Ideation Phase
Empathize & Discover

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TEAM ID	**Team-593025**
PROJECT NAME	**Online Payments Fraud Detection Using ML**
MAXIMUM MARKS	**4 Marks**
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Empathy Mapping for Online Payments Fraud Detection Using ML

Empathy mapping proves invaluable in the realm of online payments fraud detection, where the intersection of technology and human experience is crucial. Within this landscape, data scientists are driven by the sense of accomplishment when fine-tuning ML models, even as they confront the complexities of data preprocessing and the challenges of model accuracy and interpretability. Meanwhile, fraud analysts toil relentlessly under the weight of high caseloads, as they strive to uncover fraudulent patterns, and online merchants remain vigilant in their pursuit of secure transactions while balancing concerns like false positives and customer friction. To develop effective solutions in this critical domain, it's imperative to embrace the emotions and concerns of these stakeholders and users, allowing for a holistic understanding of the ever-evolving landscape of online payments fraud detection.

Template

Empathy map canvas

Online Payments Fraud Detection Using MI

Originally created by Dave Gray at

XPLANE®

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Online Payments Fraud Detection Using MI

To instill confidence in online transactions, our project aims to understand and address the concerns of both end users and businesses. By deploying advanced fraud detection algorithms, we seek to create a seamless payment experience while safeguarding against potential threats. Through this, we aspire to contribute to a secure and trustworthy e-commerce environment

WHO are we empathizing with?

Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?

End Users: Ensuring secure and trustworthy online transactions is their top priority.

Merchant & Businesses: They require a system that balances fraud prevention with seamless payment processing.

Regulatory Bodies and Compliance Entities: They demand adherence to industry standards and legal requirements for payment security.

GOAL

What do they need to DO?

What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?

End Users:
- Verify Transactions
- Recognize Warning Signs
- Seek Support if Concerned

Merchant & Businesses:
- Ensure Secure Transactions
- Monitor for Fraudulent Activities
- Maintain Smooth User Experience

Regulatory Bodies and Compliance Entities:
- See Compliance Documentation
- See Audit Trails
- See Reports on Non-Compliance

Regulatory Bodies and Compliance Entities:
- Set and Enforce Standards
- Monitor Compliance
- Address Non-Compliance

Merchants and Businesses:
- See Transaction Logs
- See Transaction Logs
- See Analytics and Reports

What do they HEAR?

What are they hearing others say?
What are they hearing from friends?
What are they hearing from colleagues?
What are they hearing second-hand?

End Users:
- Hear Reassuring Messages
- Hear Alerts for Suspicious Activities
- Hear Hold Music or Support Voice

Merchants and Businesses:
- Hear Alerts for Fraudulent Activities
- Hear Support from Customer Service
- Hear Confirmation of Transactions

Regulatory Bodies and Compliance Entities:
- Hear Reports and Updates
- Hear Notifications of Non-Compliance
- Hear Compliance Guidelines

What do they THINK and FEEL?

PAINS

What are their fears, frustrations, and anxieties?

End Users:
- Fear of Identity Theft,Unauthorized transaction,
- Unclear Communication
- Anxiety about Secure Transactions
- Anxiety about Making Costly Mistakes
- Inconvenience of Disputed Transactions

Merchants and Businesses:
- Fear of Revenue Loss
- Fear of Reputation Damage
- Manual Review Challenges
- Concerns about False Positives

Regulatory Bodies and Compliance Entities:
- Fear of Non-Compliance
- Fear of Security Breaches
- Handling Non-Compliance Cases
- Anxiety about Regulatory Gaps
- Anxiety about Ensuring Universal Compliance

GAINS

What are their wants, needs, hopes, and dreams?

End Users:
- Want Security and Trust
- Want Seamless Experience
- Need Clear Confirmation
- Need Assistance Channels
- Hope for Peace of Mind

Merchants and Businesses:
- Want Fraud Prevention
- Want Efficiency
- Need Real-Time Alerts
- Hope for Revenue Protection
- Hope for Enhanced Customer Trust

Regulatory Bodies and Compliance Entities
- Want Compliance Adherence
- Want Security Measures
- Need Effective Oversight
- Need Actionable Reports
- Hope for Industry-Wide Security

What other thoughts and feelings might influence their behavior?

End Users:
- Trust in the Platform
- Previous Experience with Fraud
- Perceived Convenience vs. Security

Merchants and Businesses:
- Revenue Impact of False Positives
- Reputation Management
- Compliance Concerns

Regulatory Bodies and Compliance Entities:
- Industry Reputation and Trust
- Enforcement Authority
- Adaptation to Technological Advances

What do they SEE?

What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?

End Users:
- See Secure Payment Indicators
- See Transaction Details
- See Confirmation Messages

What do they SAY?

What have we heard them say?
What can we magine them saying?

End Users:
- Say Reassuring Statements
- Express Concerns
- Seek Clarification

Merchants and Businesses:
- Acknowledge Alerts
- Discuss Transaction Logs
- Evaluate Analytics

Regulatory Bodies and Compliance Entities:
- Review Compliance Documentation.
- Address Non-Compliance.
- Discuss Audit Trails.

End Users:
- Check for secure indicators (padlock, "https://") on payment pages.
- Verify transaction details before proceeding.
- May contact customer support for clarification or concerns.
- Engage in online transactions with reduced apprehension.

Merchants and Businesses:
- Monitor high-value or unusual transactions closely.
- Have protocols for handling suspected fraudulent activities.

Regulatory Bodies and Compliance Entities:
- Enforce compliance through audits, reviews, and industry standards.
- Monitor and address non-compliance issues.
- Issue warnings or penalties for non-compliance.
- Experience a reduction in reported security breaches and non-compliance incidents with the implementation of an advanced fraud detection system.

Merchants and Businesses:
- Implement internal procedures to address potential fraud cases.
- Streamline operations with a reliable fraud detection system in place.

What do they DO?

What do they do today?
What behavior have we observed?
What can we imagine them doing?

Need some inspiration?

See a finished version of this template to kickstart your work.

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