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IDENTIFY THE ABILITY OF CUSTOMER-BASED ON PURCHASE BEHAVIOR

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Abstract:

Potential customers are the future sources of profits. The manager can make decisions and manage customer relationship specifically as soon as finding those people. In this paper, a novel support vector machine (SVM) algorithm is used in Web mining, in order to find potential customers who visit the Web sites. And those potential customers are divided into two classes. Support Vector Machine (SVM) constructs an optimal hyperplane utilizing a small set of vectors near boundary. However, when the two-class problem samples are very unbalanced, PSVM tends to fit better the class with more samples and has high error in the class with fewer samples.

Keywords: *Web Mining; Support Vector Machine; Classification; Potential Customers; Unbalanced Data*

I. INTRODUCTION

The majority of ambitious businesses maintain their customer data for future use [8]. These data help them to establish and maintain a direct relationship with the customers in order to target them individually for specific product offers, services, opinion mining or fund raising in the future. Rather than targeting all the customers for all types of company's promotions, which does not result positive response, there is always an enthusiasm as who are the people would be targeted for the specific offer. In target marketing, it has been an arduous task to single out customers who are likely to be fascinated for a new product or service. At this juncture, data mining techniques can be applied for filtering out the target customers out of the pool. This would increase the overall effectiveness of the marketing campaign. Out of several standard techniques, selecting the best classification technique is a major task in data mining. As one size does not suit for all, likely one technique does not produce better yield for all types of data set. Therefore, few classification techniques have been applied on the data set. Furthermore, we have analyzed the result to obtain the most suitable technique. The system helps to configure the customers purchasing behaviour using machine learning approach that take up to the customer satisfaction further their future growth.The system cannot be maintaining large amount of customer data that has been limited for the specific reason.

1.2 MOTIVATION

The focus of modern grocery superstore business has been shifted to the customer-centric organization. Customers are the most important factor for a business. Some customer can help the business to generate more profit compared to the others. A loyalty-prone customer intends to stay with the supplier who can provide the quality products. On the other hand, a deal-prone customer will always look for a better offer from a competitor. Customers can be classified into profitable and unprofitable. In this paper, we will analyze the purchase behavior of a customer using machine learning. Machine learning techniques can be divided into supervised and unsupervised learning. A supervised machine learning model is built based on previously known purchase behavior. Once the model is built, it can generate potentiality score for a new customer purchase pattern. A supervised model is built using labeled data. On the other hand, an unsupervised model does not have any labeled data, rather classifies customers into clusters based on similar purchase behavior.

Objective:

This system is mainly used to provide better CRM block chain.

1. It helps to managing a huge number of Customers at the same time.
2. Production rate manage according to the shop keeper as per the requirements.
3. Advertising can make customer attraction that helpful for shop keeper to increase the feasibility of the system.

II.LITERATURE SURVEY

In this paper, a novel support vector machine (SVM) algorithm is used in web mining, in order to find potential customers who visit the web sites.

Various models have been constructed to explore the principles of competition diffusion of B2C e-commerce (hereafter e-commerce) in customers. [1]

This research aims to perform clustering and profiling customer by using the model of Recency Frequency and Monetary (RFM) to provide customer relationship management (CRM) recommendation to middle industrial company [3].

Based on the analysis of purchased products or services, we use Association Algorithm to predict the purchasing products or services that customer will buy in future and purchasing probability, then calculate the potential value of customer. Finally we accomplish the data mining process[4].

This paper for the first time proposed the method of the calculation of wallet size and wallet share: on one hand, the corporate customer's growth rate is obtained by the use of forecasting technology[5]

To maximize customer profitability, companies should exert effort to acquire new customers, as well as to retain existing customers and add value.[6]

Keeping in view the tough competitive market, customer satisfaction is one of the most important factors for the survival of any service provisioning organization. Research community has been contributing enough literature with special focus on the analysis of the important predictors that has significant impact on customer satisfaction.[8]

III.EXISTING SYSTEM APPROACH

Customers always demand more than expected results for what they pay. It has become a crucial issue for service providers to keep their customers happy with the services and packages they provide. Almost all organizations try to gain more customers but customer satisfaction has not been paid the required attention by telecom service providers, which is causing the loss of increasing revenue on per capita investment.

Disadvantage:

1. Negative Feedback of Customer.
2. Time Consuming.

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IV.PROPOSED SYSTEM APPROACH

We proposed the system architecture for Identify Potential Customer therefore, the customer can identify behalf on their purchasing behavior also we can give samples of products to the customer for store improvements and advertisement for new customer for attraction.

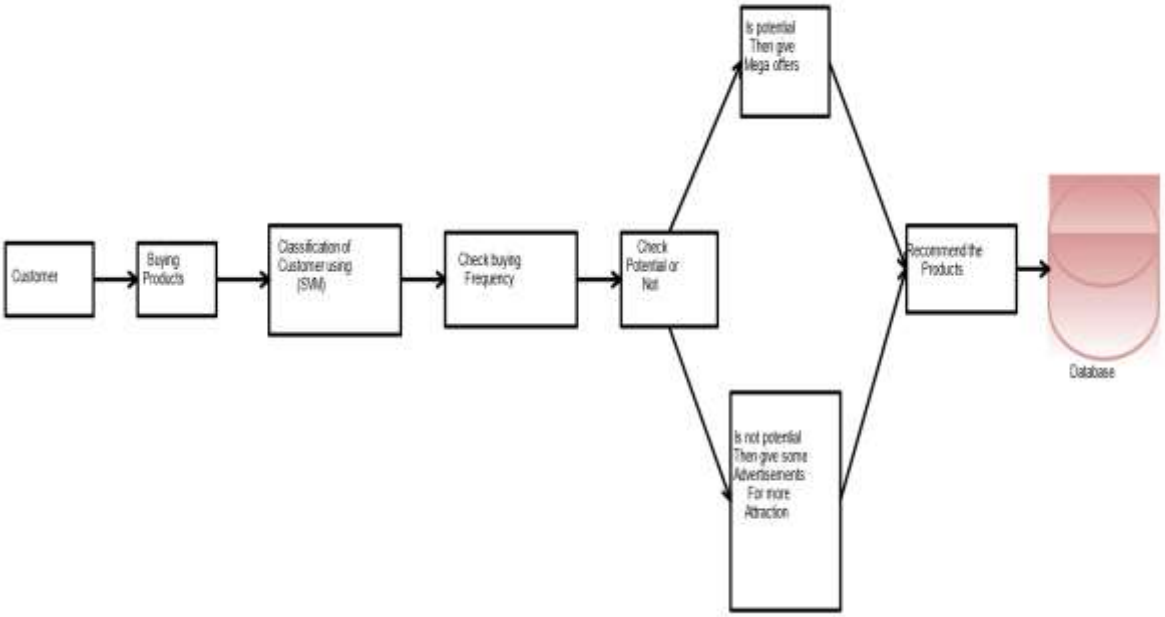

Fig 1: System Architecture

Advantage:

1. Customer Satisfaction
2. Positives Feedback.

V.CONCLUSION

In the system we identify the potential growth of customers the product can be advertise for new customer for attracting their buying and attraction. The customer has been navigates the products for uses like, we gave them samples as well offers, etc.It can also bagging out the product details that would be affected to the shopkeeper for their purchasing history that will help to reduce the production loss and have good inspiration for all customers satisfaction and as well they can classified using the clustering techniques as potential or not.

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