

Eazy Diary

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Abstract

In the traditional milk delivery system, the milkman delivers the milk door to door. In this paper, we have proposed an Easy Diary system. This system is especially for all the information and delivery of the milk, which is entered and we can keep track of all transactions. This system is a web and android based application that helps people who want to manage milk activities and places like milk booths, milk shops, dairy farms. E-commerce is booming very much and is projected to grow even further with an increasing number of people relying on mobile apps for day to day needs and the convenience it provides. Our aim is to deliver milk to the customers via the delivery application through the delivery boys. The proposed system is evaluated and compared with the existing system.

1. INTRODUCTION

We know that milk is required every morning for a household, and it is a must to have in-time delivery as one's schedule depends upon these items. Our application empowers consumers with a choice of milk and real-time information about milk quality. The traditional process of buying dairy products manually includes many inconsistencies and includes problems like the order details regarding the quantity may vary someday and the customers may wish to buy some more or less quantity of milk which the ordinary manual based.

The process may lack to update during the real-time delivery during morning or evening. The old system is highly prone to human errors as the manual work may sometime lead to minor or major inconsistencies. This may also be another cause for data inconsistencies like not maintaining the transaction logs properly, not listening to the customer order details accurately. These all reasons lead the whole traditional system of buying and selling of products highly inefficient. Eazy Diary is a web-based/android-based application, which is a dairy management application. This system will eliminate the traditional work process of buying and selling dairy products with timely delivery and efficiency in work. It is totally compatible in both android and web (web-based application). The main goal of our proposed system is to transform all tedious manual process into a fully functional automated management system. The customers can make use of our project and buy their desired dairy product from the vendors of their choice in the quantity which they want to buy. Primarily in this system, there will be three entities, namely Vendor, Customer, and

Delivery boy. The database information of all these entities will be responsive and interconnected with the respected order details. A dairy food product is our daily need products of regular life. The dairy products application shows a price catalog of products (e.g. milk, curd, butter, paneer, ghee, etc.), purchase order summary, payment history, feedback, offers, and indent order.

In addition of milk, several dairy products such as cream, butter, cheese, and ghee even though have been categorized milk into varying types of milk. The impact of milk and dairy products are useful and helpful for all agents and distributors. The agents have an account to login to this application and to view the order history and payment detail, due balance, schemes, and register a complaint about any queries and report.

The old manual or non-digitalized system which has been used so far is comparatively less efficient. Handwork of maintaining records of customers, dairy products, payments, etc. are tedious and complicated. This may result in a sort of inconvenience to the customers as well as the vendors to remember or to maintain the transaction log. This whole traditional process of buying and selling dairy products on a daily basis manually is hectic, time-consuming, inconsistent, and less efficient.

The traditional process of buying dairy products manually includes many inconsistencies and includes problems like the order details regarding the quantity may vary someday and the customers may wish to buy some more or less quantity of milk. This may also be another cause of data inconsistencies. People in our country are becoming more and more dependent upon more into

digital platforms for exchanging services. On the basis of the experimental analysis performed by us, we found that nowadays, the need for online food ordering application platforms has been drastically increased, and usage of online services is close to 45% as compared to the other methods of ordering food and pantry services.

2. LITERATURE REVIEW

This article mentions the four important and crucial stages of the management of vendor programs, which are selection and contract, execution, and renewal, along with other useful components and actions for each stage. In addition to these steps, critical strategic theory and best practices are outlined. Companies can use this article for assessing the state of their vendor program, as well as incremental steps that are required for program improvement.[1]

The growing Internet, accompanied by the development of other useful technology, has helped us made a significant impact on people's life. The emergence of stores that sell products and services online has significantly impacted many organizations across the country. Due to this, consumers are now able to purchase goods and services anywhere and anytime.[2]

A dairy food product is our essential daily need in our regular life. The dairy product application shows a price catalog of products (e.g., milk, curd, butter, etc.), purchases summary, payment history, feedback, offers, and indent order. Besides of milk and many products of dairies such as cream, cheese, and ghee even though they have been categorized milk into varying types of milk. The impact of these products is useful, helpful for all agents and distributors. The agents have an account to login to this application to view the order history, payment detail, remaining balance, schemes, and register a complaint about any query.[3]

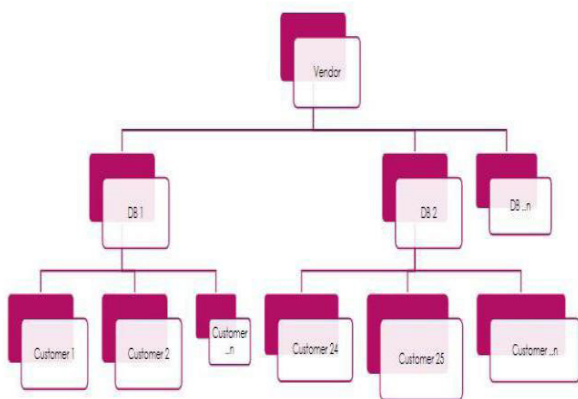


Fig. 1: System block digram

As long as the stock of production of low quantity of milk and its potential continue to be the main source of milk in rural areas in our country. As it is the traditional approach of collection of milk. In order to change that, the paper designs an efficient Android-based management system that applies to various dairy shops and farms. In this system, the terminals on mobile are based on the Android platform.[4]

3. EXISTING SYSTEM AND PROPOSED SYSTEM

3.1. Existing System

The old manual or non-digitalized system which has been used so far is comparatively less efficient. Handwork of maintaining records of customers, dairy products, payments etc. are tedious and complicated. This may result in a sort of inconvenience to the customers as well as the vendors to remember or to maintain the transaction log. This whole traditional process of buying and selling of dairy products daily manually is hectic, time-consuming, inconsistent, and less efficient.

3.2. Proposed System

The main goal of our proposed system is to transform all tedious manual process into a fully functional automated management system. The customers can make use of our project and buy their desired dairy product from the vendors of their choice in the quantity which they want to buy. Primarily in this system, there will be three entities, namely Vendor, Customer, and Delivery boy. The database information of all these entities will be responsive and interconnected with the respected order details. The main objective of our proposed system is to eliminate the old traditional or manual process of buying and selling of dairy products and transform it into the automated fully functional application that is way more efficient in terms of time, payment and maintenance of transaction logs.

3.2.1. Some of the features included in our proposed system

- Set delivery charges per month
- Set subscription – post-paid, prepaid or both
- Set cut-off time of accepting milk. Example: 21:00 pm
- Share vendor details to connect to other apps
- Get a view of any record from history about delivery boys, customers, etc
- Get a record of milk to be delivered tomorrow after cut-off time
- Get a view of total customers, delivery boys under him. Edit any of the above from settings as he wishes.

3.2.2. The Main Problems in Existing System are

- Adulteration

- Data inconsistency
- Lack of coordination
- Unavailability of services
- Human errors
- Less efficient

4. IMPLEMENTATION

Approach the vendors and take a whole brief survey about the old manual work and try to understand the challenges faced by them while exchanging of products with the customers. The survey will give a basic idea about the problems that we were unable to find. After the survey is completed, we will explain to the vendors about the whole functional features of the system and the feasibility of our proposed system. After the feasibility is being cleared and explained to the vendor, we will assign a beta web-based application to vendors and ask them to use it by giving us a review at the end of the month. We will try and ask vendors to assign delivery boys under them in the application. Delivery boys will be assigned customers by the vendor himself according to the respective locations and the customer order demand ratio. On the other hand, customers will have the free will to choose any vendor or switch between any vendor whenever required. Our system has 3 main entities Vendor, Delivery boy, and Customer.

4.1. CUSTOMER SIDE

- Customers sign-up/login to be done.
- Customer is offered a variety of choices.
- Customer can select order details as per needs.
- Order request gets forwarded to vendor.
- Order gets accepted by vendor
- Order is confirmed and ready for delivery.

4.2. DELIVERY BOY

- Each vendor has it's own delivery boys
- Delivery boy's login is done
- The delivery boy enters a unique pin of their respected vendor and sends a request.
- The vendor accepts the request if valid
- Delivery is assigned as per location of customer and delivery boy
- The parcel gets delivered respectively

4.3. VENDOR SIDE

- Share vendor details to connect to other apps
- Get a view of any record from history about delivery boys, customers etc.
- Get a record of milk to be delivered tomorrow after the cut-off time
- Get a view of total customers, delivery boys under him
- Edit any of the above from settings as he wishes
- Convert into a delivery boy if any one of them is absent

5. RESULTS

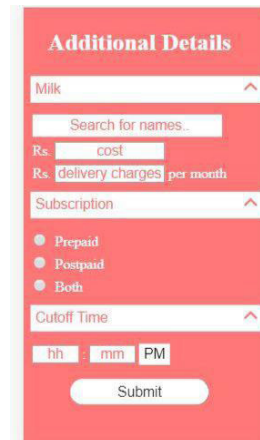


Fig. 2: Customer panel

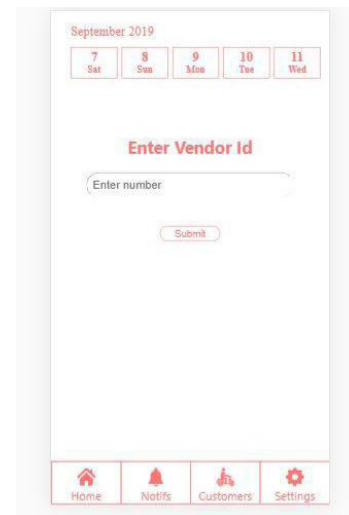


Fig. 2.1: Vendor panel



Fig. 2.2: Delivery Boy Panel

5.1. Experimental Analysis

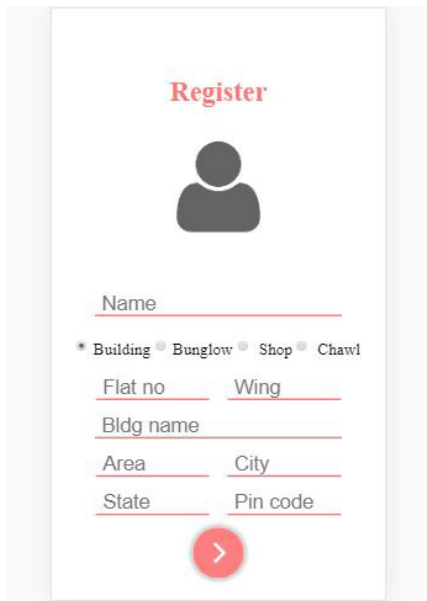


Fig. 2.3: Registration Panel



Fig. 3: shows usage of food delivery apps

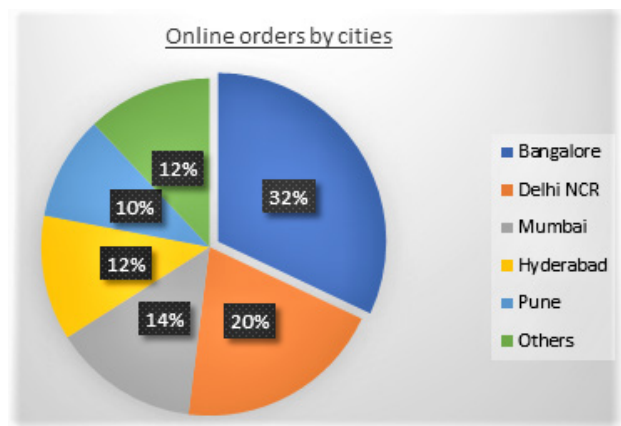


Fig. 3.1: shows percentage of online food ordering in Cities

6. FUTURE SCOPE

The current application design has functionalities, which include setting up orders by the customers, accepting those orders by the vendors, and assigning the delivery work to the delivery boys with respect to the vendors. The system also has the functionality of dynamically updating the orders as per the needs of the customers accordingly. In future versions of our proposed system, the vendors may get the notifications about whether the customer may continue the subscriptions. The customers may also get the recommendations about their desired products and new offers which they order. This will/can be implemented using machine learning algorithms, python, data-analytics.

7. CONCLUSION

The proposed dairy food product delivery application system reduces and eases manual work of order tracking and its analysis; it also helps the retailer/distributor to easily predict properly and optimize price for sales and its distribution. He was having easy access to information and feedback for convenient communication among all people in proper supply chain management, efficient combination, management of different types of data that come from different and authenticate sources. In the future, we plan to add the following features into the application. Users can store important information related to friends, accounts, reminders and other information. He can send information which is stored with the help of e-mail. Also, he can use other means like G-Drive, Skype, etc. He can search for the stored information through a search bar that will help the user for easy access. He will receive an immediate alert for a reminder.

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