

Ideation Phase

Define the Problem Statements

Date	19 September 2022
Team ID	PNT2022TMID31390
Project Name	Project - Predicting the energy output of wind turbine based on weather condition
Maximum Marks	2 Marks

Customer Problem Statement Template:

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.

A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

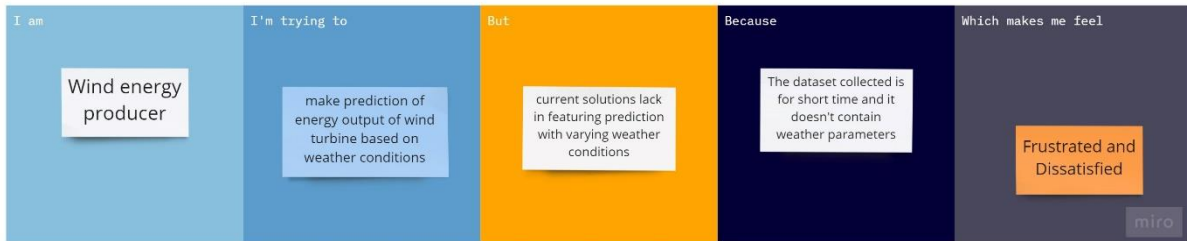
I am	<small>Describe customer with 3-4 key characteristics - who are they?</small>	Describe the customer and their attributes here
I'm trying to	<small>List their outcome or "job" the care about - what are they trying to achieve?</small>	List the thing they are trying to achieve here
but	<small>Describe what problems or barriers stand in the way - what bothers them most?</small>	Describe the problems or barriers that get in the way here
because	<small>Enter the "root cause" of why the problem or barrier exists - what needs to be solved?</small>	Describe the reason the problems or barriers exist
which makes me feel	<small>Describe the emotions from the customer's point of view - how does it impact them emotionally?</small>	Describe the emotions the result from experiencing the problems or barriers

Reference: <https://miro.com/templates/customer-problem-statement/>

FOR THIS PROJECT:

PROBLEM STATEMENT: "Any Windfarm owner needs a Wind energy output prediction software that not only gives a prediction value closest to the actual output value but also gives notifications in case of unexpected weather changes to meet their customer demands with more satisfaction so that their customers can purchase power from other sources in case of less output or zero power generation due to any failures."

Ref: [Problem Statement, Brainstorming and Prioritization of ideas.pdf](#)



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Wind energy producer	Make prediction of energy output of wind turbine based on weather conditions	Current solutions lack in featuring prediction with varying weather conditions	The Dataset collected in existing solutions is for short time and it does not contain weather parameters	Frustrated and dissatisfied
PS-2	Wind energy producer	Get a prediction software that not only gives a prediction value closest to the actual output but also gives notifications in case of unexpected weather changes to meet customer demands so that my customers can purchase power from other sources when expected power can't be generated.	Current solutions do not take unexpected weather changes into account. And it also does not have a feature to notify users.	The machine learning model is not being fed with weather conditions. Notification is not built within the software in current solutions	Dissatisfied And sad