Guest editorial

Playing games: advancing research on online and mobile gaming consumption

Introduction

Computer games consistently generate more revenue than the movie and music industries and have become one of the most ubiquitous symbols of popular culture (Takahashi, 2018). Recent technological developments are changing the ways in which consumers are able to engage with computer games as individuals – adult gamers, parents and children (Christy and Kuncheva, 2018) – and as collectives, such as communities, networks and subcultures (Hamari and Sjöblom, 2017; Seo, 2016). In particular, with the proliferation of online and mobile technologies, we have witnessed the emergence of newer forms of both computer games themselves (e.g. advertising games (advergames), virtual and augmented reality games and social media games) (Rauschnabel *et al.*, 2017) and of gaming practices (e.g. serious gaming, hardcore gaming and eSports) (Seo, 2016).

It is, therefore, not surprising that the issues concerning the ways computer games consumption is changing in light of these technological developments have received much attention across diverse disciplines of social sciences, such as marketing (e.g. Seo *et al.*, 2015), information systems (e.g. Liu *et al.*, 2013), media studies (e.g. Giddings, 2016) and internet research (e.g. Hamari and Sjöblom, 2017). The purpose of this introductory paper to the special issue "Online and mobile gaming" is to chart future research directions that are relevant to a rapidly changing postmodern digital gaming landscape. In this endeavor, this paper first provides an integrative summary of the six articles that comprise this special issue, and then draws the threads together in order to elicit the agenda for future research.

An integrative summary of the special issue

The six articles that were selected for this special issue advance research into online and mobile gaming in several ways. The opening article by Pappas, Mikalef, Giannakos and Kourouthanassis draws attention to the complex ecosystem of mobile applications in which multiple factors influence consumer behavior in mobile games. Pappas and his colleagues shed light on how price value, game content quality, positive and negative emotions, gender, and gameplay time interact with one another to predict the intention to download mobile games. This study offers useful insights by demonstrating how fuzzy set qualitative comparative analysis methodology can be applied to advance research into computer games consumption.

The study by Bae, Kim, Kim and Koo addresses the digital virtual consumption that occurs within computer games. This second paper explores the relationship between in-game items and mood management to determine the affective value of purchasing in-game items. The findings reveal that game users manage their levels of arousal and mood valence through the use of in-game purchases, suggesting that stressed users are more likely to purchase decorative items, whereas bored users tend to purchase functional items. This study offers an informative perspective of how mood management and selective exposure theories can be applied to understand the in-game purchases. Continuing this theme, the third study by Bae, Park and Koo investigates the effect of perceived corporate social responsibility (CSR) initiatives. Park and colleagues extend previous research by identifying important motivational mechanisms, such as self-esteem and compassion, which link CSR initiative perceptions with the intentions to purchase in-game items.

The fourth and fifth studies of this special issue draw our attention to the use of avatars and game characters. Liao, Cheng and Teng use social identity and flow theories to construct a novel model that explains how avatar attractiveness and customization impact

loyalty among online game consumers. In the fifth study, Choi explores the importance of game character characteristics being congruent with product types in order to make advergames more persuasive.

The final study by Lee and Ko reviews the predictors of game addiction based on loneliness, motivation and inter-personal competence. The findings of these authors suggest that regulatory focus mediates the effect of loneliness on online game addiction, and that inter-personal competence significantly buffers the indirect effect of loneliness on online game addiction. This study advances our knowledge about online game addiction through an investigation of the important role played by loneliness.

Future directions for research
Taken together, our introductory commentary and the six empirical studies that make up this special issue deepen and broaden the current understanding of how online and mobile technologies augment the consumption of computer games. In this final section of our paper, we outline potential directions for future research.

First, this special issue highlights that computer games consumption is a diverse interdisciplinary phenomenon, where important issues range from establishing the factors that determine the adoption of particular computer games to what consumers do within these games; from whether computer games enhance consumer well-being (e.g. Howes *et al.*, 2017), to whether they engender addiction (e.g. Frölich *et al.*, 2016); and from establishing how computer gaming experiences are influenced by internal psychological mechanisms to querying the effects of broader social aspects of consumer lives on computer games consumption (Kowert *et al.*, 2015). Informed by these findings, we assert that as computer games consumption becomes more complex and interactive, incorporating more technology brought about by the proliferation of online and mobile gaming, it is important that our theorizing follows by tracking the mutual imbrication of consumers, play, technology, culture, well-being and other salient issues.

Computer games consumption is a phenomenon of global significance, which is reflected by the international interest that we have received for this special issue. This prompts us to consider similarities and differences in the ways that computer games are consumed across cultures (Elmezeny and Wimmer, 2018). Many computer games themselves now foster intercultural, multicultural and transcultural experiences (Cruz *et al.*, 2018) by enabling consumers from different countries and regions to connect and build relationships within the shared virtual space. How do such experiences shape the consumption of computer games? This gap in the literature has been previously noted (Seo *et al.*, 2015), but it has not been either sufficiently detailed or theorised. Future studies should explore the role of various transcultural experiences and practices within online and mobile games consumption.

Finally, one increasingly promising area for future research is the rise of virtual reality (VR) applications. Although the earliest references to VR date back to the 1990s (e.g. Gigante, 1993), it has been only recently that technological developments have allowed VR to evolve from a niche technology into an everyday phenomenon that is readily available to consumers (Lamkin, 2017; Oleksy and Wnuk, 2017). Given that VR is an experientially distinct medium, how will it augment computer games consumption experiences and practices? Will it foster more diverse applications of computer games across various aspects of consumer lives (e.g. Tussyadiah *et al.*, 2018), or will it increase computer games addiction (e.g. Chou and Ting, 2003)? What are the current and future intersections between VR technology, online and mobile games, and how are they likely to develop and affect consumers? We envision that these and many other questions related to the application and proliferation of VR technology in computer games consumption will be an exceptionally fruitful area for future research.

In summary, we hope that this paper and the special issue, with its emphasis on online and mobile gaming, will offer new insights for researchers and practitioners who are interested in the advancement of research on computer games consumption.

Yuri Seo
Department of Marketing, University of Auckland, Auckland, New Zealand

Rebecca Dolan
University of Adelaide Business School, University of Adelaide, Adelaide, Australia, and

Margo Buchanan-Oliver
Department of Marketing, University of Auckland Business School,
University of Auckland, Auckland, New Zealand

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About the Guest Editors

Yuri Seo is Senior Lecturer at the University of Auckland of Business School, New Zealand. His research interests include digital technology and consumption, cultural branding and multicultural marketplaces. Yuri Seo is the corresponding author and can be contacted at: y.seo@auckland.ac.nz

Rebecca Dolan is Lecturer at the University of Adelaide School of Business, Australia. Her research focuses on understanding, facilitating and optimizing customer relationships, engagement, and online communication strategies. She has a specific interest in the role that digital and social media play in the modern marketing communications environment.

Margo Buchanan-Oliver is Professor in the Department of Marketing and the Co-Director of the Centre of Digital Enterprise (CODE) at the University of Auckland Business School. Her research concerns interdisciplinary consumption discourse and practice, particularly that occurring at the intersection of the digital and physical worlds.