

ABSTRACT

PT. Telkomsel has declared that IT (Information Technology) as the main function to win the competition in the cellular telecommunication business. There is hardly any business in the world that can be successful without technology support. Today, IT is no longer a support function, but has evolved into a business services. Therefore, IT in PT. Telkomsel implements the ITIL (Information Technology Infrastructure Library) framework as the most widely accepted approach to IT Service Management in the world, to provide best quality service and information for all business users as well as top management in decision making, so that PT. Telkomsel remains as the champion.

This research was focusing on the function of Service Request Management (SRM) which is a small part of ITIL, which is a medium for business users to communicate and request a services from IT Service Management unit (ITSM) in solving the problem that occur in their respective function in relation either directly or indirectly in serving customers. Analysis of the existing data on SRM becomes very important, so that IT PT. Telkomsel gets a more accurate picture of the relationship of certain variables to systems disruption groups. This study analyzes data service requests from January 2017 to June 2017, using R application and probability analysis using Orange software. The results obtained are service categorization and group symptom simultaneously have a significant effect on system disruption with an accuracy of 63.66%, and system disruption has a significant effect on its urgency with an accuracy of 86.66%. There are 3 groups of system disruption that can be predicted well, namely the activation errors problem, the Tmenu error system, the mass blocking error system with a precision level of 83.5%, 95%, and 79.3% respectively. And system disruption with medium, low urgency can be predicted well with precision levels of 80.1% and 92.4%, while the urgency of critical and high cannot be predicted properly with precision levels of 0% and 12.1% respectively.

Keywords: *ITIL, Service Request, System Disruption, ITSM, SRM, data mining, probability analysis*