

Project Design Phase Problem – Solution Fit

Date	18 February 2026
Team ID	LTVIP2026TMIDS65799
Project Name	Online Payments Fraud Detection using Machine Learning
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ Understand the existing situation in order to improve it for your target group.

Template:

Proposed Solution Fit Canvas: Online Payment Fraud Detection Using Machine Learning					
1	CUSTOMER SEGMENT(S)	CS	C	6. CUSTOMER CONSTRAINTS	CC
	Banks, fintech companies, e-commerce platforms Online shoppers and merchants Fraud prevention teams			<ul style="list-style-type: none"> High transaction volumes increasing detection Protect users from financial fraud Minimize false positives to avoid disrupting genuine transactions. 	
4	JOB-TO-BE-DONE / PROBLEMS	J&P	R	PROBLEM ROOT CAUSE	RC
	<ul style="list-style-type: none"> Detect fraudulent online transactions in real-time Protect users from financial fraud Minimize false positives to avoid disrupting genuine transactions 			<ul style="list-style-type: none"> Sophisticated fraud tactics outsmart static rules Delayed fraud detection leads to financial losses Growing online transaction volume makes manual review inefficient. 	
3	TRIGGERS	TR	S	YOUR SOLUTION	SL
	<ul style="list-style-type: none"> Real-time fraud detection for instantaneous response Adaptive learning to update detection with evolving fraud patterns Comprehensive analytics for deeper insights 			<ul style="list-style-type: none"> Develop an intelligent, real-time fraud detection system using machine learning Use algorithms (Random Forest, XGBoost) to analyze transaction data. Provide real-time fraud prediction triggers alerts and storing logs 	
7	TRIGGERS	TR	S	YOUR SOLUTION	SL
	<ul style="list-style-type: none"> Real-time fraud detection for instantaneous response Adaptive learning to update detection with evolving fraud patterns Comprehensive analytics for deeper insights. 			<ul style="list-style-type: none"> Develop an intelligent, real-time fraud detection system using machine learning Use algorithms (Random Forest, XGBoost) to analyze transaction data. Provide real-time fraud prediction triggers alerts and logs. 	
5	5. AVAILABLE SOLUTIONS	AS	6	BEHAVIOUR	BE
	<ul style="list-style-type: none"> Traditional rule-based fraud detection systems Manual review processes with human analysts Basic transaction monitoring tools 			<ul style="list-style-type: none"> Fraudsters use stolen credentials, fake accounts, test cards. Rapidly adapt tactics to avoid detection Exploit security gaps in payment systems for large-scale fraud attempts. 	
9	CHANNELS of BEHAVIOUR	CH	9	CHANNELS of BEHAVIOUR	CH
	<ul style="list-style-type: none"> ONLINE Banks and e-commerce platforms process payments via web interfaces and mobile apps. OFFLINE Fraud prevention teams review flagged transactions for follow-up action 			<ul style="list-style-type: none"> ONLINE Banks and e-commerce platforms process payments via web interfaces and mobile apps. OFFLINE Fraud prevention teams review flagged transactions for follow-up action. Fraud analytics dashboards for monitor 	
References: <ul style="list-style-type: none"> AWS Architecture Center – https://aws.amazon.com/architecture IBM Cloud Architecture Center – https://www.ibm.com/cloud/architecture How to Draw Useful Technical Architecture Diagrams (Medium) – https://medium.com/the-internal-startup-howto 					

References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>