ABSTRACT

Business Process is a set or sequence of task / process to achieve a certain goal. In the collection of business process model may be have redundancy model and is often difficult to find it, therefore it is necessary to use Similarity Search for searching based on the structure of the business process model. Telkom University is a combination of four campuses that have business processes differently and by utilizing the techniques Similarity Search, it can look for similarities of the business processes of each campus. In this final project perform similarity search for a campus that has bachelor program study (ITT, IMT, and STISI Telkom). The search process of redundancy process and workflow process (similarity search) using Graph Edit Distance is combined with the algorithm Greedy by mapping node/task to be substituted based on minimum similarity node value (MSNV), then computed similarity value using Similarity Graph Edit Distance. Value MSNV used as threshold does not affect the similarity value if the BPG which compared identical same and influential for comparison BPG which have some similarities because if the value MSNV is too small then the node/task substituted would not be appropriate and if it is too large there will be some node/task which can be substituted will be ignored (not included in mapping). The comparison of business processes based on business processes of STISI Telkom which has the fewest business processes amounted to 65. And the results of the similarity search found 23 business processes recommended to SPM Telkom University that can be used for re-evaluation in the business processes of Telkom University.

Keywords: similarity search, business process, business process graphs, graph edit distance, graph matching, greedy algorithm.