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Developing Gamification Research in Information Systems

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Developing Gamification Research in Information Systems

Panel

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ABSTRACT

Gamification, an umbrella term for incorporating game design elements into non-game systems to make them more engaging and productive, is of interest to Information System (IS) communities, because it has wide applications, such as, gamification designs for workplace, learning and health apps, social media, online communities, and the gig economy. As a multidisciplinary research domain, gamification integrates elements of technology, human motivation, task design, human-computer-interface design, and algorithms/AI design, and is a fertile ground for IS researchers with a variety of different background. There are many challenges in conducting gamification research, including how to get started in this highly multidisciplinary domain, how to identify novel issues of practical and theoretical importance, how to navigate gamification design processes and avoid common pitfalls, and how to add theoretical contributions to the literature on gamification science. This panel is designed to bring together a team of experts on gamification research to explore these issues and other related issues from the audience.

Keywords

Gamification, Gamification Design, Research Gaps, Current Issues

INTRODUCTION

Gamification, an umbrella term for incorporating game design elements into non-game systems to make them more engaging and productive, is of interest to Information System (IS) communities, because it has wide applications, such as, gamification designs for workplace, learning and health apps, social media, online communities, and the gig economy. Gamification as a multidisciplinary research domain integrates elements of technology, human motivation, task design, human-computer-interface design, and algorithms/AI design, and is a fertile ground for researchers with a variety of different backgrounds. Recent literature reviews (Koivisto and Hamari 2019; Liu, Santhanam, and Webster 2017; Lowry, Petter, and Leimeister 2020) suggest that there is increasing interest in gamification research within the IS communities, as evidenced by the robust presence of gamification research in recent IS conferences (e.g., 20+/year at AMCIS and 30+/year at HICSS) and journals. Still, there are many challenges in conducting gamification research, including how to get started in this highly multidisciplinary domain, how to identify novel issues of practical and theoretical importance, how to navigate gamification design processes and avoid common pitfalls, and how to add theoretical contributions to the literature on gamification science. This panel is designed to bring together a team of experts on gamification research to explore these issues and other related issues from the audience.

PANEL OVERVIEW AND OBJECTIVES

By bringing together a panel of experienced researchers in gamification from both within and outside of IS research communities, we hope to, for example:

- highlight the opportunities for gamification research for IS researchers of different backgrounds,
- identify effective ways of approaching this domain of research,
- discuss the challenges, common pitfalls, and mitigation strategies,
- what could be the unintended consequences or the dark side of gamification,
- provide tips on how to jump-start/advance your gamification research,
- explore strategic issues on nurturing the IS research community.

INTENDED AUDIENCE

This panel is intended for anyone with an interest in gamified information systems. Panelists will discuss issues on developing, designing, and evaluating gamification design, as well as publishing gamification research. Thus, researchers, who are interested in designing, evaluating, and understanding gamified designs for a wide range of contexts should find value in attending this panel. Though the panel is primarily geared toward researchers, managers, and designers who are interested in gamified designs for their domains of application may also find it useful and relevant.

PANEL LAYOUT

The approach to the panel is conversational in nature, encouraging the participation of the audience at each step. After short initial introductions, the moderators will ask panelists to share their views and answers to a series of questions, which are organized into a few segments. Audience members are welcome to ask follow-up questions at the end of each segment. The panel will end with a general Q&A.

PANELISTS

Richard Landers

Richard N. Landers, Ph.D., is an Associate Professor of Psychology and holds the John P. Campbell Distinguished Professorship of Industrial-Organizational Psychology at the University of Minnesota. His research concerns the use of innovative technologies in assessment, employee selection, adult learning, and research methods. Recent topics have included big data, game-based learning, game-based assessment, gamification, unproctored Internet-based testing, mobile devices, virtual reality, and online social media. His work has been published in *Journal of Applied Psychology*, *Industrial and Organizational Psychology Perspectives*, *Computers in Human Behavior*, *Simulation & Gaming*, *Social Science Computer Review*, and *Psychological Methods*, among others, and his research and writing have been featured in *Forbes*, *Business Insider*, *Science News*, *Popular Science*, *Maclean's*, and the *Chronicle of Higher Education*, among others. He currently serves as Associate Editor of *Simulation & Gaming* and the *International Journal of Gaming and Computer-Mediated Simulations*, and he is also part of the steering committee of the Coalition for Technology in Behavioral Science.

De Liu

Dr. De Liu is a Xian Dong Eric Jing Professor of Information and Decision Sciences at the Carlson School of Management, University of Minnesota. He received his Ph.D. from the University of Texas at Austin, and his Master's and Bachelor's degrees from Tsinghua University. His recent research interests include gamification, Internet-based auctions and market mechanisms, crowdfunding, and AI /Augmented Reality applications. His research has appeared in leading journals such as *MIS Quarterly*, *Management Science*, *Information Systems Research*, *Journal of Marketing*, *Journal of Market Research*, and *Production and Operations Management*. He has served as an associate editor for *Information Systems Research* and the *Journal of Organizational Computing and Electronic Commerce*. He currently serves as the academic director for the Master of Science in Business Analytics program at the Carlson School.

Paul Lowry

Paul Benjamin Lowry, Ph.D., is the Suzanne Parker Thornhill Chair Professor and Eminent Scholar in Business Information Technology, Pamplin College of Business, Virginia Tech. He received his Ph.D. in Management Information Systems from the University of Arizona. He has over 237 publications in journals such as *MIS*

Quarterly, Information Systems Research, J. of Management Information Systems), Journal of the Association for Information Systems, and Information Systems Journal. His research interests include organizational and behavioral security and privacy, online deviance, HCI, social media and gamification, as well as business analytics. He has also served or is serving in many different full-time and guest SE/AE roles for several top journals, including: MIS Quarterly, Journal of Management Information Systems, Journal of the AIS, IS Journal, European Journal of IS, Decision Sciences) Information & Management, Electronic Commerce Research and Applications, Small Group Research, AIS Transactions on HCI, and Communications of the AIS.

Fiona Nah (Tentative)

Dr. Fiona Nah is a Professor at the City University of Hong Kong. She is the Editor-in-chief of the AIS Transactions on Human-Computer Interaction. She holds a Ph.D. from the University of British Columbia in Canada. She received her M.S. and B.S. (Honors) in Computer and Information Sciences from the School of Computing, National University of Singapore. Previously, she served on the faculty of Purdue University, University of Nebraska-Lincoln, and Missouri University of Science and Technology (formerly the University of Missouri-Rolla). She was a former Senior Editor for the Journal of the Association for Information Systems. She is an Associate Editor for the International Journal of Human-Computer Studies, European Journal of Information Systems, Journal of Electronic Commerce Research, Journal of Global Information Management, and Information & Management. She also serves on the editorial board of several other journals including the International Journal of Human-Computer Interaction, Internet Research, and Journal of Database Management. Her research has been published in journals such as MIS Quarterly, Journal of the Association for Information Systems, Information and Management, International Journal of Human-Computer Studies, and International Journal of Human-Computer Interaction. She is a recipient of the Sandra Slaughter Service Award.

Radhika Santhanam (Tentative)

Professor Radhika Santhanam holds the Michael F. Price Chair in MIS and is the Director of the MIS division. Her research focus is to enhance human-technology interactions, particularly in work environments. From a micro-perspective, her research examines how user learning and training coupled with system design enhances individual employee competencies, contributes to decision-making processes, and augments their interactions with technology. From a macro perspective, her research focus is to identify ways by which organizations can support employees in collectively appropriating the benefits of implementing new information technologies. Her recent research explores gamification systems as a way to learn and motivate employees to work with technology systems. She has received external funding to support her research on facilitating employee learning of new technologies. Her research findings have been published in a variety of leading journals. She has held senior editorial positions in various journals including serving as a Senior Editor of the Journal of the Association of Information Systems and Information Systems Research. She is currently serving as one of the Senior Editors for an MIS Quarterly special issue on Managing AI. In recognition of her research and leadership role in the Information Systems discipline, she was designated as Association for Information Systems Distinguished Member Cum Laude.

REFERENCES

- Koivisto, Jonna, and Juho Hamari. 2019. "The Rise of Motivational Information Systems: A Review of Gamification Research." *International Journal of Information Management* 45 (July 2018): 191–210. <https://doi.org/10.1016/j.ijinfomgt.2018.10.013>.
- Liu, De, Radhika Santhanam, and Jane Webster. 2017. "Toward Meaningful Engagement: A Framework for Design and Research of Gamified Information Systems." *MIS Quarterly* 41 (4): 1011–34.
- Lowry, Paul Benjamin, Stacie Petter, and Jan Marco Leimeister. 2020. "Desperately Seeking the Artefacts and the Foundations of Native Theory in Gamification Research: Why Information Systems Researchers Can Play a Legitimate Role in This Discourse and How They Can Better Contribute." *European Journal of Information Systems* 29 (6): 609–20. <https://doi.org/10.1080/0960085X.2020.1841574>.