Measurement the Customer Life Time Value with Utilization of Fuzzy Delphi Analytical Hierarchy Process and Hierarchical Cluster in RFM Model

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Abstract
Nowadays, with entrance of customer relationship management in new fields, identifying the various customers' features and optimum allocating of resources to them based on their value for companies has converted in to one of the main concerns in CRM. The aim of this paper is to propose a suitable model for measurement the customer lifetime value (CLV) as a criterion for optimum allocating of resources. In proposal process of this study that was performed in Toos Shargh company, after determining weights of the indexes of RFM model (Recency,Frequency,Monetary) using fuzzy delphi analytical hierarchy process (FDAHP), processing the values of indexes at 830 customers and hierarchical clustering of customers, Finally, was measured CLV in 5 Clusters. Findings of this paper provide criteria for analysis of customers features based on RFM model and CLV and identifying the main and valuable customers. In addition, were presented suggestions for improvement of CRM system based on findings.

Keywords: Customer relationship management, Customer lifetime value, RFM model, Fuzzy Delphi Analytical Hierarchy Process, Hierarchical Cluster Analysis