

## ABSTRACT

*The development of cellular technology is currently growing rapidly where in Indonesia, Telkomsel is one of the cellular operators in Indonesia that continues to develop networks throughout Indonesia, one of which is in Riau, where from the ongoing network development, there are submissions from areas that are still not covered by the Telkomsel network. and there are also areas where new network development has been carried out.*

*This study aims to determine the effect of network quality and service quality on customer satisfaction and loyalty on the development of a new cellular network in Riau with network quality parameters and customer service quality on customer satisfaction and loyalty.*

*The method used in this research is a quantitative approach. The sampling technique used in this study is non-probability sampling with purposive sampling method. The sample taken in this study were 180 respondents who used Telkomsel network services. The data analysis used is descriptive analysis and structural equation model (SEM) analysis with the help of SmartPLS 3.0 tools.*

*The results of this study indicate that network quality has a significant effect on customer satisfaction, customer service quality has a significant effect on customer satisfaction, network quality has a significant effect on customer loyalty, service quality has a significant effect on customer loyalty, and customer satisfaction has a significant effect on customer loyalty.*

*Based on SEM analysis using smartPLS tools, it shows that the most dominant direct influence is on the service quality variable on customer satisfaction with a path coefficient value of 0.500 and the largest T-Statistic with a value of 10.00. While the smallest effect is on the network quality variable on customer loyalty with a path coefficient value of 0.259 which has the smallest T-Statistic with a value of 4.427, meaning that Telkomsel must continue to look for new ways to improve network quality to increase customer loyalty. Company must order to maintain service quality because this variable has the greatest influence on customer satisfaction, namely the path coefficient of 0.500 with the lowest percentage score for the statement item in the statement: respondents feel that Telkomsel has the latest technology, with a total score percentage value of 83.75%. To further improve customer satisfaction, Telkomsel must have a strategy in updating the latest technology, especially the acceleration of 4G + implementation, massive and comprehensive VOLTE (voice over LTE) implementation, 5G implementation acceleration, in order to increase customer satisfaction.*

**Keywords:** *customer satisfaction, loyalty, network quality, new mobile networks*