## FUZZY TSUKAMOTO METHOD IMPLEMENTATION IN THE DECISION SUPPORT SYSTEM IN DETERMINING THE BEST FRONT AGAIN (Case Study : PT. Aseli Dagadu Djokdja)

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## ABSTRACT

PT. Aseli Dagadu Djokdja is a company engaged in the creative industry of alternative souvenirs typical of Yogyakarta. Garda Depan is a part-time work program created to build partnerships between industry and students. The performance of a Guard is very important in providing the best service. To support the performance of the Front Guard, the company determines the best Front Guard every month as a symbol of company appreciation. This study aims to apply and determine the level of accuracy of the Fuzzy Tsukamoto method in determining the best Front Guard in order to create a more optimal calculation system. This system will be built using the Java programming language and based on Desktop. There are several supporting applications such as Java NetBeans IDE, Apache Web Server, and MySQL as the database. System testing was carried out using the Mean Absolute Percentage Error (MAPE) method. MAPE shows the error rate of the system created, which is 12.12% and in the MAPE categorization, by obtaining the error value, the system created is included in the "Good" category, with an accuracy rate of 87.88%, it can be concluded that Fuzzy Tsukamoto method can be applied in determining the best Front Guard.

Keywords: Fuzzy Tsukamoto, MAPE, Decision Support System