

ABSTRACT

Nowadays, telecommunication equipment has rapid development. It can be proved by fact that mobile phone request increases year by year. This condition is followed by the addition of mobile phone service operator. Addition of mobile phone service operator in Indonesia makes all operators must compete strictly, include PT. Telkom with TELKOMFlexi service. Until now, FLEXITrendy card as one of TELKOMFlexi product has *churn* level that is inclined to increase. Reason of customer *churn* FLEXITrendy card hasn't been know yet by PT.Telkom. This research has purposes to know characteristic of customer *churn*, movement pattern of customer *churn*, and primary reason that causes customer *churn* FLEXITrendy card from technical aspect and non-technical aspect as a basic from formula of program *customer retention*.

At this research, measuring tool which used is questionnaire. This questionnaire is distributed to customer of mobile phone service operator who has ever churned in Bandung. Result of questionnaire distribution will be proceed by descriptive statistic that is frequency to know characteristic of customer churn and crosstab to know movement pattern of customer churn that is proved by *prime algebra matrices* which is one kind of *markov chain* method. To know technical reason and non-technical reason I use both calculations (frequency and crosstab).

Characteristic data of customer *churn* GSM and CDMA are got from result of data processing. This characteristic can be explained based on sex, age, last education, occupation, income, expenses of pulse per month, and appropriate time of SIM Card change. Movement pattern of GSM and CDMA are also got from data processing. Where most interesting card which is chosen as churn is IM3 and the contrary is Matrix.

Based on analysis result, the main reason that caused customer churn from non-technical aspect is card which chosen by most of friends or relatives. Besides, technical reason that caused customer *churn* FLEXITrendy card are coverage area problem, network problem, *after sales service* problem, and new application problem. After analyze this reason, appropriate *customer retention* program for PT. Telkom can be concluded.

Keyword: *churn, customer retention, markov chain, prime algebra matrices, after sales service.*