**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMIDxxxxxx |
| Project Name | Estimate Of Crop Yield Production With Data Analytics |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | \*Analytics is the interpretation of data pattern that assist decision- making and performance improvement.  \* Data analytics in crop yield helps in analysing some important visualization, creating a dashboard and by going through these we will get most of the insights of Crop production in India.  \* IBM Cognos Analytics integrates reporting, modelling, analysis,exploration, dashboards, stories, and event management so we can understand our organization's data, and make effective decisions.  \*A dashboard helps us to monitor events or activities at a glance by providing key insights and analysis about our data on one or more pages or screens.  \*In this project, we visualize, analyse and gain most of the insights by creating a dashboard. |
|  | Idea / Solution description | \*Improvement in crop yield is achieved by various practices involved in farming and they are divided into three stages:  \*Crop variety improvement where right seeds are chosen for planting through [breeding](https://www.vedantu.com/biology/breeding), hybridization; \*Crop production improvement, in this step crop plants are cultivated. |
|  | Novelty / Uniqueness | \*Low precipitation or temperature extremes can drastically diminish rice yield.  \* Growing better strategies to foresee yield efficiency in a mixture of climatic conditions can help to understand the role of different principle factors that influence the rice crop yield.  \*Data analytic methods related to the rice crop yield prediction and estimation will certainly support the farmers to understand the optimum condition of the significant factors for the rice crop yield, hence can achieve higher crop yield. |
|  | Social Impact / Customer Satisfaction | \*As a result of penetration of technology into agriculture field, there is a marginal improvement in the productivity.  \*The innovations have led to new concepts like digital agriculture, smart farming, precision agriculture etc.  \*It has been observed that analysis has been done on agriculture productivity, hidden patterns discovery using data set related to seasons and crop yields data . |
|  | Business Model (Revenue Model) | \*System design  \*IBM Cognos analytics  IBM Cognos Analytics is a set of business tools available on cloud or on-premise.  \*The primary focus is in the area of Descriptive Analytics, to help users the information in your data through dashboards, professional reporting and self-service data exploration. |
|  | Scalability of the Solution | \*It has been observed that analysis has been done on agriculture productivity, hidden patterns discovery using data set related to seasons and crop yields data .  \*Farmers require accurate yield estimates for a number of reasons:  \*Crop insurance purposes.  \*Delivery estimates,  \*Planning harvest and Storage requirements.  \*Data Analytics can help farmers monitor the health of crop in real-time, create predictive analysis related to future yields and help farmers make resourse management decisions based on proven trends.  \*Reducing wastes and improving profits. |