Invitation

You are cordially invited to the public defense to obtain the academic degree of

DOCTOR OF BUSINESS ECONOMICS

by Khalid Mehmood

Living in an AI-enabled society: exploring the consumer perspective across cultures

Supervisors:
Prof. dr. Katrien Verleye – Prof. dr. Arne De Keyser – Prof dr. Bart Larivière

Thursday, 30 January 2025 at 13h30
In room 'Faculteitsraadzaal', Campus Tweekerken, Tweekerkenstraat 2, 9000 Ghent
Please confirm your attendance no later than 10 January, 2025 by email to Khalid.Mehmood@UGent.be

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Abstract

Artificial intelligence (AI) is becoming an essential part of everyday life, influencing how individuals engage with services. Despite the rise of AI-enabled service, its role and implications for individuals and society remain underexplored, especially across diverse cultural contexts. This dissertation addresses these gaps by examining AI-enabled services from a consumer perspective across WEIRD (Western, educated, industrialized, rich, and democratic) and non-WEIRD cultures. As such, this dissertation provides a culturally nuanced understanding of the opportunities and challenges presented by AI-enabled services.

Study 1 explores personalization as an AI-enabled service that tailors offerings to individual needs. It examines the existing literature to identify knowledge gaps and propose future research directions. As the literature has largely overlooked the mechanisms underlying personalization and its consumer implications, the study focuses on identifying key building blocks of personalization and calls for a comprehensive understanding of personalization that incorporates emerging AI technologies. It emphasizes the need for research that moves beyond a WEIRD-centric lens, advocating for culturally sensitive studies that examine the impact of AI-enabled services across diverse contexts.

Study 2 delves into Large Language Models (LLMs) as AI-enabled services. Specifically, this study is anchored in the concept of mental models, which are personal and internal representations that guide how people view and interact with LLMs. This study collected narratives from LLM users to uncover the mental models they employ to interpret AI's role and implications in their lives. The findings reveal that users' mental models reflect a complex ambivalence. On one hand, users appreciate LLMs for their practical benefits, such as convenience and creativity. On the other hand, they express concerns about dependence, biases, and the potential to promote misinformation. This study introduces a framework that categorizes mental models along prospects and perils for individuals and society, offering a nuanced understanding of users' mental models. It also highlights the importance of transparency and trust in LLMs, advocating for human-centered design that aligns with users' mental models. By linking mental models to technology adoption, the study advances existing models of technology acceptance.

Study 3 adopts a cross-cultural perspective by examining consumers' mental models linked to the well-being implications of AI-enabled services (here, personalization) across different cultural contexts (here, Belgium and Pakistan). According to the mental models of consumers, personalization has the ability to extend or restrict the self and contribute to either an affluent or ailing society. Yet, the findings also hint to cultural nuances: Belgian consumers seem to prioritize personal autonomy and utility and express concerns about surveillance, privacy breaches, and the homogenization of preferences when it relates to their well-being. Pakistani consumers, in turn, seem to emphasize communal benefits and societal harmony. They view AI-enabled personalization as a tool to foster relationships and inclusivity, with less pronounced concerns about privacy or over-personalization. This study highlights the need for culturally sensitive design of AI-enabled services that accounts for the diverse mental models that consumers have about the well-being implications, thereby advancing existing well-being frameworks in transformative service research (TSR).

In conclusion, the dissertation highlights the dual nature of AI in the consumers' eyes, capable of improving well-being while also posing risks of ill-being. The dissertation calls for human-centered, culturally sensitive AI-enabled service design that prioritizes transparency, inclusivity, and ethical practices. It also advocates for policy frameworks that align AI development with the United Nations Sustainable Development Goals (SDGs), ensuring that AI contributes to global well-being while minimizing its risks. As AI continues to evolve, this dissertation highlights the importance of understanding consumers' mental models to design services that truly serve humanity. "To design AI-enabled services for the future, we must first understand the mental models guiding us today," it concludes.

Curriculum vitae

Khalid Mehmood (°1983, Pakistan) holds the degree of Master of Science in Management Sciences, with a major in Marketing (2011, SZABIST, Pakistan). He joined the Center for Service Intelligence at Ghent University (Faculty of Economics and Business Administration) in 2019 as a PhD Student. He is passionate about interactive marketing and service research, with a specific focus on AI-enabled services, disruptive technologies, personalization, customer experience, and transformative service research (TSR). The second and fourth chapter of his dissertation were published in the Journal of Service Management and Journal of Services Marketing, respectively. The third chapter will be sent to another international journal after the public defense. Khalid presented his work at various international conferences, including Frontiers in Service, SERVSIG, Interactive Marketing Research Conference (IMRC), Belgian Service Research Day (BSRD), and the 18th International Research Conference in Service Management (La Londe Conference).