

## ABSTRACT

*In a shopping arcade, instant noodles are the most widely sold product. But the production of instant noodles and the number of requests every week is not constant in this PT. Indofood Sukses Makmur, so there is often a mismatch in minimarket demand with the amount of production of PT. Indofood to provide a number of noodles to increase inventory and add losses to the company. In this study conducted a comparison of the method of the fuzzy logic algorithms Tsukamoto and Takagi-Sugeno to predict the amount of instant noodle production seen from the number of sales and the remaining instant noodle stocks from the previous days. The process of determining the prediction result is used affirmation (Defuzzy) using the weighted average concept. The results gained last in comparison, and gained that the fuzzy method of Takagi-Sugeno inference has a smaller error rate of 0.1086 or 10.86% compared to the Tsukamoto method of 0.1618 or at 16.18% in Predict the amount of instant noodle purchase to be done by PT. Indofood Sukses Makmur.*

**Keywords:** *Fuzzy Tsukamoto, Fuzzy Takagi-Sugeno, noodles, Prediction the purchase, Comparison*