The Hong Kong University of Science and Technology

Department of Information Systems, Business Statistics and Operations Management

Seminar Announcement

My Advisor, Her AI and Me:
Evidence from a Field Experiment on Human-AI Collaboration and Investment Decisions
by
Prof. Kevin BAUER
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Date	**:**	**Monday, 3 April 2023**
Time	**:**	**2:00 - 3:00 PM**
Venue	**:**	**3/F Classroom 1 (3001), LSK Business Building**

Abstract: Contributing to current policy and academic debates about bringing humans in the loop of Artificial intelligence (AI), we explore whether allowing humans to collaborate with AI in the AI-based service production, compared to a pure AI solution, benefits the service production and consumption side. We conduct a field experiment with a large savings bank and produce pure AI-based and human-AI collaborative investment advice to the bank's customers. On the production side, we find that implementing a human-AI collaboration by allowing bankers to have the final say with AI output does not compromise advice quality. More importantly, on the consumption side, we find that the customers are more likely to align their final investment decisions with advice from this human-AI collaboration, compared to pure AI, especially when making more risky investments. The higher reliance on human-AI collaborative advice also translates to higher monetary payoffs. Overall, the results from the field experiment suggest that bringing humans into the AI-based advisory service production is pivotal to allowing AI-enabled efficiency gains to transmit to downstream customers. In a complementary online experiment, we further uncover the mechanism underlying customers' higher reliance on bankers' participation in generating investment advice. We find that the persuasive efficacy of human-AI collaborative advice stems from social influence on the customers. Our findings not only offer new insights for companies contemplating the provision of pure AI-based services, but also enrich policy and regulatory discussions by demonstrating the value of humans in AI-based service production.

Bio: Prof. Kevin Bauer is an assistant professor for E-Business and E-Government at the University of Mannheim. He is interested in research at the intersection of economics and technology. His current research projects focus on explainable AI, algorithmic transparency, and human information processing. His research has been published in journals such as Information Systems Research, and Business & Information Systems Engineering. Kevin received his PhD in Applied Microeconomics from Goethe University Frankfurt. He also holds two postgraduate degrees in Law & Quantitative Economics, and Information Systems.