

Project Design Phase Problem – Solution Fit Template

Date 22 June 2025

Team ID LTVIP2025TMID31628

Project Name Jewelry Inventory Management System using Salesforce

Maximum Marks 2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit means you have identified a real problem faced by your customer and designed a solution that effectively addresses it. This step helps project teams, innovators, and developers focus on user needs, behaviors, and priorities.

Purpose:

- Solve real-world problems that impact store admins and goldsmiths.
- Ensure better adoption by aligning your solution with the actual working habits of users. Improve communication by targeting key user frustrations.
- Build trust through automation and accurate data.
- Analyze current issues to create a role-based, validated, and efficient system.

Template:

| | | |
|---|--|--|
| <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">Define CS, fit into CC</div> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">1. CUSTOMER SEGMENT(S) CS</div> <p style="font-size: 0.8em;">Who is your customer? I.e. working parents of 0-5 y.o. kids</p> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">6. CUSTOMER CONSTRAINTS CC</div> <p style="font-size: 0.8em;">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> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">5. AVAILABLE SOLUTIONS AS</div> <p style="font-size: 0.8em;">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> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold; text-align: right;">Explore AS, differentiate</div> |
| <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">Focus on J&P, tap into BE, understand RC</div> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">2. JOBS-TO-BE-DONE / PROBLEMS J&P</div> <p style="font-size: 0.8em;">Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.</p> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">9. PROBLEM ROOT CAUSE RC</div> <p style="font-size: 0.8em;">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> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">7. BEHAVIOUR BE</div> <p style="font-size: 0.8em;">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> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold; text-align: right;">Focus on J&P, tap into BE, understand RC</div> |
| <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">Identify strong TR & EM</div> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">3. TRIGGERS TR</div> <p style="font-size: 0.8em;">What triggers customers to act? I.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.</p> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">4. EMOTIONS: BEFORE / AFTER EM</div> <p style="font-size: 0.8em;">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> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">10. YOUR SOLUTION SL</div> <p style="font-size: 0.8em;">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> | <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">8. CHANNELS of BEHAVIOUR CH</div> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">8.1 ONLINE</div> <p style="font-size: 0.8em;">What kind of actions do customers take online? Extract online channels from #7</p> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold;">8.2 OFFLINE</div> <p style="font-size: 0.8em;">What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.</p> <div style="background-color: #f0f0f0; padding: 2px; font-size: 0.8em; font-weight: bold; text-align: right;">Extract online & offline CH of BE</div> |

Customer Discovery Sheet – Jewel Inventory Management System

1. CUSTOMER SEGMENT(S)

Who is your customer?

- Jewelry Store Admins
- Store Managers
- Goldsmiths / Workers
- Billing Staff
- Inventory Managers

—

2. JOBS-TO-BE-DONE / PROBLEMS

Which problems does your system address?

- Manual entry of customer, item, billing, and pricing records
- No auto-calculation of pricing based on item type, weight, and purity
- Role confusion due to lack of access control
- No triggers or flows to validate or automate data entry
- Difficulty in generating consolidated reports

—

3. TRIGGERS

What motivates them to act?

- Frequent pricing or billing errors
- High customer dissatisfaction
- Delays in item delivery and order tracking
- Need for reliable, role-based access and reporting tools

—

4. EMOTIONS: BEFORE / AFTER

Before:

- Frustrated with manual calculations
- Confused about order status and records
- Lacking confidence in system accuracy

After:

- Relieved with automatic calculations
- Confident in billing and pricing
- Informed through dashboards and validation alerts

—

5. AVAILABLE SOLUTIONS

What exists today?

- Manual registers or Excel files
- Basic inventory tracking software without automation
- No built-in pricing logic enforcement or validation

—

6. CUSTOMER CONSTRAINTS

What stops them from acting?

- Lack of digital familiarity
- Limited budget for software
- Resistance to change from paper-based systems
- Concerns about security or data loss

—

7. BEHAVIOUR

What do users do today to solve these problems?

- Use calculators or price charts for billing
- Manually assign tasks to workers verbally
- Track customer orders in Excel
- Use phone or WhatsApp for coordination

—

8. CHANNELS OF BEHAVIOUR

8.1 ONLINE:

- Salesforce Lightning App

- Automated pricing logic with flows
- Apex trigger for paid amount validation
- Reports for sales, inventory, and billing

8.2 OFFLINE:

- Manual price calculation
- Verbal assignment of orders
- Paper-based bill entry and customer logs

—

9. PROBLEM ROOT CAUSE

Why does the problem exist?

- Lack of integrated CRM and pricing engine
- No role-specific permissions or validations
- Manual dependency on billing and gold rate logic
- Inefficient communication between goldsmiths and admins

—

10. YOUR SOLUTION

What do you offer?

A Salesforce-based Jewel Inventory CRM with:

- Custom Objects: Jewel_Customer_c, Item_c, Price_c, Customer_Order_c, Billing_c
- Apex Trigger: Validates and updates Paid Amount based on user input
- Flows: Automate pricing based on purity, weight, and ornament
- Reports: Sales by Item Type, Worker assignments, Revenue summary
- Role-based profiles: Gold Smith, Worker, Admin
- Record Types and Page Layouts for Gold and Silver items
- Permission Sets for flexible access across users