**M S Ramaiah Institute of Technology**

(An Autonomous Institute, Affiliated to VTU)

MSR nagar, MSRIT post, Bangalore-54

A Literature Survey on

**AN APPLICATION FOR CONSUMER-TO-CONSUMER TRADING**

Under the guidance of

Mrs. Chandrika Prasad

(Asst. Professor, CSE)

Submitted by

Lakshmishree C 1MS12CS050

Niharika W M 1MS12CS065

Raghav Chawla 1MS12CS079

Rohit Sudhakar Shetty 1MS12CS091

*In partial fulfillment for the award of the degree of*

# *Bachelor of Engineering in Computer Science & Engineering*



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**M.S. RAMAIAH INSTITUTE OF TECHNOLOGY**

**(Autonomous Institute, Affiliated to VTU)**

**BANGALORE-560054**

[www.msrit.edu](http://www.msrit.edu), **May 2016**

**INTRODUCTION**

The rapid development of information technology has facilitated an elegant trading environment in the Internet. There are many trading platforms nowadays, but there is no good platform designed for direct consumer-to-consumer trading primarily for university students and people for local trading, to sell their goods and services directly through the website from which they were bought. Such a need arises in a social network where items should be traded or exchanged easily with a small community. this platform provides a connection between the seller and buyer to complete the transaction. The platform is targeted for direct consumer-to-consumer trading among university students. The items for trading include books, household items, electronics, housing rental, sports equipment, etc. In addition, this web application also has features of a recommender system. That is, the trading system would also have the intelligence of recommending items or products to a potential buyer given his previous purchase patterns. Data mining techniques is used for the buyer who gets to see similar products to which he is looking for and even the recently viewed items.

**MAIN BODY**

This system would mainly be like a direct consumer-to-consumer trading system which means that the buyer and seller will deal with directly between themselves then having a mediator in between them trying to make some money by being the middle person. This is just a platform for the buyer and seller for direct trading business. All the available platforms are on a wider network and buying and selling products on these systems is a pain as the products are at a far off place and to get the product and check it out before buying it is a pain as u would have to travel a lot to check it out or ask the seller to travel which would be a problem for the seller also. When it’s in a smaller area, meeting the seller in the neighborhood is really easy to check out his product personally then to check it out with just images uploaded on the website. This platform is for the user to buy and sell the products on the same platform.

A recommending system is always a part of a trading system. Every trading system which comes up in the internet has a recommendation feature which would suggest the user to buy more and more products. In the paper titled *“Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions”* [4] the authors present an overview of the field of recommender systems and describes the current generation of recommendation methods that are usually classified into the following three main categories: content-based, collaborative, and hybrid recommendation approaches. This paper also describes various limitations of current recommendation methods. The reason for the use of these is that it produces very effective results. The system available before does recommend products to the buyers but it would recommend random products available on the website. This recommendation system might not be as useful as the products recommended are random and might not be the best product available on the website.

Web Mining is an application of Data Mining techniques which deals with the retrieving knowledge from the Web data. Web Content Mining focusing on the information available in Web pages in the form of text, images and multimedia contents. Web Structure Mining focusing on the structure of Web sites that is inter and intra hyperlinks present in the Web pages. Web Usage Mining or Web Log Mining deals with the extracting knowledge from server log files; Data source for Web usage mining mainly consist of logs that are generated when users access Web servers, which is represented in the form of standard formats. Caching Web objects at locations close to the user has been accepted as one of the solutions to Web server bottlenecks which reduce traffic over the internet and improve the scalability of the system. Caches act as intermediate systems that interrupt the user requests before they arrive at the remote server. A Web cache checks if the requested object is available in its local cache, if it’s available then cached page is sent back to the user; otherwise the cache redirect the request to the origin server. When the cache receives requested object it store it in local cache and forwards back the results to the user. The copies kept in the cache are used for subsequent users’ requests.

There are a few articles also which some people around the world have written describing the main use of data mining techniques and its use in e-commerce systems. They are:

* “*Study on web mining and electronic commerce”*,[1] by Mingshu Ren, of Shandong University of Science and Technology, Shandong, explored that Though the existing data mining systems have advantages of their own, yet they are not so perfect enough concerning the intelligence respect, and still need to be perfected. An Agent in the field of artificial intelligence has high quality of intelligence. The combination of the Agent and data mining system can realize the whole intellectuality of mining process.
* *“Data mining concept and technology*”,[2] by Jiawei Han, Micheline Kamber, of China Machine Press, Beijing, explained various definitions and concepts related with data mining. Data mining tools can sweep through databases and identify previously hidden patterns in one step. Data mining tools can also automate the process of finding predictive information in large databases. Questions that traditionally required extensive hands-on analysis can now be answered directly from the data — quickly.
* *“Mobile Agent-based Web Data Mining Under the Circumstance of E-commerce”,* [3] by Yezheng Liu, Yafei Li, Shanlin Yang, It is well known that over 80% of the time required to carry out any real world data mining project is usually spent on data preprocessing. Data preprocessing lays the groundwork for data mining. Before the discovery of useful information/knowledge, the target data set must be properly prepared. But it is unfortunately ignored by most researchers on data mining due to its perceived difficulty. The proposed approach is based on a unified data model derived from analysis of the characteristics of the customer survey data. The unified data model is used as a standard representation for the incoming data so that it can be mined. It not only provides flexibility for data preprocessing but also reduce complexity and difficulty of preparation for mining customer survey data.

**CONCLUSION**

The System we have proposed does make a lot of difference for the buyers and sellers of a smaller society than the larger society. This helps the buyer to buy the products easily and immediately. There won’t be much of time taken for delivery of the product because the seller who is selling the product is located in the neighbourhood. Since now-a-days almost everyone is connected to the internet 24/7 so this website will run good as everyone will be able to access it easily and since it be a user-friendly website it would be very easy to use for the customers either for buying or selling purposes. Even the new recommendation system used in the website suggests products based on three categories and even is quicker in terms of giving the results on the website. The data mining techniques is used in such a way so as to get the recommendation system working fine and to get effective results. This would help the user to comfortably to use the system and gives better results.

**REFERENCES**

1. The article *“Mobile Agent-based Web Data Mining Under the Circumstance of E-commerce”,* by Yezheng Liu, Yafei Li, Shanlin Yang.
2. The article *“Data mining concept and technology*”, by Jiawei Han, Micheline Kamber, of China Machine Press, Beijing
3. The article “*Study on web mining and electronic commerce”*, by Mingshu Ren, of Shandong University of Science and Technology, Shandong
4. In the paper titled *“Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions” by* G. Adomavicius and A. Tuzhilin   
   Carlson School of Management, Minnesota University, Minneapolis, MN, USA.
5. <http://study.com/academy/lesson/consumer-to-consumer-c2c-e-commerce-definition-business-model-examples.html>
6. <https://en.wikipedia.org/wiki/Customer_to_customer>
7. <http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7057888&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel7%2F7051394%2F7057846%2F07057888.pdf%3Farnumber%3D7057888>
8. <http://www.investopedia.com/terms/c/ctoc.asp>