Book Review

Handbook of Research on Human Social Interaction in the Age of Mobile Devices

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Human-mobile interaction, as an emerging area of investigation, is gaining greater interest by both enterprises and academics. It has evolved especially since mobile devices and ubiquitous wireless internets have become a pervasive part of our everyday lives. The book is a tour de force that provides timely and important resources for addressing practically and socially relevant issues in the rapidly growing field of human-mobile interaction. In an attempt to capture a wide range of domains where social interactions in ubiquitous environments have altered human behaviors and habits, Pro. Xiaoge Xu as the editor has broadly categorized the work consisting of 19 chapters into five sections as follows:

1. Chapters 1-5 cover a wide range of issues on how ubiquitous technologies can be integrated to support effective interactions via mobile learning.

The first chapter explores two issues of "learning about" and "learning with" mobile through students' reflectivity across gender and age groups. Pros and cons from students' perspectives regarding concerns over multi-functional features of the mobile phone, cost considerations, service speed, mobile distraction, emotional connections and health issues had been reported by informants. As for the issue of learning with mobile phone, mobile devices can positively foster collaborative learning and parent-student communication, or negatively cause exam cheating. The chapter ends by recommending the best possible ways to shape m-learning for students. Chapter 2 starts off with a deeper dive into a majority of teacher-centered theory-driven pedagogical approaches to mobilelearning in general and mobile-based language learning in particular. Based on a constructive framework used to investigate English teachers in Saudi Arabia, the discussions lead to a qualitative inquiry into potential impacts of human-mobile interaction in formal learning contexts or informal learning. Concentrating on an ethnographic navigation, chapter 3 portrays a thick description of lifestyle diglossia on mobile devices as multilingual literacy practices of Bruneian youth under two themes: enduring lifestyle changes observed from digital multilingual literacy practices and some of the influence brought about by lifestyle diglossia to multilingual digital practices. Focusing on how faculty-friendly, student-accessible, and cost-effective distance learning contexts can be beneficial,

chapter 4 summarized in a comprehensive review regarding the appropriateness of curriculum design, adaptation of technology, teacher efficacy, student readiness, as well as opportunities and challenges of the provision, followed by a case study of a university in Kazakhstan, which embraces the future education by flexibly blending an array of existing and advanced interactive technologies and teaching strategies that extend within and beyond the traditional teacher-led classroom. Chapter 5 opens with a review on benefits and disadvantages of mobile learning. It proceeds to espouse current state, latest development, definition, theoretical foundation, design and evaluation of mobile-enhanced learning. Successful instances in Africa showed that how mobile learning improved access to and quality of education.

Chapters 6-8 focus on efforts to embrace a new information era featured by providing governmental
functions and services throughout an evolution from e-government to mobile government
communications.

In chapter 6, historical method and social network analysis were performed to procedurally document a fifteen-year project of Mobile Government (mGov) in the state of Paraná, Brazil. A 6-phase endeavor from initiation, attempts to institutionalize corporative SMS service in proactive ways, strengthening formal and informal relationships among key actors involved in the project, a decline in mGov life cycle resulted by changing relations among key stakeholders, determination to retain baseline services for maintaining the project, to the delegations of more services by returned stakeholders for extending the landscape of mGov to its 15-year existence. Past and emerging challenges, directions, trends, and opportunities associated with m-government and their supporting technological services were widely reviewed from an evolutionary perspective in chapter 7. Despite m-government's efficiency and effectiveness of service delivery, it often encounters barriers caused by mismatched digital platforms, data leakage and fraud, security and privacy problems, digital divide, user readiness, information overload, to name a few. Chapter 9 proceeds to focus on how mobile election has triggered democratic revolution by performing an interdisciplinary literature review on mobile phone voting system, their SMS applications, implementation, and adaption rate, followed by another set of comparative review on barriers and recommended solutions involved in the process leading to convenient and ubiquitous elections. Research opportunities were recommended for resolving some of the pending issues given in the chapter, such as voter trafficking, security threats, interoperable platforms, optimal service quality, and digital/democratic divides.

3. With particular interest in social media's sustainable transformation into social capital, chapters 9-10 were devoted to mobile news in an attempt to espouse potential functions of mobile media as journalistic platforms to capture information flow and draw attentions to public news.

Chapter 9 presents major tipping points in an effort to answer the question of how and why mobile media have expanded spaces for contemporary journalism. Traditional media started to be aware of their crisis since 2006 when the emergence of online news publishing, as the first major tipping point, led to the collapse of legacy journalism. Keeping pace with trend, increasing amount of digital advertising sales again tipped the dominant power of online commercials surpassing the business models of TV news media. In order to regain momentum, contemporary news media altered their operations by striving towards mobile news publishing and mobilizing cross-media news work. Omnipresent strategies, such as printed media diffused with video, online TV channels launched by traditional newspapers, other popular advertising initiatives developed by traditional news media, and so forth. However, in spite of a plethora of historical transformations so far, continued efforts,

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dedicated services and considerable market recognition should be attentive to as an integral part of the industry to ensure journalism flourishes in the long run. Chapter 10 draws the section to a close by questioning if online social media, serving as one of the critical factors for social activists, do bring significant impacts on real social revolutions. A comprehensive review of relevant literature was conducted on the interwoven effects of social media campaigns and social network likened by journalists on the formations of social capital and social media activism. The chapter finals the discussions by reflecting on the role played by journalists, especially in light of open media's presence, and the extent to which journalists' positive and negative influences on audience through online social media activities.

4. Chapters 11-16, in addition to an account of social media branding process, looked at changes and challenges of mobile persuasion in areas of marketing, business, public relation and advertising applications of mobile technologies.

Chapter 11 opens a new discussion on mobile persuasion with an emphasis on Integrated Marketing Communications (IMC), enumerating diffusions of 4Ps and IMC into popular forms of inbound marketing. Commercials' places for web-based information matter but the other 3Ps should not be overlooked as they may provide consumers with time- and location-convenient, personalized information that promotes goods, services and idea. Chapter 12 lays the foundation of strategic mobile branding by discussing numerous tactics and platforms that can be uses to interact and connect with the consumer and emphasizing the importance of managerial support in the development of mobile branding initiatives, and personalization of consumer experience, cross-platform branding, stories crafted to form brand narratives would potentially put the consumer in touch with the brand on the mobile platform in form of mobile applications, mobile optimized websites or mobile social media. To engage customers, a wide variety of techniques were suggested, ranging from the incorporations of mobile branded wallets, mobile geo-location services, augmented and virtual reality to branded mobile games. Sustaining brand equity by establishing the proper brand identity, building brand relationships with the customers, and cross-cultural branding are giving the brand a very significant position in the consumers' minds, which in turn would lead to great opportunities to expand the brand's value into the consumers' life. With specific focus on potential contribution of mobile technologies to public relation building, chapter 13 discusses the impacts of unique properties and features of mobile technologies on public relation practices from the functional perspective. It indicates that digital and mobile devices have become an indispensable medium for corporate social responsibility and crisis communication as public relation practitioners interact with publics through relevant interesting and valuable dialogues by shifting to new patterns of internal communications, restructuring public segmentations to engage people with variety of needs and demands, adopting videos and more powerful Internet devices to connect with customers, etc. The chapter ends by offering future research on public relation for better understanding evolving patterns of thinking, communication and socialization in the mobile age. Chapter 14 starts with a generic overview on continuously changing and complex business environment that creates more opportunities than uncertainties, risks and threats at the levels of emergence and widespread adoption of wireless mobile telecommunication networks. Based on analyses of the industry trends and academic research, mobile technologies involve drawbacks which, in the past, limited the use of technologies to full benefit; however, valuable m-advertising and services entirely built around mobility in recent years could create promising m-enterprises if key stakeholders are empowered, m-storefronts provide broader contents and services through new strategic approaches, and future evolutions and challenges in relation to employee development are dealt with, which in turn will lead to maturation of a wide variety of m-possibilities. The focus of chapter 15 is on the growth of m-advertising which has directed to tremendous financial incentives to both enterprises and customers and the strongest influences on market promotions while comparing to other online advertising approaches. Video advertising, pragmatic advertising, together with other digital efforts through social media, blogs, white papers, ebooks, webinars, Facebook, email, cross-channel marketing on mobiles, have burst into the public eye. The chapter continues to review how the high penetration rate of m-advertising has shed light on research which developed new theories and explored problems in relation to the widespread use of m-advertising. As a continuous discussion on m-advertising, chapter 16 proceeds on examining WeChat in China which led to the rise of an advertising platform articulated and modified to influence customers for marketing purposes. Based on activity theory, the chapter highlights that the interplay between mobile phone, social media and internet has triggered the combination of WeChat with hybrid applications to deliver instant and effective messages, aiming at propagating company information and maintaining customer relations. A case study was presented in the chapter to document the peripheral route process concerning the use of WeChat to strengthen m-advertising and identify policy and technical problems and challenges that WeChat as m-advertising platform may incur for future practitioners.

5. Chapters 17-19 are intended to shed light on impacts of mobile interactions as entertaining, social and educational agencies on youth. A wide array of gratification effects of mobile gaming on youth, such as play experience, education and social networking, are reviewed in Chapter 17. A good account of literature on central concepts of mobile gaming and problematic issues about insufficient services, inaccessibility, lack of skills, behavioral and attitude intentions remain for game developers to compensate some of the shortcomings and produce high quality game design with unique features for attracting online players engage in flexible ubiquitous environment with greater joy and gratification. Regarding mobile gaming for educational purposes, the greatest potential of mobile gaming lies in its game-based nature which would largely motivate interests and persistence in learning. The chapter wraps up by noting that the journey of mobile games with social and interactive functions still continues to develop and affect a variety of aspects the industry. A critical review was undertaken in Chapter 18 on how the prevailing use of mobile phones as a communication tool influences youths' continuing socialization. Both qualitative and quantitative support were given by 24 studies pertaining to 5 themes of self-socialization, social networks, contact and social activity patterns, romantic relationships, and attachment to parents, followed by providing new concepts, themes and theories to positively increase psychological and social dependency on family and friends. The final chapter (chapter 19) of the book presents a critical discourse analysis on news stories on the impacts of cell phone on left-behind children in China. Selected new stories were summarized to four narratives depicting the value of cell phone for maintaining remote connections with families, and solving problems about charity giving and rural developments, as well as risks and accidences involved when cell phones are over or misused, and juvenile delinquency or crime stories associated with the use of cell phones by left-behind children.

As what has been discussed in the final chapter and throughout the whole book, the rise of ubiquitous computing in society is a double-edged sword. The same mobile technology used to enhance and enrich human activities also poses challenges and barriers (Hermsen, Frost, Renes & Kerkhof, 2016; Shaw, Tsou & Ye. 2016). Poor infrastructure, cost considerations, user readiness, inequalities of access, social/healthy problems and risks/crimes issues, and online security disclosed yet remained inadequately resolved are detrimental and warrant further investigations (e.g. Barnett, Pearson, Pearson & Kellermanns, 2015; Hill, Betts & Gardner, 2015; Hansen & Nissenbaum, 2009). In conclusion, any advocator of human activity seeking mobile should keep in mind that the human-mobile interactions will be embraced for long only when we are well-prepared to cope with continued development alongside the evolving nature of opportunities, constraints and unwanted threats in the age of ever-advancing digital technologies.

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