Abstract

With the development of the technology, the needs of data processing becomes faster. The manier of streaming data, forcing a faster data analyzing process so that can produce a decission with *minimum* latency. Not only on managerial or strategic level a business intelligence is needed, but also on operational level is starting need a business intelligence system to enhance their work effectivity and efficiency. But unlike the managerial or strategic level, th workers who work on operational level need a faster anaysist result compared to managerial or strategic one. Therefore, a real-time business intelligence that required to woke faster to enhance the operational level performance is constructed. In this final project, conducted a research about a real-time business intelligence to predict a flight *delay* at PT Garuda Indonesia using association *rule* method with apriori algorithm. The flight data will go trhough a preprocessing process by removing data with a missing value and changing some variable to change string data in to integer so that it can be calculated. After a preprocessing process, the algorithm that will be used on real-time analytic process to create a *rule* base is apriori. This final project uses flight data of PT Garuda Indonesia on 2014. Those data will be processed and mined in order to forming some informations or knowledges as the base of decision making. The result of real-time analytic process will be conducted in several testing scenarios with different *minimum support* and *minimum* confident, and also with different use of apriori.

Keywords : Real-time Business Intelligence, *Delay*, Association *Rule* Learning, Apriori.