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Intelligent Financial Governance: The Role of AI and Machine Learning in Enhancing Fiscal Impact Analysis and Budget Forecasting for Government Entities

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The integration of Artificial Intelligence (AI) and Machine Learning (ML) into financial governance is transforming the way government entities conduct fiscal impact analysis and budget forecasting. Traditional budget planning and fiscal assessments often rely on historical data and static models, which can be limited in accuracy and adaptability. AI-driven approaches enhance these processes by leveraging advanced data analytics, predictive modelling, and real-time insights to improve decision-making, optimize resource allocation, and mitigate financial risks. This paper explores the role of AI and ML in intelligent financial governance, highlighting their applications in revenue prediction, expenditure analysis, anomaly detection, and scenario planning. By automating complex calculations and identifying patterns in large datasets, AI-driven tools enhance transparency, efficiency, and fiscal responsibility in public financial management. The study further discusses the challenges of AI adoption in government finance, including data privacy concerns, algorithmic biases, and the need for skilled personnel. Ultimately, the integration of AI and ML in budget forecasting and fiscal impact analysis represents a significant advancement toward more data-driven, efficient, and responsive governance.