion of Implications

The overview highlights the indispensable role of public transportation in the Philippines and the variety of challenges faced by commuters, including unreliable schedules and safety concerns. These challenges necessitate a multi-faceted approach to improvement, combining digital solutions like mobile apps with infrastructural enhancements and cultural preservation efforts. Additionally, addressing the diverse socioeconomic backgrounds of commuters is crucial to ensure accessibility and affordability in transportation solutions.