

## **Simulation Modeling and Analysis of expected quantity, profit and discount margin for apparel industry**

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### **Abstract**

Simulation modelling was constructed for clothing supply chain to control retail inventory by finding expected profit and discount margin. This study measures the performance for seasonal merchandise and respective demand by creating a mathematical tool. The results of this study of the experimentation offer a many practical implications options to improve combination pattern with different available stocks of inventory to gain maximum profit and clear the stock.

This provides a benchmark model for assessing the optimal quantity decision clarity for clothing industry supply chains.

### **Keywords**

Simulation modeling, Supply chain management, retailing

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### **Biography**

**Shraddha Gawankar** is Visiting Research Scholar from Robins School of Business, University of Richmond, VA and Doctorate from National Institute of Industrial Engineering (NITIE), Mumbai India in the field of Operations Management. She holds a BE in Computer Engineering with post-graduation in operations management. Her teaching interest includes Operations Management, Supply Chain Management, Project Management and Quantitative methods, Research Methodology and aims to contribute in the field of research in fields like Supply chain modelling, Scholastic modelling, Mathematical modelling etc. She has published research papers in International refereed journals such as Benchmarking International Journal, International Journal of Physical Distribution and Logistics Management, International Journal of Procurement Management, International Journal of Business Information Systems etc.

**Bhaskar Patel** is principal of Sri Venkateswara College of Engineering & Technology with 28 years of work experience.