# **E Commerce Product Rating Based On Customer Review Mining**

# There are many users who purchase products through E-commerce websites. Through online shopping many E-commerce enterprises were unable to know whether the customers are satisfied by the services provided by the firm. This boosts us to develop a system where various customers give reviews about the product and online shopping services, which in turn help the E-commerce enterprises and manufacturers to get customer opinion to improve service and merchandise through mining customer reviews. An algorithm could be used to track and manage customer reviews, through mining topics and sentiment orientation from online customer reviews. In this system user will view various products and can purchase products online. Customer gives review about the merchandise and online shopping services. Certain keywords mentioned in the customer review will be mined and will be matched with the keywords which are already exist in the database based on the comparison, system will rate the product and services provided by the enterprise. This system will use text mining algorithm in order to mine keywords. The System takes review of various users, based on the review, system will specify whether the products and services provided by the E-commerce enterprise is good, bad, or worst. We use a database of sentiment based keywords along with positivity or negativity weight in database and then based on these sentiment keywords mined in user review is ranked. This system is a web application where user will view various products and purchase products online and can give review about the merchandise and online shopping services. This system will help many E-commerce enterprises to improve or maintain their services based on the customer review as well as to improve the merchandise based on the customer review.

# **Features**

* System will take review of the customer about the merchandise and online shopping service and will rate the merchandise and online shopping services.
* This system will help E-commerce enterprise to know about their customer services as well as about the merchandise.
* The system takes review of various users, based on the review; system will specify whether the products and services provided by the E-Commerce enterprise are good, bad or worst.
* We use text based analysis along with positivity or negativity weight in database and then based on these sentiment keywords mined in customer review, product and services provided by the E-commerce enterprise is ranked.
* This system will help many E-commerce enterprises to know about their customers.
* Text data mining used in this system to derive high quality information from text. High-quality information is typically derived through the devising of patterns and trends.
* This system scans a set of text written in natural language.

**Feasibility Study**

System will extract keywords from the review of various customers and will mine the keyword in database and will rate the E-commerce merchandise and online shopping services based on the review provided by the customers. We use a database of sentiment based keywords along with positivity or negativity weight in database and then based on these sentiment keywords mined in customer review is ranked.

* **Economic Feasibility**

This system can be used by the users who often purchase products online. This system will be helpful for the E-commerce enterprise to maintain their customer service and the merchandise which will increase the productivity and profitability of the E-commerce enterprise. This will provide economic benefits. It includes quantification and identification of all the benefits expected

* **Operational Feasibility**

This system is more reliable, maintainable, affordable and producible. These are the parameters which are considered during design and development of this project. During design and development phase of this project there was appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters.

* **Technical Feasibility**

The back end of this project is SQL server which stores details which are related to this project. There are basic requirement of hardware to run this application. This system is developed in .Net Framework using C#. This application will be online so this application can be accessed by using any device like (Personal Computers, Laptop and with some hand held devices).

**Advantages**

* This system will be useful for those users who often purchase products online.
* This system will help the E-commerce enterprise to know about their services and merchandise.
* Since system ranks the feedback based on the weight age of the keywords in database, so the result is appropriate.

**Disadvantages:**

* System will match the review with those keywords which are in database rest of the words are not considered by the system.

**Future Scope**

* System will match phrases rather than keywords so this will include those words which are not considered by the system.

**Software Requirements:**

* Windows Xp, Windows 7(ultimate, enterprise)
* Sql 2008
* Notepad ++
* Wamp Serve

**Hardware Components:**

* Processor – Dual Core
* Hard Disk – 50 GB
* Memory – 1GB RAM
* Internet Connection

**Application:**

* This system will be useful for many E-commerce enterprises.
* This system will be useful for many users who purchase products online.
* The system is useful for those who like to give review.
* User can decide which hotel to accommodate before they reach the place.

**Disadvantages:**

* System will match the opinion with those keywords which are in database rest of the words are ignored by the system.

**Future Scope**

* There will be a module where user can book rooms of desired hotel through online.
* There will be another module which will show users, facilities provided by the hotel.

**Software Requirements:**

* Windows
* Sql
* Visual studio 2010

**Hardware Components:**

* Processor – Dual Core
* Hard Disk – 50 GB
* Memory – 1GB RAM
* Internet Connection

**Application:**

* This application also works as an advertisement which makes many people aware about the hotel.
* This application is also useful for the users who travel around the country.
* This system helps to find out good hotel with good facilities.
* The system is also useful for those who like to comment.

**Reference**

* [**http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5439192&queryText=E-Commerce+Reviews+Management+System+Based+on+Online+Customer+Reviews+Mining&newsearch=true&searchField=Search\_All**](http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5439192&queryText=E-Commerce+Reviews+Management+System+Based+on+Online+Customer+Reviews+Mining&newsearch=true&searchField=Search_All)