Benchmarking Predictive System for Detection of Bankruptcy using Artificial Intelligence

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Abstract: *Bankruptcy assessment is very important for creditors and investors who are predicting bankruptcy. In the future, it will be a principal area for research. In the past several years, machine learning methods and artificial intelligence has accomplished a big success into the prediction of bankruptcy. "Class imbalance Deep learning for Bankruptcy Prediction - 2020 First International Conference on Power, Control and Computing Technologies (I.C.P.C.2.T) – Shanmukha vellamcheti, Pradeep Singh" [32] research paper was examined in this study and used as a criterion to improvise the AUC, Accuracy, and other metrics for predicting future bankruptcy using the LightGBM algorithm, a fast and high-performance open source distributed gradient boosting system. The results obtained are promising and show a greater AUC than earlier published findings. The cause of the exceptional predictive performance is examined, and it seems that the Feature Engineering element is critical. It observed that predictive models with good performance could achieved with feature engineering of the data. The average AUC obtained with this methodology for predicting bankruptcy is 0.949.*

Keywords: Artificial Intelligence, Benchmarking, Bankruptcy, Light GBM, Machine Learning

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