

Abstract

Ahmed I Ahmed Bahgat Elseddawy

CRM and Data Mining Techniques

Customer relationship management "CRM" is very important factor in enhancing the organization competitiveness. In this paper, Data mining "DM" techniques are used to improve customer services in a radiology centers. Clustering customers is needed to find unsatisfied need, promote services packages and create new service packages. The proposed system radiology data mining system "RDMS" consists of three components preprocessing, clustering and post processing. The data collected is for a period of four month for 6700 transaction. Three data sets are constructed from the original data set by dividing the whole data into 90%, 85% and 80% for training and 10%, 15% and 20% for testing respectively. Three K-means model are used with k=10, 15 and 18 cluster and each data set is used to calibrate and test the model for a total of nine ones. It is found that the best model is the one with 15 clusters. The clustering results are represented to a medical specialist who found that some results are reasonable and others go along with the center type and its policy.