

Abstract

Music evolves through times to times. Music listeners also demand different kinds of music from what they usually hear. People are not bind in only one particular genre, but they explore music. Some websites try to accommodate these people in exploring and sharing their music. One of the website is Last.fm. It offers database service, social activity, music download, and also recommendation. It has one problem: the recommendation is too obvious. The recommendation is based on the artist's music similarity. If a user's favorite artist is Lorde, Last.fm usually will give Ke\$ha for its recommendation. It is because their musics are alike: Pop.

The solution is by gathering users' behavior on their music listening activity. Most people have at least several favorite genres. The information can be processed with a Quantitative Association Rule Mining (QARM) with minConf, minSupp, and interval as its parameters, to produce a ruleset. The ruleset show various genres that can be taken as recommendation. This research modeled the activity from the users of Last.fm as the input for QARM. The algorithm that was used in this research is Apriori. After the ruleset is out, it is crossed checked with Collaborative Filtering (CF) to produce the recommendation. The research showed that QARM gave a more expressive ruleset because of its capability in processing quantitative dataset. The rule gave a richer recommendation because it's not limited in one genre, but beyond. Using the optimum parameter (minSupp, minConf, and interval), with some data characterization, the research focused on applying Association Rule with Apriori algorithm to develop a more expressive and easy to read ruleset.

Key Words: *Quantitative Association Rule Mining, Apriori, Music Genre*