# Abstract

To become a big company takes appropriate strategies such as merger that produce large amounts of business processes that often contained the same business processes with the same goal anyway. Therefore, it needs a system that can check the similarity of business processes. Business process similarity checking is a system that can check the similarity of the two business processes that generate value similarity. In the similarity check, greedy graph matching method is used. This method of looking for a partner node with the most optimal value score matching. Each iteration, greedy choose node pair with the highest similarity syntactic value, then the node pair removed. In the process, calculated syntactic similarity, node insertions / deletions (sn), edge insertions / deletions (se) and the average node substitutions (sbv). Results from this study is the number of similarity JPO and the TDP is 0.51837 and the TDP and the JPO, namely 0.51837. Based on these results it can be seen that using a greedy graph matching produces the similarity numbers where if the business process is reversed as one business process as well as business processes 2, remains the same. However, greedy graph matching is not effectively used to calculate the graph edit distance similarity because in the process, each iteration greedy only see the highest value of syntactic similarity on the same node, the next node pairs that have been subsequently removed. Though maybe next iterated node that has been removed is a partner with syntactic similarity value higher.

**Keywords** : business process similarity checking, greedy graph matching, syntactic similarity, node insertions/deletions, edge insertions/deletions, node substitutions