

## **ABSTRACT**

*Growth of the digital world that is currently increase rapidly, demanding a Telecommunications operators in Indonesia in this case PT Telkomsel continues to build a complete digital ecosystem. In recent years there has been a change in customer behavior where there has been an increase in demand for digital-based telecommunications services, both internet and other digital services.*

*Digital business is expected to make new revenue growth for operators in Indonesia specifically PT Telkomsel. Therefore, Telecommunications companies have to transformation both in terms of innovation and management so that they can generate new revenue streams that can make additional income on sustainable business.*

*This study aims to analyze the efficiency of the company PT Telkomsel in terms of digital business and find out the company's efficiency variables in the period 2007-2017 by also looking at other factors such as financial reports and also transformations. This research is carried out using the Data Envelopment Analysis (DEA) method and after that the results of the efficiency are regressed against the financial ratios that have been calculated previously.*

*The results of the study indicate that the input and output variables have a significant effect on efficiency, as well as the variable ROA & ROE variables also affect efficiency. From the results of other analyzes there are findings that the highest efficiency value occurs after the changes / transformation that the company has made in this case of digital transformation.*

**Key Word:** *Efficiency, Telekomunication, Telkomsel, Data Envelopment Analysis (DEA), digital transformation, Linear Regression.*