

Capstone Project Submission

Credit Card Default Prediction

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Topic:

- A). Explore the data
- B). Preprocess the data
- C). EDA
- D). Data Splitting
- E). Building different Models
- F). Conclusion

Please paste the GitHub Repo link.

GitHub Link:- <https://github.com/Animesh227/Capstone-Project-Credit-Card-Default-Prediction->

Summary

Bank of recent year plays a significant role in the development of the nation. The bank offers a few things that are directly dependent on any nation's general economic and financial condition. Banking efficiency leads to the business, growth in the industry, economic growth, and support for the common man with savings, improving financial security. Bank Loan has been one of the fastest-growing financial services banks in recent years. However, with the increasing number of bank loan users, banks face an ever-increasing rate of bank loan decline. This program is offered primarily to a person or company of higher value than another. Under this scheme, a small amount can be provided as a cash transfer or electronic transfer to the debtor when they can be in demand. Few of them have not returned a set amount in time, so sometimes they do not. This situation creates a problem for the bank. Then with the help of historical data, the need to predict bank loan error can be determined. As such, machine learning may offer options for addressing the current issue and handling credit risk. This analysis has the function of forecasting the inability to pay the bank loan. Analysis hits the relation between the class variable and the set of independent variables. The primary analysis produces exploratory views of data correctly. Further, this paper used ML algorithms to get predictions with accuracy to detect the default users based on transactional data.

In general, we can refer to a customer's inability to pay, or their default on a payment, or personal bankruptcy, all as potential issues of non-payment. However, each of these scenarios is a result of different circumstances.

Sometimes it is due to a sudden change in a person's income source due to job loss, health issues, or an inability to work. Sometimes it is deliberate, for instance, when the customer knows that he/she is not solvent enough to use a credit card anymore, but still uses it until the card is stopped by the bank. In the latter case, it is a type of fraud, which is very difficult to predict, and a big issue to creditors.

To address this issue, credit card companies try to predict potential default, or assess the risk probability, on a payment in advance. From the creditor's side, the earlier the potential default accounts are detected the lower the losses. For this reason, an effective approach for predicting a potential default account in advance is crucial for the creditors if they want to take preventive actions. In addition, they could also investigate and help the customer by providing necessary suggestions to avoid bankruptcy and minimize the loss.