Review on Marketing Analysis in Social Media

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Abstract - *Social media analysis is the investigation of interpersonal organizations to comprehend their structure and conduct. This has picked up popularity because of its use in various applications - from marketing to search engines and management. The fundamental inspiration driving data mining in social media is the interest to exploit learning from copious measures of information gathered, relating to social conduct of clients in online. Data mining based methods have ended up being helpful for examination of social media data, particularly for huge datasets that can't be taken care of by conventional strategies.*

1. INTRODUCTION

Social media has gained remarkable attention in the most recent decade. The access of social networking sites has become easier and affordable. People started relying on social networks heavily therefore huge data is being generated which in turn makes them complex to analyze. The data obtained from Social networking sites such as Facebook, Twitter and Instagram are usually unprocessed and raw. Knowledge is gained by analyzing the data that are unstructured and dynamic. This paper aims to provide a survey of data mining analysis and techniques in the social networking sites to perform mining on the social media data. Data mining strategies give scientists and specialists the devices expected to dissect expansive, complex, and frequently changing data. This section presents the essentials of data mining, audits social media and talks about how to mine social media data.

2. LITERATURE SURVEY

2.1 ANALYSIS OF ONLINE TRAVEL MARKET SEGMENTATION BASED ON BEHAVIORAL INTENTION FACTORS WITH TALC MODEL IN JAKARTA

To decide the variables that altogether influence customer social expectation to purchase aircraft ticket online and to know the category of the customer of online air ticket as per Technology Adoption Life Cycle (TALC) demonstrate. Information were gathered by circulating surveys to 100 respondents in Jakarta and broke down utilizing linear regression analysis, cluster analysis, and cross-tabulation. There are 13 factors which have critical impact on the consumer behavioral goal in Jakarta in purchasing the air tickets online, specifically attitude, perceived behavioral control, subjective norm, perceived usefulness, perceived ease of use, product feature, quality of mind-stimulating playfulness, promotion, price, brand image, word of mouth, perceived personal risk, and personal innovativeness. [1]

2.2 SEGMENTATION OF ONLINE BUYERS AND ITS IMPLICATION IN DETERMINING MARKETING STRATEGIES

To identify segmentation of online buyers. The segmentation of online purchasers in Indonesia, pursues by the attributes for each segment. The segmentation utilizes demographic, behavioral and psychographic factors got from earlier research. The estimation tool was conveyed through online social networks and collected 246 substantial data. This study proposes seven develop as the base of psychographic factors. They are: trust, convenience, perceived usefulness, interactive speed, customer communication, word-of-mouth, and online purchase intention. Three market categories are distinguished as: professional shopaholic buyers, socially mediocre buyers and carefree infrequent buyers.

2.3 UNDERSTANDING AND CLUSTERING HASHTAGS ACCORDING TO THEIR WORD DISTRIBUTIONS

The motivation behind the study is to understand hashtags utilized in twitter and clustering hashtags as per their word distribution, so that we can find people in general pattern of client's theme in real time and convey benefit to promoting the management. Jensen-Shannon divergence is used for clustering hashtags into significant gatherings and the outcome is showcased with dendrogram. By these methodologies, we can perceive the hierarchical structure of hashtags shown in Twitter, to compare advertisement subject with Twitter pattern.

2.4 DIGITAL MEDIA MARKETING USING TREND ANALYSIS ON SOCIAL MEDIA

To develop an application, that would help in marketing of items and administrations over social networks. The method used here is known as Social Media Marketing and is a sub-set of Digital Media Marketing. There is no customize commitment among advertisers and customers. We mean to give such information by Personal Engagement by giving a deep insight into the user's content and this would create quality information bringing about better client base, high conversion and lower bounce rates. The application provides personal engagement with the client base and help them to create a substantially more understanding rather wasting money with no solid yield. After the outcome is generated it would assist marketers with targeting specific set of individuals which would increase their per capital yield over a paid digital marketing campaign. Additionally, it would help in increasing the sale of products and build up an incredible business connection inside the community. [3]

2.5 TEXT MINING–BASED EVALUATION OF THE USER EXPERIENCE IN ONLINE SHOPPING FOR CLOTHING

This research investigates how online purchase of apparel influences the client experience by assessing the client's feedback utilizing text mining. This research additionally investigates the components of client experience of online customers and uncovers the structural connections among the dimensions. The dealer can impact a client's feelings through various factors such as product experience and value experience, so as to upgrade client fulfillment. Also, the customer's internal experience can be enhanced by four aspects: external experience, time experience, space experience, and environmental experience.

2.6 TF-IDF METHOD IN RANKING KEYWORDS OF INSTAGRAM USERS' IMAGE CAPTIONS

This paper proposes Term-Frequency and Inverse Document Frequency(TF-IDF) method to rank keywords of twenty most followed Instagram users dependent on subtitles in pictures. The goal of this research is to consequently know the principle thought of Instagram users based on 50 ongoing picture inscriptions posted. The utilization of the proposed technique in which TFIDF is actualized is extremely straightforward and successful in revealing the keywords and its ranking from a specific user. The outcomes demonstrate that the highest ranking of keyword is the fundamental topic of a user, shown by the estimation of TF-IDF. The more significant the keyword is to the specific Instagram username if the TF - IDF value is higher. [2]

2.7 ANALYSIS OF THE BEHAVIOR OF CUSTOMERS IN THE SOCIAL NETWORKS USING DATA MINING TECHNIQUES

Depicts the consequences of utilizing data mining strategies to examine the behavior of clients of a design organization in Instagram. The strategy utilized was CRISP-DM through which the illustrative models utilizing the procedures of clustering and association rules were assessed. The examination built up that favored by clients are long cocktail dresses and dressing gowns. This data is significant because the organization can plan and actualize methodologies that consider these sorts of inclinations and accomplish fulfillment and client loyalty to boost this attire. [5]

2.8 IDENTIFYING IMAGE TAGS FROM INSTAGRAM HASHTAGS USING THE HITS ALGORITHM

The effectiveness of the HITS algorithm is been investigated for recognizing the correct tags in a crowd sourced image tagging situation. A bipartite diagram is created in which the first sort of nodes compares to the annotators and the second kind to the tags they select, among the hashtags, to comment on a specific Instagram picture. It is concluded that the expert estimation of the HITS algorithm gives a precise estimation of the appropriateness of each Instagram hashtag to be utilized as a tag for the picture it goes with while the hub value can be utilized to sift through the unscrupulous annotators.

2.9 THE ANALYSIS OF INSTAGRAM TECHNOLOGY ADOPTION AS MARKETING TOOLS BY SMALL MEDIUM ENTERPRISE

The investigation will be based on the Technology Acceptance Model (TAM). It is an advancement of the Theory of Reasoned Action (TRA) which broke down the impact of belief the attitude that influences intentions and eventually showed in behavior. TAM is picked for this investigation since it is the correct model to break down the elements that impact the reception of innovation by its clients. To build a better impression on Small Medium Enterprises (SMEs) to the Instagram users, trailed by convenience in using the innovations on Instagram for advancing SMEs. [6]

2.10 INSTAGRAM ONLINE SHOP'S COMMENT CLASSIFICATION USING STATISTICAL APPROACH

To find the best strategy to order Instagram comments utilizing statistical methodology and additionally to examine the impact of pre-process and feature selection. The data utilized is 2810 Instagram comments which have been marked with 3 sorts of reactions to be specific "answered", "read", and "ignored". Utilizing 10-fold cross validation, we led 3 experiments - the baseline, pre-process, and word embedding. This investigation has baseline with accuracy of 73.274%. The pre-process analysis yielded a precision of 82.42%. By combining word embedding as highlight portrayal and CNN as learning algorithm precision equivalent to 84.235% is obtained.

2.11 THE ADOPTION OF FACEBOOK AS INTERNET MARKETING STRATEGIES IN JOURNAL PROMOTION

Discusses about how distributers could adopt marketing techniques online through social networking sites in the journal publishing industry. The adoption of Facebook as online advertising medium for journal publication promotion has positive effect in expanding the guest traffic of the journal site and expanding brand mindfulness and user engagement in the journal Facebook fan page.

2.12 DETECTING TOPICS AND LOCATIONS ON INSTAGRAM PHOTOS

Presents a system to recognize significant subjects of pictures related to a specific hashtag through text mining procedures and computer vision tools. For this research 7382 pictures related with the hashtag #allyouneedisecuador were gathered. The photos related with the hashtag #allyouneedisecuador, demonstrates that the topics recognized by the visual portrayals are related to natural tourist attractions (shorelines, mountains), people and urban areas. The most incessant photo locations are similar to the most well-known places in TripAdvisors.

2.13 MODIFIED ASPECT/FEATURE BASED OPINION MINING FOR A PRODUCT RANKING SYSTEM

To rank the products and its critical viewpoints which would in the long run gear up a quicker decision making. The created framework incorporates four imperative stages: Pre-processing, Enhanced Aspect Identification and Opinion Word Extraction with modified Naïve Bayes model, Aspect Polarity Identification, Products and Aspects Ranking in sequence. Grasps and takes care of the issue of opinion extraction, estimation, investigating and finally drawing the graph web data about opinions for different products which demonstrates the highlights positioned graphically. [7]

2.14 PREDICTING VISITORS USING LOCATION-BASED SOCIAL NETWORKS

LBSN data is used to foresee future guests at given areas. The travel history of guests are fetched by their check-ins in LBSNs and recognize five highlights that significantly drive the portability of a guest towards a location: (i) historic visits, (ii) location category, (iii) time, (iv) distance and (v) friends activities. A visitor prediction model, CMViP is provided which is based on collective matrix factorization and influence propagation. The execution of CMViP for foreseeing guests utilizing exactness and review measures are evaluated. And then the accuracy of anticipating the number of guests utilizing RMSE and MAE are evaluated. The outcomes demonstrate that CMViP beats state of-the-art strategies in accuracy and recall up to 10 times.

2.15 POPULARITY PREDICTION OF IMAGES AND VIDEOS ON INSTAGRAM

The pictures and videos are gathered from Instagram user's accounts and picture/video context highlights are used to foresee the number of likes a post acquires as a significance of fame through regression and classification techniques. The outcomes demonstrate that with 10-fold cross-validation, the results of popularity score prediction with 0.002 in RMSE and Popularity class prediction with 90.77% accuracy are obtained. [8]

3. CONCLUSION

This paper gives current assessment and update of analysis on social networking sites. Literary works have been looked into dependent on various aspects of social media analysis. The utilization of the strategies and idea of data mining and surveys the related writing about text mining and social networks. The strategies of Web mining is an intriguing field of research. However, there are numerous difficulties in this research field to be resolved with enhancement.

REFERENCES

[1] W. Wu and C. Ke, "An online shopping behavior model integrating personality traits, perceived risk, and technology acceptance," Social Behavior and Personality: An International Journal, vol. 43 no. 1, pp. 8597, 2015.

[2] J. Martin, G. Mortimer and L. Andrews, "Re-examining online customer experience to include purchase frequency and perceived risk," Journal of Retailing and Consumer Services, no. 25, pp. 81-95, 2015.

[3] Sandjai Bhulai, Peter Kampstra, Lidewij Kooiman, Ger Koole, Marijn Deurloo and Bert Kok, "Trend Visualization on Twitter: What's Hot and What's Not?" in DATA ANALYTICS, 2012.

[4] C. S. Araujo, L. P. D. Correa, A. P. C. D. Silva, R. O. Prates, and W. Meira, "It is Not Just a Picture: Revealing Some User Practices in Instagram," 2014 9th Latin American Web Congress, no. May, pp. 19–23, 2014. [Online]. Available: http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=7000167

[5] Ajzen, I., & Fishbein, M., "Understanding attitudes and predicting social behavior," Englewood Cliffs, NJ: Prentice-Hall, 1980.

[6] M. Stelzner, "How marketers are using Social Media to grow their businesses," Soc. Media Exam., no. May, pp. 1–53, 2015.

[7] J. Mir and M. Usman, "An effective model for aspect based opinion mining for social reviews," in Digital Information Management (ICDIM), 2015 nth International Conference on, pp. 49-56. IEEE, 2015.