Development of a Technology Acceptance Model for Mobile Augmented Reality Technologies

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Abstract

Retailers increasingly use augmented reality technologies to enhance online and offline customer experiences. Augmented realty (AR) and in particular mobile AR technologies (MART) allow consumers to experience interactive, virtual goods that are superimposed on the real environment. Understanding the underlying mechanisms that encourage or impede consumers to use MART is fundamental for enhancing future development and adoption of these technologies. Building on technology acceptance research, we therefore develop a MART acceptance model. Structural equation modelling (SEM) is used to test the proposed hypotheses on data collected from 217 participants. Results indicate that besides media usefulness and enjoyment, immersion and interactivity as well as system reliability are major factors influencing MART acceptance. Multigroup analysis further reveals differences in the perceived interactivity of the AR features between apps and websites. Based on these findings, we derive important implications for future acceptance research and practitioners.

Keywords: *Technology Acceptance Model (TAM); Augmented Reality; SEM*

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