



**BSc (Hons) DEGREE PROGRAMME in  
Information Systems with Business Management**

**Final Project Report (FPR)**

**Smart Purchase-Order Materials Planning System (SPOMPS)**

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## Abstract

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'MAS Holdings' is one of the pioneers in the apparel industry playing a significant role to the nation's economy. MAS Bodyline (Pvt) Ltd is a production factory under MAS Holdings, and is facing a major problem during material planning for purchase-orders. Along with the inability to solve this problem, several corresponding sub issues have also aroused resulting failures of orders. However, even with the company's SAP system going through upgrades, the issue has not been able to solve yet.

Along with the most appropriate approaches and methodologies, this research outlines the factors and findings affecting incorrect consumption measures and investigates its impact on planning to reach correct consumption measures. In order to reach this correct measure, this project proposes a Business Solution Process Model and an IT system 'Smart Purchase-Order Materials Planning System' with the most appropriate tools and technologies, which will eradicate all issues relating to incorrect consumption measures.

Along with this system, the company will not only solve the main problem but also will allow many other benefits reaching to increase profits and gain further recognition in the industry by producing quality and in-time products.

The system will also be further developed as per recommendations, to generate a revenue along with further modifications by releasing it to the market, since there are no existing systems to perform in-depth forecasting of material consumption.

**Key Words:** Apparel Industry, Material Consumption, Bill of Materials (BOM), Forecasting, Purchase-Orders (PO), Just-in-time (JIT), Data Mining, Decision Tree Analysis