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Enhanced Architecture Design for Social Media, E-Commerce and News Using Advanced Micro Blogging Information

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Abstract: To interconnecting three various servers like, social network, E-commerce application and news channels to develop an enhanced web application. Also enhanced micro blogging information has been implemented for efficient client server process. Three tier architecture has been used and also in added with three news servers are interconnected, So that the 3 their architecture ratio will be 1:1:3. The primary architecture will be the social network, in followed with ecommerce and news will be interconnected. Initially and as usual the user can sign up in the social network. While signing up in the social network, the user need provide all the personal and educational information for the user profile. After creating the social network account, the users may search for new friends and they may chat with the friends, the advanced micro blogging information considers only the public data and public chats. A micro data array will be created for the user. The micro array consists of the entire user's most important information only. Automatically the micro array details will send and search through the E-Commerce application. Here the artificial neural network will works as a third party agent and the agent will retrieves all the recommended products, as micro blogging information. A panel will be design in the social network for displaying the recommended product details. All the displayed products will be more relevant to the user's profile. The generated micro blogging information contains an alphanumerical characters like (A34#ULKNELRL*!). The micro blogging information has been generated using Artificial Neural Network (ANN) and Advanced text categorization. This micro blogging information will reduce the time of data retrieval from social network to ecommerce application. The same architecture has been enhanced for new channels, here three news channels taken for the consideration. And this is the third tier among the two tiers. As mentioned above the same micro blogging information generated for news channels also. Here the only the relevant news for the user will be displayed, so that they can quickly go through the news updates. In added with search options also provided for other news information like, user can search the news area wise, city wise and state wise. All the information will be shown in a single window. Tier one: Social Networks, Tier Two: Ecommerce. Three Tier: News servers will be the servers taken for developing this application.
Keywords: Artificial Neural Network, Text Categorization, Micro Blogging, Data dictionary, Micro Data Array

I. INTRODUCTION

Facebook, Twitter, LinkedIn, and Instagram are nearly ubiquitous in our lives. They're like the 21st-Century Main Street; we use them to communicate, find information quickly, and increasingly, to shop for products. Social media spending makes up a small fraction of most business' marketing budgets. Recent Duke University survey found that, on average, social media spending accounted for just 10% of the overall budget. But that number is projected to expand to nearly 23% in the next five years. Social media spends up to small amount of most business budgets. A recent Duke University survey found that, on average, social media spending accounted for just 10% of the overall budget. But that number is projected to expand to nearly 23% in the next five years. Clearly, ecommerce marketers recognize the power of social media to connect with an audience..

For Web businesses, effective social marketing represents real value. Social networks offer new ways to reach first-time customers, engage and reward existing customers, and showcase the best your brand has to offer. Your social network profiles and the content you share are as important as a business' storefront signage and displays in the 1950s. Businesses that integrate social media into their marketing strategy – from customer acquisition, to sales, to re-engagement campaigns – will benefit. Marketers can see in real-time what your audience cares about most, their interests, the conversations they're having and what they like. Use your social networks to better segment audience and understand your target demographics. This will help you optimize your campaigns and

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deliver more targeted messaging. Immediacy is big in social media; we want information and we want it now. That's why social networks are so great for customer service. They enable businesses to quickly respond to customer inquiries. Plus, social media makes it easier to spot and respond to unpleasant customer experiences. Develop a strategy for responding to customer inquiries via social media.

II.   RELATED WORKS

Title: Leveraging product adopter information from online reviews for product recommendation

Author: J. Wang, W. X. Zhao, Y. He, and X. Li

Year   : 2015

Description: Experimental results on over 16 million reviews crawled from JINGDONG, the largest B2C e-commerce website in China, show the feasibility and effectiveness of our proposed framework for product recommendation. With the increasing popularity of online e-commerce services, more and more people buy products online. The availability of the sheer volume of online product reviews makes it possible to derive implicit demographic information of product adopters from review documents. This paper proposes a novel approach to the extraction of product adopter mentions from online reviews. The extracted product adopters are then categorise into a number of different demographic user groups. The aggregated demographic information of many product adopters can be used to characterise both products and users, which can be incorporated into a recommendation method using weighted regularised matrix factorisation.

Title: Improving Latent Factor Models via Personalized Feature Projection for One Class Recommendation

Author: Y. Seroussi, F. Bohnert, and I. Zukerman

Year   : 2011

Description: In this paper we propose a novel personalized feature projection method to model users' preferences over items. Specifically, for each user, we define a personalized projection matrix, which takes the place of user-specific factors from existing models. Latent Factor models, which transform both users and items into the same latent feature space, are one of the most successful and ubiquitous models in recommender systems. Most existing models in this paradigm define both users' and items' latent factors to be of the same size and use an inner product to represent a user's 'compatibility' with an item. Intuitively, users' factors encode 'preferences' while item factors encode 'properties', so that the inner product encodes how well an item matches a user's preferences. However, a user's opinion of an item may be more complex, for example each dimension of each user's opinion may depend on a combination of multiple item factors simultaneously. Thus it may be better to view each dimension of a user's preference as a personalized projection of an item's properties so that the preference model can capture complex relationships between items' properties and users' preferences.

Title: Addressing Cold-Start in App Recommendation: Latent User Models Constructed from Twitter Followers

Author: J. Lin, K. Sugiyama, M. Kan, and T. Chua

Year   : 2013

Description: As a tremendous number of mobile applications (apps) are readily available, users have difficulty in identifying apps that are relevant to their interests. Recommender systems that depend on previous user ratings (i.e., collaborative filtering, or CF) can address this problem for apps that have sufficient ratings from past users. But for apps that are newly released, CF does not have any user ratings to base recommendations on, which leads to the cold-start problem. In this paper, we describe a method that accounts for nascent information culled from Twitter to provide relevant recommendation in such cold-start situations. We use Twitter handles to access an app's Twitter account and extract the IDs of their Twitter-followers. We create pseudo-documents that contain the IDs of Twitter users interested in an app and then apply latent Dirichlet allocation to generate latent groups. At test time, a target user seeking recommendations is mapped to these latent groups. By using the transitive relationship of latent groups to apps, we estimate the probability of the user liking the app. We show that by incorporating information from Twitter, our approach overcomes the difficulty of cold-start app recommendation and significantly outperforms other state-of-the-art recommendation techniques by up to 33%.applications (apps) are readily available, users have difficulty in identifying apps that are relevant to their interests. Recommender systems that depend on previous user ratings (i.e., collaborative filtering, or CF) can address this problem for apps that have sufficient ratings from past users.

III. EXISTING SYSTEM

A. Methods

1)   Feature Mapping Technique: According to the existing system in recent years, the boundaries between e-commerce and Social

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networking have become increasingly blurred. E-commerce websites such as eBay features many of the characteristics of social networks, including real-time status updates and interactions between its buyers and sellers. Some e-commerce websites also support the mechanism of social login, which allows new users to sign in with their existing login information from social networking services such as Face book, Twitter or Google+. Both Face book and Twitter have introduced a new feature last year that allow users to buy products directly from their websites by clicking a buy button to purchase items in adverts or other posts.In the existing system feature mapping technique has been implemented. The key idea is to use a small number of linked users across sites as a bridge to learn a function which maps the original feature representation. But all the side bridging is based on one to one network; this is the major drawbacks in the existing system. So that only one tier can be connected with another tier. Also the ping functions since it is not powerful to capture higher order transformation relationship between input and output. The importance of each attribute by conducting experiments results also tedious. Even in the existing system many tests are conducted. But the existing framework only deals with cross site cold start product recommendation only.

The goal of learning in the self-organizing map is to cause different parts of the network to respond similarly to certain input patterns. This is partly motivated by how visual, auditory or other sensory information is handled in separate parts of the cerebral cortex in the human brain
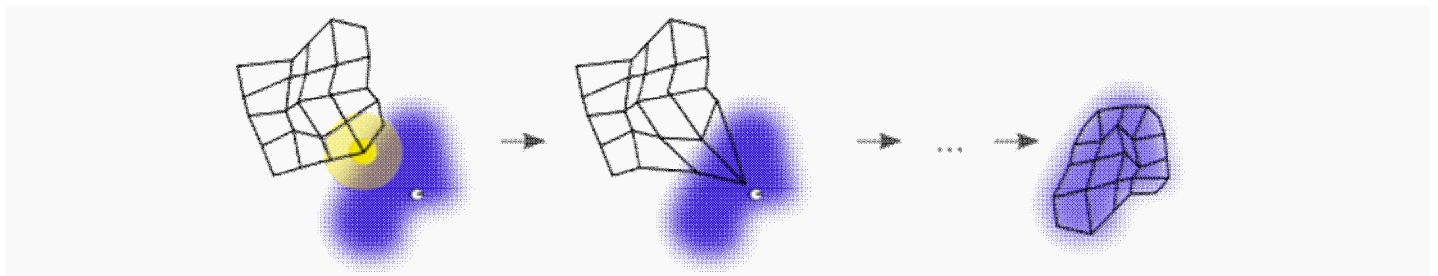

Figure 1: Feature Mapping

An illustration of the training of a self-organizing map. The blue blob is the distribution of the training data, and the small white disc is the current training datum drawn from that distribution. At first (left) the SOM nodes are arbitrarily positioned in the data space. The node (highlighted in yellow) which is nearest to the training datum is selected. It is moved towards the training datum, as (to a lesser extent) are its neighbours on the grid.

The network must be fed a large number of example vectors that represent, as close as possible, the kinds of vectors expected during mapping. The examples are usually administered several times as iterations.The training utilizes competitive learning. When a training example is fed to the network, its Euclidean distance to all weight vectors is computed. The neuron whose weight vector is most similar to the input is called the best matching unit (BMU). The weights of the BMU and neurons close to it in the SOM lattice are adjusted towards the input vector. The magnitude of the change decreases with time and with distance (within the lattice) from the BMU. The update formula for a neuron v with weight vector $W_v(s)$ is , where s is the step index, t an index into the training sample, u is the index of the BMU for D(t), $\alpha(s)$ is a monotonically decreasing learning coefficient and D(t) is the input vector; $\Theta(u, v, s)$ is the neighbourhood function which gives the distance between the neuron u and the neuron v in step s. Depending on the implementations, t can scan the training data set systematically (t is 0, 1, 2...T-1, then repeat, T being the training sample's size), be randomly drawn from the data set (bootstrap sampling), or implement some other sampling method (such as jack-knifing). The neighbourhood function $\Theta(u, v, s)$ depends on the lattice distance between the BMU (neuron *u*) and neuron *v*. In the simplest form it is 1 for all neurons close enough to BMU and 0 for others, but a Gaussian function is a common choice, too. Regardless of the functional form, the neighbourhood function shrinks with time. At the beginning when the neighbourhood is broad, the self-organizing takes place on the global scale. The network winds up associating output nodes with groups or patterns in the input data set. If these patterns can be named, the names can be attached to the associated nodes in the trained net. During mapping, there will be one single *winning* neuron: the neuron whose weight vector lies closest to the input vector. This can be simply determined by calculating the Euclidean distance between input vector and weight vector. While representing input data as vectors has been emphasized in this article, it should be noted that any kind of object which can be represented digitally, which has an appropriate distance measure associated with it, and in which the necessary operations for training are possible can be used to construct a self-organizing map. This includes matrices, continuous functions or even other self-organizing maps.

2)   Micro Blogging Information: The micro blogging deals with all the information like personal details, geo location information

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and etc. But the actual contents will be transferred from one location to another location. This makes more insecurity during the time of data transfer. In case of a intruder trying to intrude the network means, during the time of data transmission the entire details can be traced out. There are no special security methods implemented in the existing system to block the intruders during the data transfer.

IV. PROPOSED SYSTEM

A. Methods

1) *Enhanced Micro blogging:* Micro blogging services offer features such as privacy settings, which allow users to control who can read their micro blogs, or alternative ways of publishing entries besides the web-based interface. These may include text messaging, instant messaging, E-mail, digital audio or digital video. Micro blogs are the simple text based cipher codes which can be passed through various networks using web services. Micro blogs data, e.g., fb, reviews, news comments, and social media comments, has gained considerable attention in recent years due to its popularity and rich contents. Nowadays, micro blogs applications span a wide spectrum of interests, including detecting and analyzing events, user analysis for geo-targeted ads and political elections, and critical applications like discovering health issues and rescue services. Major research efforts are spent to analyze and manage micro blogs data to support different applications. In this method, we give a 1.5 hours overview about micro blogs data analysis, management, and systems. The method gives a comprehensive review for research efforts that are trying to analyze micro blogs contents to build on them new functionality and use cases. In addition, the tutorial reviews existing research that proposes core data management components to support micro blogs queries at scale. Finally, the method reviews system-level issues and on-going work on supporting micro blogs data through the rising big data systems. Through its different parts, the tutorial highlights the challenges and opportunities in micro blogs data researc. Micro blogs data, e.g., tweets, reviews, news comments, and social media comments, has become very popular in recent years. Every day, over billion users post more than four billions micro blogs on Facebook and Twitter. Such tremendous amounts of user-generated data have rich contents, e.g., news, updates on on-going events, reviews, and discussions in politics, products, and many others. The richness of micro blogs data has motivated researchers and developers worldwide to take advantage of micro blogs to support a wide variety of practical applications, including social media analysis, discovering health-related issues, real-time news delivery, rescue services, and geo-targeted advertising.

2) Text categorization: Analysis is increasingly viewed as a vital task both from an academic and a commercial standpoint. The majority of current approaches, however, attempt to detect the overall polarity of a sentence, paragraph, or text span, regardless of the entities mentioned (e.g., laptops, restaurants) and their aspects (e.g., battery, screen; food, service). By contrast, this task is concerned with aspect based opinion analysis (ABSA), where the goal is to identify the aspects of given target entities and the opinion expressed towards each aspect. Datasets consisting of customer reviews with human-authored annotations identifying the mentioned aspects of the target entities and the opinion polarity of each aspect will be provided. The task consists of the following subtasks:

a) *Subtask 1*: Aspect term extraction : Given a set of sentences with pre-identified entities (e.g., restaurants), identify the aspect terms present in the sentence and return a list containing all the distinct aspect terms. An aspect term names a particular aspect of the target entity.For example, "I liked the service and the staff, but not the food", "The food was nothing much, but I loved the staff". Multi-word aspect terms (e.g., "hard disk") should be treated as single terms (e.g., in "The hard disk is very noisy" the only aspect term is "hard disk").

b) *Subtask 2:* Aspect term polarit: For a given set of aspect terms within a sentence, determine whether the polarity of each aspect term is positive, negative, neutral or conflict (i.e., both positive and negative).

c) *For example:*

"I loved their fajitas" → {fajitas: positive}

"I hated their fajitas, but their salads were great" → {fajitas: negative, salads: positive}

"The fajitas are their first plate" → {fajitas: neutral}

"The fajitas were great to taste, but not to see" → {fajitas: conflict}

3) *Artificial Neural Network:* This training method contains bag of words which can be update by admin using Artificial Neural Network this process in called as Data training. This is the basic input for the text data training purpose. Also here all data will be uploaded in to a centralized server for data analysis purpose. Centralized data distribution systems defined here as systems

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that allow distributed end-user applications, databases and data providers to be integrated with dedicated data sources. Even thou this project will be implemented using ASP.NET, basically it will satisfies all the web based procedures and applications. In case of the organisation may having more than two branches in various locations, (ie) in different states. In artificial intelligence or machine learning, a training set consists of an input vector and an answer vector, and is used together with a supervised learning method to train a knowledge database (e.g. a neural net or a naive Bayes classifier) used by an AI machine. Validation sets can be used for regularization by early stopping: stop training when the error on the validation set increases, as this is a sign of over fitting to the training set.

1) These can be defined as
a) Training set: A set of examples used for learning that is to fit the parameters [i.e., weights] of the classifier.
b) Validation set: A set of examples used to tune the hyper parameters [i.e., architecture, not weights] of a classifier, for example to choose the number of hidden units in a neural network.
c) Test set: A set of examples used only to assess the performance [generalization] of a fully-specified classifier.

B. Algorithm – Enhanced Micro Blogging Using ANN
1) Initialization: Let S1: Server 1 (Social Network), S2: Server 2 (Ecommerce Application) S3: Server 3 (News Channels)
Profile information – P1, P2, P3......Pn
Product and Information : Pr1(a,b,cd), Pr2(a,b,c,d),Pr3(a,b,c,d).....PrN(a,b,c,d)
News Information N1,N2,N3
Users X, X1, X2, X3.....Xn
Let Communication for ANN is Artificial Neural Network. And Micro blog as MB.

2) *Working Model*
Step 1: Start Process
Step 2: S3 displays N1, N2 and N3;
Step 3: S2 shows and updates P1, P2, P3......Pn;
Step 4: S1 having P1, P2, P3......Pn;
Step 5: while loading local host. Add(rd[0].ToString().ToUpper());
Step 6: S1 will be merged with S2 with the condition of access Pr1(a,b,cd), Pr2(a,b,c,d), Pr3(a,b,c,d) .....PrN(a,b,c,d)
Step 7: After loading rd[0], next initialization is rd[1] connection S1 to S3
Step 8: Now via Local host S1→ S2 →S3; creates an artificial neural network through local host Add(rd[0][1][2]);
Step 9: MD trigger out using P1, P2, P3......Pn for the given information as the profile information; Eg: (AXRti67%*^*Fg)
Step 10: MB pass through P1, P2, P3......Pn merge with Pr1(a,b,cd), Pr2(a,b,c,d),Pr3(a,b,c,d).....PrN(a,b,c,d) for X, X1, X2, X3.....Xn.
Step 11: Lopped formation will done for the above process
Step 12: User X, X1, X2, X3.....Xn = Session [user] for Step 10 and Step 11.
Step 13: Merge recommended product by P1(Pr1(a,b,cd)),P2(Pr2(a,b,c,d)),P3(Pr3(a,b,c,d)) up to all recommendations.
Step 14 : Repeat process for S1 to S3 and User X, X1, X2, X3.....Xn = Session [user] N1,N2,N3;
Step 15 : Display P1(Pr1(a,b,cd)),P2(Pr2(a,b,c,d)),P3(Pr3(a,b,c,d)) and X, X1, X2, X3.....Xn = Session [user] N1,N2,N3 in S1 as the head node
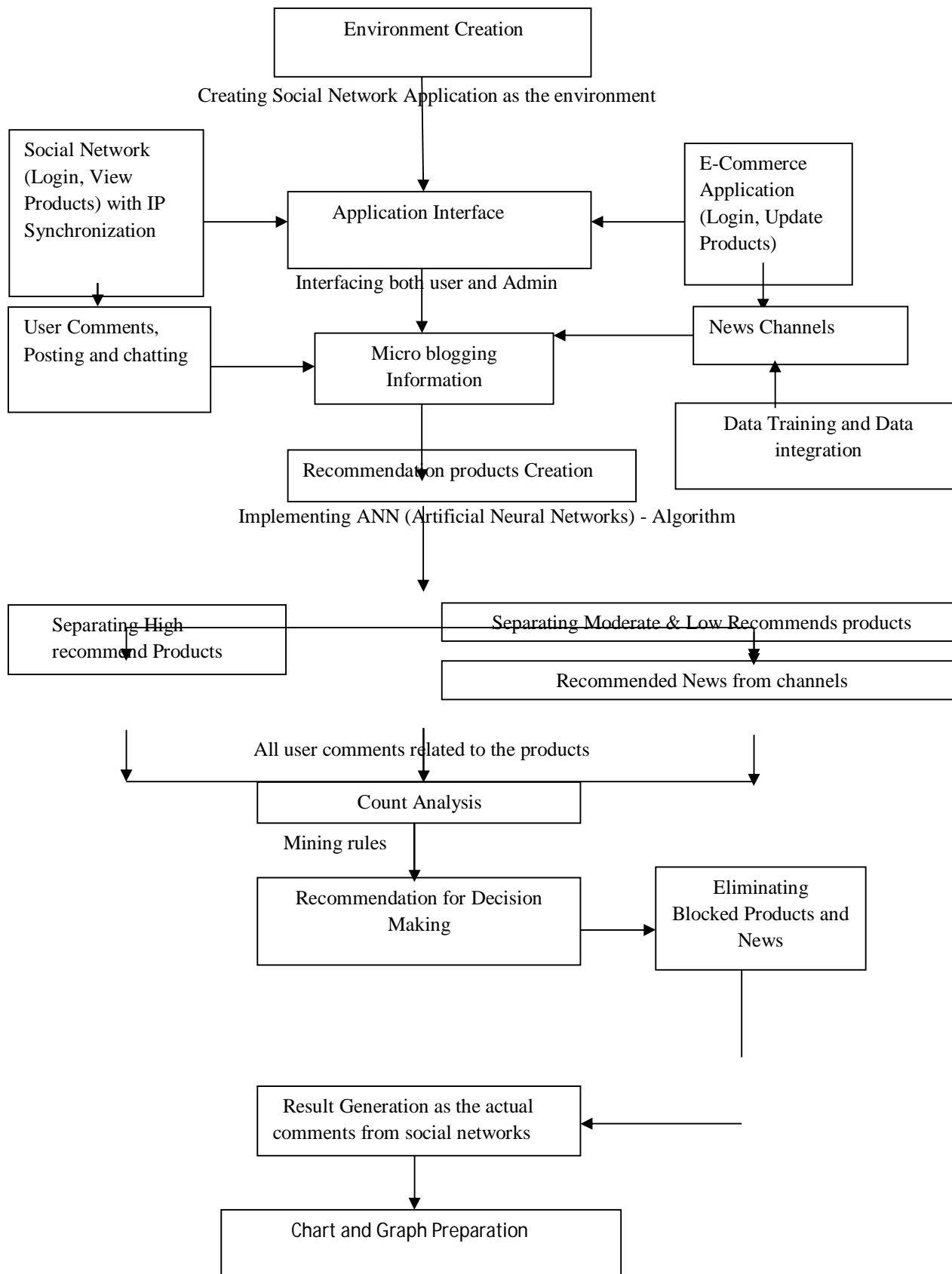Step 15: Repeat Process for X, X1, X2, X3.....Xn
Step 16 : Now S1 = S2+S3;
Step 17: Stop the process.

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V. SYSTEM ARCHITECTURE

Environment Creation

Creating Social Network Application as the environment

Social Network (Login, View Products) with IP Synchronization

E-Commerce Application (Login, Update Products)

Application Interface

Interfacing both user and Admin

User Comments, Posting and chatting

News Channels

Micro blogging Information

Data Training and Data integration

Recommendation products Creation

Implementing ANN (Artificial Neural Networks) - Algorithm

Separating High recommend Products

Separating Moderate & Low Recommends products

Recommended News from channels

All user comments related to the products

Count Analysis

Mining rules

Recommendation for Decision Making

Eliminating Blocked Products and News

Result Generation as the actual comments from social networks

Chart and Graph Preparation

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A. Modules

1) Architecture Creation: This is the initial module of this project, this modules involves with 3 tier architecture. Tier one is the primary network and head node of the architecture. According to this project tier one will be the social network. In added with tier two will be the ecommerce application and tier three will be the news channels. Architecture will be an independent process and architectures can be accessed individually. For example for social network, an admin will be provided, and the admin can manage all the social network information. In case of ecommerce application the admin can add, delete and update the products. Ecommerce application can be accessed independently. The same process will be applicable for news channels also. The three networks are having three types of architectures and various procedures. Each and every tier consists of individual database and database can be accessed separately.

2) Web Services: Through introducing the web services, the network exchange can be done. The network exchange is the method of interconnection between various networks in various categories. Here the web services will be acting as the intermediate node. Here the connection will be established for network interconnections. Initially the social network will be connected with the ecommerce application and both social network and ecommerce application will be connected with the news channels. So the web services will create triangle architecture. Each network can be accessed from other networks. This makes more data transfer and efficient data retrieval. In the web services the architecture ratio will be 1:1:3.

3) Data Training and text categorization: This is the most important module in this project. Here a data dictionary will be created for accessing the web services. The trained data are the most and frequently used data and patterns. These will be taken for the blogging reference purpose and to find the user's actual requirement. This data training is a supporting technology for this project. Text categorization is the actual pattern fetcher. This process goes through the all public data like user's profile, education details, location information, posts and comments. Text categorization will not deal with personal info. It read word by word of the user's info and selects the exact keywords. The key words will be matched with the trained data for feature extraction.

4) Micro blogging with ANN: This is the process of converting the information into codes. And the codes can be passed through any networks for data access. The gathered information from the previous module will be taken as a group of data. These data will be converted to micro blogging content. The micro blogging contains alpha numerical codes like QE098HGJ!?*, all the code represents the person's character and the recommendations. Using Artificial Neural Network the blog content will be transferred to other tier networks like ecommerce application and news channels. This is secured way of transferring the data from architecture to architecture. Through reading the entire code the recommendations can be can be find out.

5) View Recommendations: Finally all the recommendation can be viewed in the front end design on the tier one (Social Network). A dedicated panel will be designed for displaying both ecommerce recommendation and news recommendation. This recommendation will be change according to their updated in the profile or post or comments. Basically five recommendations can be create from the ecommerce application and all news updates can be shows. News search options will be integrated in the news panel. So that social network is the primary architecture and other network will follows the social network according to this design.

VI. RESULT AND DISCUSSIONS

A. Comparing the result with the Existing System

As mentioned in the abstract, here 3 architectures are comparing in single architecture. In the existing results, each networks works independently and working in various servers. And each network will generate independent results. For example in case of social network, a big data will be handled in this architecture. Along with most of the people will interact with the social network. The performance may depend according to the server speed and internet speed.

In case of ecommerce application, the next platform to the social network is the ecommerce application. The second largest architecture design has been implemented. This network too works independently. And performance based on the server and the internet speed. The same case is applicable for news channels.

Due to independent architecture in the existing system, we can't find the exact result in the existing system.

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Networks	Results
Social Networks	Contains user profile, user personal info, Photos and videos.
Ecommerce application	Contains product details, Product images, Product price, User info and payment gateway.
News channels	Contains News info area wise, city wise, state wise and county wise.

Table 1: Comparing three networks

B. Findings

Networks	Independent performance	Existing Performance	Current Performance (Proposed system)	Micro blog Ratio
Social Networks	Internet traffic and number of users. Supports up to 5 M users	Depends on server and internet speed	Tier 1 architecture. 93 % works independently	Creates Micro blogging and receives contents
Ecommerce application	Contains payment gateways. Slow performance during money transactions	Depends on server and internet speed	Tier 2 architecture. 40 % depends on social network	Receives Micro blogging and transfer contents to tier 1
News channels	Contains sensitive information. Need networks to spread news	Depends on server and internet speed	Tier 3 architecture. 60 % depends on social networks	Receives Micro blogging and transfer contents to tier 1

Table 2: Findings based on three networks
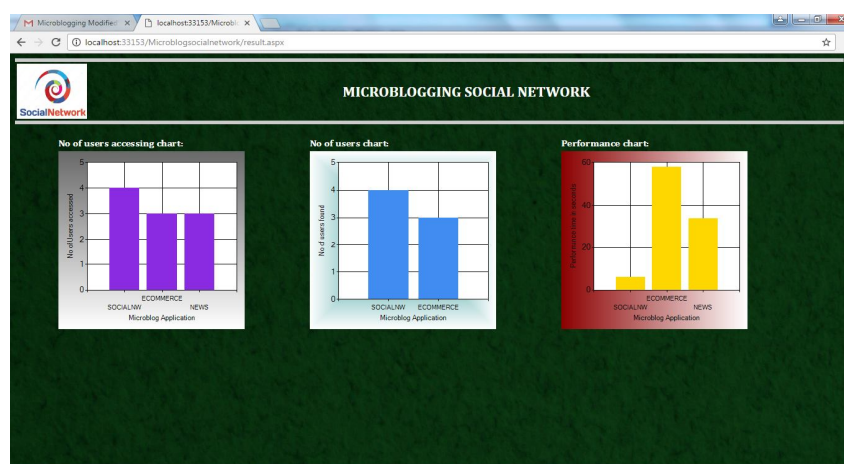
C. Analysis

Figure 7.1: Result and Finding Chart

The above shows are various diagrams from the architecture and various results obtained during the time of execution.

Result 1:
It shows the times of access of three networks. Mostly in this result the social network shows the major impact. Most of the users will interact with the social networks to obtain more information from other two networks.

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Result 2:

It shows available users in the social network and ecommerce application. This shows the impact of the available users in social network and ecommerce application.

Result 3:

It shows the time of execution, in seconds. The processing time will be calculates according to the CPU and Ram process. The output shown in seconds, and social network takes less time in execution than ecommerce and news networks.

VII. PRACTICAL RESULT

A. Social Network
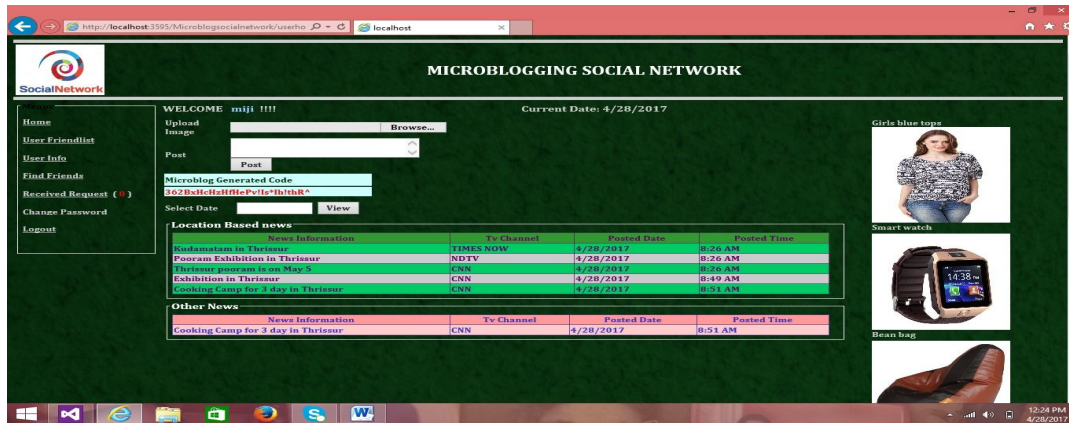
Figure 7.1: User Login

Figure 7.2: Add Posts and Comments

B. E-Commerce
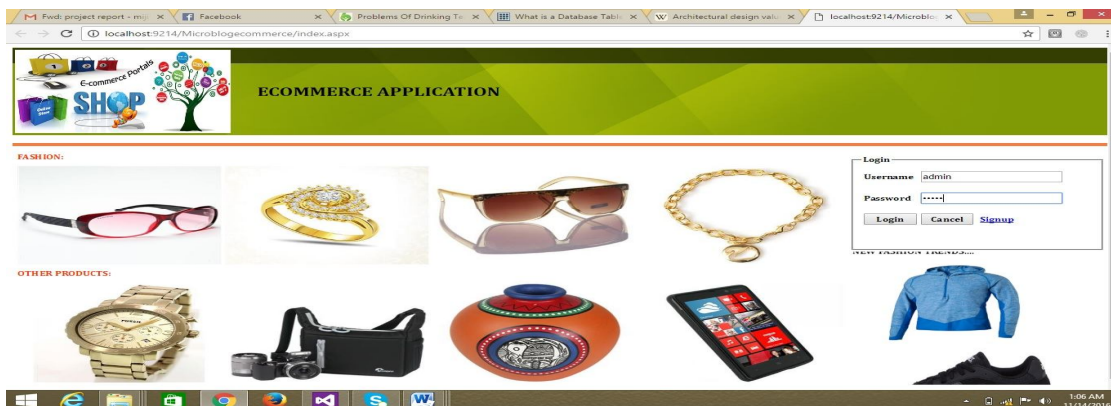
Figure 7.3: Admin Login

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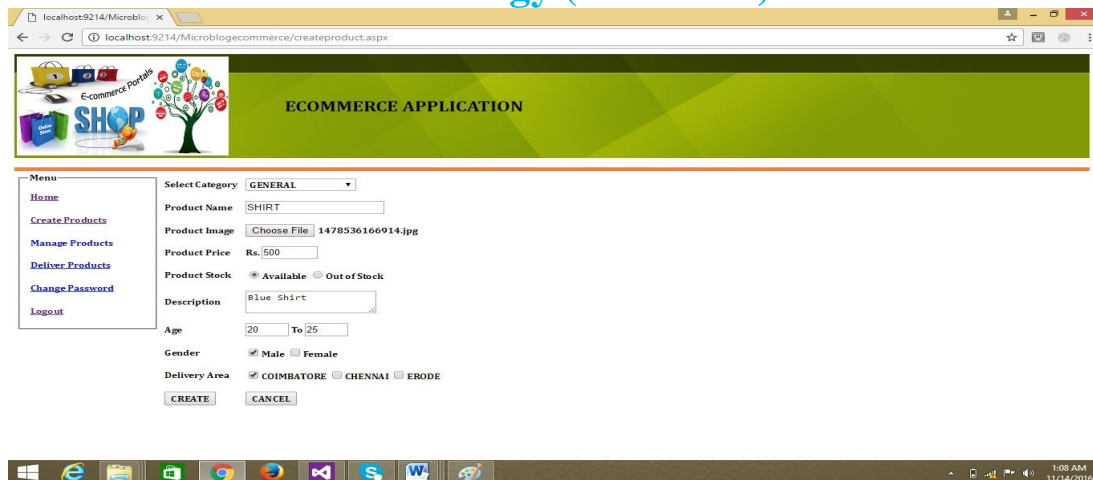# International Journal for Research in Applied Science & Engineering Technology (IJRASET)
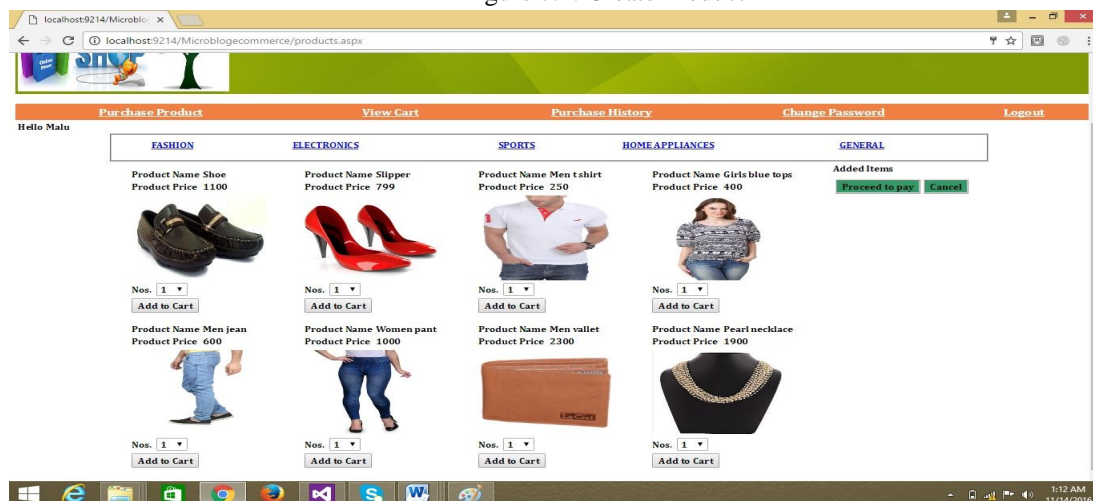

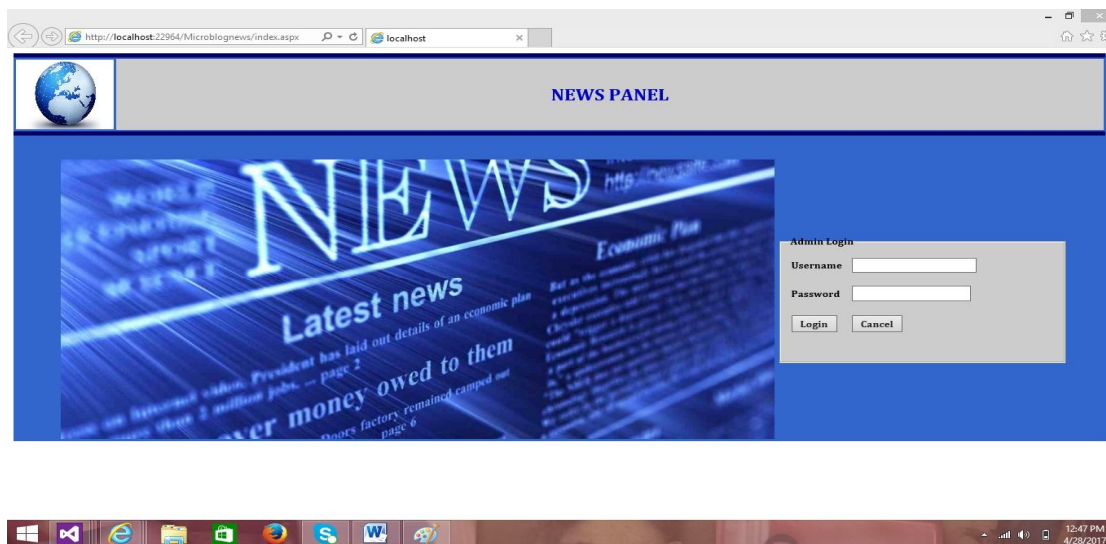Figure 7.4: Create Product

Figure 7.5: User Login

C.   News

Figure 7.6: Admin Login

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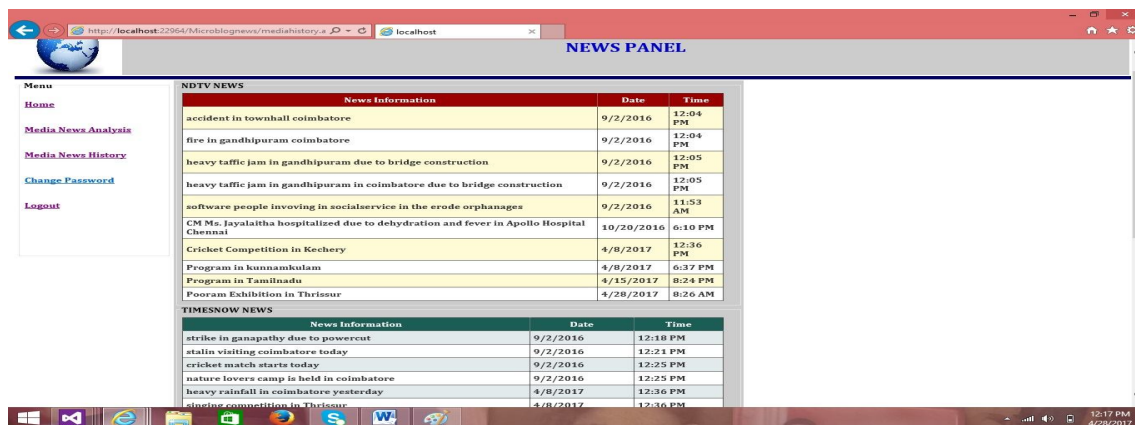

Figure 7.7: Media News Analysis

Figure 7.8: Media News History

VIII. CONCLUSION

Thus this project has been executed successfully and the output has been verified. All obtained outputs are according to committed in abstract. Initially more problems occurred during the architecture creation. As mentioned above here three tier architecture has been implemented successfully. All three networks are working perfectly in the architecture. And these networks will works on independent process too. These features will make this project more successful and efficient. The micro blog creates an internal data transfer for efficient data retrieval from the three networks.Displaying name and news will be change according to the user profile information. All the displaying news and products are more relevant to the users. As mentioned in the abstract, now the 89 % of the internet users may use the 60% of the ecommerce application. This makes more sales in the ecommerce application. And also according the news concept, 89 % of the social network users will view all the news. More information can be viewed in a single screen in less mobile data. These features make this project more successful.

IX. FUTURE WORK

Even thou many features are implemented in this project, here some of the future enhancement can be done for this application. All the provisions and database design are made in the current project for the future enhancements. So this current system supports various enhancements, they are follows.

A) *Layers can be users instead of three their architecture.*
1) Layers need live internet buffer data and API key from Google. These are more expensive. Live traffic updates and weather updates can be implementing in this project by implementing layers concept in this application,.

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B) *Web application. - Mobile responsive*

1) A dedicated mobile application can be develop of Android, IOS, Blackberry and windows. So that people can enjoy *the responsive mobile based web application.*

C) *Offline features*

1) By using adaptive memory management, offline features can be implementing. This feature will load most of the information during online and access or download the data during the offline mode.

D) *Supports many of the languages*

1) It Can implement this feature for languages like , Arab, French, Chinese, German and etc. So that it supports multilingual, also can be used in many countries.

E) *Enhancement of security*

1) Fake and fraudulent uses can be eliminated using opinion mining features. Now days there are many fake and fraudulent users are roaming in the social networks. These users can be eliminated and make the network more efficient.

REFERENCES

[1] Bohnert F, Seroussi Y, and Zukerman I, (2011) "Personalised rating prediction   for new users using latent factor models," inProc. 22ⁿᵈ ACM Conf. Hypertext Hypermedia, pp. 47–56.

[2] Chen T, Li.H, Yang.Q, and Yu.Y, (2013) "General functional matrix fac-torization   using gradient boosting," inProc. Int. Conf. Mach. Learn.,pp. 436–444.

[3] Chen.T, K. Chen, Lu.Q, Zheng.W, and Zhang.Z, (2012) "SVDFeature: A toolkit for feature-based collaborative   filtering," J. Mach. Learn. Res., vol. 13, pp. 3619–3622

[4] Chen.K, Corrado G.S, Dean.J, Mikolov T and Sutskever. I,(2013) "Distributed representations of words and phrases and their compositionality," in Proc. Adv. Neural Inf. Process. Syst., pp. 3111–3119

[5]   Chen K, Corrado.G, and Dean.J, and Mikolov T, (2013) "Efficient estima-tion of word representations in vector space," CoRR, vol. abs/ 1301.3781.

[6] Chua T ,Kan M ,Lin.J, Sugiyama K, (2013) "Addressing cold-start in app recommendation: Latent user models constructed from twitter followers," in Proc. 36th Annu. Int. ACM SIGIR Conf. Res. Develop. Inf. Retrieval, pp. 283–292.

[7] Guo. Y, Jiang.H, Li.X, and Zhao W.X, (2014) "We know what you want to buy: A demographic-based system for product recommendation on microblogs," inProc. 20th ACM SIGKDD Int. Conf. Knowl. Discovery Data Mining, pp. 1935–1944.

[8] Giering, M, (2000) "Retail sales prediction and item recommendations using customer demographics at store level,"SIGKDD Explor. Newsl., vol. 10, no. 2, pp. 84-89.

[9] Koren Y and Volinsky C, (2009) "Matrix factorization techni-ques for recommender systems,"Computer, vol. 42, no. 8, pp. 30– 37.

[10] Le Q.V and Mikolov. T, (2014) "Distributed representations of sentences and   documents,"CoRR, vol. abs/1405.4053

[11] Li.X, Wang.J and Zhao W.X, (2015) "Leveraging product adopter information from online reviews for product recommen-dation," inProc. 9th Int. AAAI Conf. Web Social Media, pp. 464–472.

[12] Rendle .S, (2012) "Social network and Click-through prediction with fac-torization   machines," inProc. KDDCup Workshop

[13] Wang.J and Zhang.Y, (2013) "Opportunity model for E-commerce rec- ommendation: Right product; right time," inProc. 36th Int. ACM SIGIR Conf. Res. Develop. Inf. Retrieval

[14] Yang S, Zhou K and Zha H, (2011) "Functional matrix factorizations for Cold- start recommendation," in Proc. 34th Int. ACM SIGIR Conf. Res. Develop. Inf. Retrieval,pp. 315–324.

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