PRODUCTIVITY PREDICTION FOR DEMAND ESTIMATION

Data-driven Accurate Forecasting	Improved Data Quality	Visualization Dashboard

The Client

$1.4 Billion fertilizer company

Industry

Agri - Fertilizer

Overview

Fertilizer companies depends on many natural & market factors in a region, such as rain fall (before/after sowing), extent of area sown, reservoir water levels, seed prices, relative market demand for different crops, seasons like Kharif and Rabi, soil characteristics, availability of bore wells, competitions, etc.

Business Challenge

While all this data has a direct impact on the demand, sales and consumption of fertilizer products. Today, especially in developing countries, at the government level as well as some companies, most of the forecasting is heavy relied on team judgment.

Our Approach:

Quadratyx built a fertilizer demand forecasting model in two phases using predictive analytics and big data technologies:

Phase 1: District wise, crop wise, accurate demand forecasting models

Phase 2: Similar models at the mandal level. Also, move from demand forecasting to sales forecasting.

Outcomes

✓ Built over 600 predictive models at the district-crop level to accurately predict acreage-sown and fertilizer-required.

✓ We extensively used external data sources collected by Government organizations in this project, and quantified data quality metrics.