



AN IMPROVED TECHNIQUE FOR ANALYZING AND PROCESSING USER FEEDBACK COMMENTS BASED ON OPINION MINING

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ABSTRACT

Many enterprises devote a significant portion of their budget to new product development (NPD) and marketing to make their products distinctive from those of competitors, and better fit the needs and wants of consumers. Hence, knowledge and feedback on customer demand and consumption experience has become an important information and asset for enterprises. Knowledge of the customers and the product itself reflect the needs of the market. Product design and planning for production lines be integrated with the knowledge of customers and market channels. The knowledge of customers and market channels be transformed into knowledge assets of the enterprises during the stage of NPD. The Apriori algorithm is a methodology of association rule for data mining, which is implemented for mining demand chain knowledge from channels and customers. Knowledge extraction is illustrated as knowledge patterns and rules in order to propose suggestions and solutions to the case firm for NPD and marketing. Ordering of product to the manufacturing company can be done. Sales report analyzes process is carried out by the manufacturing company. We use the Linguistic screen to view the suggestion and compliant given by customer, dealers, service man about the product.

KEYWORDS: Apriority Algorithm, New product development, Knowledge Extraction.

1. INTRODUCTION

Luminosity Technologies located strategically at Chennai is a software development company which aims to provide optimal business solution in the field of Banking, Financial, Health Care and retail services. Luminosity Technologies also has its focus on innovative, attractive and efficient web designing. The highly motivated staff strives for optimal business solutions and hardly compromise on the quality of the end product Luminosity intends to push the software development to its limits to satisfy the customer needs and provide benchmark to the whole software development industry.

Luminosity is a software development company established in 2008 with a focus on development for the Banking, Financial, and Health care and retail service sectors. Also on our radar is the penchant for flawless web designing. The team comprise of creative and highly experienced software development consultants who can provide solution to any software development challenges faced by the business. Our passion is to dedicate our complete resource, technical expertise and industry intelligence to make the business of our clients flourish. Our range of IT services is offered in these areas:

- Web designing



- Hospital management
- Financial
- Enterprise Resource Planning
- Retail

We follow the “why” concept which gives employees voice for improvement, the open door policy gives every employee the freedom of expression at the highest level.

2. MODULES

- Customer Modules.
- Sales & Channel Modules.
- Admin Modules.
- New Product Development Modules
 - i. Report for Admin Modules
 - ii. Sales Report
 - iii. Linguistic Report
 - iv. Fuzzy Linguistic Report

2.1 CUSTOMER MODULE

In this module customers have the privileges to register their personal details and also have the privileges to create their own user name & password. Then Customer can login to enter their expectations of which kind of product they want exactly and complaints about the products about their product (bike) which they are used. Here Linguistic Screen is used such as Low, high, medium etc with

reason with further question, reason for asking. Additionally in this module customers can view the details, price and photos of latest released product (bikes) of the company.

2.2 SALES & CHANNELS MODULE

Sales & Channels Module include both Dealers and Service member's details. In this module Service member have the privileges to register and login to enter the drawbacks about the product parts which makes problem often by previous released while they are servicing the customer bikes. Dealers have the privileges to register and login to enter their personal idea about the product and also have the privileges to enter the customer personal data, suggestions of which kind of product they want exactly and complaints about the products whom they are meeting daily in show room. Dealers have to register the sales detail with Rdo No. Ordering of bikes can also be done directly by login itself. Here Linguistic Screen is used such as Low, high, medium etc with reason with further question, reason for asking.

2.3 ADMIN MODULE

In admin module admin have the privileges to manage the master screen details of product master, product part

master, Employee Id ,Dealer Id ,Serviceman Id and can add the details about latest product of the company to show it in this website to attract & cover the customer’s intention.

2.4. NEW PRODUCT DEVELOPMENT MODULE

i.) Report for Admin Modules

In report module admin can implement a new market strategy called market segmentation and generate the report of maximum no of persons expectations and complaints of the each segmented category(customer), dealers, and service members regarding the company’s products (bikes).

ii.) Sales Report

In Sales Report modules admin can implement a new market strategy called in market segmentation and can view the sales detail and product sales in particular areas. So that manufactures can identify the product sales in area wise .

iii.) Linguistic Report

In linguistic report module admin can get the report of bike with criteria such as low, high, medium etc. Here report of

high,low,medium given reason report will be viewed.

iv. Fuzzy Linguistic Report

In Fuzzy linguistic report module admin can get the report of bike with sales. Through this report the admin can fix the target for the future development.

RESULTS AND DISCUSSIONS:

Fig 1: LOGIN

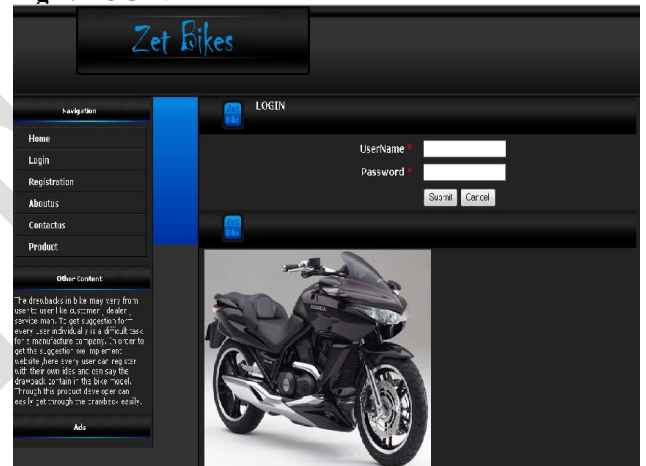


Fig 2: HOMEPAGE

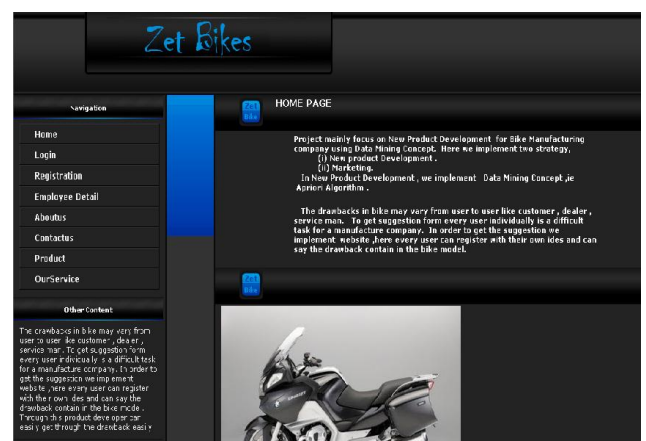


Fig 3: REGISTRATION

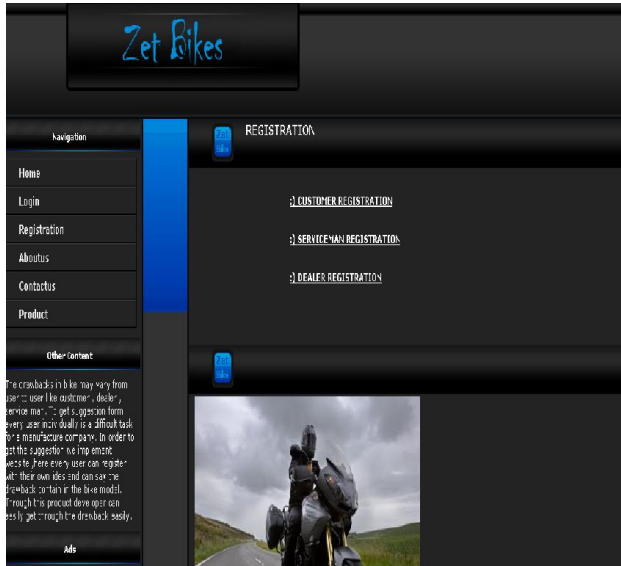


Fig 5 : SERVICE MAN REGISTRATION

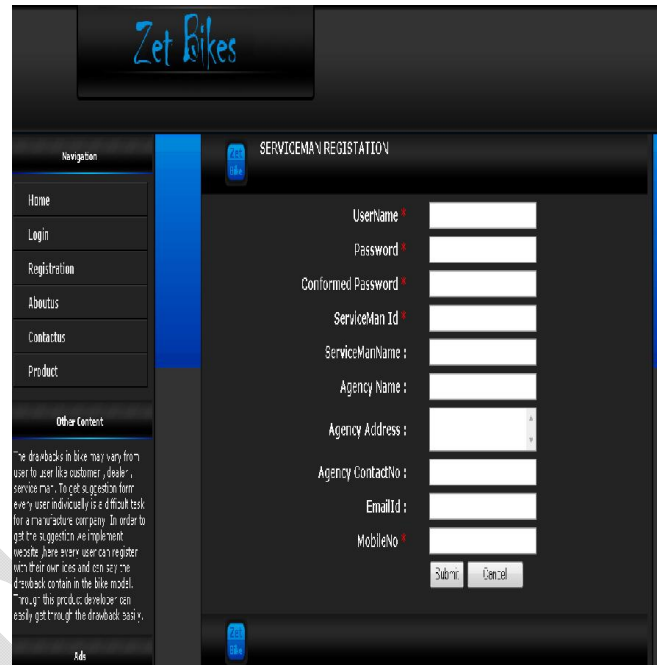


Fig 4 : CUSTOMER REGISTRATION



Fig 6 : DEALER REGISTRATION





CONCLUSION:

We make the Companies product successful in the market. We can gather the customer's feedback easily. Using this application we analyze the customer data efficiently also we generate the report based on the analyze and promote the company to produce the product according to the report. So that the company can fulfill the customer expectations. We can increase the company's sales and profit. Admin can get the sales report and company development can be analyzed directly. we have add marketing details for dealers and the company for better marketing analyze.

Linguistic Screen Criteria such as low high medium can be calculate directly and can view the reason behind it directly.

REFERENCES:

- [1] B. Liu, "Sentiment Analysis and Opinion Mining," Synthesis Lectures on Human Language Technologies, vol. 5, no. 1, pp. 1-167, May 2013
- [2] W. Jin and H.H. Ho, "A Novel Lexicalized HMM-Based Learning Framework for Web Opinion Mining," Proc. 26th Ann. Int'l Conf. Machine Learning, pp. 465-472, 2009.
- [3] N. Jakob and I. Gurevych, "Extracting Opinion Targets in a Single- and Cross-Domain Setting with Conditional Random Fields," Proc. Conf. Empirical Methods in Natural Language Processing, pp. 1035-1045, 2010.
- [4] S.-M. Kim and E. Hovy, "Extracting Opinions, Opinion Holders, and Topics Expressed in Online News Media Text," Proc. ACL/COLING Workshop Sentiment and Subjectivity in Text, 2006.
- [5] G. Qiu, C. Wang, J. Bu, K. Liu, and C. Chen, "Incorporate the Syntactic Knowledge in Opinion Mining in User-Generated Content," Proc. WWW 2008 Workshop NLP Challenges in the Information Explosion Era, 2008.
- [6] G. Qiu, B. Liu, J. Bu, and C. Chen, "Opinion Word Expansion and Target Extraction through Double Propagation," Computational Linguistics,

vol. 37, pp. 9-27, 2011.

[7] D.M. Blei, A.Y. Ng, and M.I. Jordan, "Latent Dirichlet Allocation," J. Machine Learning Research, vol. 3, pp. 993-1022, Mar. 2011.

[8] I. Titov and R. McDonald, "Modeling Online Reviews with Multi- Grain Topic Models," Proc. 17th Int'l Conf. World Wide Web, pp. 111-120, 2008.

[9] Y. Jo and A.H. Oh, "Aspect and Sentiment Unification Model for Online Review Analysis," Proc. Fourth ACM Int'l Conf. Web Search and Data Mining, pp. 815-824, 2011.

[10] M. Hu and B. Liu, "Mining and Summarizing Customer Re- views," Proc. 10th ACM SIGKDD Int'l Conf. Knowledge Discover

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Kumar Charlie Paul, Principal of A.S.L Pauls College of Engineering & Technology. Had did many National and International Conferences and published many papers in journals. He also guided many students for their Ph.D project works. Having more than 23 years of experience in teaching field.