

LOCAL MEDICAL DELIVERY APPLICATION

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ABSTRACT

The Indian Pharmaceutical industry currently tops the chart amongst the country's science based industry and its third largest in the world in terms of volume. Pharma industry in general and more, so the market in India is moving has its unique mode of operation and is very dynamic and competitive. The report is the reflection of the one month learning and hard work. The report includes survey about pharma industry of India's main players and their market share. We have done the survey to find out the medicine consumption in market.

Our project is online medical shop this is an application which helps people to find and buy all types of medicines on internet . It is useful in a way that makes an easier way to buy medicines.

Online medical shop is an interactive e-commerce solution providing users with an opportunity to buy medicines from their local area stores. In this application we have three modules the first module includes the customer module the second module includes delivery agents module and the third module includes the admin module.

The customer has to register for any enquiry related to medicines. The registered customers can view details of medicines and he or she can buy the medicines from the local medical store. He or she has to pay and will get home delivery on time. The admin module contains the access of admin page on the application. The admin can change everything in the application. The admin has the ability to add delete and update any information regarding the medicine.

Keyword: -Medical Delivery Application, online medical store, nearby stores portal

1.INTRODUCTION

Healthcare is constantly evolving. Modern technologies offer scope for more effective ways to manage disease. Over the course of the last two decades, the Internet has transformed the way in which information is accessed. Mobile devices (i.e. smartphone and tablet platforms) took this a step further by allowing users to have remote access to the World Wide Web at their fingertips. Such devices now outnumber personal computers and will soon become the most common way to access data. Interest generated in this technology may be ascribed to the availability of over one and a half million applications, available for download. Apps may be described as software packages that are used to enhance the efficiency of a device or to add functionality. Mobile apps can provide the healthcare professional with opportunity for a quick, user-friendly way of accessing important medical information to support patient care.

1.1 Objectives

The objectives of our project for paper publication are as follows:

- i. To be recognized nationally and internationally as a leader in improving medication outcomes and pharmacy practice research and education.
- ii. To connect all the local medical stores in the community and to scale their business as well.
- iii. To establish relationships with the key individuals of an organization to improve the quality use of medicines and health outcomes.
- iv. To provide an efficient system of delivery of medicines as and when required.

1.2 Scope and Applicability

The scope of our project is to help maintain a secure environment and ensure individual satisfaction with the delivery of the required essentials. It includes connecting the local medical stores for the efficient system of delivery and also to scale the business of the local pharmacies. It includes several self-checks and voluntary protocols to ensure the transparency and genuineness. All orders for medicines are processed only upon the furnishing of a valid doctor's prescription and any prohibited medicines/drugs are not listed on the inventory application. Further, the online platform only works as an order receipt and processing mechanism and each order is cross checked by the physical pharmacy that fulfils it. These technology-driven value additions result in the consumers getting the medicines faster, easier and in a more affordable manner.

We demonstrate our approach to build an application that uses flutter for the development of the application and firebase at its backend. It also uses big data analysis for the backend. It is applicable in the one of most growing medical industries to connect the local medical stores to the community members.

2. LITERATURE SURVEY

The purpose of literature survey is to gain an understanding of existing technologies and we tried to gain a deep understanding of how the medical delivery application work. Through our research we are able to understand and achieve the following:

- i. We have been able to familiarize ourselves with the project topic, we have been able to narrow down our topic and tried to work to develop a model to create an useful pharmacy application.
- ii. We have been able to identify shortcomings of previously designed models and we intend to try and resolve them and provide existing supporting features to the existing technology.
- iii. We have been able to understand the steps involved in creating an application and their requirements of knowledge.

A pharmacy app is an online medicine shop where you can buy any medicine with just a click. The delivery agent will get your medicine in a few days. You can pay for it after the delivery. You can also upload your prescriptions, get an appointment from a certified doctor.

In our literature survey we did an end user survey :

Fig 2.1, Fig 2.2, Fig 2.3, Fig 2.4 and Fig 2.5 depicts data representation in Pie Chart where we have done online survey to ask users about their views on online pharmacy application. The survey questions are as follows:

How frequently are you using online shopping for essentials?
55 responses

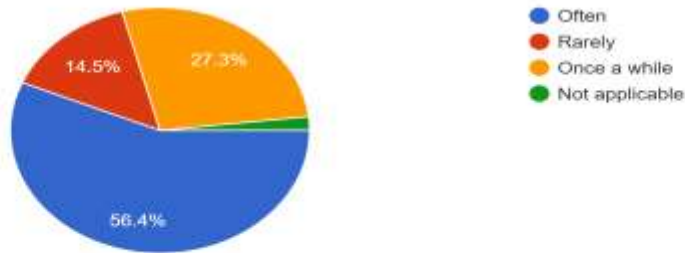


Fig 2.2.1 Pie Chart representing data for: How frequently the users do online shopping

How often do you buy medicine?
55 responses



Fig 2.2.2 Pie Chart representing data for :How often do you buy medicine?

From which place do you usually buy medicines from?
55 responses

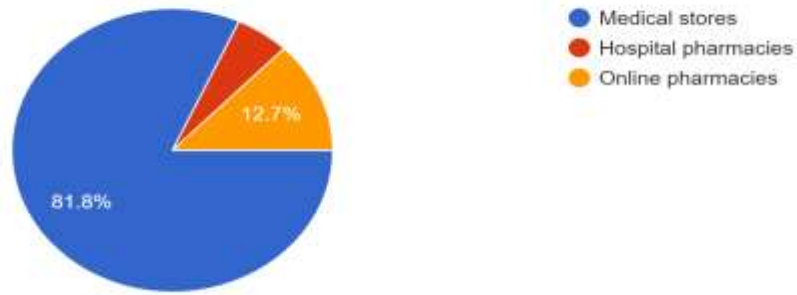


Fig 2.2.3 Pie Chart representing data for : From which place do you usually buy medicines?

Which is the most recently used app for delivery ?
54 responses

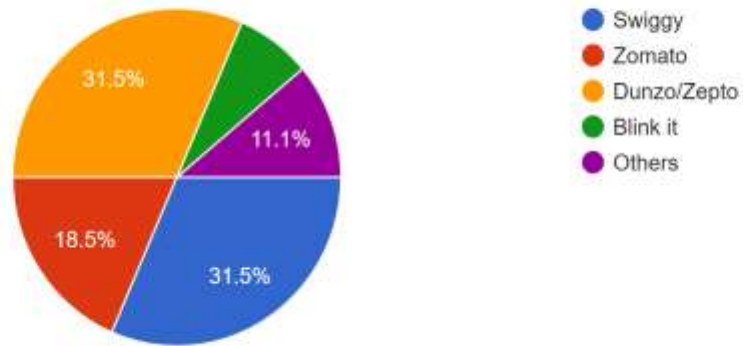


Fig 2.2.4 Pie Chart representing data for : Which is the most recently used app for delivery?

What factor do you consider most while purchasing medicine?

55 responses

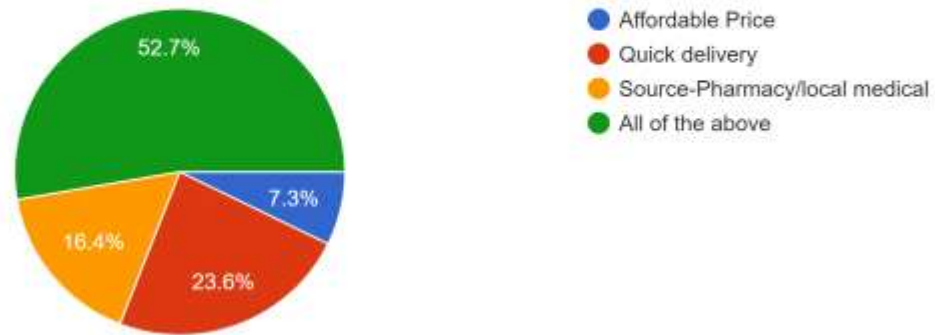


Fig 2.2.5 Pie Charts data representing data for :What factor do you consider most while purchasing medicine?

2.1 Drawbacks of existing system

- i. One of the biggest disadvantages of the online pharmacy model is the lack of physical evaluation capability. In some cases, physical evaluations can be made and situation analysis can be done very effectively. Even if the online evaluation process is done, this process will not be done by licensed healthcare professionals.
- ii. One of the disadvantages of E-Pharmacy is that there is no one you can contact face to face. When patients want to ask questions about the drugs they are taking, it is very difficult for them to reach a licensed pharmacist. For this reason, it may not be possible for patients to access their medication on the same day.
- iii. Some online pharmacies can dispense drugs to patients without a prescription. In such a case, patients can get sick much more severely instead of healing. Therefore, when buying drugs from the pharmacy, pharmacists must definitely request a prescription. Some illegal online pharmacies sell over-the-counter drugs by putting human health at risk, and it is very difficult to prevent this.
- iv. One of the issues that raise questions about the E-Pharmacy application is the privacy of personal and financial information. Therefore, online pharmacies should create their own privacy policy pages on their websites and ensure that personal information and financial information are not shared with third parties.

3. IMPLEMENTATION

For the development of Local Medical Delivery Application we are going to use:

- Google Cloud for data storage

- Firebase for hosting web application and Authentication
- Google Maps API for Geo-location tracking
- Flutter for web application design

Firestore is a set of hosting services for any type of application like Android, iOS, Javascript, Node.js, Java, Unity, PHP, C++. It offers NoSQL and real-time hosting of databases, content, social authentication, and notifications, or services, such as a real-time communication server.

Flutter is an open-source UI software development kit. It is used to develop cross-platform applications for Android, iOS, Linux, macOS, Windows and the web from a single codebase.

Google Cloud will be used for Blob storage of application data. We will utilize the available cloud services like Bigquery and Audit logs for Data Analytics.

There will be three types of users for this application

- Client/Customer
- Delivery personnel
- Pharmacy store

The client would register to the application by creating a user account. The user will then be required to place order based on availability of medical supplies and would be charged a nominal fee based on their location.

There will be registered account of Delivery personnel. They will be notified once the order of the Client is processed and the deliverable details will be sent to Deliverer to deliver the goods to Client address. The Pharmacy Store will also be provisioned account for making timely updates about the available medical supplies.

4. SYSTEM ARCHITECTURE

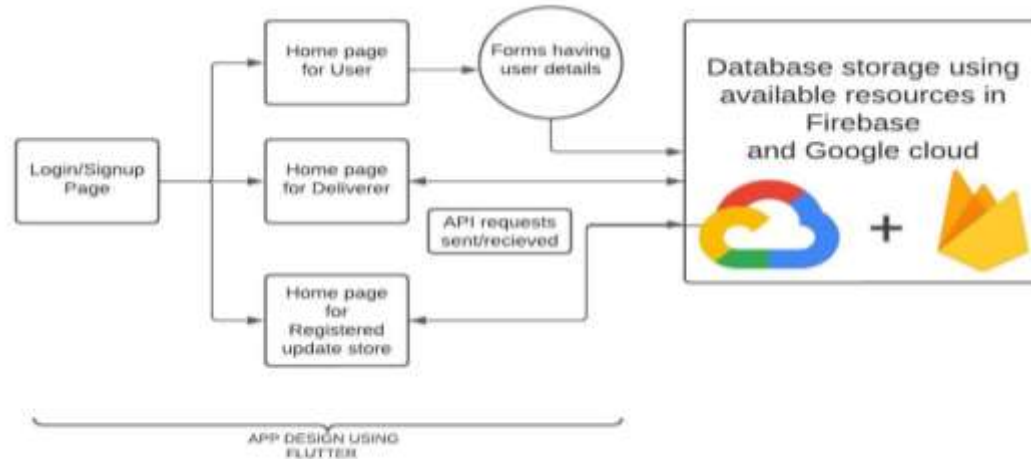


Fig 4.2 System Architecture

Figure 4.1 showcases the system architecture of Local Medical Delivery Application. System architecture refers to the high-level design and organization of the components, modules, and interactions within a software system. It defines how the different parts of the system work together to achieve the desired functionality, performance, scalability, and maintainability. In the context of medical delivery application, the system architecture is responsible for handling data integration, analysis, reporting, and user interaction.

5. CONCLUSION

Our project involves providing mobile application to end users so that they can buy medicines that they require by ordering online. The user can check the availability of the medicines that they require, track the status of their order. The pharmacy stores get notification for the order of medicines placed by user. The delivery personnel would then collect the medicine from the pharmacy store and delivery them to the user who made the order request.

7. REFERENCES

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