

Project Design Phase

Problem – Solution Fit Template

Date	16 March 2025
Team ID	PNT2025TMID07288
Project Name	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 Using Power BI
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

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

Section	Details
Problem Statement	Global food production trends fluctuate due to climate change, economic shifts, and technological advancements. There is a lack of accessible, data-driven insights for policymakers, researchers, and agricultural stakeholders to make informed decisions.
Who is affected?	<ul style="list-style-type: none"> - Agricultural policymakers and strategists - Data analysts and researchers in the food industry - Farmers and agribusiness professionals - Economists and supply chain managers
Current Challenges	<ul style="list-style-type: none"> - Data complexity and large datasets from multiple sources - Difficulty in identifying long-term production trends - Lack of real-time visualization and forecasting capabilities
Proposed Solution	<p>A Power BI-based dashboard that integrates global food production data (1961-2023) to provide visual insights, trend analysis, and forecasting tools. The solution offers:</p> <ul style="list-style-type: none"> - Data preprocessing & cleaning for accuracy - Interactive dashboards for visualization - Trend predictions using historical data - Custom reports for policymakers and stakeholders
How does the solution address the problem?	<ul style="list-style-type: none"> - Simplifies data analysis by aggregating multiple datasets in a single Power BI dashboard - Uses visual analytics and forecasting models to highlight trends in food production - Reduces complexity and improves decision-making for agricultural stakeholders
Key Benefits	<ul style="list-style-type: none"> - Enhanced decision-making for sustainable agriculture - Improved forecasting for food security and economic stability - Time efficiency by automating analysis and report generation - Scalability to accommodate future datasets and advanced analytics