Literature Review

J Ben Schafer, Joseph Konstan, John Riedl (1999)

The paper discussed the recommender system for e-commerce system, many of the largest commerce web sites are already using recommender system to help their customers find product and purchase the author focuses on how recommender system help E-commerce sites increase sales, and analyze few sites which uses recommender system, The author compare few e-commerce site and how they are using recommender system, Recommender systems used by e-commerce sites to suggest the products to their customers, the products can be recommended based on certain criteria like overall rating, based on analysis of the past behavior of buying customers which gives idea and prediction for future buying probability of the customers. According to the author these techniques are part of personalization for each customer, recommender system automate the personalization for each customer. Paper discuss the few recommender system examples like Amazon.com, Eyes, Amazon.com Delivers, Book Matcher, Customer Comments, CDNOW, MyCDNOW, eBay, Levis, Moviefinder.com, Reel.com, MovieMap all the above recommender system discuss in brief and provide a summary in tabular format after that recommendation taxonomy is discussed by the author. The paper provides e-commerce opportunities for recommender system.

Suhail Ansari, Ron Kohavi, Liew Mason, Zijian (2000)

E-commerce domain can provide all the right ingredients for successful data mining, the author describe an integrated architecture based on experience, the architecture reduce the preprocessing, cleaning and data understanding effort which takes 80% of the time in knowledge discovery, the author emphasize the need for data collection at application server layer rather than web server in order to support logging of data and metadata which is required for discovering process in the
system, author provide multiple view of data through reporting, data mining algorithms, visualization and OLAP and conclude the paper with set of challenges.

Avraham Leff, James T. RayField (IBM) (2001)

The model view controller design pattern is very useful while considering the architecture of any software system, the MVC design pattern is partition independent and provide loose coupling amongst various module in the system and it is expressed in term of an interactive application running in a single address space therefore applying model view controller design pattern on web application is complicated. The paper introduces the concept of flexible web application partitioning a programming model and implementation infrastructure that gives developer a power to build partition independent software, author focuses on MVC effective design pattern in a architecture of software system, the key idea is to separate user interface from underlying data and other module. The author focuses on how MVC is better architecture design pattern particularly in web applications, the author also discussed how partitioning can be done in web application using MVC design pattern.

Zan Huang, Wingyan Chung and Hsinchun Chen (2004)

In this paper author developed a graph model that provides generic data representation and can support different recommendation methods, author proposed three recommendation methods; direct retrieval, associated mining and high degree association retrieval for that data set of on line book store is considered evaluation results showed that combining product content information and historical customer transactional information achieved more accurate prediction and more relevant recommendation as compare to using traditional approach Collaborative information however comparisons among different methods shown that high degree association retrieval did not performed significantly better than association mining method. The paper discus the overloaded information on the internet and discuss the challenge of recommendation system and also discuss
how recommendation system beneficial to the various e-commerce system to prove a point
amazon.com is discussed, the author proposed graph model to capture various e-commerce
information and then analysis is done and various technique is applied for recommendation,


The paper discuss reengineering framework whose target system is an architecture based MVC design
pattern and Java 2 Enterprise Edition J2EE. The paper proposed a framework which is mainly concern
with decomposition of legacy web application by identifying software component to be transformed into
Java Objects such as Java Beans, Java Server Pages and Java Servlet. The paper focuses on legacy web
application need to be transformed into highly scalable, secure and maintainable environment the J2EE
based MVC architecture pattern is suggested by author. Modern web systems refer to the software
system that are focus on multitier architecture and supported by open standard and new technologies,
J2EE widely used and accepted technology for design, development and deployment of web enable
application in the enterprise scenario. The paper focus on transforming framework, and aim to adopting
existing web application into newly design based framework like MVC and J2EE.

Liu Xinging, wang peizhi (2008)

The paper discussed data mining technology with respect to its applications in electronic commerce,
paper shows survey of data mining and application of data mining in e-commerce is discussed. As data
collection and data storage rates are growing at a rapid rate as a result of this data mining becoming a
key component of electronic commerce, the trends shows that future decision making will improve in
the future. Paper describe overview of data mining and methods of data mining algorithms i.e.
Characterization, Discrimination, Association rules, classification, Prediction, Clustering, Outlier analysis,
Evaluation and deviation analysis virtualization methods are discussed in brief. The paper concludes with
the discussion of utilization of data mining in electronic commerce.
Yanfang Wang, Chunyan Guo, Lei Song (2009)

The sun micro system now Oracle Corporation J2EE model and technology, and with MVC pattern, are discussed in this paper. MVC framework is discussed using J2EE terminology for a typical e-commerce system, the author proposed four-tier architecture over traditional three-tier web-based architecture for e-commerce systems. The main benefit of J2EE is discussed as it is highly scalable, reliable and secure. The MVC approach is divided as Controller is servlet, View is Java Server Pages (JSP) and Model is Java Bean and Enterprise Java Bean, comparing to three-tier architecture based on J2EE and using principal of MVC pattern, author discuss the separation between persistence logic, business logic and presentation logic according to author using MVC provides better design to the e-commerce system.

Kanwar Singh D, Dr Himanshu Arrarwal (2009)

The paper presents various standard and technologies for mobile e-commerce it also compares J2ME Java 2 Micro Edition with other technologies in the field of mobile application development and author focus on various issues on that, the detailed mobile commerce standard is discussed which is very useful for planning any algorithm related to the field of mobile e-commerce development, the BREW and other technology compared in this scenario.

Guo Chunyan, ZHU Kong-lai, MA Zong-geo (2010)

The J2EE architecture and the development method based on J2EE is discussed, the author emphasized on MVC pattern for B2B i.e. Business to Business e-commerce system the requirement analysis of B2B is focused and four-layer architecture with Enterprise Java Bean EJB component-based development is proposed, the combination of J2EE and MVC is studied and model proposed as Controller as Servlet,
View as Java Server Pages and Model as Java Beans and Enterprise java Bean the MVC pattern build the web application framework is shown in the paper. The author designed and developed component in the multilayer structure based system with MVC mixture which ensures the scalability and maintainability of the overall system, the model part focus on EJB component based development.

Zhiwu Liu, Li Wand (2010)

The paper mainly introduces the concept and classification of web mining and discussed e-commerce web mining process and methods, the web mining in e-commerce and role in application of e-commerce is discussed. Data mining in e-commerce is the web mining which is use to automatically discover and extract interesting and useful pattern and implicit information from www resources, web documents and web service. Web information different that traditionally data warehouse in it act different than knowledge discovery process.


The paper discuss basic MVC design pattern and suggested MVC can be applied to e-commerce system developed under java EE (Java Enterprise Edition) platform. The first goal is to evaluate the improvement in design pattern and another goal of the paper is to assess the influence of design patterns on the maintainability of the e-commerce application. The author discuss the Java EE platform and technologies based on Java EE development and then MVC discuss with e-commerce perspective, As modern e-commerce applications becoming very complex and need lower maintenance cost the authors suggested the solution on that would be to develop the application so that it can be easy to change or extend in the future. The design pattern are one of the approach for solving problem from the programmer’s point of view a design pattern comprises a set of specific interactions that can be applied in common object to solve a known problem. The paper describes the implementation of specific design pattern Front Controller, Model View Controller, Transfer Object and Service to Worker in a typical E-commerce application. The main benefits describe as quantities by measuring the improvement in quality of source code after considering various aspect of implementation of each design pattern, the main aspect of the quality of code is its extensibility, which is the ability to change easily its behavior to accommodate the future requirements. The author considered the e-commerce system for electronic book store and using
Front Controller, Model View Controller, Transfer Object and Service to Worker, the quality of source code is evaluated using a set of metrics.

Belsare Satish, Patil Sunil (2012)

The author proposes and improves the use of some of the recent approaches, architectures and web mining techniques the main focus is to collect information about customer and utilizing the same information in data mining to extract meaningful information and provide services where data mining can be applied in e-commerce, clustering cloud be used to cluster similar click stream to determine learning behavior. The author also discuss wang and Laiane algorithm based on sequence alignment to measure similarity between web sessions.

The method used in the paper includes clustering algorithm, user profile algorithm which is based on latent usage information algorithm the cluster based user profiling algorithm for giant pattern mining and Recommendation algorithm is discussed. The result shows how web mining is applicable to improving the services provided by e-commerce and e-business.

Aditi Todi, Dr Rajashree Shettar (2012)

The paper discuss the development of an application for better product description to the e-commerce customer, the paper presented the idea to classification of growing data on the e-commerce, the classification is achieve using two algorithms i.e. Naïve based and DecisionTree which are supervised learning methods the comparison is done to achieve better result.

Guibing Gu, Mohamed Elgendi (2012)

The paper proposed a novel recommender system for e-commerce in virtual reality environments the system provides recommendation based on purchase rating along with post purchase rating , users
positive emotion’s are captured in the form of EEG (electroencephalogram) signals while with 3D interaction virtual product before purchase, repurchase rating calculated from averages relative power of the collected EEG signal, by using proper pre and post purchase rating user preference can be modeled more accurately. The paper compare the traditional Collaborative Filtering CF algorithm and discuss the limitations of the same, the EEG based mixture of virtual reality based e-commerce recommendation system is proposed by the author,

The Author shows the recommender system use using EEG and virtual reality methods according to the author, a number of gaming EEG handsets increases so why not take this technology in the e-commerce field, also author discussed pre purchase rating for recommendation in virtual reality rating environments.

Chunling Sun (2012)

The paper discuss the two uprising technologies i.e. cloud computing and e-commerce the paper analyze the current actuality of the application for enterprise e-commerce, and focus on main issues related to that, the paper put e-commerce characteristics with cloud framework. The paper compares cloud customers verses cloud services in the tabular form, and also discussed the influence of the cloud computing upon the E-commerce which come out with fact that cloud computing can provide good economical efficiency for the e-commerce application.

Ahmed About Elfetouh Saleh (2012)

The new framework proposed based on Cloud Computing for enhancing the E-commerce applications the new framework based on the cloud computing and solves the problem of enterprise e-commerce
development. The several feature of cloud computing is shown and the reason why cloud computing play important role in e-commerce is focused. The benefits of adopting the cloud in the enterprise e-commerce are discussed in detail and new framework based on the principal is proposed.

Yuan GUAN, Shimin CAI, Mingsheng SHANG (2013)

The paper describe the recommender system for e-commerce to help user filter out the overloaded of information. The paper discuss the Collaborative Filter (CF) system recommendation algorithm based on item quantity and user rating preferences. The author calculated the accuracy of the system in prediction as compare to traditional approaches the result shows by the author demonstrate the problem of rating prediction depends strongly on item quantity and user rating preference. The author shows a detailed study of CF Collaborative Filter algorithms and filter out the problems of CF approach and author suggested solution on that problem.

S.Kritika, M. Moorthi (2013)

The m-commerce and wireless communication technology is being use in e-commerce and give rise to mobile e-commerce, the author discuss to find the pattern for mobile users behaviors such as their locations and purchase transaction in mobile e-commerce in this paper service to the mobile commerce uses by applying weight frequent pattern and periodical pattern for prediction of purchase behavior of mobile user is taken, in this paper more efficient mobile commerce pattern mining algorithm is designed for similarity inference models and develop prediction strategies for future enhancement. The proposed
periodical pattern or temporal pattern finds more accurate for calculations of the time intervals for each item set.

P.Priyadharshini, N.Geethanjali, B. Dhivya (2013)

The paper proposed mining and predicting of mobile user’s commerce behaviors such as their movements and purchase transaction the new algorithm is proposed given name PMCP- Mine algorithm to overcome the problems of Collaborative Filtering Algorithm, the mobile commerce explorer framework has been implemented to make recommendation for stores and item. The proposed work is to recommended stores and items in new locations by considering the rating of items given by the other users in new locations. The new framework for mining and prediction of mobile user’s movement and transactions in mobile commerce environment.

Casar Astudillo, Matthew Baedeen and Narciso Cerpa (2014)

The author introduce data mining and e-commerce followed by a different data mining technique and proposed effort of support versus confidence in association rules technique applied to electronic commerce. Data mining process involves searching, selecting, exploring and modeling large amount of data to uncover previously unknown pattern that are potentially useful for e-commerce its goal is to manipulate data into knowledge. Pattern extraction is very useful process in data mining and refer to relationship between subset of data, the data mining technology is adoption is enormous in early 90’s credit and insurance companies began to use data mining for detecting fraud. Clustering or groping e-commerce customers with similar browsing behavior permit the identification of their common characteristics, which providing better understanding of customers with aim of given a more appropriate personalized service.
The different types of pattern to be mined is discussed which include classification, clustering, semi-supervised classification, Association Analysis, Regression analysis, Outlier Anomaly detection etc. Association rule and association analysis discussed in details.