

# Artificial Intelligence in Retail Banks as a Sign of Adaptation to Changes in The Environment: Polish Case Study

**Malgorzata Kiezel, and Katarzyna Bilińska**

University of Economics in Katowice, Department of Marketing Management and Tourism, Poland

## ABSTRACT

Artificial intelligence has a positive impact on the economy and contributes to grow the competitive advantage of companies. Also the banking sector is interested in implementing AI-based solutions. What is important for banks are the benefits they can gain from such innovations. Artificial intelligence helps to increase operational efficiency by reducing costs and improving productivity. AI allows banks to offer new, attractive products and manage customer experience, while shortening the entire process. AI-enabled solutions make it possible to improve service, ensure quality of service, reduce business risk and counter financial fraud. The aim of the article is to characterize AI-based solutions used by retail banks in Poland and the potential for the future use. Among other things, the use of chatbots, automated marketing communication processes and the personalisation of banking products and service processes were presented. The use of AI in KYC (Know Your Customer) processes - important for banks in verifying customers' identities and identifying them in real time and preventing fraud in online banking - was also discussed. The research suggests that the banking sector in Poland is developed in terms of introducing technological innovations and AI solutions. Certain AI activities are more popular and widely used (e.g. chatbot). More advanced solutions are used only by some banks. Mostly these are banks with very large assets or entities that have been operating under a digital business model from the beginning. The study used desk research (data from the Polish Bank Association, OECD, studies and reports by the European Commission, SAS, GARP), the results of observation and content analysis of the websites of selected retail banks operating on the Polish market.

**Keywords:** AI, automation, chatbot, competitive advantage, innovations