Team ID: PNT2022TMID15600

Problem-Solution Ip canvas 2.0

Project Title: Smart Lender-Applicant Credibility Prediction for Loan Approval

1. CUSTOMER SEG¥dEMT(S)   CS

Who is your customer?
e. working parents of 0-5 y.o. kid•

1. Investment firms
2. Venture Capitalists
3. Entrepreneurial incubation firms
4. Banks

6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices

A financial institution's credit applications process is complicated and involves a lot of paperwork. Loan defaulters may go unnotices by banks. They might lend him money as a result, exacerbating the loss.

5. AVAILABLE SOLUTIONS   AS

Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do

. Models:
1. Decision Tree Model
2. Random Forest Model
3. KNN model
4. Xgboost Model

Creating an application that uses any of these ML models to predict the loan eligibility of person.

2. JOBS-TO-BE-00NE/ PROBKMS   J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

The importance of a 24-months history of employment is very important in the loan approval. If someone has been self-employed for less than 2 years and only has the business license for 18 months that could be a problem.

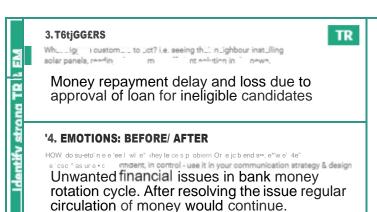## 9. PROBLEM ROOT CAUSE   RC

'Y"a• i4 the ea l - - - in hat ' ii e p'sb en ex - - "
'•'/* •• '1the " ck ated› behind the need to do h e jcb'
e -ue•on-era have -a do t because zf the change i   ulat i‹

The root cause of this problem is due to improper verification of data which might happen during manual checking. Evaluating and giving credit to customers is a difficult process that requires multiple evaluations. Wrong predictions can cost Bank big losses.

7. BEHAVIOUR   B

What does a y cur• uat c n- ar do t c ad d• aa a •he p cb e' r' and gm th a jc b dc °e•
i e dir ec•l y •ela• e4 •i °d •f'e who ao ar g an el r w a er c a cu la•e usa- 4nc °ener'...
i... ly associated: custo... s spend free time on volunteering work (i... Gre...

The outcome would be loan approval for ineligible candidates. Later could result in loss for the organization

3. T6tjGG£RS   TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading   m   nt solution in   news.

Money repayment delay and loss due to approval of loan for ineligible candidates

'4. EMOTIONS: BEFORE/ AFTER

HOW do su-eto' n e e 'ee l wl e" ‹hey le ce s p obiern Or e jc b end s••. e"w e' 4e°
e ' csc ° as ur e • c   ndent, in control - use it in your communication strategy & design

Unwanted financial issues in bank money rotation cycle. After resolving the issue regular circulation of money would continue.

TO. YOUR SOLUTION   SL

If you are working on an existing business, write down your current solution first fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solve a problem and matches customer behviow.

Our Solution involve using ensemble ML models which can predict the loan eligibility in the banking sector. It will also include an application framework that uses this ML model and some UI/UX to provide the results directly to the customers.

6. CMANN£LS of BEHAVIOUR   CH

8 1 O
What kind of actions do customers take online? Extract online channels from #7

The online way of action would be sending notice regarding deadline.

a J use "her •or cue\ome deme ops' wn\

Offline way would deal with directly approach to the client for collection of money.