**ABSTRACT**

**Objective:** The technology developing before our eyes is entering many areas of life and has an increasing influence on shaping human behavior. Undoubted­ly, it can be stated that one such area is trading on stock exchanges and other markets that offer investors the opportunity to allocate their capital. Thanks to widespread access to the Internet and the computing capabilities of com­puters used in the daily activities of investors, the nature of their working has changed significantly, compared to what we observed even 10–15 years ago. At present, stock exchange orders may be placed in person using various types of brokerage investment accounts, which allow the investor to view real-time quotations which opens up a whole new range of opportunities for investorsIts skillful application during the stock market game can positively influence a play­er’s investment performance. Machine learning is a branch of artificial intelli­gence and computer science that focuses on using data and algorithms to solve decision-making problems based on large amounts of information. In machine learning, algorithms find patterns and relationships in large data sets and make the best decisions and predictions based on this analysis.

**Methodology:** The main objective of this paper is to investigate and evaluate the applicability of machine learning for investment decisions in equity mar­kets. The analysis undertaken focuses on so-called day-trading, i.e. investing for very short periods of time, often involving only a single trading session. The hy­pothesis adopted is that the use of machine learning can contribute to a posi­tive return for a stock market player making short-term investments.

**Recommendations:** The results obtained offer investors the prospect of using the method presented in the article in their capital management strategies, which of course requires them to adapt the techniques used so far to the spe­cifics of machine learning. However, it is necessary to note that the presented method requires that each time the data on which the forecast was made be updated. Further research is needed to determine the impact of the number of companies on the effectiveness of the learning process.

**Findings:** This paper uses the Azure Microsoft Machine Learning Studio tool to enable machine learning-based calculations. It is a widely available cloud computing platform that provides an investor interested in creating a model and testing it. The calculations were made according to two schemes. The first involves teaching the model by taking 50% of the companies randomly selected from all companies, while the second involves teaching the model by taking 80% of the companies randomly selected from all companies.

**Value Added:** The results from the study indicate that investors can use ma­chine learning to earn returns that are attractive to them. Depending on the teaching model (50% or 80% companies), daily returns can range from 1.07% to even 4.23%.

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