ABSTRACK

The use of Digital Twins applications based on previous research can make a significant contribution to asset management, operational efficiency improvements, and other aspects. PT. Dayamitra Telekomunikasi, Tbk (Mitratel) has begun the trial phase of implementing Digital Twins applications, which requires an evaluation of Behavior Intention in the process. One of the commonly used models for measuring Behavior Intention is the UTAUT model, which is known to have superior validity compared to the TAM model. The UTAUT model includes several important variables: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Condition (FC), which are analyzed in relation to Behavior Intention (BI). Additionally, this study examines the role of Technology Readiness (TR), which includes the dimensions of Innovativeness (INN), Optimism (OPT), Discomfort (DIS), and Insecurity (INS) as moderating variables in the relationship between the variables in the UTAUT model and Behavior Intention, in an effort to further understand how the level of Technology Readiness influences the relationship between the UTAUT parameters and behavioral intention. This investigation employs a quantitative approach utilizing a questionnaire instrument with a Likert scale, randomly distributed to 307 employee respondents. The collected data was subsequently analyzed in depth using the Partial Least Square (PLS) method to examine the relationships between variables. Data analysis revealed that the Performance Expectancy (PE) variable had a statistically significant influence on Behavior Intention (BI) in the use of Digital Twins applications, while the other UTAUT variables did not reach significance. Although the mean score for Technology Readiness (TR) was in the moderate range (3.21), the moderation test showed that the TR variable did not play a significant role in moderating the effects of UTAUT variables on Behavior Intention ($p > 0.05$). The findings of this investigation imply that companies need to focus on developing Digital Twins features that can increase Performance Expectancy. Although the mean Technology Readiness (TR) score was in the moderate range, the moderation test showed that the TR variable did not play a significant role in moderating the effects of UTAUT variables on Behavior Intention. The findings of this investigation imply that companies need to focus on developing Digital Twins features that can increase Performance Expectancy, as well as implementing inter-employee training strategies to foster Optimism and reduce Discomfort. However, it is important to note that the use of the UTAUT model in the context of internal applications during the trial phase has limitations because this model was originally designed for widespread and public technology adoption, so some variables in the model may not adequately accommodate the dynamics of internal users in the trial process. Therefore, further research is recommended to expand the adoption model by incorporating additional moderating variables to provide a more comprehensive understanding of the acceptance of Digital Twins technology within a corporate context.

Keywords: *UTAUT, Technology Readiness, Digital Twins and Behavior Intention*