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Fraud Detection through Emerging Applications – AI Agents

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Abstract

Audit procedures are constantly evolving from the initial stage of sampling and fully human reasoning to that of automation and digitized processing of financial and accounting information. These transformations, however, are of a dual nature: on the one hand, advanced technologies for collection, processing and reporting are emerging, and on the other hand, the volume of information created by digitalization is unprecedented, requiring constant and real-time monitoring of audited transactions. This is the reason why fraud detection is becoming a complex task, in a vicious circle in which new computerized work tools are becoming indispensable in the analysis of targeted processes where technologies of the same nature have sophisticated them to a level that is difficult to audit by traditional or obsolete methods. The exponential increase in the volume of data within contemporary organizations facilitates complex fraud schemes of financial systems, which makes the auditor look for adapted solutions to detect them. This study analyzes how artificial intelligence agents redefine the processes of detecting anomalies in transactions or financial statements, thus transforming themselves into reliable tools in carrying out audit missions.

Key words: *AI agents; digital audit; financial fraud; deep learning; machine learning;*

JEL Classification: *M1, M2, M4, O3*

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