

**THE INFLUENCE OF PERFORMANCE EXPECTANCY, EFFORT  
EXPECTANCY, SOCIAL INFLUENCE, AND FACILITATING  
CONDITIONS ON THE INTENTION TO USE ELECTRIC BIKE-  
SHARING**



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## ABSTRACT

### The Influence of Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions on the Intention to Use Electric Bike-Sharing

The growing demand for sustainable urban transportation has accelerated the development of electric bike-sharing services as an environmentally friendly mobility solution. Despite this potential, the adoption of electric bike-sharing remains relatively limited in Jakarta and Surabaya. Previous studies employing the Unified Theory of Acceptance and Use of Technology (UTAUT) have reported inconsistent findings regarding the effects of Effort Expectancy and Facilitating Conditions and have primarily focused on direct relationships among the core constructs. To address these limitations, this study develops and empirically validates an Extended UTAUT model by incorporating additional causal relationships among the antecedent variables to provide a more comprehensive explanation of users' intention to adopt electric bike-sharing services. This study employed a quantitative cross-sectional survey involving 427 users of the MIGO electric bike-sharing service in Jakarta and Surabaya, selected through purposive sampling. Data were collected using a six-point Likert-scale questionnaire and analyzed using Structural Equation Modeling (SEM) with AMOS to evaluate both the measurement and structural models. The results indicate that the proposed model demonstrates satisfactory validity, reliability, and overall model fit. Effort Expectancy and Facilitating Conditions positively influence Performance Expectancy, Social Influence, and Intention to Use, while Performance Expectancy and Social Influence also have significant positive effects on Intention to Use. However, the relationship between Social Influence and Performance Expectancy is not statistically significant. Furthermore, Social Influence partially mediates the effects of Effort Expectancy and Facilitating Conditions on Intention to Use, whereas Performance Expectancy does not serve as a significant mediator. This study makes an important theoretical contribution by extending the original UTAUT framework and demonstrating that technology adoption is shaped through interconnected cognitive and social mechanisms rather than solely through direct effects. The findings highlight that Effort Expectancy and Facilitating Conditions remain fundamental direct determinants of Intention to Use, while Social Influence functions as the dominant mediating mechanism in the adoption of electric bike-sharing services. These results provide a more comprehensive understanding of sustainable urban mobility adoption and offer practical insights for policymakers and service providers seeking to promote electric bike-sharing services in Jakarta and Surabaya.

**Keywords:** UTAUT; electric bike-sharing; performance expectancy; effort expectancy; social influence; facilitating conditions; intention to use.

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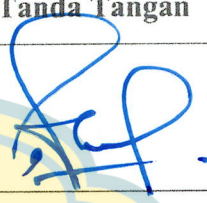
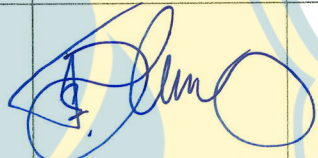
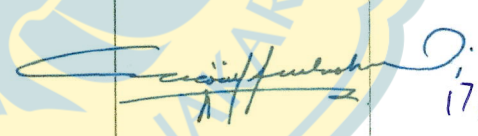
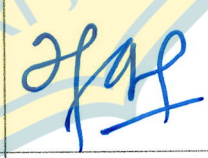
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## PREFACE

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The author

Wang Peng



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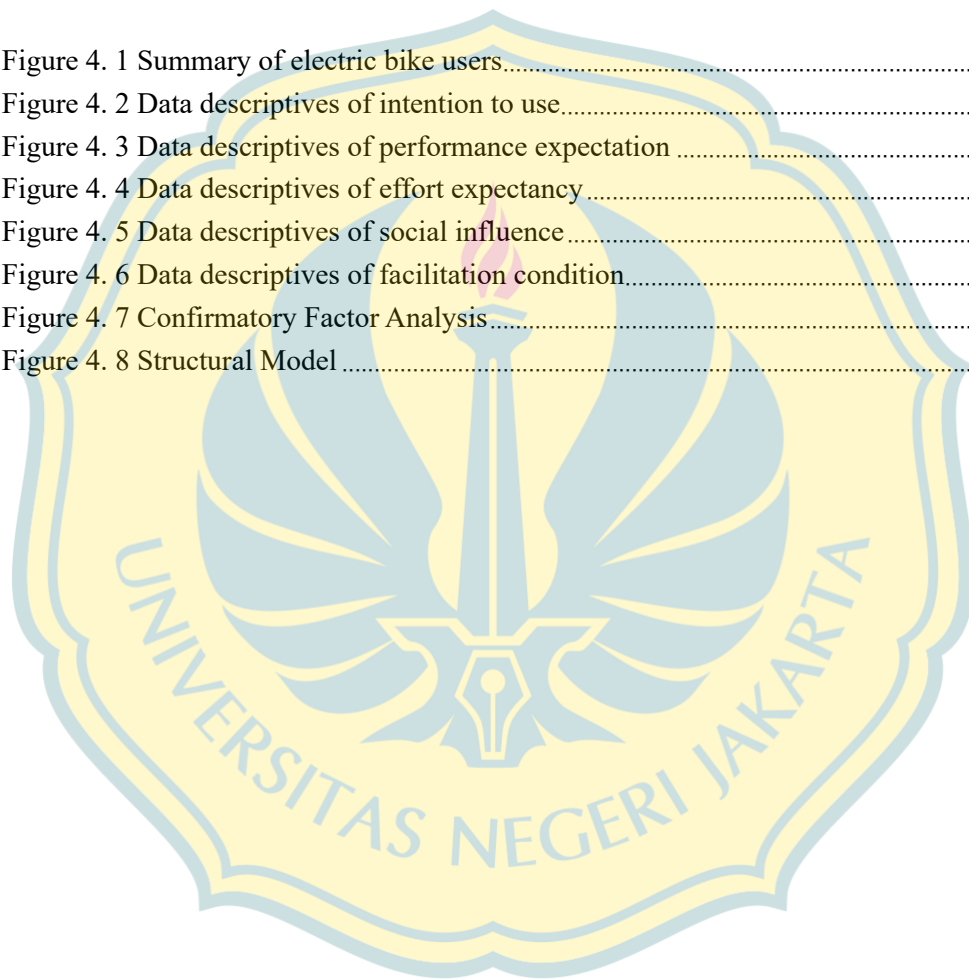
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