# Ideation Phase
# Define the Problem
# Statements

| Date | 19 September 2022 |
|---|---|
| Team ID | PNT2022TMID00759 |
| Project Name | Smart lender applicant credibility prediction for loan approval |
| Maximum Marks | 2 marks |

## Customer Problem Statement Template:

A Finance company deals in all kinds of home loans.

They have a presence across all urban, semi-urban and rural areas.

The customer first applies for a home loan and after that, the company validates the customer eligibility for the loan.

The company wants to automate the loan eligibility process (real-time) based on customer detail provided

while filling out online application forms.

These details are Gender, Marital Status, Education, Number of Dependents, Income, Loan Amount, Credit

History, and others.

To automate this process, they have provided a dataset to identify the customer segments that are eligible for

loan amounts .We have to utilize the given dataset and create a Smart lender application for Loan approval, so

that they can specifically target those customers.

## Reference:
1. Kumar Arun, Garg Ishan, Kaur Sanmeet, May-Jun. 2016. Loan Approval Prediction based on Machine Learning Approach, IOSR Journal of Computer Engineering (IOSR-JCE)
2. Wei Li, Shuai Ding, Yi Chen, and Shanlin Yang, Heterogeneous Ensemble for Default Prediction of Peer-to-Peer Lending in China, Key Laboratory of Process Optimization and Intelligent Decision-Making, Ministry of Education, Hefei University of Technology, Hefei 2009, China
3. Clustering Loan Applicants based on Risk Percentage using K-Means Clustering Techniques,

## Example:

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|---|---|---|---|---|---|
| PS-1 | A customer | Create a bank account to get a housing loan | My request is being delayed | My account verification is not yet completed | Frustrated |
| PS-2 | A customer | Take a loan | It is taking a long time | Of delay in account verification | Frustrated |