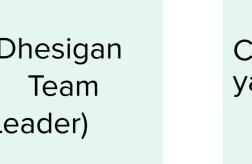


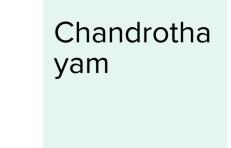
## IBM - Nalaiya Thiran: Data and Applied Science Project

This data science project is about loan approval based on the customer information like name, customer ID, credit score This customer journey map explains steps motivation, etc. For customer and stakeholder satisfaction

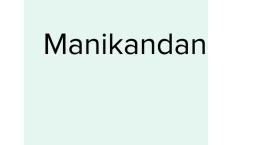
## Smart Lender -Applicant Credibility Prediction for Loan Approval

Team members: Smart Lender - Applicant Credibility Prediction for Loan Approval









Loan Approval Customer journey methods	Entice  How does someone initially become aware of this process?	Enter  What do people experience as they begin the process?	Engage In the core moments in the process, what happens?	Exit  What do people typically experience as the process finishes?	Extend What happens after the experience is over?
Steps Steps	Visit branch or company of finance / bank  Customer can gain Insights about the company about loan plans and approval  Get Customer feedback  By getting feedback customer can know in depth knowledge about loan approval.	visit website or particular branch  Customer can gain trust by making them feel comfortable in initial state.  In this step customer will come to know the entire process of loan approval  By this employees can gain insight by knowing their needs and further proceed to next steps	Gain customer details and make prediction  By customer details like credit score, salary. Company can make insights about customer	At end of the the process in loan eligibility  Customer will know entire process and the customers will come to know whether they are eligible for loan or not.	After the completion of the entire process  Employees will provide loan or terminate the application.
Interactions	By interacting with employees, customers will come to know the schemes and loan approval.  By visiting place or website they can know the quality of the company of finance/bank  At initial process employees make things clear to customers.	By entering website customer service interact with customers to fill application and queries  By entering the website or interacting with customer service they can know entire process of loan approval  By interacting customers we can gain insight background for future loan providing.	In core website or employee fill details and store it in data base or in excel sheet to make further predictions.  After the details extracted the employee make use of details gained and they perform EDA and prediction.	At end of the process employees will send mail to customer about loan eligibilty	Website will update about loan approval and also inform any loan offers they are eligible for future loans
Goals & motivations	Attract more customers to apply for loan  Focus more on marketing, advertising about company and schemes.	At beginning main motivation is to attract and ensure customer satisfaction.  Provide details of company, making customers comfortable.	Perform proper EDA to gain more insights about customers to perform and reduce the loss and gain more profit.	At end of the process, to make sure that company can offer loans to maximum number of people.  To achieve highest accuracy by Advanced ML algorithms.	After finishing the entire process to make sure the customers are not disappointed by the decision taken by the company.
Positive moments	Gaining more customers , Make them comfortable is main priority and positive moment .  Major positive moments customer can experience is the trust they gain towards company.	At beginning stage the customer feels more confidence in security and filling the details more confidentaly.  At initial state, the customer service will be good and it will further motivate to take loans.	At core Make sure there are no error and mistake in core field as it would lead heavy loss.	At end of the process make sure to impress the customers by providing more benefits regarding loan .	After finishing process the main motivation is to get highest profit, turnover and customer satisfaction.
Negative moments			The model may give less accuracy if the users drastically increase .		
Areas of opportunity	Increasing marketing and focus mainly on customer and stakeholder  Reaching out to people in more strategic way to make customers to apply for loans	Make website more interactive to attract customers	Use advanced algorithms like XGBoost to handle overfitting and inconsistant accuracy.	Improve the loan approval rate bit higher and offer additional benefits	Focusing and concerning about customers even after declining application for loan approval.