## **Abstract**

Growing of amount of informations at present generates problem in the form of finding relevant document to the need accurately and quickly. Information retrieval system can assist to solve this problem.

Relevance feedback is a technique where user do feedback and using these feedback for reformulate new query which will used for new searching. The document feedback used in Robertson and Sparck Jones algorithm is the relevant document which found. This algorithm do query reweighting and query expansion to form new query.

This algorithm can increase and reduce the searching performance like precision, recall, and IAP value which obtained at initial searching. The best result of precision value caused this algorithm is increasing 232.35% precision value of inital searching while the worst result is reduce -39.8% precision of initial searching. The best result of recall value caused this algorithm is increasing 11.38% recall value of inital searching while the worst result is reduce 23.2% recall. The best result of IAP value caused this algorithm is increasing 174.8% recall IAP of inital searching while the worst result is reduce 16.67% IAP. With this algorithm, searching time will increase fit to amount of document feedback and the expansion of term query.

Keywords: *information retrieval, relevance feedback,* Robertson dan Sparck Jones, *query reweighting dan query expansion.*