

## **ABSTRACT**

*Blockchain has been considered as the current disruptive technology which can trigger innovations in different areas. Initially, it started as the technology layering the well-known cryptocurrency called Bitcoin, but now Blockchain has applied to other areas including supply chain. According to several researches, blockchain implementation could bring various benefits that can improve the performance of business processes. One of the most highlighted benefits is the opportunity to reduce supply chain costs. Although many papers have implied that blockchain can reduce costs, some may say the benefits might not be as expected and need a long time to perceive the significant impact.*

*Therefore, this research is conducted to investigate whether blockchain implementation can actually reduce costs as stated in other researches. To analyze this issue, a paired sample t-test is conducted to examine the significant differences in costs before and after blockchain implementation. The result of this study shows that the significance value is greater than 0.05, which indicates that operating costs after blockchain implementation is not significantly lower than the operating costs before blockchain implementation.*

**Keywords:** *Blockchain Technology Implementation, Supply Chain Management, Cost Reduction, Supply Chain Costs*