Editorial Preface

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Welcome to this, the latest issue of the *International Journal of Mobile Human Computer Interaction* (IJMHCI). As we have come to expect, this issue reflects the wide range of topics representing the rich breadth of interest within the mobile HCI domain. First up, we have an exploration of behavioural intention to use mobile banking. This is followed by a literature review of location-aware computing policies. Finally, we have an article reflecting on how patterns in smartphone use differ by gender as we grow older.

The first article is "Behavioural Intention to Use Mobile Banking: An Extension of the UTAUT 2 Model" and is by Sanjay Dhingra and Shelly Gupta. The evolution of mobile banking has facilitated the provision of cost-effective banking services to vast numbers of customers by removing spatial and temporal barriers, especially within counties like India which boast high mobile phone penetration rates. Despite the sparsity of bricks and mortar banks in India, and in contradiction of the ubiquity of mobile phones therein, the adoption of mobile banking remains very low (less than 25% of the population of mobile phone users). Whilst there have been studies that have explored factors that lead to mobile banking adoption, studies that focus on the situation specific to India are scarce. As such, the authors' goal was to conduct a study to understand the motivation to adopt mobile banking in India – specifically, to determine the factors that influence mobile banking adoption in a developing country like India and to explore the impact of these factors on users' behavioural intention to adopt mobile banking services.

The authors utilized the UTAUT 2 Model which conceptualizes eight dimensions – performance expectancy, social influence, effort expectancy, hedonic motivation, facilitating conditions, habit, price value, and trust – as the basis for the study. Based on results of a survey of 252 users of mobile banking in New Delhi, India, the authors conclude that habit is the most important factor, explaining 37.6% of variance in behavioural intention. The authors reflect that this is because, as users find themselves with less time to visit physical banks, they switch to mobile banking services and, after gaining experience using such services, their experience turns into habit, resulting in repeated use of these services. Once routine, customers are unlikely to switch back. Habit is followed, in order, by facilitating conditions, trust, hedonic motivation, and social influence. The authors additionally found that behavioural intention to use mobile banking was not influenced by gender but that age and

education were influential: as might be expected, younger and more educated people were found to be more likely to use mobile banking.

Based on their findings, the authors stress that service providers should focus on the five key dimensions – habit, facilitating conditions, trust, hedonic motivation, and social influence – in this order to boost the adoption of their mobile banking services. They proffer some recommendations for service providers derived from these findings.

In "A Literature Review of Location-Aware Computing Policies: Taxonomy and Empirical Analysis in Mobile Environments" by Ajay Kumar Gupta and Udai Shanker the authors begin by exploring the relationship between context-awareness and location-based services. Further, they explore the challenges currently faced by location-aware computing – specifically, they report on a literature review that adopted an empirical-analytical approach for the study of various research challenges in the domain of location-aware computing. Their review of current location-aware mobile data management practices is extended with exploration of taxonomies for caching, map-matching, and location privacy protection with spatial-temporal queries, making this a unique survey-based offering. They provide a theoretical and analytical investigation of location-aware computing approaches, consider the strengths and weaknesses of each and the evolving processes between them. From this, the authors identify future research directions for the benefit of the research community at large and suggest their findings can be used as a quick reference resource for the development of generic as well as application-specific location-based service policies.

The final article, entitled "How Growing Older Leads to Different Patterns in Smartphone Usage Among Genders: Evidence From Korea", is by Chiho Ok. In this, Chiho not only asserts that, irrespective of culture, gender significantly influences smartphone usage patterns, but also draws attention to the fact that whilst we know that smartphone use changes with age, little is yet known about the influence of age on the relationship between gender and smartphone usage patterns. As such, Chiho explores the moderating role of age on differences in smartphone usage patterns by gender.

Based on a literature review to identify (a) published differences between genders in terms of smartphone use and (b) the role played by age in the relationship between gender and smartphone use, Chiho hypothesizes the moderating effects of age in the relationship between gender and smartphone use patterns. Chiho then ran an empirical study to investigate these hypotheses using data provided by Nielsen KoreanClick which was collated from a panel of thousands of registered users' smartphone use patterns. This objective data was collected over a period of 48 months for 9,566 individuals. Analysis of the data confirmed that, as with previous work, there is a clear difference in smartphone usage patterns according to gender that is irrespective of culture. It was recognized, however, that further work is required to explore systematic differences between countries based on culture focused on the likes of Hofstede's cultural differences. The study found, however, that an increase in age offsets gender differences – in other words, differences in use based on gender are only valid for younger generations. As such, Chiho cautions that future studies aiming to analyse smartphone use patterns by gender need to be careful with selecting populations and samples. It is also recommended that psychological studies are needed to explore how psychological motivations occur and differ as age increases. It was also noted that the pattern of gender differences by age varied by application, suggesting that as age increases, gender-based characteristics are maintained in certain areas but are neutralized in others. As Chiho draws to our attention, much is still needed to understand *why* smartphone usage patterns differ with age and, as a community, we are called to systematically explore causes and consequences of this phenomenon.

I trust that you find all these articles interesting as well as useful and are motivated to explore the reported issues further. Enjoy!

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