

PROJECT DESIGN PHASE-I

PROPOSED SOLUTION

The solution that is desired is focused on solving the problems that exist in the current situation and the parameters will describes the results that are expected.

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**PROJECT NAME : SMART LENDER-APPLICANT CREDIBILITY PREDICTION FOR
LOAN APPROVAL**

| S.NO. | PARAMETERS | DESCRIPTION |
|-------|---------------------------------------|---|
| 1) | Problems Statement | <ul style="list-style-type: none">• Less accurate evaluation.• More resources are used.• More room for human errors.• High time consumption.• Customer service will be compromised.• Tracking can be difficult. |
| 2) | Solution | <ul style="list-style-type: none">• More accurate evaluation.• Usage of resources will be reduced.• Reduces human errors.• Highly scalable and provide data driven decisions to stakeholder and higher authority.• Plenty of time will be saved.• Customer service will be improved.• Tracking gets easier. <p>We will be using classification algorithms such as Decision tree, Random Forest, KNN, and xgboost to achieve higher accuracy in predicting the model. We will train and test the data with these algorithms, tune by hyperparameter tuning. From this the above ideas are implemented.</p> |
| 3) | Novelty / Uniqueness | As soon as the essential data are provided, the model will predict whether to approve the loan or not - By use of transfer learning. |
| 4) | Social Impact / Customer Satisfaction | One of the most important factors which affect our country's economy and financial condition is the credit system governed by the banks. As we know credit risk evaluation is very crucial, there is a variety of techniques are used for risk level calculation. In addition, credit risk is one of the main functions of the banking community. |

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| 5) | Business Model (Revenue Model) | This model can be developed by minimum cost at the same time it will provide the peak performance, higher accuracy and the result will be more effective than traditional techniques. |
| 6) | Scalability of the Solution | Banks need not to go through the background verification process of the applicant by using this model. The model will predict the customers data and their attributes like salary, credit score, etc. |