**Title:** PiCloud: Databank Information System with Decision Support System for Farmers Registry in Region XI with In-House Cloud Storage using Raspberry Pi

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## **EXECUTIVE SUMMARY**

Agriculture is the backbone of the Philippine economy since it is the main source of livelihood in the country. The agricultural sector of the Philippines is in the stage of modernizing and is starting to adopt modern ideas and methods. Farming in the Philippines has long started the modernization which its use of various machines to speed up farming processes. However, when it comes to modernization in managing the farmers' records, the country has not fully adopted modern techniques. The dilemma is the same especially in provinces like the Davao Region.

In the Department of Agriculture Region XI, gathering of the farmers' records takes half a year which makes it time-consuming. After gathering of data, the farmers' data collected needs to be encoded which also takes half a year. Annual reports can take at least two years to finish. With this, the Philippine government is having difficulty in assisting farmers.

The PiCloud will give solution to this dilemma through having a mobile application that can be used in gathering farmers' data and a desktop application that can be used to view reports and projections. The PiCloud ensures the improvement in speed and productivity by providing a more modernized technique on collecting and analyzing farmers' data.

**Keywords:** Cloud, Cloud Storage, ownCloud, Raspberry Pi, Department of Agriculture, Agriculture, Databank, Android, Android Application, Farmer, PiCloud, Decision Support, Decision Support System, DSS, OpenStreetMap