

## **ABSTRACT**

Aren Boba is a company engaged in the sale of sweet drinks. Aren Boba also has two activities, namely sales and purchases. Aren Boba companies are often faced with challenges in managing their operational costs, where an error in projecting costs that will be incurred in the coming month. This research aims to develop an application that can analyze cost behavior based on historical data using linear regression. This application has the functionality to manage sales, other costs within the company, manage general journals, manage estimation result reports. The research methods used include literature study to understand the concepts of cost analysis and linear regression, as well as collecting cost data from Aren Boba as a case study. This application was created using the System Development Life Cycle (SDLC) method, using the PHP programming language and Laravel framework and using MySql as database management. The results showed that this application can help Aren Boba in analyzing cost behavior, identifying fixed and variable costs, and predicting costs based on the company's activity level and help Aren Boba to make more informed decisions in managing its operational costs, thereby increasing the accuracy in determining costs in the following month.

Keywords: Application, Cost Behavior, Linear Regression