## ABSTRACT

IT Telkom is one of the private universities that offer academic focus in telecommunications. IT Telkom wanted to be a world-class university in 2017 who excelled in the field of information and communication. Along with these objectives, the more the new department was opened by IT Telkom. The more majors, the more students there are, which means demand for goods and services are increasing. This need goes along with the need for adequate and well-established supplier.

One of the problems that happened in IT Telkom is the tendency of using the same suppliers continuously, so that the dependence on certain suppliers is high. In addition, the assessment of the suppliers are only based on the strategic and qualitative assessment which drive to subjective assessment. Therefore, we need a system that allows the assessment of quantitative methods and available with manual labor in the implementation of business processes which is fit with best practice.

AHP method used in the evaluation of supplier assessment process. One of the advantages of this method is to quantizing qualitative criteria so that assessment becomes more objectives. From the weighting process, Quality System as a criterion with the highest weight and other criteria followed for the evaluation of supplier pre-selection. As for the evaluation of supplier performance, Quality criteria has the highest weight followed by other criteria. In addition, the design of business process best practices based on business process reference from previous research.

Finally, system of supplier evaluation of logical and systematic approach that can make the decision process becomes more structured and accountable. Functionally, the system facilitates the logistics for evaluating suppliers and making the decisions.

Keywords: Supplier Evaluation, AHP, Business Process