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Bridging the Gap: Data-Driven Techniques to Improve Tax Collection Efficiency

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Governments that collect taxes inefficiently are financially weakened, which impacts economic growth. The "tax gap" that results from this, or the difference between the amount of tax that is actually collected and the amount that is theoretically owing, is quite costly. This study explores the ways in which data-driven research might be used to close this disparity and enhance the efficiency of tax collection. To do this, we suggest utilizing the potential of sophisticated analytics, especially network machine learning. By analyzing intricate links within taxpayer data, network machine learning enables us to find hidden patterns and abnormalities. The "true" tax burden for people and corporations will be estimated taking into account a variety of economic factors using methods such as linear regression analysis. Furthermore, clustering techniques will be used to find taxpayer groups that share traits and are more likely to violate regulations. By using taxpayer data, the project seeks to formulate a multifaceted strategy. First, using the data analysis to identify high-risk locations, focused audits will be created. This method concentrates resources on people who are most likely to be non-compliant, which maximizes the effectiveness of audits. Second, the project will use these data to develop focused campaigns that encourage taxpayers to comply voluntarily. This could entail tax filing process simplification, educational initiatives, or incentive schemes for accurate and timely tax reporting. Through the use of advanced analytics, the project seeks to create a system that is more effective and efficient by revealing hidden trends and risk concern.

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