DEVELOPING TOOLS TO INTEGRATE PRODUCTION PLANNING AND INVENTORY CONTROL DATA FOR PACKAGING MANUFACTURER

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Revision after the Thesis Defense on 11 July 2023

STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

DEVELOPING TOOLS TO INTEGRATE PRODUCTION PLANNING AND INVENTORY CONTROL DATA FOR PACKAGING MANUFACTURER

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This company of this research still utilized Microsoft Excel as the main software to process the PPIC data and Google Drive to distribute the data through the organization. There are several problems occurs in the company, many versions of file circulating around the company, double process inputs occur, time waste and inconsistent calculations occur because of too many manual inputs data and formulas, users having difficulties to find the required sheet. The objective is to eliminate many versions of data circulating around the company, eliminate double process input, reduce manual input processes, and ease the way to find the required sheet. This research will discuss the implementation of a web-based application and integrating the production planning and inventory control data. The methodology that is conducted in this thesis to improve data integration is Waterfall Methodology. The requirement phase will elaborate the problem and the expectation from the company. The design phase will be the planning for the implementation. The implementation shows the interface and the formulas inside the file. Black Box testing is conducted in this thesis to test the manual inputs connectivity to the data and the automation inspection. List of new formulas implemented to help the user to maintenance the PPIC file. The current condition and the proposed conditions are compared to see the benefits of implementing the data integration in the result sub-chapter.

Keywords: Packaging Manufacturer, Production Planning and Inventory Control, Data Integration, Web-Based Application, Waterfall Methodology, Black Box Testing.

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DEDICATION

I dedicate this thesis to my family, friends, lecturers, advisor, and co-advisor, and myself.

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