

## **ABSTRACT**

*Telkomsel as leading operator in Indonesia, continuously trying to improve quality of service to the customers. . One of them is by network developments, especially 4G. To be able to use 4G network, customers are required to use 4G devices and 4G USIM cards. The development of 4G networks coverage has not been absorbed by customers optimally, seen by the low penetration of 4G smartphone device just reached 42%. Besides, there are still many customers who have not replaced USIM (4G sim card) even though they have 4G capable devices.*

*The purpose of this research is to obtain an overview of the relationship between 4G device penetration and network development. And to get answers related to the penetration of 4G devices that are still not in accordance with the target. This research will identify the cause and find out the programs that have been obtained.*

*This research use descriptive qualitative method where data collection is based on interview / direct interviews with some expertise in the Telkomsel as primary data. While secondary data was obtained from internal companies as well as row sampling data in the Jabotabek region with several variables i.e., device type, USIM, revenue and customer's length of stay (LoS).*

*The results of this research show that the cause of still not maximal in 4G device penetration are, no subsidy in 4G devices and partnerships, customer's perception that 4G devices is wasteful both the quota and the battery, farther, customers already feel enough with 3G network speed. Customers who use 4G devices but have not replaced the 4G USIM due to long queue in Grapari Telkomsel.*

*Hopefully this research can be used for further research, especially in network development strategies that are associated with device penetration. So that there is an equilibrium between the investment that has been spent by the company and the reciprocity that it receives..*

**Keywords : 4G LTE, Smartphone, Data Broadband, Device, Penetration**