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QUANTITATIVE METHODS TO SEGMENT TARGET BUSINESSES IN A TELECOMMUNICATION ENVIRONMENT FOR SALES OPTIMISATION

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C2 General

Abstract

The dissertation focuses on studying various quantitative response-based, multivariate analysis (MVA) methods to segment a potential enterprise business to business (B2B) customer database for a telecommunications (telecom) company. Segmentation in the telecom industry is of high interest due to the competitive nature and the complexity of the sales environment.

MVA methods fall into two categories, namely interdependence and dependence analysis. The interdependence analysis methods evaluated were *k*-means clustering (KMC) and particle swarm optimisation (PSO). With regard to dependence analysis, chi-square automatic interaction detection (CHAID) and artificial neural networks (ANN) were evaluated.

Applying a method in a business environment were assessed through testing some hypotheses and answering applicable research questions.

The quantitative evaluation of the interdependent and dependent methods were done in the form of test runs to measure quality of output and speed of processing. Based on the results, guidelines and recommendations were identified for business segmentation through application of the methods.