

Comparative Analysis of Different Fraud Detection Tools and Technology

(Machine Learning and AI Algorithms, Predictive Analytics, Behavioral Analytics Transaction Monitoring Systems)

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Abstract

This research analyzes and compares several fraud detection techniques and technologies to counter the rising threat of fraudulent conduct in digital transactions. It evaluates techniques including machine learning, block chain solutions, rule-based systems, and anomaly detection, analyzing their cost, installation difficulty, scalability, and effectiveness. The study underscores the necessity of merging many detection strategies to enhance the overall efficacy of fraud detection, considering the mutual reinforcement between them. Upon closely reading the literature and case studies, the research gives businesses useful information to select fraud protection strategies. Businesses that understand the benefits and drawbacks of each strategy may develop robust fraud prevention policies to safe guard assets and preserve consumer trust in the digital realm.

Keywords: *Fraud Detection, Tools, Technologies, Machine Learning, Artificial Intelligence, Big Data, Blockchain, Data Visualization, Rule-based Systems, Statistical Models, Intrusion Detection.*