International Classified Advertisement Web Application using Data Mining

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***Abstract*: The E-market place has emerged as an efficient and important vehicle for transactions in the e-commerce industry. The practical implication is that, the e-markets on the one-hand, like olx.ng need to design and implement a system that will check both buyers and sellers. So both parties will have trust in one another transacting. This is to facilitate all people who are busy with their works and have no time to get their desired goods. We are here to provide you all the best and suitable places for sale. If once you register into our site, then you are benefitted with the consumer. This is used to advertise the products with image. Online classifieds are used to provide the customer with huge amount of information. This is a site to login to get latest updates of the automobiles, matrimony and real estates. An easy way to buy a product just sitting in front of your computers by registering into our site. This is used to advertise the products with images. He can get the desired product with different rates and quality. The main goal is to provide the customer with various goods just by sitting in front of a computer. He can get the goods easily without moving from place to place. Consumers can also have a chance of introducing their products not only in a single place but throughout the world using online classifieds. This system allows the user to interact directly just by sitting in front of the computer. Consumer have a chance of comparing the product and purchase the desired one.**

1. Introduction

Online classifieds are used to provide the user with a bulk of information. This is used to advertise the products with images. One can easily login to get any kind of information. Here the user is also facilitated to directly interact with the customer. He can get the desired product with different rates and quality. Customer can also have a chance to introduce their products not only in a single place but throughout the world through online classifieds. It is a free online classifieds site which lets you post ads if you want to buy or sell some things. What more, it is not only limited to buying or selling. It goes on to trading, discussing, organizing and meeting. It has managed to get there with sheer dedication and some intelligent marketing techniques. Now, I am writing with no doubt that whenever you or your family members think of selling your stuff or buying some stuff for cheaper prices, you must think of SRV. The impact SRV has made is stupendous. In this post, we will discuss about SRV. What is SRV? How has it made it so big? How are its ad campaigns so unique and attractive? So, get ready to delve into the world of the next generation of free online classifieds, SRV.

The needs have multiplied but the income hasn't. When it comes to consumer items, the rise in .income may not be corresponding to the rise in aspirations and the insatiable aspirations are leading them to the second-hand market to fill the gap. For a largely floating community of young professional in metropolitan cities unenthusiastic to compromise on their lifestyle needs. The second-hand market offers a more convenient and financially possible means of shopping. Relocations are increasingly becoming a career and lifestyle necessity, be it city hopping to accommodate a career, or moving to greener pastures. And this leads to situations where families try to get rid of 'junk', which invariably finds a place on a shop shelf somewhere.

2. Data Mining

Data mining is a process of extracting and discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems. Data mining is an interdisciplinary subfield of computer science and statistics with an overall goal to extract information (with intelligent methods) from a data set and transform the information into a comprehensible structure for further use. Data mining is the analysis step of the "knowledge discovery in databases" process, or KDD. Aside from the raw analysis step, it also involves database and data management aspects, data pre-processing, model and inference consideration, interestingness metrics, complexity considerations, post-processing of discovered structures, visualization, and online updating. The term "data mining" is a misnomer, because the goal is the extraction of patterns and knowledge from large amounts of data, not the extraction (mining) of data itself. It also is a buzzword and is frequently applied to any form of large-scale data or information processing (collection, extraction, warehousing, analysis, and statistics) as well as any application of computer decision support system, including artificial intelligence (e.g., machine learning) and business intelligence. The book Data mining: Practical machine learning tools and techniques with Java (which covers mostly machine learning material) was originally to be named just Practical machine learning, and the term data mining was only added for marketing reasons. Often the more general terms (large scale) data analysis and analytics or, when referring to actual methods, artificial intelligence and machine learning are more appropriate.

3. Data Set

Title - title of advert. Pub date - date of publication in 'dd/mm/yy' format. views - number of views of advert. mark - mark of auto (e.g. Toyota,BMW). model - model of a car. address - location of a car. year - car's production year (0 if year is not specified). mileage - mileage of a car (0 if mileage is not specified). body type - type of car's body (e.g. Sedan, Hatchback). color - color of the

car. Engine vol - volume of car's engine incubic centimeters (0 if volume of an engine is not specified). fuel - type of fuel. Gearbox - type of gearbox. Cleared - car customs cleared or not (1- cleared, 0 - not cleared). condition - condition of a car. add opt - additional options that installed on a car. multimedia - type of multimedia in a car. security - security options (e.g Airbags). other - other installed options. Owner note - note of owner of a car. price - price of a car in US dollars.The category table holds all categories in hierarchical format, going from root level to leaf level by means of recursive relationships.
The columns are: id, category name, parent category id, maximum images allowed post validity interval in days, property name, property unit, screen control id, possible values.

4. Need and Significance of the Study

The shopping cart is said to have been abandoned when the online shopper places items in the cart but leaves the e-commerce website without purchasing those items. Surprisingly, only 33 per cent of the online shoppers tend to complete the purchase process. The rest, two-third of the online shoppers tend to abandon their shopping carts (Coppola and Sousa, 2008). These statistics have been corroborated by numerous surveys conducted in the recent past. Some surveys have suggested that the online cart abandonment rate is 68 per cent (Bolton, 2015). This information has different subtexts. Less than a third of shoppers go ahead and complete their purchase. Online shoppers are fond of window shopping alone. Surfers log on only for what marketing literature documents as information search. There are stumbling blocks that in the online shopping process. All said, not being able to convert 68 out of 100 potential clients may spell doom for any business. These figures thus speak volumes of the enormous revenue that e-tailers can potentially generate. Even if we do not talk of absolute numbers, the aforesaid data suggests that e-tailers could more than double their top-line if they could simply the cart online shoppers from abandoning their shopping carts. There has been some improvement so far as the incidence of shopping cart abandonment is concerned. A decade back, only a tenth of the online shoppers completed the shopping process (Kukar-Kinney and Close, 2010). It is important to understand that online cart abandonment is not the problem; it is a symptom of the problem(s). The key then is to uncover the reasons that lead to online cart abandonment. This aspect gains monumental importance in the Indian context where online retail business is expected to maintain its growth trajectory. The present study has attempted to uncover the various factors because of which online shoppers abandon their shopping carts. This understanding will enable e-tailers to devise suitable strategies, reduce the incidence on online cart abandonment and thus increase their top line.

5. Need and Significance of the Study

The results of the present study indicate that online shoppers can be categorized into two broad categories; value seeking, task-oriented, rational shoppers and experiential shoppers.Managers have to devise separate strategies to woo these distinct segments of online consumers. They have to increase the usefulness and trust quotient of the website for theformer category of consumers and enhance the entertainment and interaction dimensions for the latter. A follow up on the online shoppers who dispose of their shopping carts is of utmost importance to draw them back to the e-tailer's websites. The industry as a whole needs to work together to attenuate the perceived risk of the consumers. It is pertinent to mention that Flipkart, the poster boy of e-commerce in India, ran a marketing campaign to assuage thesecurity concerns of the customers. Such promotional campaigns are likely to drive up demand for the entire industry. Needless to say, the market leader, in this case Flipkart, islikely to bag the biggest proportion of the increased market demand.

6. Urban Neighborhoods

In our study, we use the term urban neighborhood to refer to a in nature defined residential area [14]. In increasing countries, urban division in digital format of a city at the intra-urban level is scarce, therefore, we replicate intra-urban boundaries of Guayaquil using Google Maps and a Geographic Information System (GIS) to build polygons and store them in Geo-JSON format. Each polygon represents an urban neighborhood which is the third administrative level after the province and district. The urban neighborhoods dataset contains information of the 89 neighborhoods to be found in Guayaquil. Our analysis aims to characterize the socioeconomic status of those urban neighborhoods. We should highlight that we conducted a similar analysis at a province level for which public data is available. However, those administrative divisions involve some very large districts where neighborhoods of different characteristics are mixed up. This is why, we chose to work at a more granular level.

7. Online Classified ADS

Classified advertisement sites are popular platforms for people who want to rent or sell properties. People can freely post their ads promoting all kinds of products. In particular, when advertising houses, sellers describe aset of features that usually includes area, number of bedrooms, number of bathrooms, parking availability, address, price among others.SRV and Plusvalia are popular classified ads sites in Ecuador. We collected a listing of houses for sale in Guayaquil, publicly available in OLX and Plusvalia from December 2018 to March 2019. It includes information of 5,571 housing properties distributed across the entire city. Each record corresponds to a unique residential property with price information, area and geographic coordinates. We use the latitude andlongitude to map the polygon that the house is located in. In that way, we are able to map the advertised property to one of the 89 neighborhoods aforementioned and conduct our analysis aggregating data at a geographic neighborhood level.

8. Top-Up Transactions and Shops

Ecuador, currently, has three providers for top-ups transactions. We are collaborating with the dominant provider in the country that produced an anonymized dataset with more than 1M top-up transactions sampled uniformly at random. We are given a set of transactions, recorded at the same time period when the classified ads were collected (December 2018 to March 2019), for the purchases of one of the most popular product offered by the company such as mobile air time. Transactions in our sample are

performed by 134,032 unique customers in 1,083 unique shops geographically distributed across Guayaquil. Each top-up transaction records the timestamp, the customer ID, the shop ID and the total amount of purchased credit.

Transaction Records

Additionally, a complementary dataset contains a unique ID for each shop involved in the transactions and its corresponding geographic coordinates. Each shop has a pair latitude/longitude associated with it and those points are distributed across the entire city. In the same way as we did with the ads, we map each shop geographic coordinate to one of the 89 neighborhoods previously identified. We should note that, prior handing in the information to us, the company removed sensitive customer's information by transforming the IDs that identify uniquely to the customer. In the case of mobile airtime purchases, for example, the customer ID would correspond to the telephone number to which the credit is made. An additional level of anonymization is applied transforming the total amount of credit by applying a function that preserves the original ranking.

CONCLUSION

With the increased adoption ad fission of the Internet, World Wide Web is fitting gradually a standard advertisement platform. The Web is gift business advertisement world with more rich media tools, interactive services, and global reach. The need is to the know types of advertisement and buyer of this medium and also the factors determining the buyer behaviour tounderstandtarget consumers and then strategize wisely in order to gain maximum out of this new medium. Management Global Review ::: ISSN 2231- 623X Page 35 The paper gives the clear view of the types of advertisement and buyer of this medium and gives way for the future study related to thefactors determining buyer behaviour. This study further examines the behaviour of online consumer in terms of internet usage, perceived risks, and website attributes influencing online users.

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