Published by :
http://www.ijert.org

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
Vol. 5 Issue 03, March-2016

Location based Product Recommendation on Online Social Network

Prema P
Assistant professor
Department of Computer Science and Engineering
Dhanalakshmi College of Engineering
Chennai, Tamil Nadu - India.

Subaasri J,
Vaishnavi B,
Department of Computer Science and Engineeering
Dhanalakshmi College of Engineering
Chennai, Tamil Nadu - India.

***Abstract* - Online Social Networking is biggest user network, to built social relationship among different interested peoples around the world. So many of the producers (online product sellers) may create an account on online social network and then post their products into all the users walls, who are all in social network, for improving their revenue. But most of the producers have lot of sub-branches, then posting products for selling process does not considering locations of branch, location of products higher selling area and so on. In this system different location's products are posted to difference locations of users. In This way there is a chance to get unused / not suitable products for particular locations users. Also this system there is no considerations for account expiration notification and if we want to post a images then we should have it for posting. To overcome these drawbacks, propose a new system. In proposed system whenever producers post their products then, this system collects same location's / regions users and post it all of these users and also collect their rating of users on that location / region. Based on higher rating, products are recommended to same region / location users. If any account expiration is occur then find it before and then send an email to that particular user with the content of avoiding account expiration and also created a way to post visuals directly from website using urls.**

I. INTRODUCTION

Social networking is biggest user's network, to build social relationship among different interested peoples around the world. The objective of this project is to improve profitability of particular products in urban places through social network. Here recommendation is main process for improving customer's satisfaction. This process recommends products with higher rating prediction on particular location by using preference of all other users within that location. In the existing system only the social relationship among the users and highest rating prediction only considered for product recommendation.

II. RELATED WORK

A.Collaborative Filtering

In collaborative filtering we have two methods: memory based and model based to predict the similarity between the users for better product recommendation. In model based recommendation we have clustering of different users with same preference so that recommendation can be made much easier. But the social union does not consider about the location of users for providing services. Generally it can be said that in this method recommendation of product is based on highest rating prediction.

B.Affiliation Recommendation

In this paper, recommendation is based on relationship between users and communities on social network. In this there are two ways of modelling the network:1. graph proximity viewpoint 2. Interaction of users and groups in two networks.

III. EXISTING SYSTEM

In this existing system all products are recommended to all users even-though, he/she are in different geographical locations. Particularly in urban places, this type of online shopping is more time consuming process and also there is no trustful services. Also there is no specialized remainder for account expiration. Also there are no specialized remainders for account expiration. If he/she want to post visuals from websites then it is not possible. Algorithm used in existing system: Social union algorithm which is comprised of user-item bipartite graph and user social graph.

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
Vol. 5 Issue 03, March-2016

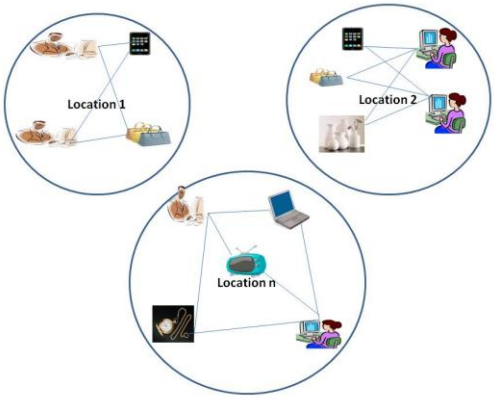

Fig.1.1.Relationship between user and items on different location.

IV. PROPOSED SYSTEM

To overcome the disadvantages in the existing system, we have proposed a recommendation system which consists of some steps and then prefer some products to the users based on the highest rating on the specified location. In addition with that existing system sends expiration mail to particular user to increase lifetime of he/she account in social network. Website based visual posting is also created for easier for posting visuals.

V. EXPERIMENTAL WORK

A. Authentication and adding product

Initially all the Product Owners and user will register in this websites with own details like user name, password, Address, E-Mail ID and also with user type like normal users, product owner. After registration if Product owner to access their panel then enter correct user name / e-mail id and password it will allows to go to inside the websites or else user name or password alert will come. Admin will enter correct user name and password it will allows to goto Admin home the websites. If user name and password is incorrect then it will not allow to access their panel.

After login, Product owners are add their own products for improve their business. If any updation in product details then also product owner update it. Sometimes offer for each products is required. For that time product owner will create offers for every own products and also post it into this social network

B. Graph Generation and matrix creation

There are three graph generations in our system. First we Generate user-item bipartite graph for identifying the relationship between users and particular products with higher rating. Secondly, Generating user-user graph for identifying the relationship between one user with another users with the help of modified-friends TNS algorithm. Finally generate user-location relationship for identifying relationship between location of users and locations of products based on address details.

After generation of user-item bipartite graph, user-user graph and user-location graph, the matrix is generated for each graph individually. This matrix is fully arranged by using modified-fastfloyd algorithm. This algorithm provide better matrix, compared to other matrix generation algorithm.

C. Recommendation and expiration notification

Users login for access their own panel, at this time based on the previous modules output will recommend products to all users with the consideration of each and every users and products geographical locations. Here all products ratings are also calculated based on location, user and item details.

To monitor product owners as well as users of this site login and logout information. Based on these details to calculate and remove account from this site expiry date for better service providing for all other users. Before Removing the particular account, it is needed to send notification mail about expiration of his/her account.

D. Events in circle and Post Visuals

Each and every user has a permission to add events of particular location of network with the following details: Event name, exact place and time. Those details are stored into database. These events are also notified to every users within that specified location. User of social network will exchange the visual like photos, videos and other things. Here users also provide like and commands for those visuals as the feedback.

VI. CONCLUSION

In this paper, we present a most efficient way of recommendation of products to variety of users on social network based on location. In the proposed scheme, we use spatial social union algorithm which is used for predicting user-user similarity, user-item similarity, and user-location similarity for providing better services. This algorithm is more effective and efficient in rating prediction and recommendation of items in different geographical location.

REFERENCES

[1] P. Symeonidis, E. Tiakas, Y. Manolopoulos : Product Recommendation And Rating Prediction based on Multi-modal Social Networks, *In Proc. ACM RecSys'11*, 2011.

[2] C. Gentile, S. Li and G. Zappella : Online Clustering of Bandits. *In the Journal of Machine Learning Research (JMLR), Workshop and Conference Proceedings, Vol. 32, Proc. of ICML 2014*

[3] L. Siksnys, J. Thomsen, S. Saltenis, and M. L. Yiu. Private and Flexible Proximity Detection In Mobile Social Networks. *In Proc. of MDM'10*, pages 75–84, 2010.

[4] V. Vasuki, N. Natarajan, Z. Lu, and I. Dhillon. Affiliation RecommendationUsing Auxiliary Networks. *In Proc. of ACM RecSys*, pages 103–110, 2010.

[5] H. Ma, M. R. Lyu, I. King. Learning to Recommend with Trust an Distrust Relationships. *In Proc. of ACM RecSys*, pages 189–196, 2009.