**Case Study: Modernization of an Agriculture Company**

You are a consultant hired by "AgriTech Solutions"(ATS), an agriculture company in Croatia. The company produces and sells various crops, such as wheat, corn, soybeans, sunflowers, etc. The company has several farms and exports its products to other countries in Europe and beyond.

The company is facing several challenges in its current business model. The company relies on outdated and manual methods for managing production, inventory, quality, and sales. These methods are inefficient, inaccurate, and costly. The company also lacks visibility and coordination among its farms and customers. The company has no centralized database or information system to store and share data. The company uses some standalone software applications for accounting, payroll, and human resources, but these applications are not integrated with each other or with the core business processes.

While ATS has a strong presence in the market, its management recognizes the need for modernization to stay competitive and meet the demands of a rapidly evolving industry and, therefore, decided to use contemporary technological solutions to modernize production and increase efficiency. The management believes this will improve the company's quality, quantity, and profitability.

The primary objective of this modernization initiative is to create a comprehensive information system that supports AgriTech Solutions in achieving its goals:

1. **Production Efficiency:** ATS aims to leverage contemporary technological solutions to streamline production processes, reduce waste, and optimize resource allocation to improve efficiency.

2. **Market Expansion:** The company seeks to enhance its domestic and international market reach by improving supply chain management, product traceability, and data-driven decision-making.

3. **Sustainability:** ATS is committed to sustainable agriculture practices and aims to use technology to minimize its environmental impact while maintaining high-quality product standards.

The management has asked you to design and propose an information system supporting this modernization.