

Automated Decision Making in Financial Fraud Control with Leveraging Business Rules and AI for Enhanced Risk Management.

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Abstract: *Financial fraud continues to be a significant concern for financial institutions, with ever-evolving methods of attack. This paper investigates the role of automated decision-making systems in enhancing financial fraud control by integrating Business Rules Management Systems (BRMS) with Artificial Intelligence (AI). By combining these two technologies, organizations can better detect and prevent fraudulent activities in real-time, ensuring compliance with regulations and improving risk management frameworks. The research explores the benefits of leveraging AI algorithms, such as machine learning models, in tandem with BRMS to automate decision-making processes, reduce false positives, and enhance detection accuracy. Through a case study of a leading financial institution, we demonstrate the efficiency of this integrated approach in reducing financial crime and improving operational efficiency. The findings underscore the importance of AI and BRMS in creating dynamic, adaptive fraud detection systems capable of addressing the complex challenges of modern financial fraud.*

Keywords: Financial Fraud Control, Automated Decision Making, Business Rules Management Systems (BRMS), Artificial Intelligence, Risk Management, Machine Learning, Fraud Detection

