

## Ideation Phase

### Empathize & Discover

Date	13 February 2026
Team ID	LTVIP2026TMIDS88814
Project Name	Online Payments Fraud Detection using Machine Learning
Maximum Marks	4 Marks

#### Empathy Map Canvas:

An empathy map helps the team deeply understand users by capturing what they think, feel, see, hear, say, and do. It enables building solutions grounded in real user needs and constraints..

#### Target User Persona: Small & Marginal Farmer (Rain-dependent region in India)

	<b>THINKS &amp; FEELS</b> <ul style="list-style-type: none"><li>• Worried about unauthorized transactions</li><li>• Concerned about losing hard-earned money</li><li>• Hopes for secure and instant fraud detection.</li></ul>	
<b>SEES</b> <ul style="list-style-type: none"><li>• Increasing news about cyber fraud cases</li><li>• Suspicious transaction alerts from banks</li><li>• OTP requests for unknown payments</li></ul>		<b>HEARS</b> <ul style="list-style-type: none"><li>• Bank warnings about phishing and fraud</li><li>• Advice to not share OTPs or passwords</li><li>• Social media posts about hacked accounts.</li></ul>
	<b>SAYS &amp; DOES</b> <ul style="list-style-type: none"><li>• Frequently checks transaction history</li><li>• Enables SMS/email transaction alerts</li><li>• Immediately reports suspicious activity</li></ul>	

### **PAINS**

- Financial loss due to fraud
- Delay in refund or investigation process
- False transaction blocks affecting genuine payments
- Loss of trust in digital platforms

### **GAINS**

- Real-time fraud detection and alerts
- Secure and seamless transactions
- Reduced financial risk
- Increased trust in online payment systems

### **How Our Solution Helps**

The Machine Learning-based Online Payment Fraud Detection System analyzes transaction behavior patterns, detects anomalies in real-time, and flags suspicious activities instantly. This enhances transaction security, reduces financial loss, and builds trust for customers, banks, and payment platforms.