

# Cloud Computing Expose for Online Retail Management System

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**Abstract** – In the complex world of today, the consumer is king and retailers are keener on consumer satisfaction. Considering the busy lifestyles of today's consumers, the retailers also provide services apart from products. Retailing occupies a very important place in the economics of any country. It is the final stage of distribution of product or service. It not only contributes to country's GDP but also empowers a large number of people by providing employment. The life pace becomes faster and faster, people are less likely to spend time and energy on doing hard work. The core of such systems is to make work easier for both vendors and customers. 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. Online Retail Management which is user friendly and beneficial for the customers. It gave full freedom for the shopkeepers to set up their shops. It used the latest offerings on Open Source platform and Cloud Computing to deliver the final product. As Cloud Computing is implemented the main objective or goal of cloud computing is to reduce the infrastructure cost burden from the organizations. In addition to this, it offers organizations better performance, security and less maintenance cost.

**Index Terms** – Cloud computing, economics, infrastructure, open source platform, retail, security.

## 1. INTRODUCTION

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, Complaints Management, Security, etc. integrated to deliver a complete retail experience to

customers. Each of these is an entire application. It 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. They used the latest offerings on Open Source platform and Cloud Computing to deliver the final product.

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.

Cloud computing remains the focusing area since past few years. Cloud computing is basically a network (internet) based innovative model and is referred as platforms, infrastructure and software sold as a service. The main objective or goal of cloud computing is to reduce the infrastructure cost burden from the organizations. In addition to this, it offers organizations better performance, security and less maintenance cost. Cloud computing is being promoted by many of the large companies. In cloud computing a program or application can be run on many computers. Cloud has become the essential necessity to survive in the market, that's the reason for most of the companies to move towards the cloud. 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. But the different shops have their different systems. As per customer satisfaction such local systems are unable to fulfill customers demand so the different retail management framework is introduced. Online Retailing is undoubtedly one of the most frequent and necessary works of every person. However, as the life pace becomes faster and faster, people are less likely to spend time and energy on doing it with personally visiting different shops. Moreover, people can use not only computers but also various types of handheld devices, e.g., PDAs, smart phones and tablets, to surf websites so as to do their shopping easily as information technology advances recently. As a result, shopping different things online

becomes more and more popular. Under such circumstance, how to make online purchasing quick and efficient becomes a vital issue in e-commerce to fulfill the demands of the customer.

So considering all the things above a new methodology is developed in which a platform provided for different retailers as well as different customer considering different things like desire of every retailer & customer also the satisfaction. There is also some related work about this schema is introduced in this paper that the online retail management system, the cloud security, and also the data integrity is implemented.

## 2. RELATED WORK

In Today's, individuals are utilizing web as one of the fundamental need. Online is the new enormous thing. Everything from a little stick to huge home furniture things are accessible online for the exchange. Purchasing things online is advantageous in such a large number of ways. As a matter of first importance it spares time, it is helpful. The Web based business is likewise have certain advantages that speedier purchasing/offering system, and also simple to discover items. More reach to clients, there is no hypothetical geographic confinements. Low operational expenses and better nature of administrations. In paper [1] an audit of the articles and business reports identified with buyers' shopping for food basic leadership handle, in both disconnected and online retail channels. The goal was to obtain a general review of shopping for food, in what relates to this exposition and consequent research questions, and in that capacity the attention depends for the most part on the decisional stage and affecting pre-decisional period of the basic need customer basic leadership handle. In light of the result of the writing survey played out, a reasonable structure that guided the outline and execution of the experimental reviews, going for giving responses to the proposed look into inquiries, is additionally displayed. In paper [2] a prospect about online shopping for food is demonstrated where we can see that it has turned out to be increasingly well known as of late. To encourage the buy procedure, numerous online stores give a shopping suggestion framework to their purchasers. In this way, the bland suggestion frameworks for the most part consider inclinations of a customer in light of his/her buy histories. All things considered, it is noticed that there is nothing to do with the correct planning to buy an item from the view purpose of item recharging or monetary acquiring. Consequently, we build up another suggestion scheme particularly for online shopping for food by consolidating two extra contemplations, i.e., item renewal and item advancement. We trust that such another plan ought to have the capacity to give a superior suggestion list which fit buyer goals, needs, and spending contemplations lastly support exchanges however there is just a proposal system is appeared with the single servers yet rather than this cloud computing innovation is more. In paper [3] Cloud Computing is an as of

late developed model which is getting to be distinctly famous among all endeavors. It includes the idea of on request benefits which implies utilizing the cloud assets on request and we can scale the assets according to request. Cloud computing without a doubt gives unending advantages and is a practical model. The significant worry in this model is Security in cloud.

In paper [4] data authentication, data integrity, querying and outsourcing the encrypted data. The risks can arise at operational trust modes, resource sharing, new attack strategies. New attack strategies like Virtual Machine Introspection (VMI) can be used at virtualization layer to process and alter the data. In paper [5] both data and software are fully not contained on the user's computer; Data Security concerns arising because both user data and program are residing in Provider Premises. Data security model for cloud computing was used. A new data security model based on studying of cloud computing architecture is used. It implements software to select the suitable and the highest security encryption algorithm. In paper [6] some of the notable challenges associated with cloud Storage. The challenges are Security, Privacy and Lack of Standards which slow down services in the cloud. It defines some privacy and security-related issues that are believed to have long-term significance for cloud storage. In paper [7] Cloud have an association display, like Open private and Half and half, and we are the consideration on Mixture disseminated computing for appropriating load in different system, for passing on load it required weight equality structure, In this paper we fuse best model of weight leveling structure related to hybrid cloud. Stack altering in the conveyed computing environment essentially influences the execution. Incredible weight conforming makes circulated computing more capable and upgrades customer satisfaction. In light of the cloud allocating thought with a change instrument to pick assorted strategies for different conditions.

## 3. PROPOSED SYSTEM

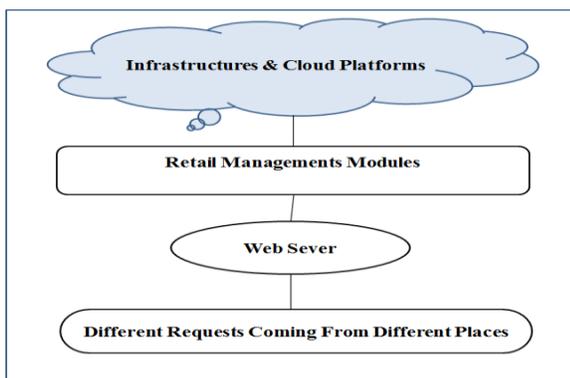
In the proposed system shopkeeper and customer directly interact with each other without the middle man. Shopkeeper have full authorized to set their shops details, order new products, update products and so on. In these system shopkeeper load of managing products are reduced. Customer need not go to the shop for buying the products. He can order the product he wish to buy through the application. If customer new in particular area that times its saved his/her time for searching different products through this application. Customer identifies same product costs in different shops and according to customer requirement customer purchased the product and saved his/her time period. Since all data are stored in cloud so there were best security of data and no worries of any disaster.

The Successful Retailing is nothing but to fulfill the customers demand that what they want. Every customer wants his product with the good quality, lowest possible prices with a pleasant

experience. There are different points regarding with the traditional retailing like shortage of goods and items in the stores that are not available at a particular time for their customer. Another problem is needed to call distributors to find the product is available or not. The customers also wait for to check availability and product. As customer placed order sometimes the order may receive late. So to overcome such problem we proposed a new system in which a framework is designed using cloud computing technology. Cloud computing is a type of Internet-based computing that provides shared computer processing resources and data to computers and other devices on demand.. The main idea for this paper is to give such a platform for the vendor where they can put up their shops and 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. Every shops data is store is deployed on to the cloud while the shopkeeper have made continues observation on their data. If item is in the stock then then it will shows the warning to place order. Different orders are placed by different customers so it also plans for the fast delivery of the item. It will also help to recover from the shortfalls.

The whole data is store on to the cloud so maintenance and security also plays an important role while building it. Instead of traditional databases cloud store all shops into their own account. It will also help to inform sellers regularly for goods and items availability. Seller does not need to put attention in shortfall items system will do automatically. Data store on cloud in encrypted manner so only seller and CSP will decode data and observed it. The system design is shown in the figure which includes different modules like Job requesting, load manager, different retail management modules and the cloud architecture. Several jobs are requesting from different users situated at different locations, the load manager or web server manager is implemented to balances the system and provide gateway to the users. As per users request the retail management modules are located and request forwarded in cloud environment, the desired data is fetched and the respond will be generated.

#### 4. SYSTEM ARCHITECTURE AND DESIGN



#### 5. CONCLUSION

In this paper we are proposing an idea to generate a cloud based Retail Management Framework that will be used globally as well as locally. It helps to local vendors and gives the ease of operation for both shopkeeper and the customers by not SEC getting into logistics and payment related transactions. Today's data are very essential things so in this paper we are proposing reliable data accessing over cloud architecture and provide data filtering techniques over cloud in the future. We propose to give a local platform to the shopkeeper to come and setup their shop on our website according to their own liking and this website also useful for customers. They can easily search the product which they want to be.

#### REFERENCES

- [1] R. Venkatesan and V. Kumar, "A Customer Lifetime Value Framework for Customer Selection and Resource Allocation Strategy," *Journal of Marketing*, 68(4):106-125, October 2004.
- [2] SaakshiNarula ,Arushi Jain , Ms. Prachi,"Cloud Computing securities: Amazon Web Services" in 2015 Fifth International Conference on Advanced Computing & Communication Technologies.
- [3] Mr. Jagdish R. Yadav, Mr. Rajkumar R. Yadav, Mr. Rahul R. Papalkar," A Load Balancing System Based on Cloud Partitioning for the Hybrid Public Cloud" in *International Journal on Recent and Innovation Trends in Computing and Communication*.
- [4] Brian Hay, Kara Nance, Matt Bishop, "Storm Clouds Rising: Security Challenges for IaaS Cloud Computing" *Proceedings of the 44th Hawaii International Conference on System Sciences*, pp.1-7, 2011.
- [5] Mladen A. Vouk, "Cloud Computing- Issues, Research and Implementations" *Journal of Computing and Information Technology – CIT* 16, 4, pp 235-246, 2008.
- [6] John Harauz, Lori M. Kaufman, Bruce Potter. *Data Security in the World of Cloud Computing*. IEEE July/August 2009.
- [7] Puneet Jai Kaur, SakshiKaushal, "Security Concerns in Cloud Computing", *Communication in Computer and Information Science* Volume 169, pp.103-112, 2011.
- [8] Somerville, J. Stuart, L.J. ; Barlow N. "Easy Grocery: 3D Visualization in e-Grocery", Published in: *Information Visualization, 2006. IV 2006. Tenth International Conference on* 10.1109/IV.2006.47 , Publisher: IEEE , DOI: 10.1109/IV.2006.
- [9] Qi Zhang, Lu Cheng, RaoufBoutaba. *Cloud Computing: State-of-the-art and research challenges*. J Internet ServAppl (2010).
- [10] Rabi Prasad Padhy, ManasRanjanPatra, Suresh Chandra Satyapathy. *Cloud Computing: Security Issues and Research Challenges*. IJCSITS Vol. 1, No. 2, December 2011.