

**Sistem Peramalan Pengeluaran Anggaran Koperasi Menggunakan Metode
Weighted Moving Average (Studi Kasus Koperasi ITS Mandala Jember)**
*(Cooperative Budget Expenditure Forecasting System Using the Weighted
Moving Average Method (Case Study: of ITS Mandala Jember Cooperative))*

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ABSTRACT

An organization often has financial management problems. People who manage finances are very important in an organization. The ITS Mandala Jember employee cooperative is a cooperative that operates in the savings and loan sector as well as grocery stores. The problem with the ITS Mandala Jember employee cooperative is setting operational costs every month and year which are not quite right. This problem causes budget swelling in cooperatives. To overcome this problem, a system was created that could predict budget spending every month and year at the ITS Mandala Jember Employee Cooperative. The system is designed using the Weighted Moving Average Method. This WMA forecasting method is similar to a simple MA calculation. However, this method requires a weighting process for each time period that will be used for the forecasting process, where the weight value assigned to each period is different. The most recent existing historical data will be assigned a higher weighting value than previous historical data. The error rate in this system uses the WMA (Weighted Moving Average) method, which is 19.016851%.

Keywords: *cooperative, WMA, forecasting, system*