

## **ABSTRACT**

*PT. XYZ is one of the cloud computing service providers in Indonesia. The advantages of virtualized networks and software platforms make cloud computing a business operational support for organizations. One of the focuses of the company as a cloud computing service provider is reliability and high availability.*

*As an experienced company, the company has a Standard Operation Procedure (SOP) which is used to carry out a business process known as incident management. However, in the implementation of the incident management process for cloud computing services there are still problems that could potentially interfere with the incident handling process. So it is necessary to conduct business process analysis to optimize operations and end-to-end solutions to customers.*

*The research began with literature study and data collection. Next, extract the event log data and the analysis process using the R and ProM software. The incident log found 806 cases and 5466 activities. Then the researchers conducted business process modeling from the event log for running process analysis.*

*From the results of business process analysis and comparison with the SOP of PT. XYZ found a process that was not implemented. And the average duration of incident handling was 3 to 4 days. This has an impact on the fees charged by PT. XYZ.*

*The results of this study with process data and analyze business processes, the research know implications for PT. XYZ. Based on this analysis, the researcher provide recommendations for handling incidents to be effective and efficient. In addition, information can be continued with various of process mining to explore incident management scenarios.*

**Keywords :** *Business Process, Process Mining, Incident Management, Event Log*