

# FEASIBILITY STUDY – DAIRY DISTRIBUTION SYSTEM

## Technical feasibility

A technical feasibility is the analysis of ability to successfully develop, implement and maintain a proposed project using current or available technology, skills and resources.

In the project “ Dairy Management System ” technology used are :

Frontend: React

Backend: python

Database: MongoDB

Additional Technology: Machine learning

These technologies are apt with the project requirements. Stakeholder has necessary skills to use these technologies to manage the project. If any issues occur with lack of skills will refer more resources. The system design will be scalable to manage the storage of data while data become more or less. Security measures like https protocol, data encryption etc are taken to protect sensitive data of users. Ensure authorized users such as admin, seller, customer are accessing the system. Implement a dedicated responsive tool for fast response. Conduct regular testing for finding vulnerabilities. The system should support same user experience in any environment and devices .

In future technology devices like IOT sensors can be integrated for automatic quality testing and machine learning can be implemented to make quick response to sellers helping improvement in quality of products.

- Do stakeholders have the expertise needed?

Stakeholders include farmers, customers and Administrators. Expertise means domain knowledge in dairy products, cattle details, distribution etc.

Farmers can seek appropriate training measures to familiar with the system. By giving recommendation message while lowering the quality of milk they can identify the health issue of the cattle and solve the issue. They could understand how to manage everything according to customer needs.

Providing user friendly interface and training program creates easiness for the stakeholders.

- Are additional resources needed in the health system Including Infrastructure, skills-sets or job aids?

Yes. Additional resources are needed for infrastructure, skill sets or job aids. The system requires additional implementation of necessary resources such as hardware, server capacity for system operation, network connectivity, security, backup etc..

Skill set training includes additional training facilities for administrators and users (stakeholders).

Job aids includes providing online support to the users when a problem in accessing the system occurs.

- Is the health system ready in terms of the technology required?

Yes. The system is ready in terms of required technology. To check whether the technology are readily available and compatible with the projects requirement.

Hardware and software are readily available and configured. The additional technology such as payment, recommendation and analytics can be integrated with existing technologies. Provides scalability ,security for financial support etc.

## **Economical feasibility**

Economic feasibility determines if a project can make enough money to be worthwhile. It includes the project costs and compares them to potential profits to see if they are suitable investments. It figure out whether a project will succeed financially.

In the project, regular conduct of cost analysis is possible which include initial cost, return of investment, operating cost etc checks the sustainability status.

- Do the resources needed exist?

Required resources are:

Physical: server, network, storage, workspace

Human: developer

Technologies: hardware, software , additional tools and technologies

Current resources are readily available within the workspace. Making proper plan, budgeting and resource management to ensure successful development and operation of the system. Adjust the resource allocations as necessary to satisfy the system needs.

- Will the proposed health service or Initiative lead to better use of resources to improve health outcomes, when compared with other options?

Resource utilization, decision making, health monitoring and recommendations, cost analysis, feedback etc can make better use of system.

Resource utilization includes the use of resource within the dairy production and distribution process which involves product wastage management, inventory management etc. Decision making include early solving of issues of cattle by giving automatic recommendations and improve the quality of milk.

Comparing new system with traditional process of dairy management and distribution makes improving the functionalities. Feedback facility help to identify the ability of stakeholders to manage the system.

## **Operational feasibility**

Operational Feasibility refers to the ability of a proposed project or ventures to be successfully implemented and integrated into existing business process, systems and practices.

The project dairy distribution system has user friendly interface.so it can be operate easily by all the stakeholders. Evaluate feedback and make necessary improvements.

- Do existing health system procedures and protocols support the new service or initiative?

The existing protocols and procedures can be align with the new system requirements.it is analysed that there is a compliance between the existing system and new system including milk collection, quality testing, inventory management, customer order etc. New system can be easily adaptable to enhance existing system which improves data accuracy. If any problem occurs in compatibility or integration it will consider by updating or modifying the requirements and including training and communication to stakeholders.

- How will key collaborators be involved?

Key collaborators are dairy farmers/sellers, customers, system administrators. Farmers explain the benefits of new system include recommendation messages to farmers improve health of cattle

Customers are informed about the new product and rate are added to the product list and payment process via online or offline make payment easy.

Admin empower the system implementation, user account management, support to user.

Regular communication will help in feedback from users and make inform all changes with them.