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**SAP ERP Lay Planning Management Workbench For
MAS Holdings**
Solution for SAP Apparel and Footwear Manufacturing Plants

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Dissertation submitted to the Faculty of Information Technology, University of Moratuwa, Sri Lanka for the partial fulfillment of the requirements of the Degree of MSc in Information Technology.

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Declaration

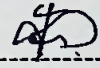
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Dedication

This dissertation is dedicated to my beloved parents, siblings who gave me endless courage and support to achieve my task and goal in completing the research project.

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Abstract

In Garments Industry, Tracking the fabric cutting Process is a key requirement in any manufacturing discipline. When the production process is more human oriented, tracking process becomes more difficult compare to an automated process.

Due to the inefficient and decentralized nature of requirements sharing and communication methods used for calculating fabric cutting ratio and planning process of the garment manufacturing industries, a number of issues such as long lead times, high fabric wastage due to incorrect ratio planning, etc have negatively affected high cost and employee relations in the industry.

The project provides SAP R/3 based solution to solving these issues by proposing both a business as well as an IT solution. The deductive approach which to research is used to carry out a comprehensive research that works to identified the factors influence incorrect ratio planning to increase efficiency, reliability & accuracy through the centralized system. These factors are then taken as variables to formulate hypotheses of the study. A comprehensive industrial survey was carried out to gather further details on the subject matter thus the results of it were considered whilst proving or disapproving the hypotheses. The most influential factors identified through the research were then used to design the business solution. Furthermore, various issues, perspectives and theories that were identified through the research were used to model, design and eventually develop the IT solution.

These solutions is provided an all-round solution; both strategically and systematically were highly rated by the evaluators of the project.

Keywords: SAP R/3 , SAP, Lay Planning, Marker Creation, CAD System, Fabric Cutting.

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