

## ABSTRACT

*Data Mining is one of area which grows rapidly because level of requirement of added value from big scale database which gets a lot of accumulation in line with information technology growth. Implementation from data mining can give important contribution in the world of business. Association pattern yielded can be used as consideration material in decision making in a company.*

*Association represent one of fungsionalist or technique from data mining to find the assosiatif order among an item combination. Various algorithm have been developed to get the association pattern by considering aspect of good effective and efficiency.*

*This final task criticism analysis of data mining to look for the association rules from a transaction dataset on application by using Pattern Decomposition algorithm. Analysis based on experimentation result. From the experimentation we can get information that if minimum support is large, frequent itemsets is small. Linear relationship between minimum support dan frequent itemsets can be difined with this formula :*

$$f(x) = a \cdot 1/x^2 + c$$

*A dataset that used atexperimentation is very influential. Dataset with high number record will need many time for processing all mining, moreover with small minimum support.*

**Keywords :** *data mining, association, pattern decomposition, minimum support, frequent itemsets.*