

## Ideation Phase

### Define the Problem Statements

Date	
Team ID	LTVIP2026TMIDS40243
Project Name	Online Payments Fraud Detection System
Maximum Marks	2 Marks

**Customer Problem Statement :** Our project focuses on understanding the concerns and expectations of online payment users and financial institutions regarding transaction security. We aim to build a reliable and intelligent fraud detection system that protects users from financial loss while ensuring smooth and secure digital transactions. Through this process, we empathize with users who fear unauthorized transactions and financial risks, helping us address their need for trust, security, and real-time fraud prevention in online payment systems.

I am	An online banking / digital payment user	Make secure online transactions quickly and conveniently
I'm trying to	Make secure online transactions quickly	There is a risk of fraudulent transactions happening without my knowledge
But	There is a risk of fraudulent transactions.	Traditional rule-based systems cannot effectively detect new and complex fraud patterns in real time.
Because	Traditional rule-based systems cannot effect-	Anxious, insecure, and worried about financial loss
Which makes me feel	Complex and complex Fraud present Staatenere in rear time:	Anxious, insecure, and worried about financial loss

Reference: <https://miro.com/templates/customer-problem-statement/>

Problem Statement (PS-1)					
I am (Customer)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	An online banking / digital payment user	Make secure online transactions quickly and .... conveniently	Traditional rule-based systems cannot	Anxious, insecure, and worried about financial loss	
PS-2	A financial institution / online payment service provider	Protect customers from fraudulent transactions, while maintaining smooth transaction processing.		Concerned about financial losses, customer trust, and brand reputation	
PS-2	A financial institution / online payment service provider	Fraudulent transactions are rare and difficult to identify due to severe class imbalance in the dataset			