

CASE STUDY

SMART AG

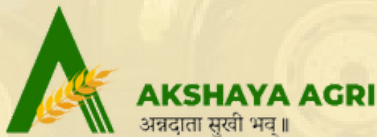
FARMING SYSTEM



INTRODUCTION

Today's farmers must be more innovative, efficient, and competitive while preserving resources in order to meet increased demand for agricultural products and address many of the industry's difficulties. As a result, comprehensive, cost-effective, and configurable agricultural machinery tracking systems, as well as process monitoring and automation, are becoming more than an attractive option; they are becoming a necessity.

THE CLIENT



Incorporated in September 2020, Akshaya Agri Equipment & Services Pvt. Ltd. are supported by like-minded individuals that are passionate about agriculture and have extensive experience in the agricultural value chain. The goal is to make farmers' lives easier by providing useful agricultural equipment, implements, and service spaces. They offer mechanization solutions as well as a broad variety of technology-driven agricultural solutions that give considerable benefits to farmers.

KEY CHALLENGES

Every year, the world's population grows by roughly 83 million people. The population of the world has expanded from 1 billion in 1800 to 7.9 billion in 2022. As the agriculture industry is critical to our survival, it must find a way to perform in an efficient way without the wastage of time and effort.

One of the key issues in large-scale farming is efficient management and tracking automation of agricultural types of machinery, such as soil cultivation, planting, harvesting/post-harvest, and any industry-specific equipment or accessories attached for a specific function. The use of traditional paper notes or maps are no longer practicable or meets current farming standards and practices.

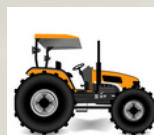
In addition, these issues result in poor harvesting and huge financial losses. According to the State of Food and Agriculture (SOFA) report, food loss and waste in North America and Europe reached over 15% in 2019, and over 20% in Central and South Asia? So, how can today's farm owners solve this efficient machinery tracking and management problem with the least amount of effort and maximum results?

SOLUTION

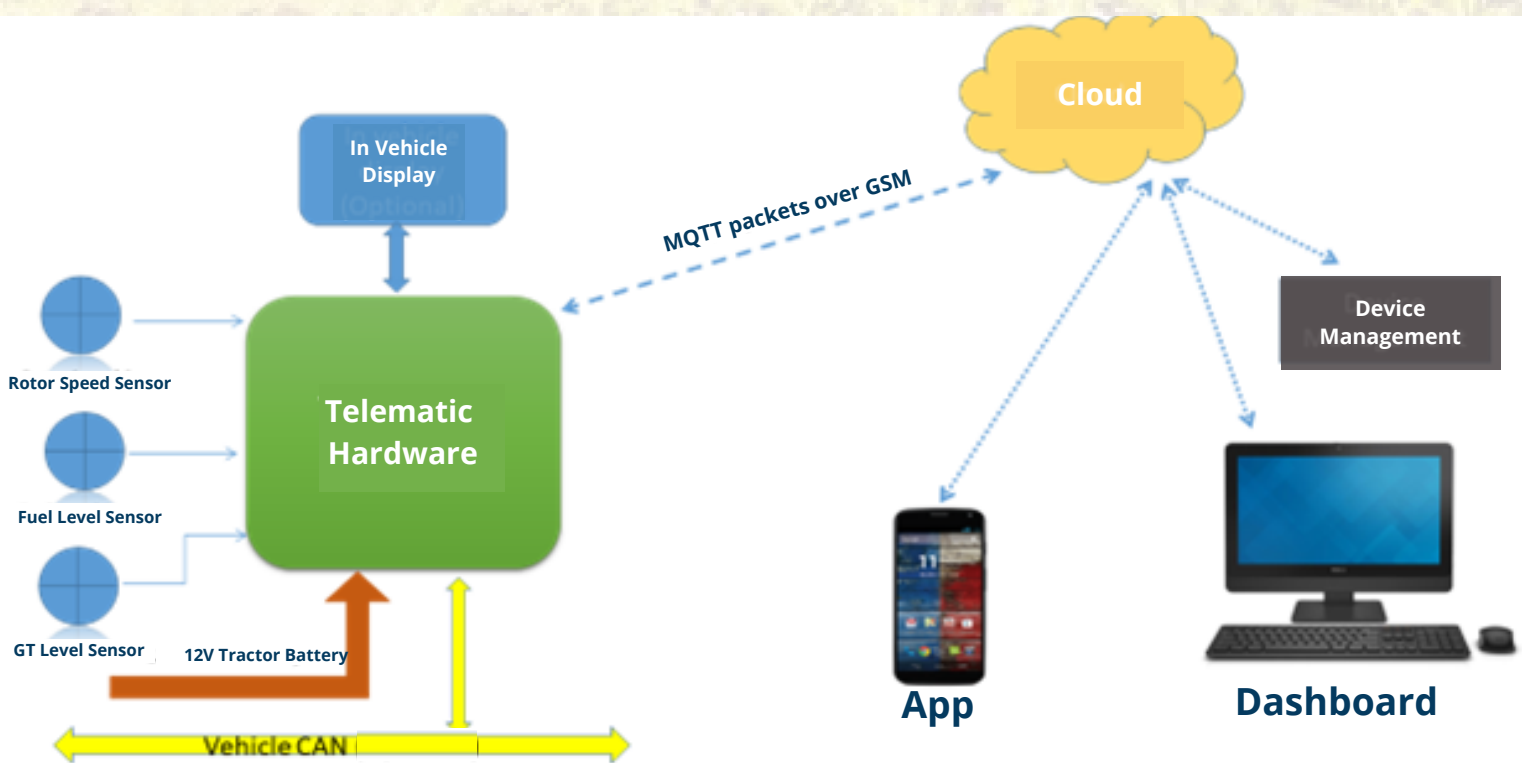
Akshaya Agri, in collaboration with MeshBA, has created a smart system in order to deliver relevant solutions to farmers. This is the first of several solutions designed to make farmers' lives easier.

MeshBA developed a system which comes with an inbuilt E-SIM card. A mobile will be connected to this E-SIM card through GPS and satellite, allowing access to real-time information of tractor. Once the tractor is equipped with this smart system, the Akshaya Agri app can be downloaded on the mobile to get connected with the system.

BENEFITS



- Acreage of your tractor
- Real time location
- Work completion report
- Account tracking
- Fuel level alerts
- Service reminders



TECHNOLOGY AND TOOLS

Android, iOS, React Native, Angular, MS Dot Net Core, MS SQL Server, CICD, Hardware and Firmware Development, Device Management