

## Chapter 9

# Artificial Intelligence Effectiveness in Customer Experience at Retail

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### ABSTRACT

*Many academics and practitioners now understand artificial intelligence (AI) as a new way for brands to interact with clients and a tool to improve customer experience. Many companies have implemented AI systems at their offline stores to enhance customer experience. However, some studies reveal that most individuals tend to prefer human interactions. This research aims to understand consumers' perceptions of the benefits of using AI in retail and how this can contribute to a positive experience. This study used an online survey distributed to a sample of customers of a well-known international retailer. Findings indicate that AI effectiveness, studied by the customer experience proxy, impacts perceived service quality, customization, and brand trust, positively impacting brand commitment and loyalty. The scales and the model were assessed and validated for this data. This study reinforces how AI can enable customer experience and, by doing so, help retailers to have trusting clients, committed individuals to the point of sale, and even develop brand loyalty.*

DOI: 10.4018/978-1-6684-8574-3.ch009

## INTRODUCTION

Using Artificial Intelligence (AI) seems to contribute to a real revolution in how brands interact with their customers (Ameen et al., 2021; Bagdare, 2015; Trawnih et al., 2022). Mature and dynamic markets push organizations to reinvent systems, methods, and tools to get competitive advantages. The retail sector involves complex assortment management, reveals a high number of transactions per customer and, consequently, is one of the economic sectors where experiences with AI technologies are constantly increasing (Anica-Popa et al., 2021; Rana et al., 2021; Trawnih et al., 2022). Retailers use various AI tools to improve operations, customer experience and sales (e.g., Ameen et al., 2021; Hoyer et al., 2020; Rana et al., 2021) like self-checkout machines (less time spent); smart shelves equipped with sensors and cameras that control stocks and trigger alerts (no breaks); intelligent pricing software that analyses, in real-time, competitors' prices and promotions making the proper adjustments; customer service chatbots for online attendance and complaints' resolution (rapid solution); personalised recommendations and loyalty cards promotions (using algorithms); and augmented and virtual reality. Excellent examples, already used by retailers in Portugal (Martins, 2021), are self-checkout of purchases without cash and, in logistics, picking robots, stock control, and RFID electronic tags (that allow changing prices in all stores with a single click simultaneously). Internationally, Lidl is using conversation chatbot Margot on Facebook Messenger (UK), incorporating Natural Language Understanding (NLU), which helps buyers to choose the best wine and provides advice on combining food and wines, therefore creating a better customer experience (<https://engagecustomer.com/lidl-uk-launches-ai-wine-chatbot-margot-customers>). H&M, in 2016, anticipated its competitors by launching a chatbot in Canada (Kik), allowing customers to view, share and even buy products from the H&M catalogue; a personal stylist was also included in the chatbot, interacting with customers, and creating a style profile per person (Anica-Popa et al., 2021). Tesco is deploying big data and AI to gain insights into consumer behaviour (<https://www.information-age.com/tesco-using-ai-gain-customer-insight-123466328/>).

AI allows customizing services and products by observing the customer's path and identifying past purchases and preferences. Technology helps companies to serve markets better, increasing the customer experience using multiple new techs (Ameen et al., 2021; Kotler et al., 2021; Pillai et al., 2020). Customer experience results from interactions that allow customers to perceive convenience and ease to use, as well as personalized services and products with good service quality. When this is achieved, individuals feel satisfied (Ameen et al., 2021; Anica-Popa et al., 2021; Prentice & Nguyen, 2020), leading to customer engagement, brand trust, commitment, repurchase intention, and loyalty (Ho & Chaw, 2023; Prentice & Nguyen, 2020). In other words, AI tools can help brands to build trust, commitment, and loyalty by allowing them to provide personalised experiences, keeping consistency in their messaging and branding across all channels, being transparent, basing decisions on predictive analytics and, by doing so, delivering enhanced customer service. Predicting future behaviours and preferences leads to anticipating consumers' needs and desires and proactively providing proper solutions, building competitive advantage (Nazir et al., 2023; Pillai et al., 2020; Trawnih et al., 2022; Rana et al., 2021). So, when retailers bet on using AI tools, they are increasing their brand awareness, ensuring positive customer experiences and better customer relationships in time (e.g., Rana et al., 2021).

This exploratory study tries to understand how Portuguese consumers perceive the use of AI in a retail company, proposing a model to analyse the relationships between AI effectiveness (measured by Customer Experience) and Brand Trust, Commitment, and Loyalty.

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