

POTENTIAL PHD RESEARCH TOPIC

AI Powered Marketing and Service Revolution

Lead Supervisor: Professor Sanjit Roy

Associate Supervisor: Dr. Saalem Sadeque

Abstract

Despite the proliferation of artificial intelligence (AI) in marketing decision making across various industries, there is still lack of understanding of the drivers that influence the interactions between humans and machines. As the world increasingly adopts Industry 5.0, understanding these drivers will be critical for impacting not only individual well-being but also societal well-being. Furthermore, companies are interested to learn how these interactions impacts value creation and revolutionises the customer service. The aim of this research project is, therefore, to uncover the mechanisms through which the human-machine interactions can be understood. The research will attempt to evaluate the efficacy of current psychological theories and how these may or may not apply to the new realities of human-machine co-existence.

Further details

Industry 5.0 is a value driven initiative, not a technology driven revolution, that drives technological transformation to achieve a particular purpose (Xu et al., 2021). Examining value-driving initiatives in Industry 5.0, such as real-world applications of AI-based technologies (e.g., service robots), reveals the widespread use of AI across various industries like tourism, education, manufacturing, healthcare, entertainment, and retail. Businesses have seen much infusion of AI in managing customer service in several industries (Xiao & Kumar, 2021; Grewal et al., 2020; Grewal et al., 2021). For instance, Lowes (in retail industry) introduced a robot called “LoweBot” to respond to customers’ queries and assist them in locating products. Recent research underscores the relevance of human-machine interactions and their impact on value creation by augmenting their respective capabilities (Noble et al., 2022). There is an emerging consensus that the future of service firms depends on the harmonious collaborations between humans and machines (Haesevotes et al., 2021). In industry 5.0, the ultimate focus of the human-machine collaboration is stakeholder well-being (e.g., customers, employees, and society). This new focus has the potential to revolutionise value creation and service firms. Additional research is needed to maximise the strengths of both technology and

humans by understanding and examining their respective capabilities. In industry 5.0 the focus is on the well-being of the planet and all of humanity (Noble et al., 2022).

In addition, Kopalle et al. (2022) argue that technological systems (such as AI and robots) and humans can symbiotically co-exist, and humans can focus on the empathy/feeling tasks and machines can take up the analytical tasks (Huang & Rust, 2021). Some of the key research questions which can be addressed in this 5th industrial revolution are the following:

1. Can traditional theories (e.g., social exchange, investment model, relationship norms) explain AI-powered marketing and human-machine collaborative relationships, or are novel theories needed (e.g., psychological ownership theory, role theory)?
2. What are the unintended consequences of AI-powered marketing?
3. Determine the causes and psychological consequences of speciesism in human-machine relationships (Schmitt, 2020). What would be the effect of speciesism on the adoption of machines by both frontline employees and customers?
4. Research is also needed on overcoming speciesism.
5. Will attachments between humans and machines mimic human-human attachments?
6. What would be the frontline employee- and customer level outcomes when machines show empathy towards them?
7. What is the role of human (front-line-employees and customers) motivations to engage with machines in industry 5.0?
8. How does service profit chain and servicescape frameworks evolve in the era of industrial revolution 5.0?
9. What is the impact of automated social presence (Van Doorn et al., 2017) on the transformative potential of human-machine collaboration?
10. Service science considers that all actors are resources and value cocreation is a result of interactions between resources and embeddedness of these interactions within a network of systems, subsystems and suprasystems (Bock et al., 2020). Research is needed to investigate the conditions and drivers to determine whether human-machine collaboration enhances or diminishes value creation.

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