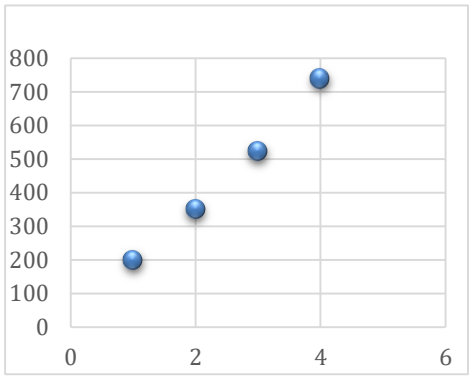
Project Design Phase-I - Proposed Solution

Date	25 September 2022
Team ID	PNT2022TMID11451
Project Name	Project – Smart Farmer-IoT Enabled smart Farming Application
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	**Problem Statement (Problem to be solved)**	• Watering a field requires waiting on the field until the entire agricultural field is submerged in water. • One of the issues is the power supply. Power availability in Village Side may be variable. • The biggest obstacles to IoT adoption in the agricultural sector are a lack of knowledge, high adoption rates, high costs, and security concerns.
2.	**Idea / Solution description**	• Similar to precision agriculture, smart farming techniques let farmers keep better track of their fields' humidity levels. • Information from sensors, such as humidity, temperature, wetness, and dew detections, is used to forecast the weather in farms. So, cultivation for appropriate crops is carried out.
3.	**Novelty / Uniqueness**	• IoT sensor nodes gather data about the farming environment, including soil moisture, air humidity, temperature, the nutrients in the soil, photos of pests, and water quality. The collected data is subsequently sent to IoT backhaul devices. • Remote control access enables the farmer to control the motor from any location.
4.	**Social Impact / Customer Satisfaction**	• It saves a lot of time and lowers the wages paid to farm labourers. • By boosting the consumer experience overall, IoT may help strengthen customer connections. • Identify maintenance requirements quickly, create better goods, deliver tailored messaging, and more. • IoT may also support the growth and sales of e-commerce companies. • It creates a prosperous society.

5.	**Business Model (Revenue Model)**	Revenue (No. of Users vs Months) User 
6.	**Scalability of the Solution**	Scalability in smart farming refers to a system's ability to expand its capacity, such as the number of technological components like sensors and actuators, while allowing for prompt analysis.