

Project Initialization and Planning Phase

Date	8 July 2024
Team ID	SWTID1720096271
Project Name	Machine learning approach for Predicting the price of natural gas
Maximum Marks	3 Marks

Define Problem Statements (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 your customers' challenges. 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.

Develop a Machine Learning Model to accurately forecast natural gas prices, addressing the challenges of market volatility and unreliable current methods, to aid energy planners, Natural gas traders and financial advisors in making informed, confident, and cost-effective decisions.

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

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

Example:

I am	I'm trying to	But	Because	Which makes me feel
A financial advisor	Advise clients on natural gas investments	Market trends are hard to anticipate	I lack access to advanced prediction models	Less confident in my advice

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Natural gas trader	Predict future prices of natural gas	the market is highly volatile	I don't have accurate forecasting tool	Uncertain and stressed
PS-2	An energy market analyst	Make informed investment decisions	Historical data is complex	Its hard to identify patterns	Less confident in my decisions