

ABSTRACT

Indonesia has recently faced significant economic challenges in the form of deflation, resulting in decreased aggregate demand and weakened economic activity. This condition has led to slowed economic growth, reduced investment, and an increased unemployment rate of 4.91% as of August 2024. The deflation, triggered by falling commodity prices and abundant supply, further pressures consumer purchasing power. In this situation, investment through Foreign Exchange (Forex) trading emerges as an alternative source of additional income, albeit with high risks, especially for inexperienced beginner traders.

To address the risks in forex trading, an Expert Advisor (EA) named Trading-Dong 2.0 was developed using the MetaTrader 5 platform, focusing on the XAUUSD market with a 15 minute time frame. This EA integrates Artificial Intelligence (AI) technology based on the CatBoost algorithm to enhance prediction accuracy and adaptability to dynamic market conditions. The system also implements strict risk management features, such as automatic trailing stop loss, dynamic lot sizing, and real time drawdown monitoring. The development complies with BAPPEBTI Regulation No. 12/2022 to ensure the legality and safety of EA usage.

Backtesting results over a two-year period show that Trading-Dong 2.0 with AI integration achieves a win rate of 62.14%, a drawdown of 15.36% and a Return on Investment (ROI) of 590%, outperforming the version without AI. Real-time testing over one week yielded a 100% win rate, 0% drawdown, and 92.18% ROI, significantly better than the previous version. Thus, Trading-Dong 2.0 presents an effective, legal and reliable forex trading solution to support income improvement for Indonesians amid deflationary economic challenges.

Keywords: Artificial Intelligence, Expert Advisor, Forex Trading.