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(57) Abstract :

The present invention discloses an IoT-based framework (100) for real-time agricultural harvest prediction. It integrates a sensor data acquisition unit (101), a machine learning prediction engine (102), a cloud analytics platform (103), a communication interface (104), and a decision support system (105). The framework continuously captures soil and crop parameters, processes them using predictive algorithms, and provides actionable harvest insights through multi-channel communication. This invention enhances harvest accuracy, reduces post-harvest losses, and improves agricultural efficiency by enabling data-driven decisions for farmers and supply chain stakeholders.

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