SMS Based Shop Recommendation Using Distributed Computing

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Abstract: In this paper we are discussing about Shop Recommendation Using Mobile Technology, which helps user to find compatible shop with its nearby location along with its requirements. With the help of mobile SMS customer gets shops along with its user rating. In other approach calling, internet, and marketing is necessary for gathering information about shop in particular area. The most of methodology for SMS based Shop Recommendation are suffering from performance issues like Time and Space complexity. This paper tries to analyze most of the important prior work of SMS Based Shop Recommendation & try to find a new way which performs better than old system in one or two parameters.

Keywords: Distributed Computing, SMS Engine, Web Services, Web Crawler.

1. Introduction:

Distributed Computing is a having many computers who are located around the world & connected to common network to communicate with each other through message passing to achieve common goal.

Today SMS Based service is very easy to understand and to work with it. In IT sector almost all companies are using the Distributed System for working. Today SMS based service is very cheaper than DATA Packs by Service providers in India. For shopping online through apps in smart phones takes valuable space in memory. This online shopping apps also need large processing power due to its large size.

As India is fastest growing economy in the world. In India there are about 15 million retailer stores are registered and Retailer Industry contribute for about 10% of India’s GDP. Retailer market in India will cross about US $600 Billion market value up to 2020.

2. Existing System:

In previous system, for shopping online many users are using apps in their smart phones but this apps taking valuable storage and processing power in smart phones. So for many online shopping companies are making apps for users, due to that users install many shopping apps for various online shopping companies. This various apps take large storage in smart phones. Smart phone having limited storage so here storage problem occurs.

In every online shopping company there may be 1000+ various brands are doing business but in India there are 15 million retailer are doing business. This retailers are having loss in their business because of online shopping. Users are attacking towards online shopping it’s a good thing but also consider the local retailer at the same time.

3. Proposed System

![Figure 1. System Architecture.](image)

In above figure 1. User send only his location (name of area) and keyword or item which user want to buy its nearby. After receiving SMS from user SMS engine send this data to distributed server. In distributed server it processes that data using web crawler. Web crawler is a data mining technique from which it can read the whole website to search particular content or item. These website data are stored on third party Host server and from there distributed server fetches that data and send the
require data to SMS engine. Then SMS engine convert that data into SMS in 160 character format and send to User.

This will also fulfill the requirement of Digital platform to local retailer in their particular area to grow their business also.

4. Literature survey

1) Intellectual Scaling in a Distributed Cloud Application Architecture: a Message Classification Algorithm.

In distributed system many kind of data types, format, topic, and content of message are available. In existing service systems focused was on Message exchange not on the message Sent. So here more advance approach required. In this, it uses the local training algorithm allowing to classify messages which are sent through the same protocol with various contents and do not correspond to pre-set format.

2) A Fuzzy Content Matching Based E-commerce Recommendation Approach.

E-commerce website having data in tree structured format contains product information with its attributes. In this paper it using fuzzy content matching based recommendation approach to assist e-commerce users to select their items. In this it converts tree structured information in set of descriptors and user rating are convert fuzzy rating using fuzzy number operations. Then it uses fuzzy Topsis ranking method is proposed to rank all candidates item according to fuzzy match degree and highest ranked items are recommended to target users.

3) A comment on “A Similarity Measure for text Classification and clustering”.

A Similarity measure for text processing (SMTP) is proposed by Lin.et al. for knowledge Discovery on text collection. It has three cases similarity measurement between pair of documents. These cases uses absence and presence of features appearing in pairs of documents. The first case covers features appearing in both of documents, Second case covers the feature appearing in one document, Third case covers feature appearing none of documents. But in this it is not considering similar documents and this gap is overcome in this paper.

4) Infrastructure assisted Geo-Fencing: Proactive Location Based Service with Thin Mobile Clients and Smart Servers.

Today smart phone are so popular and using by almost all users. A Smart phones having applications that provides location specific information to users if ask by users. A few amount of users are using geo-notifications when they enter or left particular dedicated zone. So to provide location based services a Geo-Fencing technology is used. It is executed on smart phones. In this it introduce the infrastructure for installing Geo-Fencing and user will get geo-notification by provide its mobile location in dedicated zones.

5) Connecting Social Media to E-Commerce: Cold Start Product Recommendation Using Microblogging Information.

In recent year, the boundaries between E-Commerce and Social Networking have become increasingly unclear. Lots of E-Commerce Websites support the structure of social login where user can log in using his Social Networking identities such as Facebook or Twitter accounts. User can also post their newly purchased product with links to e-commerce product web pages. In this they purposed a different solution for cross site cold start product recommendation, which gives importance to recommend products to users at social networking sites in “cold start situation”. In this, a major issues is to How to rank the knowledge extracted from social networking sites for cross site cold start recommendation. In this they propose to use linked users across the social networking sites and E-commerce websites.


In this, investigates how Retail business may promote their products online to move offline sales via social media online to Offline Commerce. In that they focus on country context where such an rising e-commerce model is particularly common, i.e., china. Key to leveraging this model is to attract consumer attention and stimulate their actions both online to offline, which can be achieve through Information Technology (IT)- enabled promotional approaches, such as administering banner advert and digital coupons. The earlier focus on communicating product attribute information and recent focus on communicating incentives. In this they also conduct a survey on china’s largest social media website for restaurant review and conduct a field investigation on consumer approaches of two promotional approaches. They provide digital advertising platform.
7) The Crawling Hidden objects with KNN Queries.

Lots of Websites offering Location Based Services (LBS) provide KNN Search interface that gives Top K-Nearer Neighbor objects for your given location. In this they overcome the problem of crawling all objects smoothly from an LBS website, through the public K-NN web search interface it provides. They produce the crawling algorithm for 2D and higher dimensions spaces respectively and determine through theoretical analysis that is above the their algorithms can be articulated by a functions of the number of dimensions and number of crawled objects, coarse of basic distribution of objects.

5. Conclusion

Proposed system successfully receives user requirement through SMS which is a mobile App free system. This SMS is properly scrutinized using preprocessing and feature extraction techniques of Fuzzy logic. Then by the combination of content based recommendation and hybrid recommendation system provides an accurate recommended e-commerce site for customer further process.

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