

# PROJECT DESIGN PHASE - I

## PROBLEM SOLUTION FIT

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TEAM ID	PNT2022TMID51041	
PROJECT TITLE	Smart Lender - Applicant Credibility Prediction for Loan Approval	
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## Smart Lender - Applicant Credibility Prediction for Loan Approval

### PROBLEM SOLUTION FIT

### Problem-Solution fit canvas 2.0

Project Title: Smart Lender-Applicant credibility prediction for loan approval  
Project Design Phase-I - Solution Fit  
Team ID: PNT2022TMID28895

Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">CS</span> <p>Customer are mainly the officials from Bank sector who will approve the loan to the customer. It may also include who loan lender,bank account user,and credit/debit users.</p>	<b>6. CUSTOMER CONSTRAINTS</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">CC</span> <p>The Choices of solutions are limited by their budget, knowledge that required to use the solution, database access, database connectivity, etc.</p>	<b>5. AVAILABLE SOLUTIONS</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">AS</span> <p>The current mechanism for evaluating the loan application is done by paperwork and based credit score.They require lot of effort and time but also not able to cover all the parameters to consider.</p>	Explore AS, differentiate
	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">J&amp;P</span> <p>To validate whether the customer is eligibility for availing the loan scheme from bank. It may take long time check the eligibility manually.</p>	<b>9. PROBLEM ROOT CAUSE</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">RC</span> <p>One of the major factor in increasing trend of banking sector that affect countries economy is credit system handled by banks.Increased rate of credit defaulter is a difficult task as credit risk evaluation is very crucial..</p>	<b>7. BEHAVIOUR</b> <span style="float: right; background-color: #ffc107; padding: 2px 5px;">BE</span> <p>Verify whether the loan requested person is eligible for loan based on the different parameter like person economic potential ,property support,financial performarice,etc</p>	
Identify strong TR & EM	<b>3. TRIGGERS</b> <span style="float: right; background-color: #c6e0b4; padding: 2px 5px;">TR</span> <p>Financial situation of the user,Credit score rates,Low interest rates are also some of the trigger. Customers are triggered from the need to standardise the loan process and make their work more customer-friendly.</p>	<b>10. YOUR SOLUTION</b> <span style="float: right; background-color: #c6e0b4; padding: 2px 5px;">SL</span> <p>Based on the previous loan log of the bank's generated machine learning model which is used for evaluating the loan applicant eligibility. The proposed solution is the prediction of credit defaulters using classification algorithms such as Decision tree, Random forest and detect the credit risk evaluation. We use classification algorithms such as KNN and XGBOOST algorithms that forecast the loan defaulters and predict loan approval.</p>	<b>8. CHANNELS of BEHAVIOUR</b> <span style="float: right; background-color: #c6e0b4; padding: 2px 5px;">CH</span> <p><b>1. ONLINE</b> Customers can easily predict their eligibility through a user interface. Proper Document verification Customer Background verification The applicant details are collected and cross verified. The verified data is given to the system for the evaluation.</p> <p><b>8.2 OFFLINE</b></p> <ul style="list-style-type: none"> <li>Submission of document</li> <li>It is time consuming process</li> <li>It is complex.</li> </ul>	Extract online & offline CH of BE
	<b>4. EMOTIONS: BEFORE / AFTER</b> <span style="float: right; background-color: #c6e0b4; padding: 2px 5px;">EM</span> <p>While evaluating the loan applicant the bankers struggle in deciding how to evaluate the loan applicant, which are the things to be considered and what are the criteria level needed to be checked. If the loan borrowers are not paying back the loan at specified intervals then the bank's are not able to generate income which is necessary for maintaining the bank and providing the interest for the depositors.</p>			