

## ABSTRACT

Telkomsel is the biggest cellular telecommunication operator in Indonesia, with 100 million of customer and market share of 51%, but Telkomsel is still not devoid of *churn* problem. It is proven as the *churn* of Telkomsel increases from 5% to more than 7% in 2011. Although PT Telkomsel obtains increasing number of customer relatively significant every year, it will be useless if the same amount of customer commit *churn*. According Rosenberg and Czepiel (1984), the cost required to obtain new customer is six times bigger compared to the cost required to maintain one registered customer (in Kuusik and Varblane, 2008). Therefore, Telkomsel currently forms a *churn prediction* team under *Predictive Analytics Department* which is currently in the process of *churn* analysis system improvement of Telkomsel prepaid card customer by selecting the best system offered by the vendor.

The process of this observation is done by using Quality Function Deployment (QFD) method. QFD method helps in product planning or service planning that is suitable with the customer's needs. This method is able to determine *critical customer needs* of the customer and translate *customer needs* in the form of technical requirement, design and project. This observation aims to make the specification of the system/product, which is the function of QFD Iteration 1. Therefore, QFD method is utilized solely in step Iteration 1 in this observation. According to the data collected, it is found that there are 30 *customer needs* which become *customer needs* of Telkomsel in order to provide *churn* analysis system. The obtained data is then processed by using AHP method in order to obtain each weight of customer needs. In order to specify the system using QFD, firstly, the 30 *customer needs* are being translated in the form of technical characteristic or *Metrics*. From the formulation result using *QFD Iteration 1*, the weight of each *Metrics* can then be obtained. These weights of each *Metrics* or technical characteristics will then become the specification proposal of *churn* analysis system for Telkomsel as a consideration in selecting the best *churn* analysis system which will be offered by the vendors.

Key words : *Churn* Analysis System Application , Telkomsel prepaid card, QFD, System Specification, AHP, *Churn*