A Real Time Production Tracking and a Decision Support System (PTDSS): A Case Study from an Apparel Company

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Abstract
The production process is vital in any manufacturing environment. Thus, the time taken for the production process needs to be planned, monitored and controlled. This study describes the process of developing and implementing a real time production tracking and a decision Support System for a leading apparel company (PTDSS), specifically for tracking the job cards of a production sample room. In this paper the authors present the methodology used for production planning, process tracking, and the analytical tool pack designed and developed as part of the decision support system. The detailed of the system design and development with the technologies used with respect to the implementation will be elaborated in the subsequent sections. The PTDSS uses barcode tracking technology to trace and monitor the production process along with a mobile application developed on Android platform. The key findings of this research include novel approach in selecting the wide variety of technologies used to plan, track, and control the production process of a sample room and the decision supper nature embedded by providing Visual Basic for Application (VBA) based analytical dashboard. The PTDSS has successfully passed the trials at the actual go-live and has enhanced the visibility of the sample production process and reduced the time taken for the sample production process to complete. Finally, the article discusses the possible future expansions to the PTDSS itself and research direction in the production and tracking systems for apparel industry as a whole.

Key words: *Real time production tracking, Apparel industry, Sample production*

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