Feasibility Study

Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study. The results of the feasibility study should be a report that recommends whether or not it is worth carrying on with the requirements engineering and system development process.

Green Grocery is an online platform designed to facilitate the sale and distribution of fresh fruits and vegetables directly from local farmers to customers. The platform includes features for inventory management, customer orders, delivery scheduling, nutritional information, and product quality assurance through image recognition. Additionally, a chatbot feature is integrated to assist users with their queries.

The study aims to:

- See if the software meets the needs of the organization.
- Check if the software can be built with current technology within budget and on time.
- Determine if the software can work well with existing systems.

This platform will automate many processes, improve communication, provide real-time updates, and streamline inventory and sales.

Green Grocery will help the business by improving efficiency, enhancing customer experience, increasing revenue, and offering valuable data insights. It can work with existing systems but may require new technologies like cloud computing, which will need training and support. The platform will handle essential functions like order processing, delivery tracking, inventory management, secure payments, and communication, while ignoring non-essential items and outdated systems.

Overall, Green Grocery offers significant benefits and is a feasible and valuable investment.

Types of Feasibility

1. Technical Feasibility

Technical feasibility assesses whether the current technology and resources can support the development of the Green Grocery platform.

- **Resources and Technology:** Ensure current hardware and software can support the platform.
- **Team Skills:** Ensure the development team has the right skills for web development, payment integration, and tracking systems.
- **Technology Stability**: Use stable and widely-used technologies like cloud services.
- **Interoperability:** Ensure the system can integrate with other existing systems.

Conclusion: Technical feasibility is achievable given the stability of the required technologies and the proficiency of the development team.

2. Operational Feasibility

Operational feasibility evaluates whether the platform can perform necessary tasks to solve business problems and meet user requirements. It considers human resources and involves visualizing the software's functionality post-development.

- **User Requirements:** Make sure the platform meets user needs, like easy order submission and delivery tracking.
- **Solution Acceptability**: Ensure the platform meets organizational needs.
- **User Adaptation:** Make sure users can easily adapt to the new platform through feedback and testing.
- **Alternative Solutions:** Compare with other solutions to ensure this one is the best.

Conclusion: Operational feasibility is high, given the clear benefits and user-centric design of the platform.

3. Economic Feasibility

Economic feasibility assesses whether the platform will generate financial benefits for the organization. It involves evaluating the costs related to development, hardware, software, and training.

- **Development Costs:** Estimate total costs for development, including team hiring, hardware, software, and maintenance.
- **Financial Gains:** Project potential gains from improved efficiency, increased sales, and better customer satisfaction.
- **Budget Alignment:** Ensure the project stays within budget.

Conclusion: Economic feasibility is promising, with potential for significant long-term financial benefits and a manageable initial investment.

Conclusion

Based on the feasibility study, the development of the Green Grocery platform appears to be practical and workable. The technical, operational, and economic analyses all indicate that the project is feasible. Therefore, it is recommended to proceed with the requirements engineering and system development process for the Green Grocery platform.