

## ABSTRACT

Unnoyon Textile Limited faces challenges in its production line, leading to delays and affecting customer deadlines. To overcome these issues, they are considering implementing the SCOR Racetrack 12.0 process. Key areas requiring improvement include production scheduling, sustainable raw material procurement, and production and test cycle time. To address these, Unnoyon Textile Limited proposes implementing maintenance planning and optimizing the production layout using lean management and 5S principles. These improvements aim to create an efficient, sustainable, and green supply chain, reducing waste, enhancing productivity, and meeting production targets. By adopting these measures, the company can improve overall operational efficiency, product quality, and cost savings while ensuring a positive environmental impact. Implementing these changes will position Unnoyon Textile Limited as a responsible and competitive player in the market, appealing to environmentally conscious customers and achieving long-term success. Based on the observations and analysis conducted for Matrix 2.1 Production Cycle Time, there is a discrepancy of 1.8 days between the actual time and the internal target time. Further analysis at Matrix Level 3 reveals three metrics with gaps. These metrics are as follows: RS. 3.1 Production Scheduling activities with a gap of 0.30 days, RS. 3.2 Sustainable raw material procurement activities with a gap of 0.8 days, and RS. 3.3 Production and test cycle time with a gap of 0.85 days.

**Keywords: Sustainable, Environment, Supply Chain, Supply Chain Operations Reference (SCOR), SCOR Racetrack 12.0.**