

Performance Study of Classification Algorithms for Consumer Online Shopping Attitudes and Behavior Using Data Mining

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Abstract : With the growing popularity and acceptance of e-commerce platforms, users face an ever increasing burden in actually choosing the right product from the large number of online offers. Thus, techniques for personalization and shopping guides are needed by users. For a pleasant and successful shopping experience, users need to know easily which products to buy with high confidence. Since selling a wide variety of products has become easier due to the popularity of online stores, online retailers are able to sell more products than a physical store. The disadvantage is that the customers might not find products they need. In this research the customer will be able to find the products he is searching for, because recommender systems are used in some ecommerce web sites. Recommender system learns from the information about customers and products and provides appropriate personalized recommendations to customers to find the needed product. In this paper eleven classification algorithms are comparatively tested to find the best classifier fit for consumer online shopping attitudes and behavior in the experimented dataset. The WEKA knowledge analysis tool, which is an open source data mining workbench software used in comparing conventional classifiers to get the best classifier was used in this research. In this research by using the data mining tool (WEKA) with the experimented classifiers the results show that decision table and filtered classifier gives the highest accuracy and the lowest accuracy classification via clustering and simple cart.

Keywords : classification, data mining, machine learning, online shopping, WEKA

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