

EVALUATING THE EFFECTIVENESS OF MARKETING TACTICS USING PURCHASE DATA

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ABSTRACT

With the evolution of information technology, the variety of marketing tactics used by retail stores to retain customers is increasing. Although such tactics represent effective ways to retain customers, they can be very costly. Therefore, stores have to choose their tactics carefully to create a strategy. In this research, we aim to quantitatively identify effective tactics. We propose a method to calculate the quantity of tactics that should be devoted to each customer based on purchase data and analyze tactic effectiveness for different groups of customers using covariance structure analysis. We conducted these evaluation experiments using large-scale purchase data and determined that it is possible to obtain quantitative measures of tactic effectiveness and that it is effective to analyze each group individually because the quantity and effectiveness of the employed tactics differ according to variables such as age or sex.

Keywords: *Service engineering, Big data analysis, Covariance structure analysis*