MUHAMMAD RIZA. Establishment of Target Market based on Credit Card Transactions Stream Data (Clustering and Association Rule Mining) in PT Bank Bukopin. Supervised by KUDANG BORO SEMINAR and AGUS MAULANA.

The company communicate the value of a product and build relationships to consumers is through a medium of marketing. The need for figure out the characteristics of and consumer advocacy to value of a goods and markets can be the key to successfully in increasing marketing activities. Therefore, the credit card business is one business product that requires an effective marketing support by collecting data and information related to the characteristics of consumers recognize the need for a credit card merchant.

Business of credit cards PT Bank Bukopin has made major contributions to the company in 2014 that is by 41.8%, but a decline in the use of the card number. Declining in the growth of total sales in merchant and increasing a promotional marketing credit cards make some issues to the company. Therefore we need extracting information (data mining) as one way to improve market and promotion activities credit card effectively.

The merging of two techniques namely clustering and data mining association rule mining (ARM) can be used to identifying customer segmentation and merchant dominant role that is used as a place to transact. clustering process using the k-means algorithm with 10 attempts resulted in three clusters with a silhouette value close to 1 is 0.40 while the results ARM using 1% minimum support and minimum confidence of 33% resulted in two role relationships between the type of merchant. Merger clustering and ARM identifies two types of role relationships between merchant with three clusters of potential customers based on the characteristics of employment, income, education, age, region of origin. The results of this study is expected to make an effective input credit card marketing and increase the fee based income of the company.

Keywords : ARM, clustering, credit card, segmentation