Project Design Phase-I
Proposed Solution Template

Date	02 November 2022
Team ID	PNT2022TMID29392
Project Name	Project – Estimation the crop yield using data analytics
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To assist the farmers in taking better decision in order to acquire healthy crop production by applying data Analytics. Crop production in India is one of the most important sources of income and India is one of the top countries to produce crops. Where Digital Farming and Precision Agriculture allow precise utilization of inputs like seed, water, pesticides, and fertilizers at the right time for the crop for maximizing productivity, healthy crop production. uality, and yields. Most of farmers practice traditional farming patterns to decide on crops to be cultivated in a field. Based on analytics farmers can take better decisions for
2.	Idea / Solution description	Applying data Analytics methods for predicting the crop production across various areas let us to estimate the optimal crop production assisting the framers to benefit from the forecast. We can comprehend the data and make wise decisions by integrating reporting, modelling, analysis, exploration, dashboards, stories, and event management with IBM Cognos Analytics. By presenting critical insights and analyses about our data on one or more pages or screens, a dashboard enables us to keep track of events or actions at a glance. In this project, we use a dashboard to view, analyse, and extract the majority of the findings.
3.	Novelty / Uniqueness	To visualize the past crop yield data and to list out the crops that may yield poor production leading to loss of invested revenue and identify suitable areas for their production. Consideration of all factors that affect crop yield.

4.	Social Impact / Customer Satisfaction	Extreme weather conditions such as high temperature, heavy storms or droughts can severely disrupt crop production.
5.	Business Model (Revenue Model)	Increased amount of waste produced from the crop production may lead to a degrade of profit margin
6.	Scalability of the Solution	The acquired insights from the visualization of crop yield data must be durable in such a way that the production is fairly stable even in sudden change of conditions.