

Chapter 1

Introduction

1.1 Preamble

Tracking the Production 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.

Apparel Manufacturing is one of such highly labor intensive industry which gives huge revenue to the country. Therefore implementing a production confirmation system is one of key requirement in such environment. In addition to that there is no unified process of apparel manufacturing as such like other industries. Eg: Automobile, Telecommunication Equipments etc. There can be different permutations of operations in apparel manufacturing depend on the style. Due to these facts tracking of the production process is not an easy task. [1]

With the high competition around the world for apparel manufacturing to sustain in the industry it's a must to eliminate waste and reproduction without compromising the product quality. Lean Manufacturing concept [8] is one of the highly proven Business Process Reengineering (BPR) methodologies that help in leveraging the business process in eliminating waste and enhancing the efficiency without reducing the quality. More detailed description about Lean concepts is attached in appendix G.

When applying Lean Concepts to apparel manufacturing, the existing production confirmation process (if there is) will get obsolete in most cases. Then a need of new production confirmation system is a must.

1.2 Aim and objectives

- Implementing Production Confirmation System for Apparel Manufacturing plant.
- Enable to monitor the production process sensitively, Therefore it supports to enhance the efficiency and smoothness of the production process
- Leverage the implementation of Lean Manufacturing concepts
- Implement and maintain this production confirmation system with minimum cost
- By this solution current SAP system should enable to capture the production confirmation quantities.
- Generate views and reports that are useful in operational level
- Create Simple and effective interfaces that makes users life easy



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1.3 Solution

Since SAP R/3 (AFS) 4.6 is currently use in Contourline this Production Confirmation System will be developed base on current SAP implementation.

This System will be creating its own Bundle guide and Material requisition base on current Production orders in SAP. Bundle guide no will be use to Line In operation Confirmation. Since the Line Out operation is captured via NIKE upc sticker for every Sales Order/Line Item the relevant NIKE upc stickers has to be enter to the system.

With the Bundle guide number the Line In operation can be confirmed using the link between Bundle guide number and Production order. Material requisition is also created for the respective Bundle guide Sewing RM's can be issued automatically in Line In operation Confirmation.

To capture the Line Out operation confirmation NIKE upc sticker has to be scanned. This is done via IP scanners placed in the end of all production modules in the Contourline production flow. IP scanners will be sent the UPC code + IP of the scanner to a local server. Local server will record all the Line Out confirmations and upload to SAP schedule wise.

SAP server will receive the Line Out quantities from the schedule process. Then the records are being sort according to the available Bundle guides and Line Out confirmation is performed. At the same time Packing RM' also issued for the respective Production order.



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In addition to the SAP upload, local server updates display boards with line IN/OUT quantities.

1.4 Structure of the dissertation

Chapter 1: Introduction chapter, brief description about production confirmation and its current issues and the solutions proposed are briefly outlined here

Chapter 2: A detailed explanation about problem domain and current system will be covered with in this chapter. A comparison about available solutions also included

Chapter 3: This Technology review chapter covers available technologies and tools that are considered for a development in this nature.

Chapter 4: My approach chapter is about the technologies and methodologies adapted to this system. It will give some detailed explanation about the selected technologies and methodologies I'm going to using in this development.

Chapter 5: This chapter is covering up the analysis and design stage of the development. Starting from the current system study it will provides all the necessary artifacts up to GUI, DATABASE and class designed diagrams.

Chapter 6: Implementation information is included in this chapter. I will be discussing most of the critical and vital implementation methods.



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Chapter 7: This evaluation chapter will cover software evaluation methods. With regard to the development it will discuss the evaluation methods and test cases for the evaluation.

Chapter 8: This chapter is for the conclusion and further enhancements to the system. There I will discuss the success of this development and the capabilities of further enhancements.