A Score Based Ranking Algorithm for Product Tracking System

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Abstract

This application is an aid to improve marketing through online. The idea is to divide the whole webpage into blocks, each block holding the link to specific products. The application resembles an online marketing street, where we allow different owners to host their products. Thereby the system provides a pool of variety of products in which user can search for desired category, one that will display out the products of that particular genre according to the user rating. Through this system we are trying to promote the business of the product owners, by gathering the details and planting it under a single roof where the traffic of the customers are more likely to come. Another beneficiary of this is the customers, who can reach out to any product or service by a single click.

Keywords: Advertise Frames, License and Offers

I. INTRODUCTION

E-Marketing is the process of marketing a brand using the Internet. It includes both direct response marketing and indirect marketing elements and uses a range of technologies to help connect businesses to their customers. E-marketing refers to the use of the Internet and digital media capabilities to help sell your products or services. These digital technologies are a valuable addition to traditional marketing approaches regardless of the size and type of your business. E-marketing is also referred to as Internet marketing (i-marketing), online marketing or web-marketing. The web marketing is the branch of the activities of marketing company that leverages the online channel to study the market and develop trade relations (promotion advertising, distribution, sales, customer service, etc.) via the Web. Usually the web marketing activities translate into first place with the publication of a project, then in the creation of a website and its promotion, in this way the company oversees the web channel attracting visitors interested in the products / services in the set. The traditional method of web marketing is to create their own website by each and every companies to market their product details. The proposed idea is an integrated web page, to host the product details of various companies, increase traffic and thereby lift the company’s clients.

As with conventional marketing, e-marketing is creating a strategy that helps businesses deliver the right messages and product/services to the right audience. It consists of all activities and processes with the purpose of finding, attracting, winning and retaining customers. What has changed is its wider scope and options compared to conventional marketing methods. E-marketing is deemed to be broad in scope, because it not only refers to marketing and promotions over the Internet, but also includes marketing done via e-mail and wireless media. E-marketing also embraces the management of digital customer data and electronic customer relationship management and several other business management functions.

E-marketing joins creative and technical aspects of the Internet, including: design, development, advertising and sales. It includes the use of a website in combination with online promotional techniques such as search engine marketing (SEM), social medial marketing, interactive online ads, online directories, e-mail marketing, affiliate marketing, viral marketing and so on. The digital technologies used as delivery and communication mediums within the scope of e-marketing include:

- Internet media such as websites and e-mail
- Digital media such as wireless, mobile, cable and satellite.

II. OBJECTIVE

The scope of the project is to improve marketing through online and an idea is to divide the whole webpage into blocks and displaying the company detail. To host various company details in single webpage. Arrange the product detail in category list and discount for different products from different companies which can be in short amount of time.
III. EXISTING SYSTEM

E-marketing is directly marketing a commercial message to a group of people using email. Broadly, the term is usually used to refer to sending email messages with the purpose of enhancing the relationship of a merchant with its current or previous customers.

To encourage customer loyalty and repeat business, acquiring new customers or convincing current customers to purchase something immediately, and adding advertisements to email messages sent by other companies to their customers. Two methods followed are one, transaction mails and direct mails.

A. **Drawbacks in Existing System:**

- Spam: People's in-boxes get flood with email, both solicited and unsolicited.
- Engagement: E-marketing requires constant tweaking to keep your subscribers engaged.
- Appearance: Distortion of the desired look due changes in machine settings.
- Cost: Highly expensive to maintain.

IV. PROPOSED SYSTEM

In this proposed system, various companies product are displayed. They can be displayed in different frames. Various categories of products and companies are available in the system.

A. **Advantages of Proposed System:**

- Integrating all the company detail in single window.
- Issues the license to display their company logo, images.
- Organize their product in category list and also given the rating.
- And to display the current product discount details

V. FUNCTIONALITY

A. **Advertise Frame:**

This section gives the details about buying the frames for shop owner. Then shop owner gives the details of the shop and its logo. That logo will be displayed in the frames list and also in categories of the shops.

B. **Authenticate Shop Owner:**

All the shop owners will be given individual login id and password to post their products. If the shop owners are in need to change the password, intimation message will be sent to them to authorize the shop owners and then password can be changed.

C. **Grant License:**

Once the shop owners gets registered by giving the mandatory details about the shop, fixed amount for each set of frames to be paid. After the payment process of the frames license will be uniquely granted to the shop owners.

D. **Explore Products:**

The registered shop’s details such as the logo of the shop, products to be sold at the shop are displayed. Here the shops are displayed based on some quality criteria.

E. **Post offer:**

The shop owners can login with their login id and password to post about their products and to post the offers for every product. That offers may be short term offers, so that timer will be running to intimate the time period of that specific product offers.
**F. Shop Search:**

Shops which are registered will be displayed in the frame list and category list of the shops. From that we can search the respective shops. Since Google map is linked, by giving the district name and shop name, location details of the shops will be displayed in the map.

**VI. SCORE BASED RANKING ALGORITHM**

Score Based Algorithm have proposed a more common approach whereby the scoring scheme may be perceived to be dissimilar if they induce identical ranking. In this algorithm a metric has been proposed to compare score vectors and the similarity and dissimilarity are measured on the basis of score fusion. Experimental results are in agreement with the theory applied and results demonstrate the various applications of the metric used in the theory applied for the proposed algorithm.

**A. Related Work:**

Score based ranking algorithm related this work is used to give the premium rating to the customers based on buying the frames. It is to display the customers ranking in the process of shops searching by the customers.

**B. Algorithm Steps:**

1) **Step1:**

Ranking will be based on buying number of frames by a customer. The maximum number of frames will be ten.

\[ CR = \sum f(n) \quad (1) \]

Where CR is customer ranking

f(n) is number of frames (n=1 to 100).

2) **Step2:**

Analyze the registered customers who have bought number of frames.

Where customer = c(n),

Row = r(n),

(n=1 to 10)

3) **Step3:**

Analyze the customers who have bought maximum number of frames and giving then priority to whose have bought maximum number of frames.

Example: c(1) =3, C(2) = 8

C(2) = 8 will be given high priority.

4) **Step4:**

If there is a condition were different customer have bought same number of frames, the row based priority will be allotted. (i.e., row 2(high priority), row 5(low priority)

Example:

If c(1) = 4, r(2)

c(2) = 4, r(5)

Then c(1) > c(2), -------- (2)

Because c(1) have bought frames in row 2

But c(2) has bought frames in row 5.

5) **Step5:**

The customers who have bought same number of frame in the same row the time based priority may be allotted.

Example:

If c(5) =4, r(2), t(6)

c(7) =4, r(2), t(1)

Then c(7) > c(5) -------- (3)

Because c(7) bought frame at time t(1)

But c(5) bought frame at time t(6).

**VII. ADVANTAGES OF E-MARKETING**

- Extremely low risk.
- Reduction in costs through automation and use of electronic media.
- Faster response to both marketers and the end user.
- Increased ability to measure and collect data.
- Opens the possibility to a market of one through personalization.
- Increased interactivity.
- Increased exposure of products and services.
- Boundless universal accessibility.

VIII. DISADVANTAGES OF E-MARKETING

- Dependability on technology.
- Security issues and privacy issues.
- Maintenance costs due to a constantly evolving environment.
- Higher transparency of pricing and increased price competition.
- Internet marketing depends heavily on technology.
- It is vulnerable to technical faults.
- This may easily become irate and take his business somewhere else.
- The rules of the trade change rapidly in Internet marketing.
- It requires attention and monitoring to ensure that marketing strategy.

IX. CONCLUSION

This work has clearly shown that e-marketing impacts upon businesses in a number of important ways. When used effectively, e-marketing campaigns and strategies have the potential to reach customers in a speedy and low-cost manner and can provide promotion for a wide range of products and services.

E-marketing also offers businesses the opportunity to gather data about their consumer base to an extent that has previously been very difficult to achieve via traditional marketing methods. The development of e-marketing and social media advertising has led to examples of businesses in recent years that appear to little more than categorize and filter information relating to products and services on the Internet, taking a small cut from any transaction that may occur as a result.

However, despite the global reach, speed and the extent of information that can be gained from e-marketing there are a number of important disadvantages to this type of marketing that businesses must bear in mind. The technology driven approach of e-marketing leaves certain businesses vulnerable and overly-dependent upon technology. It also empowers dissatisfied consumers to a far greater extent than ever before and can lead to bad reviews that have the potential to greatly destabilize certain e-marketing campaigns and operations. Despite these problems it is reasonable to conclude that e-marketing is on the whole a positive development for businesses and that despite certain dangers its impact upon businesses has been largely positive.

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