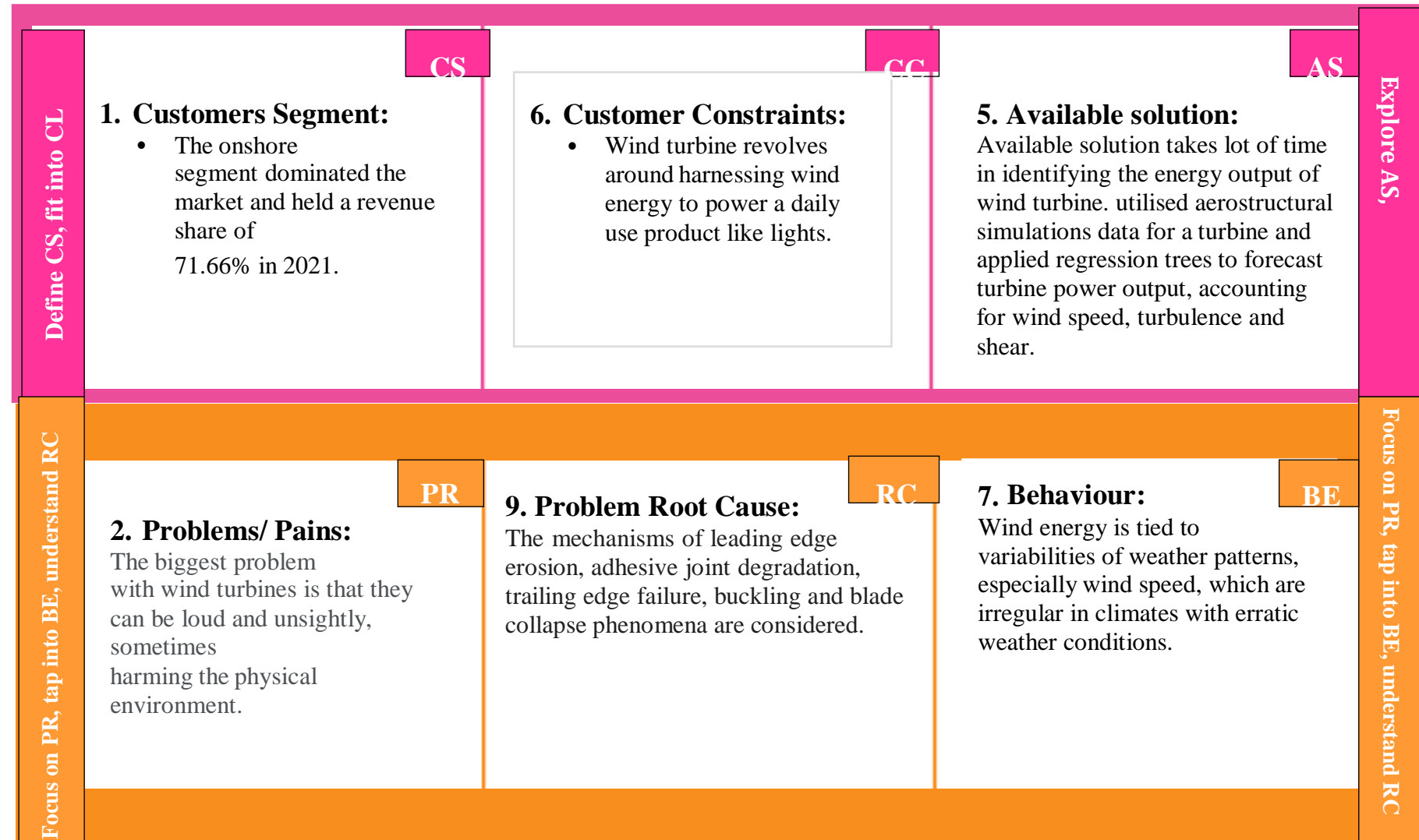


Project Design Phase-I - Solution Fit

Project Title: Predicting the Energy Output of Wind Turbine Based on Weather Conditions

Team ID: PNT2022TMID54445

DATE: 19 SEPTEMBER 2022



TR

3. Triggers:

The energy output of a wind farm is highly dependent on the weather conditions present at its site. If the output can be predicted more accurately, energy suppliers can coordinate the collaborative production.

10. Your Solutions:

Our studies are carried out on publicly available weather and energy data for a wind farm. We report on the correlation of the different variables for the energy output.

SL

CH

8. Channels of behaviour:

Behaviour include the functions of wind turbine weather it works properly with all the mechanisms included.

EM

4. Emotions:

- Most significant is the hub height wind speed, followed by hub height turbulence intensity and then wind speed shear across the rotor disk.