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AI-Enhanced Third-Party Risk Management

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Abstract: *Organizations risk grave chances of undergoing severe cyber security, financial, and compliance risks to great extents by increasingly depending on third parties to conduct business. This paper outlines an AI-driven framework using ML techniques for third-party risk management. It involves incorporating natural language processing into a real-time risk assessment process, uses of anomaly detection algorithms in fraud identification, and predictive analytics used in order to predict potential vendor failures. Experimental results on a 5,000 vendor-profile dataset indicate that risk classification reaches accuracy of 92% over traditional rule-based models. The results indicate that AI-enhanced TPRM can greatly improve the efficacy of risk mitigation strategies as well as compliance with regulatory requirements. Future work includes the integration of XAI to enhance model interpretability.*

Keywords: TPRM, NLP, Sentiment Analyzer

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