Enhancing the Motivational Affordance of Information Systems: The Effects of Real-Time Performance Feedback and Goal Setting in Group Collaboration Environments

ABSTRACT
Increasing globalization has created tremendous opportunities and challenges for organizations and societies. Consequently, a broad range of information technologies to better support the collaboration of diverse and increasingly distributed sets of participants is ever more utilized. Arguably, the success of such technology-mediated collaboration is dependent upon the quality of each individual’s contributions; however, while individuals’ motivations to do their best could be significantly influenced by the design of a system’s human-computer interface, this area has received little attention within the context of group collaboration environments. We fill this gap by integrating research from human-computer interaction, motivation, and technology supported group work to theoretically derive mechanisms for increasing each individual’s motivation within a collective setting. Specifically, we manipulate the interface of a computer-mediated idea generation system (a widely used collaboration tool) to enhance the system’s motivational affordance, i.e., the system's properties that fulfill users’ motivational needs. Results from two studies demonstrate that by embedding the theoretically derived mechanisms “providing feedback” and “designing for optimal challenge” into the collaboration environment, significant performance gains were realized. The results suggest that even slight manipulations of the human-computer interface can contribute significantly to the successful design of a wide variety of group collaboration environments.

BIOGRAPHICAL SKETCH
Joe Valacich is The George and Carolyn Hubman Distinguished Professor of MIS and was the inaugural Marian E. Smith Presidential Endowed Chair at Washington State University. He was an associate professor at Indiana University Bloomington and the Sanjay Subhedar Faculty Fellow. He has had visiting faculty appointments at universities in the United States, Hong Kong, Norway, Finland, and Latvia and has conducted corporate training and executive development programs for many Fortune 500 organizations. His primary research interests include human-computer interaction, technology-mediated collaboration, mobile and emerging technologies, e-business, and distance education. His work has been published in numerous journals, including: MIS Quarterly, Information Systems Research, Management Science, Academy of Management Journal, Journal of MIS, Decision Sciences, Journal of the AIS, Communications of the ACM, Organizational Behavior and Human Decision Processes, Journal of Applied Psychology, and many others. He is a co-author of several leading textbooks including Modern Systems Analysis and Design (6th ed.) and Information Systems Today (5th ed.). In 2009, Dr. Valacich is a Fellow of the Association for Information Systems and has received the Outstanding Alumnus Award from the School of Business Administration, University of Montana. For more information on his research and interests, see http://www.cbe.wsu.edu/~jsv/