



Sustainability – Garments Industry Digitalization

Transforming Garments with Smart & Sustainable Solutions.

The garment industry faces increasing pressure to operate sustainably while maintaining productivity and quality standards. Energy-intensive processes and high human occupancy levels contribute significantly to operational costs and environmental impact. Traditional monitoring methods often fail to provide real-time visibility into resource utilization, resulting in inefficiencies and wastage. Digitalization through IoT, data analytics, and smart sensors enables continuous monitoring of energy usage, occupancy patterns, and other utilities. This intelligent approach empowers manufacturers to optimize resources, enhance operational transparency, and align with global sustainability goals.

Problem Statement

- The garment manufacturing sector continues to face major challenges in optimizing energy utilization and managing workforce occupancy within large-scale production environments.
- Most facilities rely on legacy systems with limited integration and manual monitoring, resulting in data silos, delayed insights, and inefficient resource allocation.
- Excessive energy consumption occurs due to unmonitored machine operations, improper scheduling, and lack of correlation between occupancy levels and actual production demand.
- Utilities such as electricity, water, compressed air, and HVAC systems are often operated without real-time tracking, leading to hidden wastage and higher operational costs.
- The absence of digital transparency restricts manufacturers from implementing effective sustainability strategies, achieving energy efficiency targets, and maintaining compliance with global environmental standards.

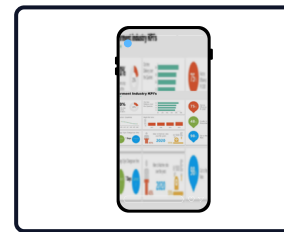
Solution

- Implement an integrated IoT-based monitoring system to track real-time energy consumption, workforce occupancy, and critical utility usage across garment production facilities.
- Centralize all collected data on a cloud-based platform to break down data silos, providing seamless visibility and actionable insights for all departments.
- Leverage AI and advanced analytics to identify inefficiencies, optimize machine operations, correlate occupancy with energy demand, and predict resource requirements.
- Enable data-driven decision-making to enhance operational efficiency, minimize wastage, reduce environmental footprint, and ensure adherence to sustainability and compliance standards.

Products



IoT Device with
RFID



Mobile APP

