

## An Enhanced Medical M-Commerce an Customer Care Solution Using Android Application with Data Analysis

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**Abstract** — The objective of data analysis for E-medicine app is to convert input and results provide valuable information. It is difficult for manager of medical store to have decision on raw input data. The E-Medicine Data analysis follows two main objectives: First, Collects raw input into structured format second, Convert raw data into information as unstructured format. For each data analysis, it supports to create dynamically analysis reports. It also allows using the framework to store full analysis record of an executed analysis in internal database.

**Keywords-** Data analysis, Data Analysis tools, unstructured information, mathematical model, raw data

### I. INTRODUCTION

This paper presents an analysis of medical data through data mining concepts. Medical stores supply systems should ensure adequate stock of all the required items to maintain uninterrupted supply. Medical stores supply medical care and drugs where, it has disproportionately increased the expenditure on medicine delivery. Therefore, medical stores purchase medicines from pharmacy company and supply these to customers. There is necessitates in management of medical store in efficient and effective manner by keeping a close supervision on important drugs, prevention of pilferage, and priority setting in purchase and distribution of drugs.

Customers purchase medicine using android application where, there is exponentially growth of using android app. Customers can purchase medicine using E-Medicine App. Server contains raw data of these order by customers. These data can be analyses by using data analysis. Data Analysis takes input as raw data and convert into information, where this information can be used by manager to take a decision. The received information can be visualized as unstructured such as pie chart, bar graph, etc, when customers order medicine through online app their ordered products as saved as record sheet. Using this record sheet we can generate pie chart for profit expenditure of products prices

E-Medicine Data Analysis allows having such pie chart and analyze on those data. Manager of medical stores can now have those unstructured and take a decision. As we know they are no technical person, So this E-Medicine Data Analysis give information on raw data through which manager can have certain knowledge of data analysis.

### II. SURVEY OF PROPOSED SYSTEM

This page of the Online Medicine purchase application will be the first page to be displayed, when a person visits the Online Medicine purchase application. Customers logs into E-Medicine Application and order products which they are required. This all raw ordered data are stored at server. Sever calculate bills of ordered products and send generated bill to customers. After generating bill, sever take this raw data and convert into information. This raw data is in record sheet which convert into unstructured format like pie chart. It uses mathematical formula to draw such pie chart. Pie chart can contain information like monthly income of products purchased by customer's. It can also contain records of all ordered history of customers. It can also calculate year expenditure of products using data which are stored in record sheet. Server uses data analysis tools to have such pie chart information.

### III. SYSTEM ARCHITECTURE

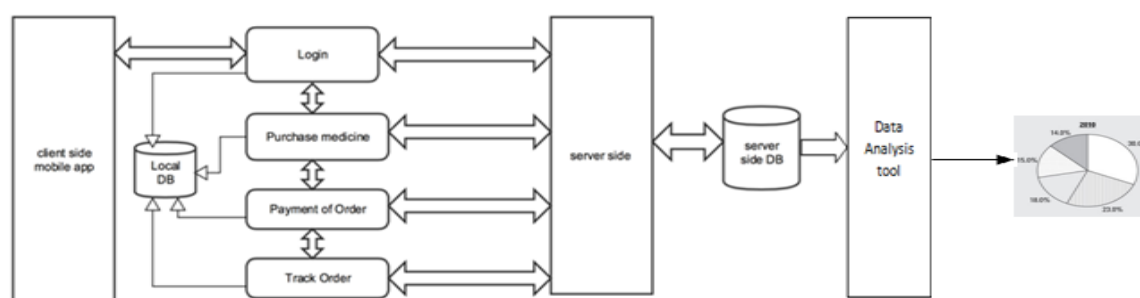


Fig1. System architecture

Figure 1 shows system architecture of An Enhanced Medical M-Commerce and Customer Care Solution Using Android Application with Data Analysis. It consists two DB, they are local and server DB. Local DB is used to store customers local information at customer side and server contain server DB which consists updating the product lists, order place, payment information, order history of customers. It also consists list of products. Login model is used to log in into application. Purchase medicine consist list of medicine. Payment order consist payment information of customers. At server side data analysis are performed by using customer's information. Data analysis takes raw data from server DB and convert into information. It can take payment information of customers and apply some mathematical methods to convert into information i.e. pie chart. Data analysis can send this information to customers to analyze their details.

#### **IV. CONCLUSION AND FUTURE WORK**

Data Analysis is becoming a common feature for medical products to medical stores. At present, many data analysis methods have been successfully applied to a variety of practical problems in medicine products. Data analysis is particularly successful where data are in abundance. For pharmacy products, this includes the analysis of raw data stores at server site to studies and emerge the decisions conducted by manager. Crucial to such data are those data analysis approaches which allow the use of the background knowledge, discover interesting interpretable and non-trivial relationships, construct rule-based and generate pie chart. Decision-making that uses a particular prediction model should therefore also take into account the issues of ethics and the cost of prediction while being concerned with the analysis of outcomes.

#### **V. BENEFITS**

Mobile devices with apps have provided many benefits for medical data analysis, allowing them to make take rapid decisions with a small number of error rate, increasing the quality of data management and accessibility, and improving practice efficiency and knowledge.

##### **1) Conveniences**

Most mobile apps have made the practice of evidence-based medicine at the point of care more convenient. Medical app associate large number conveniences with using a mobile device in medical practice, such as: portability, rapid access to information of medical data, flexible communications. Other studies describe keeping current through access to modifications about new books, guidelines, reviews, and medical data literature as an appreciated convenience. Customers also no longer have to use reference books, since many can now be accessed with a mobile device. Consequently, they can carry all the information about analysis medical books and other necessary references in one small device that fits in a lab-coat pocket.

##### **2) Better Clinical Decision-Making**

Many applications make mobile devices invaluable tools that support clinical decision-making at the point of care. This quality is most important when practicing evidence-based medicine, since medical may not always seek answers to clinical questions after the completion of every medical data encounter. Practicing clinicians, as well as medical and nursing customers, the much useful mobile tools for supporting evidence-based medicine and clinical decision-making as being drug reference, medical textbook, disease diagnosis, and medical analysis apps. The use of mobile devices can also support better decision-making by medical store by providing instant access to multiple drug information sources and other medical references.

##### **3) Improved Accuracy**

Mobile devices with medical applications have repeatedly been found to improve the completeness and accuracy of patient documentation, an effect that has often been attributes for data analysis to ease of use. More accurate coding, more frequent documentation of side effects, and increased medication safety through reduced medical data analysis errors have been reported. Based on a more description of medical data findings and a correct progress assessment, document the records prepared using a mobile app was decided to be of higher quality than document the data prepared using paper records.

##### **4) Increased Efficiency**

Evidence has shown that mobile devices allow medical app to be more efficient in their work practices. The most doctors believe that meaningful adoption of patient requires prescription to identify the type of patient and analysis their information to generate records.

The use of mobile devices with E-Medicine app with numerous enhanced efficiency, including: increased quality of patient documentation with less error and more complete records, more rapid access to new information, and improved flow of patterns. It also requires less time to convert raw data into information.

### **5) Enhanced Productivity**

Mobile devices with medicine application have been found to cause a significant increase in the average rate of prescription of customers. Mobile apps can also increase pharmacist productivity by allowing important product information, such as contraindications and interactions, to be checked quickly, resulting in more rapid processing of prescriptions. Pharmacists using a mobile device with medicine application reported recording more information and completing more fields, which resulted in more thorough documentation.

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