Research Statement

NAH Fui Hoon “Fiona”
School of Computing and Information Systems, Singapore Management University
Tel: (65) 6826-4866; Email: fionanah@smu.edu.sg
20 (Day) 12 (Month) 2024 (Year)

Background

- Broadly speaking, my research interest is in human-computer interaction.
- My goal is to build a solid psychological understanding of human-computer interaction so that better interfaces, media and software applications can be designed that fit the mental model and mental state of users in the context of use. Most human-computer interfaces are designed in an ad-hoc or haphazard manner without scientific or theoretical grounding. My research will continue to develop, enhance, and advance theoretical understanding of principles to guide and evaluate human-computer interaction design.

(Examples of) Research Areas

- Human-computer interaction and NeuroIS
    - I study problems and issues in human-computer interaction. I am interested in developing an in-depth understanding of issues related to the interaction between technologies and users to help improve the effective use of technology. My research also incorporates the use of psychophysiological methods (e.g., eye-tracking and electroencephalogram/EEG) to deepen our understanding of design issues, cognition, and affect in human-computer interaction.
    - I have studied, assessed, and evaluated the trade-offs between 2D and 3D virtual worlds, the personalization-privacy paradox, and Web users’ tolerable waiting time. One of my current research projects analyzes design and contextual principles to induce flow optimal experience in using information systems.

- Metaverse and virtual worlds
    - I research in the area of marketing and education in the metaverse. I am working on using metaverse to enhance teaching and learning, and in assessing the efficacy of using the metaverse for marketing and branding.
    - My earlier research has provided guidance and suggestions for using the metaverse in marketing and education. I am continuing this stream of research to enhance the utilization and efficacy of the metaverse in the business and education contexts.

- Generative artificial intelligence
    - I am interested in studying and understanding how the use of generative AI on a regular or daily basis could have an impact on our well-being and our concept of self-identity. A research question of interest is: Does the use of generative AI affect our self-identity, need for companionship, and capacity for creative self-expression?

Selected Publications and Outputs

Zhu, Z., Hsu, C., Nah, F., Liu, N. (forthcoming). “Generative AI Adoption and Solvers’ Popularity on Supply-Driven Crowdsourcing Platform: The Dual Role of Price Signals,” *Internet Research*.

Zheng, R., and Nah, F. (2026). “Uncovering the Values of the Metaverse for Leisure Use by Individuals: A Value-focused Thinking Approach,” *Technological Forecasting & Social Change*, 222, 124399 (e-print available on 4 November 2025).

Nah, F., Eschenbrenner, B., and Chen, L. (2025). “Flowing Together or Alone: Impact of Collaboration in the Metaverse,” *Decision Support Systems*, *188*, 114346.

Jia, F., Sia, C., Shi, Y., Nah, F. and Siau, K. (2025). “Predicting Consumers’ Purchase Intentions of Browsed Products: A Study Based on Eye-tracking Data,” *18th China Summer Workshop on Information Management*, Xi’an, China, 28-29 June 2025.

Eldaly, A., Kang, Z., Nah, F., Chan, L., Liu, X., Siau, K., Chen, L., Yelamanchili, T., and Weber, R. (2024). “Brain Synchronization Dimensionality and Flow Experience: A Video Gaming Study Using Electroencephalogram,” *Workshop on Information Technology and Systems (WITS)*, Bangkok, Thailand, 18-20 December 2024.

Kang, Z., Eldaly, A., Nah, F., Chan, L., Siau, K., Liu, X., Chen, L., Yelamanchili, T., and Weber, R. (2024). “Comparison of Pre-Flow and Flow Neural Dynamics: A Video Gaming Study Using Electroencephalogram,” *Twenty-Third Annual Pre-ICIS Workshop on HCI Research in MIS (SIGHCI Workshop)*, Bangkok, Thailand, 15 December 2024.

Schiller, S., Nah, F., Luse, A., and Siau, K. (2024). “Men are from Mars and Women are from Venus: Dyadic Collaboration in the Metaverse,” *Internet Research*, *34*(1), pp. 149-173.

Moqbel, M., Nevo, S., and Nah, F. (2023). “Unveiling the Dark Side in Smartphone Addiction: Mediation of Strain and Moderation of Hedonic Use on Well-being,” *Internet Research*, *33*(1), pp. 12-38.

Wan, W., Tsimplis, M., Siau, K., Yue, W., Nah, F., and Yu, G. (2022). “Legal and Regulatory Issues on Artificial Intelligence, Machine Learning, Data Science, and Big Data,” *Lecture Notes in Computer Science 13518*, J. Y. C. Chen., G. Fragomeni, H. Degen, and S. Ntoa (editors), Springer, pp. 558-567.

Bansal, G. and Nah, F. (2022). “Internet Privacy Concerns Revisited: Oversight from Surveillance and Right to be Forgotten as New Dimensions,” *Information & Management*, *59*(3), 103618.

Sharma, K., Zhan, X., Nah, F., Siau, K., and Cheng, M. (2021). “Impact of Digital Nudging on Information Security Behavior: An Experimental Study on Framing and Priming in Cybersecurity,” *Organizational Cybersecurity Journal: Practice, Process and People*, *1*(1), pp. 69-91.

Jia, F., Shi, Y., Sia, C., Tan, C.-H., Nah, F., and Siau, K. (2021). “Users’ Reception of Product Recommendations: Analyses Based on Eye Tracking Data,” *Lecture Notes in Computer Science 12783*, F. F.-H. Nah, and K. Siau (editors), Springer, pp. 90-104.

Stephanidis, C., Salvendy, G., Antona, M., Chen, J., Dong, J., Duffy, V., Fang, X., Fidopiastis, C., Fragomeni, G., Fu, L., Guo, Y., Harris, D., Ioannou, A., Jeong, K., Konomi, S., Krömker, H., Kurosu, M., Lewis, J.R., Marcus, A., Meiselwitz, G., Moallem, A., Mori, H., Nah, F., Ntoa, S., Rau, P., Schmorrow, D., Siau, K., Streitz, N., Wang, W., Yamamoto, S., Zaphiris, P., and Zhou, J. (2019). “Seven HCI Grand Challenges,” *International Journal of Human-Computer Interaction*, *35*(14), pp. 1229-1269.

Nah, F., Eschenbrenner, B., Claybaugh, C., and Koob, P. (2019). “Gamification of Enterprise Systems,” *Systems*, *7*(1), pp. 1-21.

Chan, E., Nah, F., Liu, Q., and Lu, Z. (2018). “Effect of Gamification on Intrinsic Motivation,” *Lecture Notes in Computer Science 10923*, F. F.-H. Nah and B. S. Xiao (editors), Springer, pp. 445-454.

Adapa, A., Nah, F., Hall, R., Siau, K., and Smith, S. (2018). “Factors Influencing the Adoption of Smart Wearable Devices,” *International Journal of Human-Computer Interaction*, *34*(5), pp. 399-409.

Moqbel, M. and Nah, F. (2017). “Enterprise Social Media Use and Impact on Performance: The Role of Workplace Integration and Positive Emotions,” *AIS Transactions on Human-Computer Interaction*, *9*(4), pp. 261-280.

Nah, F., Yelamanchili, T., and Siau, K. (2017). “A Review on Neuropsychophysiological Correlates of Flow,” *Lecture Notes in Computer Science 10294*, F. F.-H. Nah and C.-H. Tan (editors), Springer, pp. 364-372.

Shi, Y., Zeng, Q., Nah, F., Tan, C., Sia, C., Siau, K., and Yan, J. (2017). “Effect of Timing and Source of Online Product Recommendations: An Eye-tracking Study,”

Lecture Notes in Computer Science 10294, F. F.-H. Nah and C.-H. Tan (editors), Springer, pp. 95-107.

Eschenbrenner, B., Nah, F., and Telaprolu, V. (2015). "Efficacy of Social Media Utilization by Public Accounting Firms: Findings and Directions for Future Research," *Journal of Information Systems*, *29*(2), pp. 5-21.

Eschenbrenner, B. and Nah, F. (2014). "Information Systems User Competency: A Conceptual Foundation," *Communications of the Association for Information Systems*, *34*, Article 81, pp. 1363-1378.

Schiller, S., Mennecke, B., Nah, F., and Luse, A. (2014). "Institutional Boundaries and Trust of Virtual Teams in Collaborative Design: An Experimental Study in a Virtual World Environment," *Computers in Human Behavior*, *35*, pp. 565-577.

Nah, F., Eschenbrenner, B., Zeng, Q., Telaprolu, V., and Sepehr, S. (2014). "Flow in Gaming: Literature Synthesis and Framework Development," *International Journal of Information Systems and Management*, *1*(1/2), pp. 83-124.

Chen, X., Siau, K., and Nah, F. (2012). "Empirical Comparison of 3-D Virtual World and Face-to-face Classroom for Higher Education," *Journal of Database Management*, *23*(3), pp. 30-49.

Nah, F., Eschenbrenner, B., and DeWester, D. (2011). "Enhancing Brand Equity through Flow and Telepresence: A Comparison of 2D and 3D Virtual Worlds," *MIS Quarterly*, *35*(3), pp. 731-747.

Nah, F., Eschenbrenner, B., DeWester, D., and Park, S. (2010). "Impact of Flow and Brand Equity in 3D Virtual Worlds," *Journal of Database Management*, *21*(3), July-pp. 69-89.

Sheng, H., Siau, K., and Nah, F. (2010). "Understanding the Values of Mobile Technology in Education: A Value-Focused Thinking Approach," *DATA BASE for Advances in Information Systems*, *41*(2), pp. 25-44.

Park, S., Nah, F., DeWester, D., Eschenbrenner, B., and Jeon, S. (2008). "Virtual World Affordances: Enhancing Brand Value," *Journal of Virtual Worlds Research*, *1*(2), pp. 1-18.

Sheng, H., Nah, F., and Siau, K. (2008). "An Experimental Study on U-commerce Adoption: Impact of Personalization and Privacy Concerns," *Journal of the Association for Information Systems*, *9*(6), pp. 344-376.

Galanxhi-Janaqi, H. and Nah, F. (2007). “Deception in Cyberspace: A Comparison of Text-only vs. Avatar-supported Medium,” *International Journal of Human-Computer Studies*, *65*(9), pp. 770-783.

Nah, F. and Delgado, S. (2006). “Critical Success Factors for ERP Implementation and Upgrade,” *Journal of Computer Information Systems*, *46*(5), pp. 99-113.

Galanxhi, H. and Nah, F. (2006). “Privacy Issues in the Era of Ubiquitous Commerce,” *Electronic Markets*, *16*(3), pp. 222-232.

Siau, K., Sheng, H., and Nah, F. (2006). “Use of a Classroom Response System to Enhance Classroom Interactivity,” *IEEE Transactions on Education*, *49*(3), pp. 398-403.

Sheng, H., Nah, F., and Siau, K. (2005). “Strategic Implications of Mobile Technology: A Case Study Using Value-Focused Thinking,” *Journal of Strategic Information Systems*, *14*(3), pp. 269-290.

Shukla, S. and Nah, F. (2005). “Web Browsing and Spyware Intrusion,” *Communications of the ACM*, *48*(8), pp. 85-90.

Nah, F., Siau, K., and Sheng, H. (2005). “The Value of Mobile Applications: A Utility Company Study,” *Communications of the ACM*, *48*(2), pp. 85-90.

Nah, F., Tan, X., and Teh, S.H. (2004). “An Empirical Investigation on End-Users’ Acceptance of Enterprise Systems,” *Information Resources Management Journal*, *17*(3), pp. 32-53.

Nah, F. (2004). “A Study on Tolerable Waiting Time: How Long Are Web Users Willing to Wait?” *Behaviour and Information Technology*, *23*(3), pp. 153-163.

Nah, F. and Benbasat, I. (2004). “Knowledge-based Support in a Group Decision Making Context: An Expert-Novice Comparison,” *Journal of the Association for Information Systems*, *5*(3), pp. 125-150.

Nadkarni, S. and Nah, F. (2003). “Aggregated Causal Maps: An Approach to Elicit and Aggregate the Knowledge of Multiple Experts,” *Communications of the Association for Information Systems*, *12*, Article 25, pp. 406-436.

Nah, F., Zuckweiler, K.M., and Lau, J.L. (2003). “ERP Implementation: Chief Information Officers’ Perceptions of Critical Success Factors,” *International Journal of Human-Computer Interaction*, *16*(1), pp. 5-22.

Nah, F. and Davis, S. (2002). “HCI Research Issues in Electronic Commerce,” *Journal of Electronic Commerce Research*, *3*(3), pp. 98-113.

Siau, K., Nah, F., and Teng, J.L. (2002). “Internet Abuse and Acceptable Internet Use Policy,” *Communications of the ACM*, *45*(1), January 2002, pp. 75-79.

Nah, F., Faja, S., and Cata, T. (2001). “Characteristics of ERP Software Maintenance: A Multiple Case Study,” *Journal of Software Maintenance and Evolution*, *13*(6), December 2001, pp. 399-414.

Nah, F., Lau, J., and Kuang, J. (2001). “Critical Factors for Successful Implementation of Enterprise Systems,” *Business Process Management Journal*, *7*(3), pp. 285-296.

Sieber, T., Siau, K., Nah, F., and Sieber, M. (2000). “SAP Implementation at the University of Nebraska,” *Journal of Information Technology Cases and Applications*, *2*(1), pp. 41-72.

Nah, F., Mao, J., and Benbasat, I. (1999). “The Effectiveness of Expert Support Technology for Decision Making: Individuals versus Small Groups,” *Journal of Information Technology*, *14*(2), pp. 137-147.