Introduction to “Analyzing the Impact of Digitization on Business Operations” Minitrack

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As Artificial Intelligence is applied to business processes that are traditionally performed by human agents, the performance and customer satisfaction about the services provided by AI is in the question.

Due to the pandemic and change of format, this year the “Analyzing the Impact of Digitization on Business Operations” minitrack at HICSS has accepted only one paper. It is entitled “*The Value of Humanization in Customer Service*” by Yang Gao, Huaxia Rui and Shujing Sun. This paper explores the value of algorithm-based agents handling, customer service queries, and customers’ perception and responses. Using the data from a quasi-experiment --- customer service agents from Southwest Airlines on Twitter started including their first names in Responses to customer tweets on March 16, 2018. This abrupt changes the perception of customers that they are dealing with a human agent. This study shows that customers are more willing to engage, and upon engagement, more likely to reach a resolution, with more humanized agents. Furthermore, the study finds no evidence of increased customer verbal aggression towards more humanized agents, despite the theoretical prediction that this could happen. The authors conducted a series of robustness checks, falsification tests, and two sets of synthetic control analyses. So the results about the positive value of humanization in AI in customer services are robust.

This study provides empirical evidence about how to add humanization to AI chatbot technology to overcome the gap between algorithm agent and human agent. It sheds light to businesses that are considering adopting AI technologies to replace humans agents to server the customer on how to improve the service quality and customer satisfaction.