

THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

Departmental Research Seminar



The Promise and Peril of Empathic Chatbots By

Prof. Han Zhang
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Date : 13 Apr 2023 (THU)

Time : 9:30 – 11 am

Venue : Online via Zoom

Abstract

The advance of artificial intelligence technologies has enabled chatbots to be emotionally responsive. Expressing empathy constitutes a critical component of emotional responsiveness often required for human service employees, but the impact of chatbot-expressed empathy is underexamined. In this research, we investigate the effect of service chatbots' empathy expressions on customers' service evaluations. Extending the social perception literature, we propose that an empathic chatbot may not always be perceived by customers to have greater warmth, and it can backfire under certain situations. Specifically, when a cue that undermines a chatbot's competence (e.g., chatbot failure) is salient, chatbot-expressed empathy hurts service evaluations by decreasing the perceived competence of the chatbot, which spills over to the warmth perception. On the other hand, when such a cue does not exist, chatbot-expressed empathy enhances service evaluations by increasing the perceived warmth of the chatbot, which spills over to the competence perception. Results from three laboratory experiments provide evidence for these predictions. Our theoretical framework and findings illuminate the more nuanced role of empathy expressed by service chatbots, and they offer practical guidance for companies on when they can benefit from deploying empathic chatbots.

Prof. Han Zhang is a Full Professor of Information Technology Management (ITM) and Steven A. Denning Professor of Technology & Management at the Scheller College of Business, Georgia Institute of Technology (Georgia Tech). He received his Ph.D. in Information Systems from the University of Texas at Austin. Prof. Zhang currently serves as the Faculty Director of the Denning Technology & Management (T&M) Program. He was the ITM Area Coordinator from 2007 to 2012 and served as the Faculty Director of the Executive MBA Program from 2013 to 2016. His research focuses on online trust and reputation, online word-of-mouth, and AI chatbot. His research on the institutional setup to help small businesses grow in the digital economy has been used as the basis for testimony before the Congressional House Committee on Small Business. His research on AI chatbots has been featured in *Wall Street Journal* (March 20, 2023). He has published in *MIS Quarterly*, *Information Systems Research*, *Journal of Marketing Research*, *Production and Operations Management*, *Journal of Management Information Systems*, *Journal of the Association for Information Systems*, and other academic journals. Prof. Zhang was a co-founder of the China Summer Workshop on Information Management (CSWIM) in 2007, and he served as the workshop Co-Chair of CSWIM 2007 and CSWIM 2010. He was the Program Co-Chair of the Sixth Workshop on e-Business (WeB) in 2007 and in 2016-2020 as well as the Program Co-Chair of the 14th Pacific Asia Conference on Information Systems (PACIS) in 2010. He currently serves as a senior editor for *MIS Quarterly* and Co-Editor-in-Chief for *Information & Management*. Prof. Zhang was a 2009 Hesburgh Award Teaching Fellow at Georgia Tech. He received the 2009 Georgia Tech Outstanding Undergraduate Research Mentor Award and the 2010 Brady Family Award for Faculty Teaching Excellence at Scheller College of Business. He received Georgia Tech Steven A. Denning Faculty Award for Global Engagement in 2018 and the Linda and Lloyd L. Byars Award for Faculty Research Excellence at Scheller College of Business in 2022.

All interested are welcome.



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