## ABSTRACT

Internet and smartphones penetration in Indonesia has pushed the growth of digital lifestyle, one of them is playing mobile game. Potential value of game industry in Indonesia in 2022 is estimated 3.7 billion US dollars. This is encouraging PT Telkomsel to issue a special package GamesMAX as part of the Digital Lifestyle Service. Based on the GamesMAX Telkomsel package performance data, the number of GamesMAX customers compared with Telkomsel customer data that accessing game in a month is still very small, only 2.7%. Required effort to recognize the characteristics of GamesMAX customers to increase the number of customers and transactions.

Through this research GamesMAX customer classification was conducted based on customer demography consisting of age and gender and customer behavior represented by RFM (Recency, Frequency and Monetary) modeling using the TwoStep algorithm. In addition, this study evaluates the segments formed to define the target segment as priority that can be followed by marketing actions and package recommendations.

The data collection method was carried out using Telkomsel's big data containing data purchase of GamesMAX products made by Telkomsel prepaid customers during the period May to July 2018. Data processing and classification were carried out using the IBM SPSS Modeler version 18.0.

Based on the results of data processing, there are seven segments of GamesMAX Telkomsel customers consisting of Casual Gamer Male Adult, Casual Gamer Female Adult, Heavy Gamer, Casual Gamer Female Youth, Casual Gamer Female Teen, Casual Gamer Male Youth, dan Casual Gamer Male Old. Evaluation of models using a silhouette measure of cohesion and separation in the Fair category. The targeted priority segment is Heavy Gamer with package recommendations are quota Game 5GB, quota Internet 3GB, with additional games and voucher: Clash of Clans, Seven Kingdoms, Clash Royale, Garena Game, Hago.

Based on the results of study, Telkomsel can practically focus on Heavy Gamer segment (4,4%) to keep their loyalty and migrate from Casual Gamer to be Heavy Gamer with recommended packages and further research can be done to predict potential customers to buy the GamesMAX package and find factors that influence customers in using or buy the GamesMAX package

*Keywords* : *Games, GamesMAX, Telkomsel, Segmentation, Clustering, TwoStep,* SPSS, RFM