## **Capstone Project**

- Q. Why is your proposal important in today's world? How predicting a good client is worthy for a bank?
- Predicting credit card approval is crucial for banks to mitigate risks associated with providing credit to customers who may default on payments.
- It helps in making informed decisions and managing the finance of the institution.
- Q. How is it going to impact the banking sector?
- Implementing an effective credit approval system can lead to better risk management, reduced default rates, and improved overall financial stability for the bank.
- Q. If any, what is the gap in the knowledge or how your proposed method can be helpful if required in future for any bank in India.
- The proposed method can help identify patterns and factors affecting credit approval, providing valuable insights for future credit assessment strategies in the banking sector.

## **Section: Data analysis approach**

- Q. What approach are you going to take in order to prove or disprove your hypothesis?
- Hypothesis 1:
- Applicants with higher annual income are more likely to have their credit card applications approved.
- Hypothesis 2:
- Education level may influence credit card approval, with higher education levels correlating with a higher likelihood of approval.
- Hypothesis 3:
- Applicants with more family members may have a higher chance of credit card approval.
- Q. What feature engineering techniques will be relevant to your project?

I can perform feature scaling, Imputation(dealing with missing values), and encoding as there are a few categorical variables available in the project.

**Section: Machine learning approach** 

Q. What method will you use for machine learning based predictions for credit card approval?

As this project comes under classification supervised learning. I believe logistic regression or random forest classification

would give better accuracy.

Q.Please justify the most appropriate model.

We try to choose the model with the highest accuracy and consider factors like interpretability, simplicity and computational efficiency.

Q.Please perform necessary steps required to improve the accuracy of your model.

We can try hyperparameter tuning, feature selection, or other techniques to improve model performance.

Q.Please compare all models (at least 4 models).

We can try different algorithms (e.g., logistic regression, random forest classifier, decision tree classifier, Xgboost classifier) and compare their performance.