

ABSTRACT

Kresna Seafood is an MSME that serves seafood with a wide variety of food variants. Currently, Kresna Seafood still uses manual data collection of raw materials, the purchase of food raw materials is still estimating the amount to be purchased. Inventory stock of raw materials will be updated when it runs out, and raw materials that are not used up are stored in the freezer, so that the procurement of raw materials and data collection is not effective and efficient. For this reason, the authors design an information system for forecasting raw materials to manage stock that has run out and perform calculations systematically.

The system designed is expected to make it easier for workers to collect data on raw materials. The design is made using the Agile Development method. With this method, software development is based on an iterative process where the rules and solutions have been agreed in an organized and structured manner.

Forecasting calculations are carried out using the moving average method in the form of time series data, which requires sales data in the past to forecast future sales so that the results can be determined. In doing system modeling, Unified Modeling Language (UML) is used. The design results were tested using blackbox and User Acceptance Test (UAT).

The results of the study are in the form of raw material forecasting calculations to find out how many raw materials are needed for the next month. The benefits of making a system for Kresna Seafood SMEs are helping to optimize raw material management.

Keyword: *Unifiel Modeling Language (UML), Blackbox Testing, Agile Development, moving average, entity relationship diagram*