**ABSTRACT**

**Objective:** The main purpose of this article is to assess the potential implications of machine learning in making investment decisions when investing capital in stock markets. The analysis carried out focuses on the so­‑called day­‑trading, i.e., investing for very short periods of time, covering only one stock market session. The hypothesis adopted by the authors is that the use of machine learning can, under certain conditions, effectively contribute to attractive rates of return for players making short­‑term investments.

**Methodology:** The study used Microsoft Machine Learning Studio’s Azure tool to enable machine learning­‑based computing. Thanks to this publicly available computing platform, any potential interested investor can create a model and test it. An important assumption of the described study is the adoption of a short investment horizon for the calculation. The calculations used data from five stock market sessions, so that the most recent data is taken into account.

**Findings:** Based on the calculations, the authors observed that the methodology adopted for applying machine learning to investment decision­‑making can be a valuable tool to help make short­‑term investment decisions.

**Value Added:** The research made can be used in a practical way by investors when they transact in the stock market.

**Recommendations**: It should be noted that the presented method requires updating the data on which the predictions are made every time. Further in­‑depth research is also needed to determine the impact of the number of financial instruments on the effectiveness of the learning process.

**Key words:** stock market, investment strategies, machine learning, capital market, artificial intelligence.

**JEL codes:** E 22, E 44, G 11, G 31