

Project Design Phase

Problem – Solution Fit Template

Date	15 February 2025
Team ID	LTVIP2026TMIDS79606
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:

The purpose of this project is to develop a machine learning-based fraud detection system that accurately identifies fraudulent online payment transactions in real time.

The system aims to analyze transaction data using advanced algorithms to reduce financial losses, improve transaction security, and enhance user trust in digital payment platforms.

By replacing traditional rule-based detection methods with an intelligent predictive model, the project seeks to provide faster, more accurate, and scalable fraud detection solutions for modern financial systems.

Template:

<p>1. CUSTOMER SEGMENT(S) Who is your customer? I.e. working parents of 0-5 y.o. kids</p> <p>CS</p> <p>Define CS, fit into CC</p>	<p>6. CUSTOMER CONSTRAINTS What constraints prevent your customers from taking action or limit their choices of solutions? I.e. spending power, budget, no cash, network connection, available devices.</p> <p>CC</p>	<p>5. AVAILABLE SOLUTIONS Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? I.e. pen and paper is an alternative to digital notetaking</p> <p>AS</p> <p>Explore AS, differentiate</p>
<p>2. JOBS-TO-BE-DONE / PROBLEMS Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</p> <p>J&P</p> <p>Focus on J&P, tap into BE, understand RC</p>	<p>9. PROBLEM ROOT CAUSE What is the real reason that this problem exists? What is the back story behind the need to do this job? I.e. customers have to do it because of the change in regulations.</p> <p>RC</p>	<p>7. BEHAVIOUR What does your customer do to address the problem and get the job done? I.e. directly related: find the right solar panel installer, calculate usage and benefits; Indirectly associated: customers spend free time on volunteering work (I.e. Greenpeace)</p> <p>BE</p> <p>Focus on J&P, tap into BE, understand RC</p>
<p>3. TRIGGERS What triggers customers to act? I.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</p> <p>TR</p> <p>Identify strong TR & EM</p>	<p>10. YOUR SOLUTION If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.</p> <p>SL</p>	<p>8. CHANNELS OF BEHAVIOUR 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7</p> <p>CH</p> <p>Extract online & offline CH of BE</p> <p>8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</p>
<p>4. EMOTIONS: BEFORE / AFTER How do customers feel when they face a problem or a job and afterwards? I.e. lost, insecure > confident, in control - use it in your communication strategy & design.</p> <p>EM</p>		

References:

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