## **ABSTRACT**

Micro, Small and Medium Enterprises (MSMEs) are small businesses that contribute significantly to economic development in Indonesia. The significant role of MSMEs in Indonesia aligns with the Sustainable Development Goals (SDGs). One of the sustainable development goals is goal number 8, namely decent work and economic growth. The existence of this goal is expected to fulfill economic productivity through high innovation from existing diversification so that each economic sector is able to increase consumption and production resources and decent work for everyone. One of the MSME sectors that contributes to economic growth is the Birkin Pet animal clothing industry with its product called Ergonomic Pet Harness.

Ergonomic Pet Harness is a pet body protection harness that is designed into clothing according to ergonomic standards. The product sales media is carried out online through e-commerce Shopee and TikTok Shop. Ergonomic Pet Harness plans to develop products by adding technological features like a GPS Tracker.

The purpose of this research is to analyze the economic feasibility of the Ergonomic Pet Harness when adding the GPS Tracker feature by considering technical aspects, market aspects, and financial aspects. The research conducted is descriptive qualitative research, which emphasizes phenomenon research. The feasibility analysis was analyzed from the financial aspect by considering market and technical aspects. Market data was obtained using the TAM, SAM, and SOM market size estimation methods. The estimation results show that TAM is 4.8 million cat owners with global size, SAM is 1.248 million cat owners with Indonesian size data, and SOM is 12,480 cat owners with Indonesian data. Technical aspects were analyzed to determine the number of employees, tools and materials, and locations needed. The results showed that adopting the GPS Tracker on the Ergonomic Pet Harness was feasible if it obtained an NPV of Rp 52,366,342 with an IRR of 24 percent. The payback period is obtained in the fifth year. This nominal increase can be achieved if the Ergonomic Pet Harness sells 2,220 pieces in the first year and experiences a 15 percent increase in sales each year. The Ergonomic Pet Harness will be feasible to sell if the thresholds are an overall salary increase of 3.5 percent, a decrease in profit margin of 3.5 percent, and a decrease in revenue of 2.7 percent. If it exceeds these thresholds, the business will incur losses or not be viable.

Keywords: feasibility analysis, sensitivity analysis, IRR, NPV, Payback Period