Volume: 3 Issue: 3 12-Nov-2014,ISSN_NO: 2321-3337



SOCIAL NETWORK BASED OPINION PROCESSING FOR OPTIMAL RECOMMENDER ENGINE

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ABSTRACT----In the latest trend of internet, optimized suggestions for the search are anticipated by every individual. Crowd sourcing, a largest human resource provider network useful in search suggestions that helps to find out common phrases that other people have searched for. We identify an interesting real time problem, finding the best products through suggestions with individual user rating to a particular brand as well as with the rating of the friends to the product and the generalized crowd sourcing opinion. The system comprise of product to product co-relation under a brand, user to user co-relation under common attributes, crowd sourcing opinion by means of key factors obtained for the product in order make the suggestions more optimal.

1, INTRODUCTION

Data mining is the process of analyzing data from different perspectives and summarizing it into useful information - information that can be used to increase revenue, cuts costs, or both. Data mining software is one of a number of analytical tools for analyzing data. It allows users to analyze data from many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases. Data mining is primarily used today by companies with a strong consumer focus - retail, financial, communication, and marketing organizations. It enables these companies to determine relationships among "internal" factors such as price, product positioning, or staff skills, and "external" factors such as economic indicators, competition, and customer demographics. Crowd sourcing is the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers. The process of crowd sourcing is often used to subdivide tedious work and has occurred successfully offline.

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OBJECTIVE

Crowd sourcing, a largest human resource supplier network helpful in search suggestions that helps to search out common phrases that people have probe for. We have a tendency to determine a remarkable real time downside, finding the simplest product through suggestions with individual user rating to a specific whole additionally like the rating of the particular user to the merchandise and therefore the generalized crowd sourcing opinion.

Scope

The system comprise of product to product co-relation beneath a complete, user to user co-relation beneath common attributes, crowd sourcing opinion by means that of key factors obtained for the merchandise so as build the suggestions additional optimum.

2, FEASIBILITY STUDY

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in feasibility analysis are the

ECONOMICAL FEASIBILITY

TECHNICAL FEASIBILITY

SOCIAL FEASIBILITY

2.1 ECONOMICAL FEASIBILITY

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

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2.2 TECHNICAL FEASIBILITY

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

2.3 SOCIAL FEASIBILITY

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it. His level of confidence must be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

3, SYSTEM ANALYSIS

System Analysis is a combined process dissecting the system responsibilities that are based on the problem domain characteristics and user requirements.

3.1 EXISTING SYSTEM:

In the existing system, the concepts of mining are predominant to match the preference and tastes of one user with other in order to make suggestions for the search.

Generalised rating of the product has been gathered in the existing system to suggest any user according to the mining strategies.

There is no specific consideration of rating in order to suggest the user's search that could serve as an optimal suggestion for the search.

The good rating by an user for a particular product of a brand that owns many product may not be considered to suggest the same user if he/she searches for some other product that the brand itself owns.

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3.2 The contributions in solving these problems are:

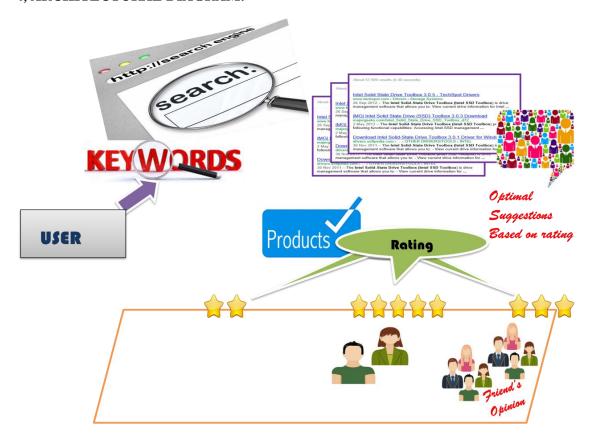
A novel method of mining has been concentrated in the system so as to thrive the suggestion engine more effective for every individual users.

This system efficiently overcome the drawbacks of the existing system by considering the factors of product to product co-relation and users to users co-relation and key factors obtained from crowd sourcing data.

Rating for the product has been considered specifically according to each user's individual brand opinion about the product, opinion of the user's friend about the product and the crowd sourcing opinion.

According to the rating of each of these mentioned factors an optimal suggestion for the search has been made to the user.

4, ARCHITECTURAL DIAGRAM:



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5. IMPLEMENTATION

Implementation is the stage of the project when the theoretical design is turned out into a working system.

- 1. Item grouping (Product-Product Clustering) Module
- 2. Product-User Clustering Module
- 3. User grouping (User-User Clustering) Module
- 4. Adaptive weighting & grouping (Dominating) product recognizer Module
- 5. Search system-user specific recommender Module
- 6. User co-relation recommendation search Module

1. ITEM GROUPTING(PRODUCT-PRODUCT CLUSTERING) MODULE:

Item grouping feature is added by selecting the multiple items in the list and choosing Group from menu (right click an item to pop up),

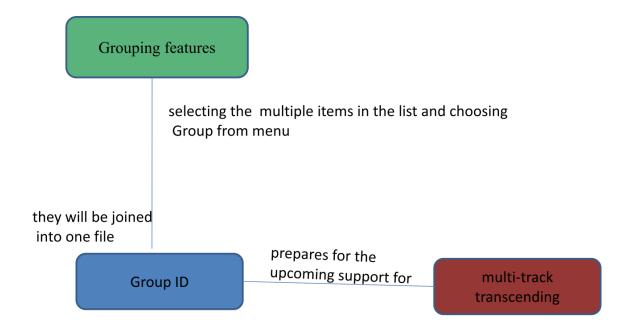
The items will be marked as the same group ID during processing, they will be joined into one file.

We have implemented all approaches on the items, which allows for a fair comparison of run time on modern hardware platforms.

The grouping feature also prepares for the upcoming support for multi-track transcending item grouping specification that tends to join mode at verifiable grouping of product constrain.

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2 PRODUCT USER CLUSTERING MODULE:

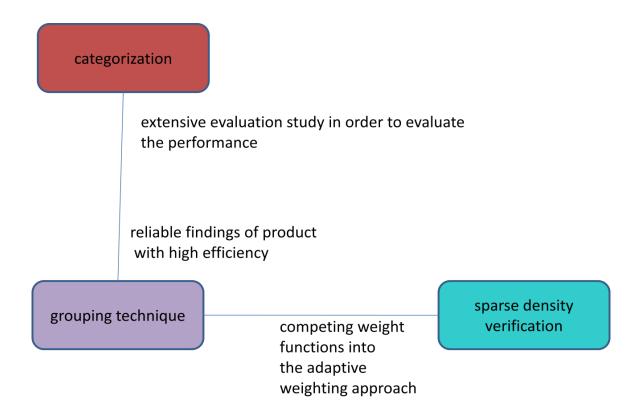
In this module we present an extensive evaluation study in order to evaluate the performance of various methods for computing the adaptive support weights including the original product as well as more recent approaches based on item categorization of the guided filtering of feedback approach.

To obtain reliable findings of product with high efficiency, we test these different weight functions on a large set of grouping technique of the disparity pairs.

Apart from the standard local matching using sparse density verification, we also embed the competing weight functions into the adaptive weighting approach, which uses slanted item grouping and represents a state-of-the-art of dynamic feature implementation.

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3. USER GROUPING (USER-USER CLUSTERING) MODULE:

User grouping feature is added considering the level of friends in the profile information of the user

Friends of the users will be manifest as the main consideration for the suggestion using the rating provided by them to the particular brand/product.

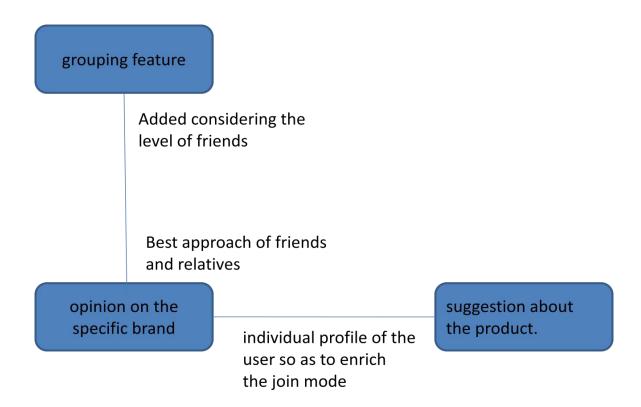
We have integrated the rating based on the clustering approach of the user with best friends/friends/crowd sourcing opinion on the specific brand/product for an optimistic suggestion.

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Multi-track transcend approach has been considered in each individual profile of the user so as to enrich the join mode at verifiable grouping of the friend's suggestion about the product.



ADAPTIVE WEIGHTING & GROUPING (DOMINATING) PRODUCT RECOGNIZER MODULE:

In this module we present an extensive evaluation study in order to evaluate the performance of various methods for computing the adaptive support weights including the original product as well as more recent approaches based on item categorization of the guided filtering of feedback approach.

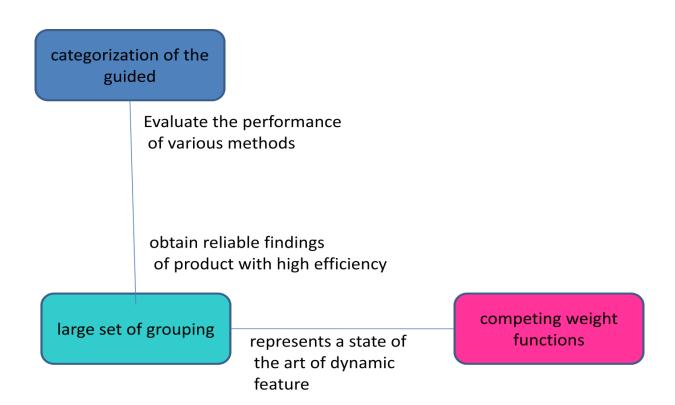
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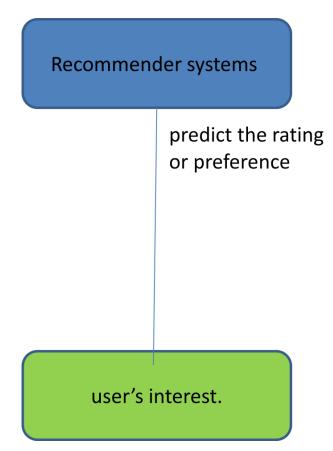
5. SEARCH SYSTEM USER SPECIFIC RECOMMENDER MODULE:

Recommender systems is an suggestion generation engine comprises of a subclass of information filtering technique that seek to predict the 'rating' or 'preference' that user would give to an item.

In this module, the user own preference in terms of rating to the individual brand or product has been considered and the recommender system suggest other products of the particular brand of the user's interest.

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6. USER CO-RELATION RECOMMENDATION SEARCH MODULE:

Recommender systems is an suggestion generation engine comprises of a subclass of information filtering technique that seek to predict the 'rating' or 'preference' that user would give to an item.

In this module, the concept of correlation of the friend of the user opinion has been considered for making suggestion.

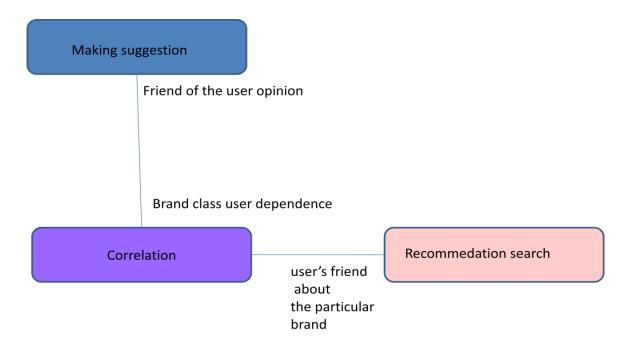
The concept of Correlation refers to any of a broad class of statistical relationships involving dependence.

The rating of the user's friend about the particular brand/product has been considered for the suggestion to the user in this recommendation search.

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6,TESTING OBJECTIVES

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub assemblies, assemblies and/or a finished product It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

CONCLUSION

In this paper, we proposed the concept of future enhancement over the Distributed Attribute Based Encryption (DABE) as an extension of Ciphertext-Policy Attribute-Based Encryption (CP-ABE) that supports an arbitrary number of attribute authorities and allows to dynamically add new users and authorities at any time, which will provide an efficient construction of DABE that uses only two pairing operations in the decryption algorithm and no pairing operation in any other algorithm. A limitation of the construction is that access policies need to be in DNF form.

We leave it as an open question to design a more expressive DABE scheme, while preferably maintaining the O(1) number of pairings that our construction offers.

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