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The Needs and Satisfaction of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand

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Abstract

This quantitative research aims to investigate The Needs and Satisfaction of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi itinerary, Ranong Province, Thailand. The sample group consisted of 385 Thai and Myanmar commuters, selected through an accidental sampling method. The primary data collection instrument was a questionnaire. Data analysis was performed using descriptive statistics, including frequency, percentage, mean (\bar{x}), and standard deviation (S.D.)

The research findings indicate that the majority of service users were female, under the age of 25 years, holding Thai nationality, and primarily students/pupils traveling for work or professional duties. In terms of Service Needs, the overall level was rated as Highest ($\bar{x} = 4.85$), with the highest demands centered on punctuality and reliability ($\bar{x} = 4.90$) and safety during travel ($\bar{x} = 4.87$). Regarding Service Satisfaction, the overall level was rated as High ($\bar{x} = 4.44$). Users reported the highest satisfaction with the value for money and the convenience of access ($\bar{x} = 4.47$ for both). However, the lowest satisfaction score was recorded for the suitability of seating capacity and overcrowding ($\bar{x} = 4.36$), suggesting an area requiring immediate operational improvement.

Keywords: Needs, Satisfaction, Service Users, Public Transport System, Local Wooden Bus

1.Introduction

Transportation is classified as a critical service sector for national tourism, as efficient systems enhance visitor convenience, reduce travel time, and maximize leisure. Visitors invariably choose destinations with superior transport links. The Tourism Satellite Account (TSA: RMF 2008) officially designates tourism transport as one of the twelve key service sectors.

Historically, the nation's infrastructure strategy emphasized road construction while lacking serious management of transport networks. This operational deficiency led to ineffective public transit and a resultant increase in private vehicle reliance (Thiengburanatham et al., 2010). Despite these challenges, road transport maintains a vital role in daily life and tourism, especially in Ranong Province, where it is highly favored for its convenience, speed, and affordability.

The Wooden Baht Bus (Songthaew Mai) is a unique public vehicle emblematic of Ranong. It was widely used from 1957 to 1987 due to its low operating cost, simple maintenance, durability, low fares, and cultural authenticity. Consequently, this research is motivated to investigate the needs and satisfaction of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand, to develop more appropriate and efficient public transport services in the future.

1.1 Research Objective

1) To study the General Characteristics of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand.

2) To study the needs of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand.

3) To study the satisfaction of Thai-Myanmar Customers towards the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand.

2. Literature review

2.1 Concepts and Theories Related to Needs

The theoretical understanding of public transport user needs draws on multiple frameworks. Maslow's hierarchy (Allen, Muñoz & Ortúzar, 2019) is applied to prioritize needs: Functional (e.g., reliability), Security (e.g., safety), and Hedonic (e.g., comfort), emphasizing that reliability and safety are foundational. The ERG Theory (Cleland, Thompson, & Alderfer) categorizes transport needs into Existence (safety, convenience) and Growth (e.g., environmental values). Service quality (QoS) needs encompass both quantitative factors (e.g., travel/waiting time) and qualitative factors (e.g., staff conduct, safety) (Eboli & Mazzulla, 2007). Overall service needs can be summarized by accessibility, reliability, cleanliness, emotional factors (mood), and perceived value (Silveira et al., 2024), which often reflect the gap between user expectations and perceived service quality.

2.2 Concepts and Theories Related to Satisfaction

Satisfaction is defined as an emotional state or an evaluation resulting from the comparison between personal expectations and the actual perceived experience (Oliver, 2017; Kotler & Keller, 2020). This concept aligns with the Expectation - Confirmation Theory (ECT), which posits that satisfaction occurs when service outcomes meet or exceed those expectations. In the context of public transportation, satisfaction is contingent upon the assessment of service quality (Zeithaml & Bitner, 2018). Key factors influencing satisfaction include convenience of access, safety, vehicle quality, and value for money (fare cost). Consequently, satisfaction serves as a critical indicator of service success and directly influences the decision for future patronage (Pensub, 2023).

2.3 Concepts and Theories Related to Public Transportation

Public Transportation is defined as shared passenger services provided for the general public, typically managed or controlled by government agencies or related organizations, operating along specified routes and schedules (Department of Land Transport, 2016). It plays a crucial role beyond accessibility, serving as a tool to alleviate urban traffic congestion and promote environmental sustainability by reducing personal vehicle use (Müller & Pfund,

2018). Service formats are diverse, including both fixed-route and specialized services. The key components for evaluating a public transport system include Infrastructure (e.g., stops/terminals), Rolling Stock (e.g., vehicle condition and capacity), Operational Systems (e.g., scheduling and routing), and Human Capital (e.g., drivers and staff). Effective service development must focus on design that accommodates the needs of all user groups, such as the elderly and disabled (Litman, 2024). Service quality refers to providing services that can meet the expectations of service users and make them satisfied. It consists of 5 components: service tangibility, trustworthiness, responsiveness to service recipients, providing confidence to service recipients, and understanding and empathy. (Kumpetch & Pensub, 2024)

3. Methodology

3.1 Population for the Study

The population for this research comprised Thai and Myanmar service users of the Local Wooden Bus Public Transport (Songthaew Mai) operating on the route from Mueang Ranong District to Kraburi District, Ranong Province, Thailand.

3.2 Sampling Procedure and Sample Size

The sample group consisted of Thai and Myanmar service users utilizing the Local Wooden Bus Public Transport (Songthaew Mai) along the Mueang Ranong District to Kraburi District route, Ranong Province. Non-probability sampling was employed, specifically using accidental sampling. As the exact population size was unknown, the sample size was calculated using Khazanie's formula for estimating the population mean (μ - Population Mean). A confidence level of 95% was set, with an allowable error of 1/10 (0.1) of the population's standard deviation. This calculation yielded a final sample size of 385 respondents.

3.3 Data Analysis and Statistics

The research instrument used for data collection was a questionnaire. Data analysis was performed using descriptive statistics, including frequency, percentage, mean (\bar{x}), and standard deviation (S.D.)

4. Results

The first part of the questionnaire collected the General Characteristics of Respondents, including their Number and percentage classified by Gender, Age, Occupation, Purpose of Travel, Frequency of Service Usage, and Nationality.

The data analysis of the demographic characteristics of the 385 service users of the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand. The analysis indicates that the majority of respondents were female (251 individuals, 65.20%), compared to 134 males (34.80%). The largest age group was those under 25 years (133 individuals, 34.50%), followed by those aged 25-34 years (88 individuals, 22.90%), 35-44 years (87 individuals, 22.60%), and 45 years and over (77 individuals, 20.00%). The majority of users were of Thai Nationality (300 individuals, 77.90%), with the remainder being Myanmar nationals (85 individuals, 22.10%). Regarding Occupation, the largest group was Students/Pupils (118 individuals, 30.60%), followed by Self-employed/Traders (108 individuals, 28.10%), General Labor/Workers (71 individuals, 18.40%), Private/Company Employees (42 individuals, 10.90%), Government/State Enterprise Employees (29 individuals,

7.50%), and Unemployed individuals (17 individuals, 4.40%). The primary Purpose of Travel was for work/vocation (123 individuals, 31.90%), closely followed by personal errands (121 individuals, 31.40%), tourism/visiting relatives (91 individuals, 23.60%), and for study/education (50 individuals, 13.00%). Finally, the highest Frequency of Service Usage was 1-2 days per week (113 individuals, 29.40%), followed by irregular/as-needed use (110 individuals, 28.60%), with both daily use and 3-5 days per week registering 81 individuals (21.00% each).

The second part of the questionnaire collected the Mean (\bar{x}) and Standard Deviation (S.D.) of Respondents' Service Needs level for using the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand.

The data analysis revealed that the respondents' overall level of service needs was rated as Highest ($\bar{x} = 4.85$). When considering individual items, the highest need was for the wooden bus service to be punctual and reliable ($\bar{x} = 4.90$). This was followed by the perception that safety during travel is a significant factor influencing the decision to use the service ($\bar{x} = 4.87$), and the need for the journey to be comfortable, encompassing ease of boarding/alighting and the vehicle's appropriate condition ($\bar{x} = 4.87$).

Other high-ranking needs included the requirement for the interior atmosphere to promote relaxation or a positive mood during travel ($\bar{x} = 4.86$), the necessity for the wooden bus system to provide clear information such as routes, fares, or service times ($\bar{x} = 4.85$), and the need for routes and stops to be close to community centers or actual destinations ($\bar{x} = 4.85$). Users also expected the fare price to be appropriate and offer value for the quality of service ($\bar{x} = 4.80$). The lowest-rated need, though still very high, was the view that the wooden bus is a mode of travel that should be preserved in Ranong ($\bar{x} = 4.76$).

The Third part of the questionnaire collected the Mean (\bar{x}) and Standard Deviation (S.D.) of Respondents' Satisfaction level with the Local Wooden Bus (Songthaew Mai) system on the Ranong to Kraburi Itinerary, Ranong Province, Thailand.

The analysis indicated that the respondents' overall level of service satisfaction was rated as High ($\bar{x} = 4.44$). When examined by individual item, the highest satisfaction was found in the value for money (fare cost) ($\bar{x} = 4.47$). This was closely followed by the convenience of accessing the wooden bus (stops, routes) ($\bar{x} = 4.47$), and safety during travel ($\bar{x} = 4.46$).

Further results showed satisfaction with the behavior and manners of the drivers ($\bar{x} = 4.45$), the condition of the wooden bus (cleanliness, integrity) ($\bar{x} = 4.43$), and the punctuality of the service ($\bar{x} = 4.42$). The lowest satisfaction score was recorded for the suitability of seating capacity and overcrowding ($\bar{x} = 4.36$), suggesting a critical area for improvement.

5. Conclusion

This research investigated the needs and satisfaction of Thai and Myanmar users regarding the Wooden Baht Bus (Songthaew Mai) public transport system operating between Mueang Ranong and Kraburi districts. The primary user demographic consists of women, students, and those traveling for work or personal errands, underscoring the system's significant socio-economic role.

The study found that overall needs were rated at the Highest level, with the most crucial factors being reliable punctuality and travel safety. In contrast, overall satisfaction was rated at a High level, with the highest satisfaction scores attributed to the value for money of the fare

and the accessibility of the service. However, the lowest satisfaction was found in relation to the adequacy of seating and overcrowding. In conclusion, operators should prioritize service improvements to narrow the expectation-satisfaction gap, focusing particularly on enhancing reliability, safety, and managing passenger capacity, thus preserving and developing the distinctive transport identity of Ranong Province, Thailand.

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References

- Allen, J., Muñoz, J.C., & de Dios Ortúzar, J. (2019). Understanding public transport satisfaction: Using Maslow's hierarchy of (transit) needs. *Transport Policy*, Vol. 81, pp. 75-94.
- Department of Land Transport. (2016). Summary of review of key factors causing road traffic accidents. Retrieved August 28, 2017, from <http://www.dlt.go.th/Itsbt/download>
- Eboli, L. and Mazzulla, G. (2007) Service Quality Attributes Affecting Customer Satisfaction for Bus Transit. *Journal of Public Transportation*, 10, 21-34. <https://doi.org/10.5038/2375-0901.10.3.2>
- Kumpetch, N., & Pensub, S. (2024). Factors and components affecting the success of local fishery product entrepreneurs in Ranong Province. *Actual Economy: Local Solutions for Global Challenges*, 25–36.
- Litman, T. (2024). Evaluating Public Transit Benefits and Costs. Victoria Transport Policy Institute. Retrieved from <https://vtpi.org/tranben.pdf>
- Müller, M. S., & Pfund, M. (2018). Universal Design in Public Transportation: A Review of Literature and Current Practice. *Transportation Research Part A: Policy and Practice*, 118, 560-573.
- Oliver, A. (2017). *The Origins of Behavioural Public Policy*. NY : Cambridge University Press. Kotler & Keller, 2020
- Pensub, S. (2023). An investigation of Thai tourists' satisfaction with resort accommodation services in Mueang District, Ranong Province. *Santapol College Academic Journal*, 2(1), 1–14. Retrieved from <https://so05.tci-thaijo.org/index.php/scaj/article/view/208359>
- Silveira, T., Kütter, M., Nornberg, B., Meirelles, M., Silva, D., López, A.I., Lopes, A., Castro, C., Moraes, J., Schimith, L.E., de Leon, P., Marins, L.F., Remião, M. (2024). Course on Breeding, Handling, and Experimental Procedures of Zebrafish (*Danio rerio*): Training, Refinement, Paradigm Shift, and Dissemination of Knowledge from Brazil to the World. *Zebrafish*. 21:155161155-161.
- Thiengburanatham, P., et al. (2010). A Study and Demonstration of Red Shared Taxi Management System in Chiang Mai City for Improving Energy Efficiency, Chiang Mai: Faculty of Engineering, Chiang Mai University.
- United Nations. (2008). *Tourism Satellite Account: Recommended Methodological Framework (TSA; RMF)*, Department of Economic and Social Affairs.
- Zeithaml, v. A., bitner, m. J.,| gremler, d. D. (2018). *Services marketing: integrating customer focus across the firm* (7th ed). McGraw-hill education: new york.