INCREASING EFFICIENCY IN THE PREPARING OF UNLOADING PROCESS REPORT USING SYSTEM DEVELOPMENT LIFE CYCLE (SDLC) METHOD AT PT XYZ

UNDERGRADUATE FINAL PROJECT

Submitted as one of the requirements to obtain Sarjana Teknik (S.T.)

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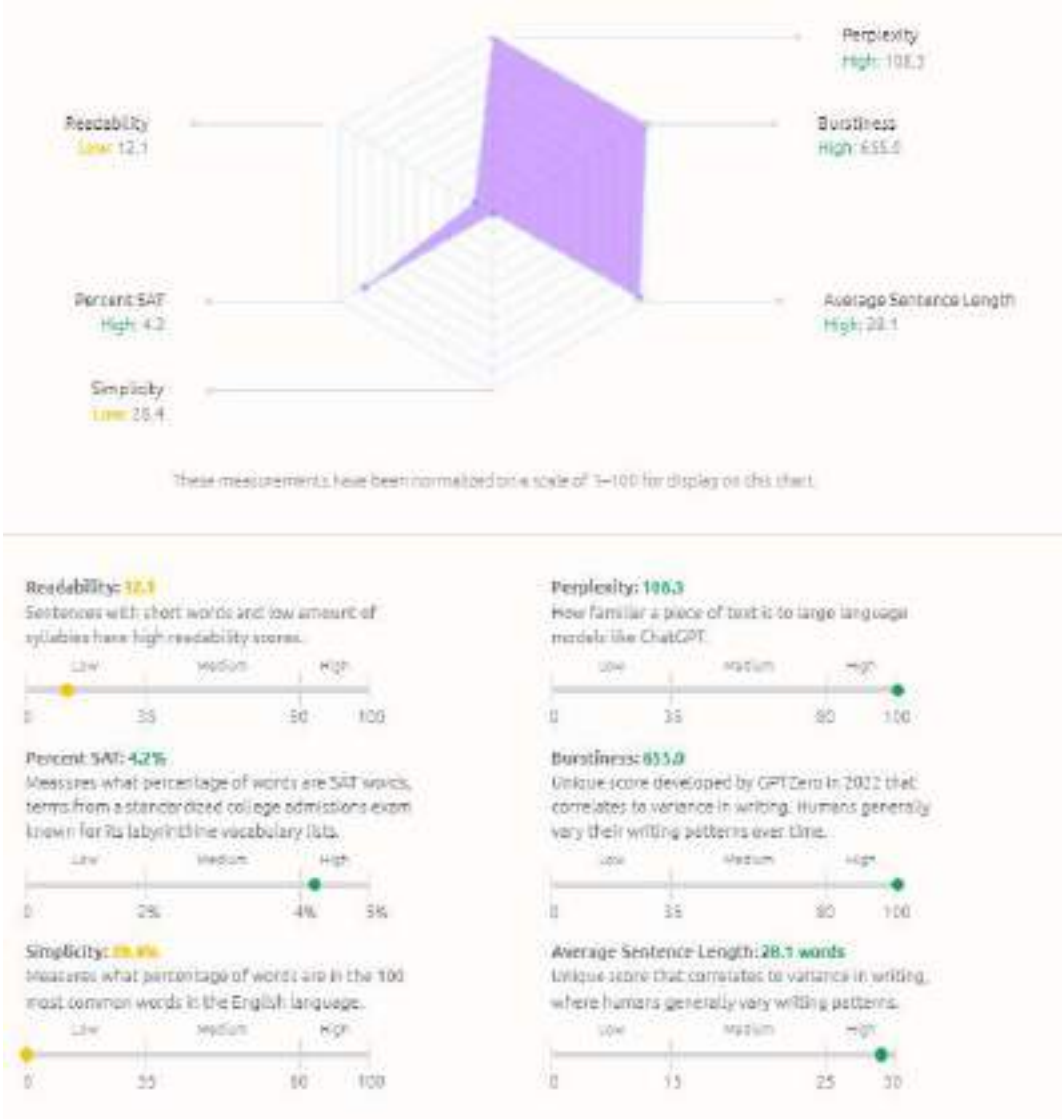
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ABSTRACT

PT XYZ is a pharmaceutical goods distribution company that need warehouse to run its operation. So, warehouse management system is required to ensure quality results. Warehouse management system is the activities and procedures that enable a smooth flow of warehouse processes. The warehouse processes consist of unloading, put away, picking, and loading. The process starts from the inbound area, namely unloading. This process is the most important and critical, because this process determines the condition of incoming goods before they are finally stored in the warehouse. In the unloading process, a monthly report is made for principals as a form of receiving and recording their goods in the distributor's warehouse. When calculating the cycle time to create an unloading report, it takes a very high processing time of 1870.98 minutes or 31.8 working hours. This high cycle time is caused by the report preparation is still using the manual method. The report preparation system will be improved by using a system engineering design namely the System Development Life Cycle (SDLC) approach with the waterfall method. The proposed system is based on Excel Macro VBA as the main tool to reduce cycle time. After the improvement has made, the time required is 25.6 minutes or 0.43 hours to complete the report. This improvement can help users to increase time efficiency to 98.63%, and get savings opportunities that can be an added value for the company.

Keywords: *Automation system, Cycle time Reduction, System Development Life Cycle (SDLC), Unloading Process, Visual Basic for Application, Warehouse Operations*

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LIST OF TERMINOLOGIES

SAP	:	Software based on ERP or Enterprise Resources Planning which is used to run the daily activity management of an organization or company.
Unloading	:	The movement of items from a vehicle to a reception location in a warehouse.
Warehouse Management System	:	WMS is a system that regulates and manages warehouse activities such as receiving, storing, picking, sorting, packing, and shipping.