Project Design Phase-I

Proposed Solution

Date	5.11.2022
Team ID	PNT2022TMID46328
Project Name	Estimate the crop yield using data analytics
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	• The project mainly deals with the crop yield production and we predict it using the data set and data analytics. • Agriculture is the backbone of Indian Economy. • India is provide food 70 %. • The India, majority of the farmers are not getting the expected crop yield due to several reasons. • Is accurate crop yield prediction model can help farmers to decide on yield crop.
2.	Idea / Solution description	• The proposed solution is to predict the crop yield using weather conditions. • Crop yield is the measure most often used for cereal, grain, or legumes; and typically is measured in bushels, tons, or pounds per acre in the U.S. • The use of Business Analytics' technologies allows the agricultural entrepreneur to make easier and better decisions based on information
3.	Novelty / Uniqueness	Agriculture is important for human survival because it serves the basic need. A well-known fact that the majority of population (≥55%) in India is into agriculture. Due to variations in climatic conditions, there exist bottlenecks for increasing the crop production in India
4.	Social Impact / Customer Satisfaction	It provides farmers with information on changes in weather, rainfall, soil moisture and other factors that affect crop yield. With

		all this data, the growers are able to make accurate and reliable decisions, ultimately improving farm yields.
5.	Business Model (Revenue Model)	It provides farmers with information on changes in weather, rainfall, soil moisture and other factors that affect crop yield. With all this data, the growers are able to make accurate and reliable decisions, ultimately improving farm yields.
6.	Scalability of the Solution	The recent trends in the domain of agriculture have made the people to understand the significance of Big data. The main challenge using big data in agriculture is identification of impact and effectiveness of big data analytics. Efforts are going on to understand how big data analytics can be used to improve the productivity in agricultural practices. The analysis of data related to agriculture helps in crop yield prediction, crop health monitoring and other such related activities. In literature, there exist several studies related to the use of data analytics in the agriculture domain. The present study gives insights on various data analytics methods applied to crop yield prediction. The work also signifies the important lacunae points' in the proposed area of research. The use of technology in agriculture has increased in recent year and data analytics is one such trend that has penetrated into the agriculture field being used for management of crop yield and monitoring crop health.