

IOM Research Seminar

Organised by: Department of Intelligent Operations and Marketing

Bringing the Virtual and the Real Together: A Mixed-Method Study on Augmented Reality (AR) Visual Realism for Product Promotion

Abstract

While Augmented Reality (AR) technology can combine the “real” and the “virtual”, little research has been conducted to understand its unique features from the user’s perspective. Against this backdrop, we employed a two-phase, mixed-methods research design with the means-end-chain theory as our metatheoretical lens to identify the granular ways in which users perceive AR factors in the retail context and why AR might be useful to them. In Phase I, our qualitative research design revealed visual realism as an AR design feature, which we identify as conceptually distinct from the other concepts of realism discussed in previous literature in this field. We find that ‘realism’ has been conceptualized differently in the existing literature, and the way it has been conceptualized can be categorized hierarchically from concrete to abstract, and as direct perception or judgment. We identify visual realism as a subtype of realism that is perceived directly (i.e., it looks real), rather than a psychological judgment of realism (i.e., it feels real). In the qualitative study in Phase I, we also found that low AR visual realism, particularly cartoonized AR design, was perceived as more capable of simulating cognitive flexibility compared to photorealistic AR design, and this design may be beneficial in contexts where creativity is needed, such as in introducing novel product concepts. We tested and verified this finding in Phase II with two field experiments, employing the context of novel product acceptance. Our findings have important implications for how we can conceptualize and better implement the integration of the real and the virtual, which is a defining attribute of AR.

Presenter

Alain Yee Loong Chong is Vice Provost for Research and Knowledge Exchange and Chair Professor of Information Systems and Digital Innovation at University of Nottingham Ningbo China. He previously served as Vice Provost for Global Engagement and Partnerships and Dean of the Graduate School. Professor Chong has been recognized as one of the most cited researchers in China and is ranked among the top 2 percent of scientists globally by Elsevier Scopus. He received the Ten Outstanding Young Malaysians Award in 2012 and the West Lake Friendship Award from the Zhejiang government in 2023.

His research interests include social media analytics, digital transformation, and mobile computing. His work has been published in leading journals such as the Journal of the Association for Information Systems (JAIS), Information Systems Journal (ISJ), and International Journal of Operations and Production Management (IJOPM). He currently serves as Co-Editor of Industrial Management & Data Systems (IMDS), Senior Editor of Decision Support Systems (DSS), and Associate Editor of Information & Management.

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Time

4:00PM-5:30PM (China Standard)

Location

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