ABSTRACT

This study aims to determine the impact of the application of machine learning, deep learning, and data mining in financial statement fraud detection based on published research articles. This research also aims to explore the gaps in knowledge to develop future academic studies.

The method used in this research is Systematic Literature Review (SLR) to analyze various articles published in academic journals indexed in Scopus from 2020 to 2024. The articles were filtered using predetermined keywords obtained from various top-ranked journals, resulting in twenty-one articles being reviewed. This SLR method was used to examine the topics, results, methodology, recommendations and limitations of the published articles.

The analysis provides evidence that machine learning, deep learning, and data mining have a positive impact on financial statement fraud detection. The adoption of these technologies can assist auditors in improving the accuracy of fraud detection. New technologies such as machine learning, deep learning, and data mining can find hidden patterns contained in data and are able to find relationships between each component of the data. In addition, this research also identifies the weaknesses and strengths of the algorithms used in fraud detection. This study also provides recommendations for future research, including the development of more sophisticated algorithms, identifying factors inhibiting the adoption of these technologies in financial statement fraud detection.

Keywords: machine learning, deep learning, data mining, financial statement fraud detection, SLR