Data driven decision making in Tvet: the impact of augmented Reality technology on Institutional efficiency

ABSTRACT

The unprecedented growth and evolution of technology and innovations within the current digital age have been firmly established, with digital transformation trends deeply restructuring the worldwide educational settings. The confluence of technological advancements, rise of novel sectors and constantly evolving jobsites require affirmative action from Technical and Vocational Education and Training institutions (TVETi). Especially since the objective of these institutions is to prepare students with the practical skillsets and knowledge that are synchronized with the demands of the labor market. It is vital for Malaysian (TVETi) to develop globally renowned frameworks, industry-driven curricula, the necessary futuristic knowledge, and skillsets to optimize job opportunities and foster a sustainable economic growth. Data driven decisions and strategies involving the management of TVET institutions, including the design of lessons and curricula as well as quality assurance necessitate a significant research focus. Among the more advanced innovations involving the education sector currently is the Augmented Reality (AR) technology. This study examines the potential of assimilating AR technology into Malaysian (TVETi) and the consequent impacts of this on institutional efficiency. A questionnaire survey was conducted which involved 150 lecturers based in various private (TVETi) across the state of Selangor in Malaysia. This served to evaluate the respondents' knowledge and perceptions concerning AR technology. The findings indicated that the respondents had a good understanding of AR technology and also positively perceived this as a means to enhance institutional efficiency. The findings also indicate that there are positive links amongst the respondents' knowledge of AR and their receptiveness toward utilizing this technology for their teaching activities.