

## Ideation Phase

### Empathy Map

<b>Date</b>	31 January 2026
<b>Team ID</b>	LTVIP2026TMIDS55701
<b>Project Name</b>	Online Payment Fraud Detection using Machine Learning
<b>Maximum Marks</b>	2 Marks

#### Empathy Map:

An Empathy Map is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to create a shared understanding, and to aid in decision making. For this project, the primary user is a Financial Institution or Payment Gateway Operator trying to secure digital transactions using an automated fraud detection system.

SAYS	THINKS
<ul style="list-style-type: none"><li>• "We need faster, automated fraud alerts."</li><li>• "Rule-based systems are generating too many false positives."</li><li>• "We lose customer trust every time a fraud slips through."</li><li>• "Our manual review team is overwhelmed."</li></ul>	<ul style="list-style-type: none"><li>• An ML model could identify patterns humans miss.</li><li>• Real-time detection would reduce chargebacks significantly.</li><li>• Regulatory pressure is increasing; we must act now.</li><li>• A predictive model trained on our data would outperform generic tools.</li></ul>
DOES	FEELS
<ul style="list-style-type: none"><li>• Manually reviews flagged transactions daily.</li><li>• Adjusts rule thresholds reactively after fraud incidents.</li><li>• Spends significant resources on fraud chargeback resolution.</li><li>• Integrates basic threshold-based fraud filters in payment pipeline.</li></ul>	<ul style="list-style-type: none"><li>• <b>Before:</b> Frustrated with reactive, slow detection; anxious about regulatory fines.</li><li>• <b>After (with ML system):</b> Confident in real-time protection; relieved by reduced false positives and automated alerts.</li></ul>