

Project Design Phase-I
Problem – Solution Fit

Date	8 November 2022
Team ID	PNT2022TMID13378
Project Name	Smart Solution For Railway
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:

- ❖ Automated train operation (ATO) is a solution that provides support for automation of driving function (e.g., starting, accelerating, braking, and stopping) that is used in conjunction with the safety automatic train protection (ATP) function of train control.
- ❖ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ❖ Smart sensors and analytics across the train engine, coaches, and tracks allow rail systems to be remotely checked.
- ❖ Support for development and implementation of smart railway solutions .Use of intelligent.
- ❖ Understand the existing situation in order to improve it for your target group.

Template:

Project Title:

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMIDxxxxxx

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
	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)	
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 8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.	Identify strong TR & EM
	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.			

References:

1. <https://ieeexplore.ieee.org/document/8026132>
2. <https://ieeexplore.ieee.org/document/8026132>

