

Editorial Preface

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Welcome to the latest issue of the *International Journal of Mobile Human Computer Interaction* (IJMHCI). As is typically the case with the IJMHCI, this issue takes us through a range of interesting topics, from an exploration of continued intention to use mobile money transfer services by students in the developing country of Ghana, through implications for mid-air and speech-based mobile interaction design for older adults, to single-handed mobile device interaction. Representing varied methodological approaches and topics of investigation, we are presented with a rich and engaging spectrum of scientific endeavor and outcome.

In the first article – “*Factors Determining the Continued Intention to Use Mobile Money Transfer Services (MMTS) Among University Students in Ghana*” by Isaac Kofi Mensah, Luo Chuanyong, and Guohua Zeng – we are introduced to a study which used the Unified Theory of Acceptance and Use of Technology (UTAUT) as the underlying theoretical framework to explore factors influencing the continued intention of university students in Ghana to use mobile money transfer services. The authors explain that, as a developing country, Ghana has benefitted and continues to benefit from mobile money technology and associated transactions following the Ghanaian Government’s 2018 launch of the first mobile money interoperability system in Ghana in order to “widen and deepen financial inclusion and encourage a cashless economy”. The authors note that, among students in Ghana, active use of mobile money services has been shown to have a positive impact on students’ spending habits and thus the authors’ reported study set out to explore the factors determining the continued intention of university students to adopt and use mobile money transfer services in Ghana. Data for their study was collected from 284 students (a 57% return rate) via a self-administered questionnaire distributed to students at 3 Ghanaian universities. Based on their findings, the authors were able to illustrate that students’ continued intention to use mobile money transfer services is influenced by expectancy of performance and effort, as well as social influence, facilitating conditions and perceived service quality, and that, in particular, perceived service quality was found to be a significant predictor of the actual use of such services. Their results further revealed that the continued intention to use was a positive determinant of the actual usage of mobile money transfer services. In their paper, the authors discuss the implications of these and other findings of the study, including the importance of results such as theirs in terms of policy formulation and implementation.

In “*Framing the Design Space of Multimodal Mid-air Gesture and Speech-based Interaction with Mobile Devices for Older People*” by Ornella Mich, Gianluca Schiavo, Michela Ferron, and Nadia Mana the authors highlight the increasing prominence of multimodal interaction with mobile devices, often facilitated by the use of affordable sensors. They remind us, however, that access to information technologies is key to effective participation in modern society but that older adults (considered by the authors to be aged 65 or older) often face age-related barriers in terms of accessing such technologies and services. As such, the authors’ goal was to “frame the design space of multimodal mid-air gesture and speech-based interaction with mobile devices for older adults” based on existing scientific literature on these topics. Hence, they provide a framework for mid-air gesture and speech-

based interaction for older adults in which they highlight the critical factors to take into consideration when designing multimodal mobile technology for older adults in order to “promote the usefulness and potential of multimodal technologies based on mid-air gestures and voice input for making older adults’ interaction with mobile devices more accessible and inclusive”.

The final article by Don D.H. Shin, Park Beede, Mohammad Ibabrane, and Paul Lowmann is entitled “*Interactivity Effects on Single-Handed Interaction: An Empirical Investigation of Thumb Movement and Touch-Based Interaction Techniques for Smartphones*”. In this, the authors note that the majority of smartphone users interact with their devices when using public transport – in fact, for some demographics (namely those in the 20s), in-transit use exceeds at-home use. They argue that, in order to combat the ever-increasing range of features and functions on mobile devices and thus continue to ensure they are usable within realistic contexts of use such as transit, it is important to consider their use via single-handed interaction. In response, the authors report on a study conducted with 152 participants to examine the effects of interaction techniques and range of thumb movements on interactivity, engagement, attitude, and behavioral intention in single-handed interaction with smartphones. The authors’ results revealed that the ranges of thumb movement (wide v. narrow) significantly impact perceived interactivity, engagement, attitude, and behavioral intention; in contrast, no effects were observed for interaction techniques (swiping v. tapping). In particular, narrow range of thumb movement was the most influential in terms of interactivity outcomes. The authors discuss the implications of their findings in terms of how applications should be designed, especially for mobile devices with larger screens.

I trust that you find all three articles interesting, stimulating and hopefully useful – enjoy!

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