

# Abstract

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## **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 &#97;&#110;&#100; create new service packages. The proposed system radiology data mining system "RDMS" consists of three components preprocessing, clustering &#97;&#110;&#100; 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% &#97;&#110;&#100; 80% for training &#97;&#110;&#100; 10%, 15% &#97;&#110;&#100; 20% for testing respectively. Three K-means model are used with k=10, 15 &#97;&#110;&#100; 18 cluster &#97;&#110;&#100; each data set is used to calibrate &#97;&#110;&#100; 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 &#97;&#110;&#100; others go along with the center type &#97;&#110;&#100; its policy.