

Module Name: MODULE: BM563 Operations and Service Management

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Executive Summary

The following report has explored the effectiveness of the operational management exercise of Tee Tree Group Ltd, recognised as an SME fashion company located 20 miles from Buckinghamshire New University. The first session of the discussion demonstrated the core function of business operations and highlighted the inventory management process of the organisation. The next session of discussion disclosed that the process company can incorporate the technology of Industry 4.0, including IoT, AI, and automation. Finally, the report analyses the way supporting functions of an organisation align with operations, offering a holistic view of collaborating among departments, enhancing the organisation's ability to provide high-quality products, reduce maintenance costs, and develop customer satisfaction.

Table of Contents

Introduction.....	4
1. Identification and explanation of an operations management practice.....	5
2. Analysis of the management practice supporting the success of organisational	8
3. Impact of Industry 4.0 Technologies on Tee Tree Group Ltd.'s Operations Management.....	10
4. Supporting Functions Related to Inventory Management	13
Conclusion	15
References.....	16

Introduction

The Tee Tree Group Ltd is a small business (SME) operating in the fashion industry in the United Kingdom (GOV.UK, 2025). It specialises in fashion-forward and sustainable clothing, and the organisation has become a main player in the highly competitive fashion sector, delivering unique designs with a key focus on eco-friendly materials. The Tee Tree Group Ltd strives to balance environmental responsibility with profitability with its emphasis on environmental production practices.

The report will delve into the key operations of the company that focus on inventory management as a main operational practice. In the fashion industry, inventory management is especially significant as it directly affects the ability of the company to respond in transit of customer trends, meet customer demand for customers and maintain cost-effectiveness. It will also identify numerous supporting functions like HR, IT, finance, marketing, and procurement that contribute in improving overall operational efficiency and optimise inventory management practices.

Moreover, it will examine the industry 4.0 technologies' potential, such as automation, IoT, and AI, to improve the inventory management of the company. It will also include technology analysis that guides the organisation to navigate complexities such as demand forecasting and supply chain disruption. This technology integration will be analysed for relevant benefits and risks. This report will crucially analyse these businesses' operational practices and their supporting functions by delivering a detailed evaluation contributing to the thriving, fast-evolving fashion industry.

1. Identification and explanation of an operations management practice

Tee Tree Group Ltd is considered an SME fashion company located within a 20-mile radius of Buckinghamshire New University. However, the company specialises in its customised apparel, including hoodies, t-shirts, and corporate wear. The organisation focuses on the implications of effective operation management exercises that are cost-effective and smooth. Tee Tree Group Ltd mitigates the criteria of demonstrating fewer than 250 employees, along with under €50 million turnover.

Company Overview

Tee Tree Group Ltd was founded aiming the business goal of offering high-quality apparel to its customers, and enlisted both corporate and individual clients. The organisation operates within a small team, fewer than 10 employees and produces its revenue from both bulk orders and direct sales from consumers for its businesses. Tee Tree Group focuses on multiple operations management practices to maintain a competitive advantage in the market (Company Information, 2025).

Core functions of the company

- **Customisation and Product Design:** Tee Tree Group is specialised in fostering personalised designs for apparel items, t-shirts, hoodies, and tote bags.
- **Manufacturing and Production:** It is associated with suppliers and applies in-house equipment in manufacturing its brands, ensuring timely delivery and maintaining high-quality products
- **Sales and Distribution:** It operates both physically and online, and deliveries are conducted through several third-party logistics to ensure speedy and trustworthy shipping.

- Consumer Service: Provides excellence in customer service, including customised consultations for direct communication and bulk orders.

Operations Management method: Inventory Management

Inventory management is recognised as a key deliverance of the company. The company focuses on efficiency in inventory management to address issues like over- or understock issues to enhance customer satisfaction.

1. Stock Control: maintaining a lean inventory system to reduce storage costs, while ensuring enough stock to mitigate customer demands.
2. Supplier Relationships: Building a strong relationship with its reliable suppliers enables the organisation to quickly restock the items when needed.
3. Demand Forecasting: Conducting historical data regarding sales, the company is enabled to forecast demand for every product line.
4. Technology Integration: Adapting “inventory management software” so that the level of stock can be tracked on a real-time basis.
5. Order Processing: An effective order processing method, capable of tracking customer orders, shipping details, and inventory (Kongprasert et al., 2021).

Academic Theory Application

The company can incorporate the "Economic Order Quantity (EOQ) Model to evaluate its inventory management. The theoretical assertions of the model can suggest that the organisation determine its optimal quality of orders that reduces both holding and ordering costs. By adapting the lawn inventory model, the company can reduce its inventory cost. Similarly, it has also adopted the principle of "Just-in-Time (JIT)" to minimise its holding cost by ordering stock while required (Batth, 2021).

Effectiveness of Operations Management

A lean inventory system helps the company reduce its holding and storage costs effectively. With the help of an inventory tracking system, timely delivery enhances customer satisfaction and flexibility in arranging stock levels according to market demand, ensuring the agility of its inventory system (Jurado-Muñoz et al., 2021).

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2. Analysis of the management practice supporting the success of organisational

The critical analysis disclosed how inventory management, as a form of operational management exercise, plays a significant role in company efficiency and success. The analysis shed light on five key performances discussed below:

Theoretical Framework

The analysis is outlined through the application of “Performance Objectives Theory.” It highlighted the five key components that evolved with operations management, such as cost, quality, dependability, flexibility, and speed. In addition, the Just-In-Time and Lean Inventory Theory philosophy is also applicable to enhance business operations (Musheke and Phiri, 2021).

Efficiency through Inventory Management

Quality: High-quality standards are maintained in the inventory management system at the company across the range of products. It ensures that the organisation’s product range prevents damage and defects and meets quality levels. Based on the stock demand, the product is forecasted to reduce the risk of overstocking the product and assess the quality. The company ensures the materials' premium quality in its stock to enhance customer satisfaction and customer loyalty. In this aspect, the theoretical assertion of “Total Quality Management Theory” is applied to minimise human errors.

Cost: Inventory management closely influences its cost efficiency by reducing holding costs. The company applies demand forecasting in anticipating the required amount of stock and considering maintaining lean inventory. This reduces the price of storing excessive stock. By incorporating the Just-in-Time (JIT) system, the organisation orders stock while required, reducing the scope of excessive-ordering costs from unsold inventory (Hänninen, 2024).

Dependability: Dependability is necessary for customer retention, and an effective inventory management system contributes to enhancing reliability. By managing accuracy in inventory levels, the organisation can align with consumer demand on time, reducing the scope of backorders and stockouts.

Speed: Speed in its delivery of goods and processing orders is crucial in the sector of the fashion industry. The organisation's inventory management system permits it to respond quickly to its customer orders. The application of "real-time stock tracking software" ensure that the organisation can effectively process orders to avoid delays, and deliver products on time.

Flexibility: The company emphasises operational flexibility by adapting the model of lean inventory. By managing smaller quantities of stock and depending on accuracy in its demand forecasting, the organisation can quickly integrate with the changing perspective of its consumer preferences (Carpitella and Izquierdo, 2025).

Internal and External Advantages Relevant to Performance Objectives

Operational efficiency by adopting lean inventory management is enhanced by diminishing cost and waste. Employee productivity is also considered another internal benefit. Automated inventory accuracy data leverages employee productivity. On the other hand, customer satisfaction and supply chain relationship are recognised as external benefits. Accuracy in on-time delivery leverages customer satisfaction. Efficiency in inventory management allows the company to build a strong relationship. An effective inventory management permits organisations to deliver accurate demand forecast that leads to better terms and better supplier planning. It also permits fast order fulfilment, which leads to rising loyalty and customer satisfaction. It allows organisations to deliver a more timely and accurate forecast of future demand.

3. Impact of Industry 4.0 Technologies on Tee Tree Group Ltd.'s Operations Management

Industry 4.0 has revolutionised sectors such as fashion by introducing advanced technologies that enhance adaptability, productivity and operational efficiency (Jin and Shin, 2021).

Overview of Industry 4.0 and Its Influence on Business Operations

Industry 4.0 is also known as the Fourth Industrial Revolution, which describes the constant shift in data exchange and greater automation (Hughes et al., 2022). In the case of SMES such as TEE Tree Group Ltd, adoption of Industry 4.0 technology can enhance customer service, production efficiency and inventory management. It delivers a competitive benefit in the evolving fashion industry (Casciani et al., 2022).

Integration of Industry 4.0 Technologies in Tee Tree Group Ltd.'s Operations

a) Smart Inventory Management and Internet of Things (IoT): One of the most encouraging Industry 4.0 technologies in the case of Tee Tree Group Ltd allows real-time tracking of production and inventory procedures with connected devices. For instance, the Internet of Things (IoT) enables RFID tags that can be used in tracking products as they move towards the warehouse or production line (Carpitella and Izquierdo, 2025).

b) Demand Forecasting and Artificial Intelligence (AI): Artificial technologies can improve forecasting demand, which is a significant component of the Tee Tree Group Ltd.'s inventory management system. Meanwhile, machine learning can identify changing patterns in customer purchasing behaviour that guide the organisation in adjusting its inventory level (Aderibigbe et al., 2023). For example, AI-powered predictive analysis can help by notifying Tee Tree Group Ltd to procure more stock or ramp up production when there is a sudden demand surge for a special product.

c) Data Analytics and Cloud Computing: Big data analytics and cloud computing are significant aims to scale up functions and also gain deep, valuable insights into their operations. Tee Tree Group Ltd can store vast operational data, which is accessed remotely by management and employees by moving its data to the cloud. For example, the managers can analyse inventory data, customer feedback and sales trends in real time (Koppad et al., 2021).

Risks and Challenges of Industry 4.0 Technologies

Industry 4.0 technologies deliver substantial advantages, but they also pose various challenges and risks for small businesses such as Tee Tree Group Ltd.

a) Technology Dependency: Heavy dependency on technology can pose a risk if the equipment downtime and system fail (Taylor, 2021). Tee Tree Group Ltd requires have contingency plan and backup system in place to reduce such risks.

b) Data Security and Privacy Concerns: In the case of Tee Tree Group Ltd, it ensures customer information security, particularly in the segment such as fashion segment. Here, the personal data is often used for personalisation, which is significant to adherence with data protection regulations such as the General Data Protection Regulation (GDPR) and maintains trust (Manda, 2022).

c) Higher Initial Investment: The advanced technologies implementation, like AI, IoT, and automation, needs substantial upfront investments in training, software and infrastructure (Angle, 2024).

4. Supporting Functions Related to Inventory Management

Supporting functions play a significant role in ensuring that the key operational procedure is aligned, effective and efficient with business goals in any operations management practice. In the case of Tee Tree Group Ltd, a SME enterprise in the fashion sector, the backbone of their operations is served by inventory management. Below are some of the supporting functions concerning the organisational inventory management.

a) Human Resources (HR) Function: It is another supporting function that impacts business inventory management. The Department of Human Resources ensures that inventory management is well-staffed with qualified personnel who effectively manage and track stocks.

b) Procurement Function: It is one of the most significant supporting functions, especially in the case of inventory management. It is responsible for acquiring these essential services and goods, which include materials which are crucial for business operations and effective management of inventory. Tee Tree Group Ltd can manage their inventory level effectively that avoiding stockouts or overstocking by maintaining better use of data-driven procurement approaches and better relationships with suppliers.

c) Finance Function: It is directly included to manage costs relevant to operations and inventory. This consists of tasks such as financial planning, budgeting and cost control. The inventory turnover is a main financial measurement that the finance function is monitoring closely, which ensures Tee Tree Group Ltd can maintain an optimal level for its inventory without compromising profitability.

d) Marketing Function: They play a significant role in driving demand for Tee Tree Group Ltd products. For instance, inventory managers can assemble higher demand products by adjusting of

stock or procurement level in advance if the marketing team classifies a forthcoming trend into eco-friendly clothing products.

e) IT Function: Implementation of the Enterprise Resource Planning (ERP) system can improve its operational efficiency by relating procurement, sales data and finance with inventory management in real-time. These integrations permit Tee Tree Group Ltd to make well-informed decisions concerning distribution, stock ordering and procurement.

Supporting Functions Contribution to Business Success

a) Real-Time Data and IT: Tee Tree Group Ltd can help to streamline operations and optimise their inventory levels by integrating IoT solutions and ERP systems with real-time data. These IT functions deliver advanced technology as a backbone for inventory management. Its immediate access is significant for the application where the timeliness is significant, like real-time analytics, navigation and stock trading.

b) Customer Satisfaction and Marketing: It ensures that the products of Tee Tree Group align with consumer demand and preferences, which leads to rising sales. It gathers feedback, adapts product and marketing approaches, and understands customer behaviour accordingly. This company can raise their overall organisational performance and customer loyalty by focusing on these aspects. Inventory management can be prepared in advance to meet emerging shifts and trends in customer behaviour that result in enhanced customer satisfaction and fewer stockouts.

c) Efficiency and Procurement: An effective procurement practice guides Tee Tree Group Ltd to reduce lead times, maintain cost-effective purchasing approaches and ensure availability of correct products if required.

Conclusion

The report has crucially analysed the Tee Tree Group Ltd.'s operational management practices in the fashion industry, an SME focusing on inventory management. The primary segment has identified the key operational practices and their supporting functions of the company, like HR, IT, finance, marketing and procurement, that operate in tandem in the optimisation of inventory control. It has highlighted the significance of these functions to improve customer service satisfaction, reduce costs and enhance operational efficiency by reviewing secondary research.

The next section evaluated the Industry 4.0 technology, like automation, IoT, and artificial intelligence, that integrates into the Tee Tree Group Ltd.'s functions to enhance efficiency further. It has been summarised with guidance in streamlining inventory management, reducing operational costs and enhancing forecasting. It also highlights the risks, such as cybersecurity concerns and high initial investment. Lastly, the report has examined the supporting functions that interact and contribute to the company's success. Along with these, it addressed that collaboration across various departments is significant to achieve optimal inventory levels, ensure the business remains agile and reduce lead times in response to changing market demands.

In summary, the above findings have suggested that by leveraging emerging advanced technologies and current operational efficiency, the business can improve its competitiveness, profitability and efficiency. The business's ability in inventory optimisation, Industry 4.0 technologies, and better integrations of supporting functions will be significant to sustain success and growth in the fast-paced fashion industry.

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