


Chapter 12

Proposal of a Structural Model to Analyze the Impact of Brand Trust on Consumer Adoption and Behavior With Chatbots

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ABSTRACT

In the context of management and marketing strategies, one of the applications where chatbots offer important advantages is in customer service tasks. This chapter postulates a structural model to examine the factors that influence consumer adoption and behavior with chatbots, incorporating brand trust as the central element of the model. Using a sample of 374 participants, the author evaluates the model using structural equation modeling and partial least squares analysis (PLS-SEM). Hypothesis testing shows that the comprehensiveness ($\beta=0.271$; p -value $<.05$) and up-to-dateness ($\beta=0.319$ / p -value $<.05$) of the information provided by the chatbot affects the company's brand trust, which in turn affects the satisfaction ($\beta=0.307$ / p -value $<.01$) and usage intention ($\beta=0.299$ / p -value $<.01$) of these technologies. The author concludes that proper brand management is critical not only for the adoption and use of chatbots, but also for their success as a customer service tool.

INTRODUCTION

In the rapidly evolving landscape of management and marketing strategies, the integration of artificial intelligence has become increasingly pivotal, particularly in the realm of customer service (Mızrak & Cevher, 2023). Among the array of AI applications, chatbots have emerged as indispensable tools, offering a multitude of advantages. This chapter delves into the intricate dynamics of consumer interaction with chatbots, proposing a comprehensive structural model that places brand trust at its core. Recognizing

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the pivotal role of brand trust in shaping consumer behavior, the study aims to shed light on the nuanced relationship between brand trust, consumer adoption, and behavior in the context of chatbot interactions.

The foundation of this inquiry lies in the premise that understanding the factors influencing consumer attitudes and behaviors towards chatbots is essential for effective implementation in contemporary business practices. By anchoring the proposed structural model around brand trust, the chapter seeks to unravel the intricate interplay between information provided by chatbots, brand trust formation, and subsequent impacts on consumer satisfaction and usage intention. In essence, the exploration pivots on the hypothesis that the perceived comprehensiveness and up-to-dateness of information relayed by chatbots significantly influence brand trust, thereby shaping the overall success of these AI-driven technologies in customer service tasks.

To empirically validate the proposed model, the author conducts a meticulous analysis using a sample of 374 participants. The evaluation employs advanced statistical techniques, namely structural equation modeling and partial least squares analysis (PLS-SEM). The results derived from hypothesis testing provide compelling insights into the relationships postulated within the model. Notably, the comprehensiveness and up-to-dateness of chatbot-provided information are found to exert a significant impact on the formation of brand trust. Furthermore, the study establishes a chain of influence, revealing that brand trust, in turn, significantly affects consumer satisfaction and usage intention with chatbot technologies.

The originality and value of this chapter lie in its emphasis on the pivotal role of brand management in the realm of chatbot adoption and utilization. The findings underscore that beyond the technical attributes of chatbots, the success of these AI-driven tools in customer service hinges on the establishment and maintenance of brand trust. As businesses continue to embrace AI for enhanced customer interactions, the insights derived from this study contribute not only to the theoretical understanding of consumer behavior but also offer practical implications for effective implementation in the marketplace.

While the current chapter focuses on specific instrumental characteristics of chatbots, namely system quality and information quality, it acknowledges its limitations and suggests avenues for future research. The chapter proposes an expansion of the analytical framework to include other instrumental constructs of generative AI, such as anthropomorphism and perceived risks in technology. This forward-looking perspective invites future scholars to explore the broader landscape of chatbot interactions, considering elements beyond mere functionality and information provision. In doing so, the research contributes to the ongoing dialogue on the evolving nature of consumer interactions with AI technologies.

BACKGROUND

Generative Artificial Intelligence

Generative artificial intelligence (hereafter referred to as generative AI) is a term generally used to refer to systems that have the ability to generate content or information autonomously and creatively. These systems use generative models to produce new data using existing datasets as input sources (Euchner, 2023; García-Peñalvo & Vázquez-Ingelmo, 2023).

The generative models on which generative AI is based can be different, however, two types of models stand out. Here we can distinguish between machine-learning algorithms, on the one hand, and generative adversarial neural networks (GANs), on the other. Machine-learning algorithms use input datasets to thereafter, either autonomously or supervised, identify patterns, make predictions, and create new

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