Project Design Phase-I Proposed Solution

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| Date | 30 September 2022 |
| Team ID | PNT2002TMID23562 |
| Project Name | Project - Estimate the crop yield using data analytics |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

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| **S.No.** | **Parameter** | The**Description** |
| 1. | Problem Statement (Problem to be  solved) | With the changing of climate, agriculture faces increasing problems with extreme weather events leading to considerable yield losses of crops. Most often, crop plants are sensitive to stresses since they were mostly selected for high yield, and not for stress tolerance. |
| 2. | Idea / Solution description | Crop production in India is one of the most important sources of income and India is one of the top countries to produce 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. |
| 3. | Novelty / Uniqueness | Exploratory data analysis technique is being proposed for interactive dashboard using multiple real time parameters |
| 4. | Social Impact / Customer Satisfaction | 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. It has become challenging task to achieve desired targets in Agri based crop yield. |
| 5. | Business Model (Revenue Model) | Exploratory data analysis report and dashboard services can be provided using subscription based model through which revenue can be generated. |
| 6. | Scalability of the Solution | Our project is highly scalable and it is very efficient method to estimate the crop yield using data analytics than other methods. Hence the proposed solution can be scaled to estimate the crop yeild . |