Project Design Phase-I Problem Solution Fit

Project Title: Predicting the energy output of wind turbine based on weather condition

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

- Industrialists
- People
- Government

6. CUSTOMER CONSTRAINTS

Providing wrong inputs

Unclear on how to utilize energy efficiently

5. AVAILABLE SOLUTIONS AS

- Predicting based on the past data present.

Pros:
Consumes less time
Cost-effective

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS J&P

To build a supervised machine learning model using regression algorithms for forecasting the value of an energy of a wind turbine based on multiple attributes such as

sharpness,

reliability

9. PROBLEM ROOT CAUSE RC

Unpredictable weather condition.

High setup cost.

7. BEHAVIOUR BE

Since wind speed is constantly changing, so is the wind's energy content. The amount of fluctuation depends on the local surface conditions and obstructions as well as the weather.

I d e n t i f y s t r o n g T R & E M		

3. TRIGGERS `PR`
 	
   Prediction of wind energy helps individuals and electricity suppliers to locate better location for wind farms and let them earn revenue.
	10. YOUR SOLUTION `SL`
	
	The main aim of this project is to predict theaccurate output energy of a wind turbine based on weather condition using the Machine Learning (ML) algorithms and collection of data about the input values of wind energy.
		8. CHANNELS of BEHAVIOUR `CH`
		
		ONLINE:
		
		   App predicts the wind energy output after uploading the data
		
		OFFLINE:
		   Output can be predicted.

4. EMOTIONS: BEFORE / AFTER `EM` **Before:** • The consumers cannot predict the exact wind energy that produces by the wind turbine. **After:** • The consumers can be able to predict the accurate output that produces by the wind turbine		

I d e n t i f y s t r o n g T R & E M