**AI-DRIVEN PROCUREMENT FRAUD DETECTION SYSTEM**

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**Business Understanding**

**Business Overview**

Procurement fraud is a persistent challenge across sectors, impacting both financial integrity and public trust. Fraud schemes like bribery, bid rigging, and collusion exploit weaknesses in procurement processes, resulting in inflated costs, resource misallocation, and compromised service quality. Traditional fraud detection methods, reliant on manual checks and set rules, are often insufficient

due to the evolving nature of fraud schemes. Here, Artificial Intelligence (AI) provides a solution by offering real-time, scalable, and data-driven insights into procurement practices. AI-powered fraud detection can analyze massive datasets, identify anomalous patterns, and predict potential fraudulent activities. This project leverages machine learning models to create an intelligent procurement fraud detection system designed to identify collusive behaviors, inflated invoicing, and other red flags in

procurement transactions. The goal is to support governance efforts, optimize resource use, and foster transparency in public and private sector procurement.

**Problem Statement**

Procurement fraud significantly impacts economic stability, as it leads to increased project costs, resource misallocation, and eroded public trust. Current detection methods are limited in scope and effectiveness, unable to adapt to the changing strategies employed by fraudsters. This project addresses these gaps by developing an AI-driven fraud detection system tailored to

procurement, capable of identifying unusual bidding behaviors, inflated pricing, and other fraudulent activities. The system aims to offer a scalable solution that not only improves detection accuracy but also integrates seamlessly into existing financial infrastructures.