Virtual reality adoption capability in Malaysian automotive manufacturing industry.

ABSTRACT

Virtual reality and three-dimensional modelling technologies are mainly used in industry in many aspects. The automotive industry is considered as the initial group that uses virtual reality technologies. However, without adopting advanced technology, the automotive industry cannot compete with its global competition. In this study, six automotive companies in Malaysia were selected as case study to verify the virtual reality adoption capability. A total number of 240 questionnaires were distributed among the six car companies in Malaysia and 153 people responded to the questionnaires. For analysing, Pearson chi-square test was conducted followed by frequency analysis on the respondents' answers. The analysis showed that 54% of industry respondents have stated that existing technology is not enough while 83.7% of them showed tendency towards adoption and improvement with new technology in which virtual reality was found as the best option that can be adopted to different sections of automotive manufacturing industry. The results also revealed that manufacturing, designing, 'planning and research' and engineering departments are the appropriate areas for implementing virtual reality technology.