

ABSTRACT

The improvement of augmented reality (AR) technology continues to increase in various sectors globally, a growing trend in adopting AR technology, especially in the fields of education, science, tourism, precision breeding, maintenance operations, medicine, and industrial training. The development of AR technology in Indonesia has ample opportunities to increase existing business opportunities in Indonesia. This research is focused on one of the companies in Bandung City. However, there are obstacles that arise in the development of AR technology in Bandung City, namely, limited innovation, limited acceptance of new technology, and limited facilities in using AR technology which causes less recognition and lack of utilization of AR technology in Indonesia. This study aims to explain the effect of stimuli organism response, open innovation, and organizational performance on the development of AR technology in Indonesia, especially in Bandung City. This research uses a mix method approach from qualitative and quantitative, where data is collected through questionnaires given to respondents involved in the use of AR technology in Bandung City. The data was analyzed using structural equation modeling (SEM) to test the relationship between the variables studied. The results of the study are expected to provide a better understanding of the influence of stimuli organism response, open innovation, and organizational performance on the development of AR technology in Bandung City. The result of this study is to find that the response organism stimuli variable has a negative effect on organizational performance. While the variable stimuli organism response to open innovation and open innovation to organizational performance has a statistically significant positive effect. In addition, the results of the compiled FAHP calculations are used to provide recommendations to organizations in determining alternative strategies for developing optimal AR by considering operational and financial aspects. The variables used in calculating FAHP are sourced from valid variables from SEM-PLS testing and are quantitative in nature. In this study, there are twenty-one alternative strategies in developing AR technology by considering interactivity and features from the opinions of experts in developing AR technology.

Keywords: *Augmented reality (AR), Stimuli Organism Respons, Open Innovation, Organizational Performance*