Chapter 6
Personalized Product Recommendation and User Satisfaction:
Reference to Industry 5.0

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ABSTRACT

The transition from Industry 4.0 to Industry 5.0 started when personalization options became available to customers. This revolution aims to bring back the human touch with the convergence of advanced technology towards a degree of personalization to meet the demand of the customers. In the era of Industry 5.0, consumers want to differentiate themselves as unique, and personalized products allow them to express themselves as individuals. This has prompted personal recommendations to become more popular. Despite the increasing popularity of personalized recommendations, little research has been conducted on the impact of these recommendations on user satisfaction. As a result, an online survey was conducted to test the relationships between personalized product recommendations and user satisfaction and proposed a conceptual model. The findings of the study indicated a positive association between personalized product recommendations and consumer satisfaction and highlighted several managerial and practical implications that academics and retailers may find useful.

INTRODUCTION

Innovation, personalization, and customization are the three aspects where Industry 4.0 falls short (Doyle-Kent & Kopacek, 2019) since, in today's market, mass customization fuelled by Industry 4.0 technologies is inadequate to satisfy highly personalized customer demands (Ostergaard, 2018). Hence, Industry 5.0 initiated the fundamental foundations of personalization (Iyengar et al., 2022) and allowed for product personalization with higher human intelligence engagement (Akundi et al., 2022). The transition from mass production primarily drives mass customization, where traditional marketing is transformed to create a super-empowered customer with innovative digital information technologies. Consumer demand for mass customization is the primary force behind Industry 5.0. Since of this insight, consumers are willing to pay a premium for Industry 5.0 products because they allow them to satisfy their self-expression needs. In a nutshell, the goal of the Industry 5.0 paradigm is people-focused and robust, providing an option for customers to select products tailored to their specific preferences and requirements. This revolution aimed at bringing back the human touch with the convergence of advanced technology towards a degree of personalization to meet the customers' demand. This technological advancement makes it possible to achieve high performance and allows a high personalization level to fulfill demands specific to individual customers. Researchers have identified several enablers for Industry 5.0, including AI, IoT, and Big data, which help in enterprise digitization and innovation (Maddikunta et al., 2022). This human-machine interaction can be used in various ways to influence consumer behavior. In this technology era, the rapid proliferation of internet information and services makes it challenging for users to make clear decisions regarding e-shopping. Hence, recommendation systems are designed to alleviate the problem of information overload by recommending products based on a user's interests. As a result, many online recommendation systems have been created to assess users' preferences for product qualities and help them make more informed purchases (Ghasemaghaei et al., 2019). Online Product Recommendations are the recommendations generated based on the user's preferences (Bathla, 2017). Recommendation systems use a variety of strategies, including content-based, collaborative filtering, and trust-based recommendations. A collaborative filtering algorithm analyses the user's browsing history and current activity to generate personalized recommendations to forecast their possible future behavior (Wu, 2021). To predict future purchases, OPR analyses a customer's recent purchase, purchase frequency, and transaction amount of past purchases (Nassar et al., 2020). Hence, e-commerce websites utilize product recommendation algorithms to help users discover new products more quickly and easily.

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