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CLOUD BASED ONLINE RETAIL MANAGEMENT FRAMEWORK: A DIFFERENT ASPECT.

Pooja N Vengurlekar
SITS Narhe, India

Vivek S Kulkarni
SITS Narhe, India

Piyusha R Kulkarni
SITS Narhe, India

Saket Z Jadhav
SITS Narhe, India

ABSTRACT

Wider acceptance of the Internet and increasing comfort of the urban population to transact on it, is disrupting the traditional channels of delivery of the smallest of goods or services to the customer. The focus is now shifting entirely from traditional commission based channels to value added channels. So now there is a lot of discussion of 'cutting the middleman' and moving to direct delivery from producer of product / service to consumer. And the Internet is strongly enabling this. This does not mean that the traditional channels did not add any value from a perspective of the customer experience / satisfaction. The traditional channels still do offer a lot of value especially in respect to last mile delivery of product / service, customer intimacy, instant delivery, etc. A typical Retail Management System has various applications such as Customer Management, Ordering System, Inventory Management, Financial transaction management, Logistics, Vendor Management, Marketing, Complains Management, Security, etc. integrated to deliver a complete retail experience to customers. Each of these is an entire application. We propose to develop a Retail Order management framework which includes all the basics of the typical retail online systems with a new interface and working system .We want to give full freedom for the shopkeepers to set up their shops. we propose to use the latest offerings on Open Source platform and Cloud Computing to deliver the final product.

I. INTRODUCTION

The secret of successful retailing is to give your customers what they want. And really, if you think about it from the point of view of the customer, you want everything: a wide assortment of good quality merchandise; the lowest possible prices; guaranteed satisfaction with what you buy; friendly, knowledgeable service; convenient hours; a pleasant shopping experience.

The Online Retail web application is intended to provide complete solutions for vendors as well as customers through a single gateway using the internet as the sole medium. It will enable vendors to setup online shops, customer to browse through the shop and purchase them online without having to visit the shop physically. The administration module will enable a system administrator to approve and reject requests for new shops and maintain various lists of shop category.

The main idea for this paper is to give such a platform for the vendor where they can put up their shopsand deal with customers according to themselves. The website or the framework provider will act just as a platform for customers to act with the shopkeepers. No logistics related transactions will be done by the website owners. All such logistics related transactions and payment transactions will be between the shopkeepers and the customers on a whole. Furthermore the idea projects the shopkeepers or the vendors to put up the shop as they want. There won't be any barriers like a fix category, rates etc. The website will act as a plot for lease and shopkeepers will setup their shops on the plot. The retail management is meant for the local vendors. As we can see that emerging companies like Flipkart or Amazon have decreased the sale of the local vendors so this website will be created for such vendors who can also sell their goods like Flipkart or Amazon.

The website will also be based on the GPS and it will give you information about goods that is available in a specific area so if anyone is new to some area and needs a particular thing then one doesn't have to go all the way for

Searching it. He can just open the app and set the radius and product required and will get the information accordingly.

II. LITERATURE SURVEY

Now a day's, people are using internet as one of the basic need. Online is the new big thing. Everything from a small pin to large home furnishings items are available online for the transaction. People are having ease to buy everything they want. Buying things online is beneficial in so many ways. First of all it saves time, it is convenient. Shopping online saves logistics for you. The e-Commerce people deliver the product to your door steps. You have a lot of options to choose from. When you shop normally you have some constraints like brands, location, pricing. Shopping online gives you freedom to shop from anywhere throughout the country. All the brands are available, no location barriers, various options.

In paper [1] a review of the articles and business reports related to consumers' grocery shopping decision making process, in both offline and online retail channels. The intent was to acquire a general overview of grocery shopping, in what pertains to this dissertation and subsequent research questions, and as such the focus relies mostly on the decisional phase and influencing pre-decisional phase of the grocery shopper decision making process. Based on the outcome of the literature review performed, a conceptual framework that guided the design and performance of the empirical studies, aiming at providing answers to the proposed research questions, is also presented.

In paper [2] a prospect about online grocery shopping is shown where we can see that it has becomes more and more popular in recent years. To facilitate the purchase process, many online stores provide a shopping recommendation system for their consumers. So far, the generic recommendation systems mainly consider preferences of a consumer based on his/her purchase histories. Nevertheless, it is noted that there is nothing to do with the right timing to purchase a product from the view point of product replenishment or economic purchasing. Hence, we develop a new recommendation scheme especially for online grocery shopping by incorporating two additional considerations, i.e., product replenishment and product promotion. We believe that such a new scheme should be able to provide a better recommendation list which fit consumer desires, needs, and budget considerations and finally boost transactions.

In paper [3] we can learn about 3D shopping. Generally we can see that the online shopping has normal text and pictures but this website www.easygrocery.co.uk has developed an innovative way of displaying the products in 3D manner. This 3D system follows the mental model of the user as opposed to that of the developer. Additionally, the user is able to select the layout of the online store so that it matches the layout of their local store, thus enabling even new users to exploit their own knowledge of how items are organized to shop efficiently. The Easy Grocery system demonstrates that 3D online shopping can provide significant advantages for both consumers and retailers.

III. FIGURES GRAPHS AND TABLES

3.1 Architecture

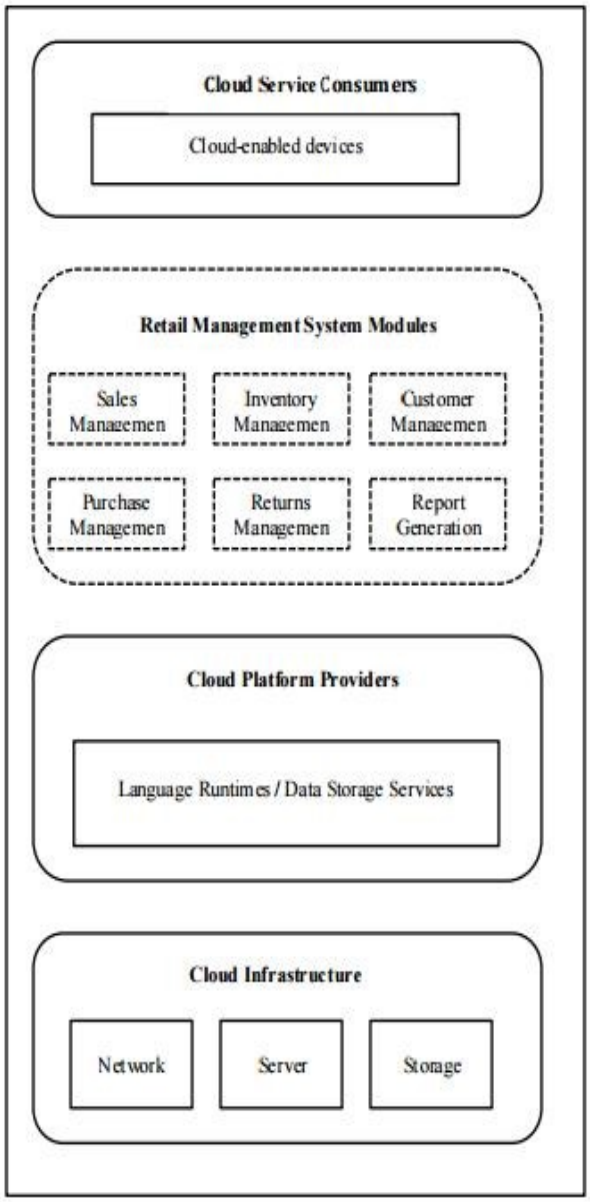

Figure 1 : Block diagram of the system

1. **Cloud Service Consumers-**
   - Here the fundamental UI is given where users can actually interact with the website or the platform.
2. **Retail Managemnt System Modules.**

The retail management framework is present at this level where all the working of the website is actually stored.

- Modules present are
  - ✓ Sales Management.- The buying and selling of all the items are handled here.
  - ✓ Inventory Management.- All database related functions are managed inn this module.

- ✓ Customer Management.- Data and information of the customers are very important and handling of this info from storage to ratings given are handled in this module.
- ✓ Purchase Management. – Goods requested by the customer are made available and sold to the customer.

3. **Cloud Platforms Providers.**
   - Here we provide the platform to put up our website on Cloud.
   - This basically helps accessibility of the website.
4. **Cloud Infrastructure.**
   - Here the main cloud infrastructure is present which shows the components or modules required for working of the Cloud.
   - The three main parts are
     - Network
     - Server
     - Storage

3.2 Sequence Diagram.

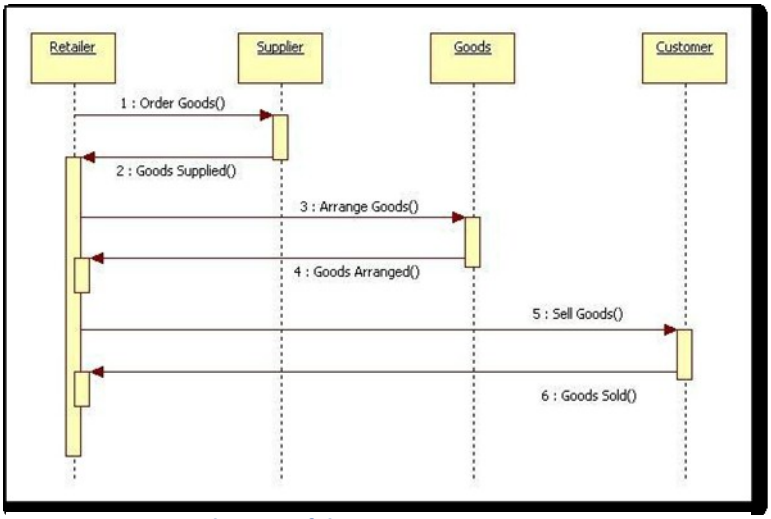

Figure 3 : Sequence diagram of the system.

order is received by the vendor after requesting it by the customer and the delivery is done to the customer.

IV.EXPECTED RESULTS

In this project we are getting following results-

1. Order receiving and delivery as soon as possible.
2. High quality products delivery.
3. Benefits for the local vendors.
4. Easy UI for both customers and vendors.
5. Smooth working of the website and the app.
6. Proper cloud service provision.

IV. CONCLUSION

In this paper we are proposing an idea to create such a Retail Management Framework which will be a pure platform that will be used locally and will benefit the local vendors and give the ease of operation for both customers and the vendors by not getting into logistics and payment related transactions. We also propose to give a local platform to the vendors to come and setup their shop on our website according to their own liking.

V. FUTURE SCOPE

- The local vendors will be benefited.
- There won't be the decline of the local vendors due to the use of this framework.
- The website can be expanded to all the areas.
- The location based searching system will be so useful for people visiting a particular place for the first time.
- It will exclude the local language constraints.

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