PROPOSED SOLUTION

Team ID : PNT2022TMID21513

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	**Estimate the crop yield using data analytics** Agriculture is the backbone of Indian Economy. In India, majority of the farmers are not getting the expected crop yield due to several reasons. The agricultural yield is primarily depending on weather conditions. Rainfall conditions also influences the rice cultivation. In this context, the farmers necessarily require a timely advice to predict the future crop productivity and an analysis is to be made in order to help the farmers to maximize the crop production in their crops. As per this project we will be analyzing some important visualization, creating a dashboard and by going through these we will get most of the insights of Crop production in India.
2.	Idea / Solution Description	Agriculture mechanization has made significant progress. Farming strategies and programmers have been geared toward the replacement of traditional and inefficient implements with improved ones, allowing farmers to own tractors, power tillers, harvesters, and other machines.
3.	Novelty / Uniqueness	Agriculture machines are also being developed for a broad industrial base. Efforts are being made to encourage farmers to use technologically advanced agricultural equipment. Climate variables had no significant impact on crop yields across the board. The regression analysis revealed a negative relationship between maize yield and summer precipitation, a positive relationship between wheat yield and winter minimum temperature, and a positive relationship between millet yield and summer maximum temperature.

4.	Social Impact / Customer Satisfaction	The primary goals of this technique are crop production predictions, which can be very helpful to farmers in making plans for harvest and sale of grain harvest. For growers, raising agricultural yields is a top priority. There will be a greater crop and grain yield despite climate change and global warming. Utilizing crop yield analysis and estimation tools will also improve nutrition.
5.	Business Model (Revenue Model)	The advancement of technology into the agriculture industry has resulted in significant increases in productivity. Technology advancements have given rise to new concepts such as precision agriculture, which has observed and analyzed the various crops grown, as well as their area and production levels in various states and districts. The planned method's goal is to be transparent, easily accessible, reproducible, and capable of predicting yield. Correct procedures and a long-term gain plan are simple to implement and require less capital.
6.	Scalability of the Solution	• Meets social expectations and complies with community norms. • Livestock management system. • warmer temperature. • Decreased moisture stress. • Possibility of growing new crops • Reduce time management complexity of farmers • The profitability of sustainable farming will be high.