

ABSTRACT

Inventory is one of the important drivers of supply chain flow because policy changes can change suddenly and drastically on the level of supply chain responsiveness and efficiency. Likewise, inventory management is one of the activities that has an important role and requires special attention and treatment from the company. When waste occurs in the supply of raw materials, the company will suffer losses.

Satellite warehouse is a branch of the spare part storage warehouse for production machines that process raw materials into cement. In the existing inventory management at the satellite warehouse, it has not used a computer system to collect data on incoming and outgoing spare parts taken by production and uses a manual record data collection system such as a book. This study aims to design a spare part inventory management system at the satellite warehouse at XYZ based on visual basic and worksheet. The method used in designing this system is the waterfall method to describe a systematic and structured approach before designing an inventory management system and to model the design of a visual basic-based inventory management system and worksheets to describe the flow of the inventory management system to be designed by applying Use Case Diagrams, Activity Diagrams, Entity Relationship Diagrams (ERD), and Data Flow Diagrams (DFD). After designing an inventory management system based on the functionality of this warehouse satellite requirement, testing is carried out on the system by applying the black box testing method to conduct functional testing of the system. The test results show that the whole functional system is successful and running well.

Keywords: System Design; Inventory Management; Spare Part