ABSTRACT

XYZ Ltd. is one of logistic services provider company or commonly known with 3PL (Third Party Logistics) Company. Current condition of SKUs (Stock Keeping Unit) management doesn't give guarantee both inaccuracy and service rate. The existing business process in warehouse stil implementing direct putaway and direct picking method that takes much portion of process time to search empty location to store SKUs in inbound process and search to locate and pick the SKUs for shipment in outbound process which is takes almost 50% of processing time and prone to error in picking process. The current used system only made to be able to store information of SKUSs inbound and outbound process limited on quantity and date of transactions. The existing system can only be used byone user for one client, so there is more than some same kind of application that used in managing warehouse.

Business process improvement of warehouse management begins with optimizing SKUs storage layout by doing zonification and sloting using lean warehousing approach which considering turnover rate of each SKU. With the aim to reduce total required time to finish the process. To do so, it will require changes in business process to adopt directed putaway and directed picking model. This study will develop a warehose management system that will be able to accommodate directed putaway and picking model, and implement SKU storage allocation optimization.

The result of this warehouse management system development, can shorten the processing time and also improve the process of warehouse management it self especially in inbound and outbound process that will indirectly increase the capacity ofservice that can be provided. This system is also designed to accommodate more than a client so as to reduce duplication and improve data accuracy

Key Word: Warehouse Management System, Waterfall Method, Code Igniter Framework.