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Real-time data and traceability are becoming the new compliance factor in the apparel industry

At a time when global apparel brands are rapidly shifting toward data-driven sourcing, traceability, and Digital Product Passport (DPP) compliance, Bangladesh's garment industry is facing a critical transition toward smarter and more transparent manufacturing. To explore how digital transformation, real-time production visibility, and standardized manufacturing solutions are shaping the future of the industry, Textile Today recently interviewed Md. Rafiqul Islam, Senior Sales Manager at Coats Digital.



Figure 1: Md. Rafiqul Islam, Senior Sales Manager at Coats Digital.

With 15+ years of extensive experience working on RFID and factory solutions at Avery Dennison, Rafiqul Islam shared valuable insights on Bangladesh's preparedness for Digital Product Passport requirements, the growing importance of end-to-end traceability, and the role of real-time production data in improving factory decision-making.

He also discussed how Coats Digital's advanced manufacturing solutions are helping apparel manufacturers enhance SMV accuracy, scientific costing, production planning, and operational efficiency to remain competitive in an increasingly demanding global market.

Textile Today: Global brands and regulators are increasingly demanding transparency through initiatives like Digital Product Passport (DPP). How prepared is Bangladesh's apparel industry to meet these upcoming requirements, and where do you currently see the biggest gaps?

Md. Rafiqul Islam: Bangladesh's apparel industry has already started moving toward the Digital Product Passport (DPP) journey, but I would say we are still in the early-to-mid stage of preparedness. The positive side is that many export-oriented manufacturers are now more aware of sustainability, traceability, and compliance expectations coming from EU and US brands. Large groups have already invested in Digital solutions, automation, RFID tracking, and data management processes. However, the biggest challenge is not only technology adoption—it is data consistency and supply chain integration.

DPP is not just a labeling requirement; it is essentially a digital identity of a product that captures material origin, manufacturing journey, sustainability attributes, and lifecycle data. To achieve this, factories need connected ecosystems where sourcing, production, quality, compliance, and logistics data can flow seamlessly.

From my experience working with RFID and factory solutions at [Avery Dennison](#), I believe Bangladesh still has gaps in upstream traceability, standardized data collection, and digital interoperability between different stakeholders. Most of the factories still operate with fragmented systems and manual processes. The future winners will be manufacturers who invest early in digital infrastructure, real-time visibility, and data-driven operations rather than treating DPP only as a compliance obligation.

Textile Today: End-to-end traceability is now becoming a critical expectation from global buyers. From your experience working with RFID and traceability solutions, how is Bangladesh's apparel industry progressing toward building a more transparent and traceable supply chain ecosystem?

Md. Rafiqul Islam: Traceability has evolved from a "value-added capability" to a strategic business requirement. Today, global brands want visibility not only into finished garments, but also into raw materials, processing stages, labor compliance, and environmental impact throughout the supply chain.

Bangladesh has made encouraging progress over the last few years. Many large apparel exporters are already adopting RFID, process tracking systems, digital labeling, automated data capture, and integrated planning systems to improve supply chain transparency. I worked closely with global brands and manufacturers on RFID-enabled traceability and factory digitalization initiatives. What I observed is that brands are increasingly prioritizing suppliers who can provide reliable, real-time operational and product data.

However, the industry still faces several challenges. Traceability cannot be achieved only through software implementation—it requires process discipline, accurate data input, cross-functional alignment, and collaboration across the entire supply chain ecosystem. Many factories still struggle with silo-based operations where merchandising, production, compliance, and sourcing data are disconnected.

I believe Bangladesh has a tremendous opportunity because our industry is already globally significant. If manufacturers can combine digital technologies, standardized operational processes, and data transparency, Bangladesh can position itself not only as a cost-efficient sourcing destination but also as a trusted and future-ready manufacturing hub.

Textile Today: As compliance and traceability requirements grow, factories are under increasing pressure to digitize their operations and improve data visibility. In your view, how important is real-time production data in enabling smarter and faster factory decision-making?

Md. Rafiqul Islam: Real-time production data is becoming the backbone of modern apparel manufacturing. In today's competitive environment, factories can no longer rely on delayed reports, manual spreadsheets, or reactive decision-making. Whether it is DPP compliance, traceability, productivity improvement, or on-time delivery performance, everything now depends on data visibility and speed of execution.

One major challenge in many factories is that data is collected but not transformed into actionable intelligence. Production teams often receive information too late to prevent inefficiencies, bottlenecks, or shipment risks. This is where digital manufacturing solutions become critical.

In my view, factories that embrace real-time visibility will gain significant competitive advantages in speed, efficiency, compliance readiness, and customer confidence. The future apparel factory will not only produce garments—it will operate as an intelligent, connected ecosystem where decisions are driven by live operational insights rather than assumptions.

Textile Today: Many apparel manufacturers still face challenges around accurate SMV calculation, scientific costing, and production standardization. How does Coats Digital help factories improve operational efficiency and costing accuracy through digital manufacturing solutions?

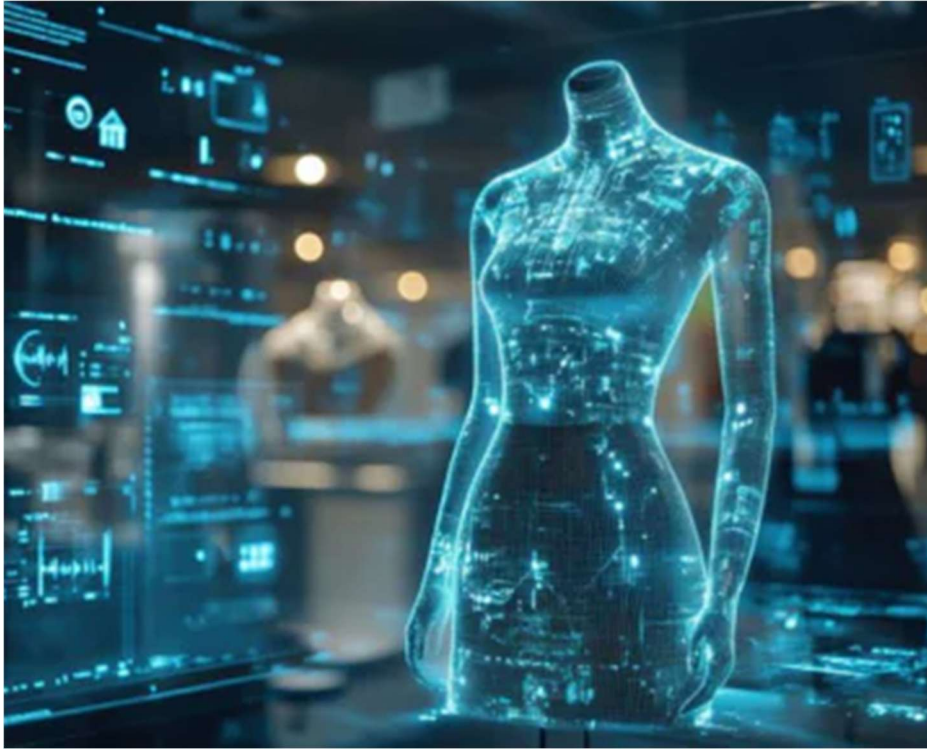
Md. Rafiqul Islam: At Coats Digital, we help manufacturers move away from estimation-based processes towards data-driven, standardised decision-making. One of the biggest challenges many factories face is inconsistency in SMV calculation and costing methodologies, which can lead to inaccurate pricing, reduced profitability, planning inefficiencies, and difficulties in managing customer expectations.

Our solutions are designed to address these challenges through globally recognised methodologies and digital manufacturing intelligence. GSDCost, built on the internationally recognised GSD™ methodology, enables factories to establish accurate method-time-cost benchmarks using scientifically validated predetermined motion codes and standard methods. This creates a consistent and transparent foundation for costing, capacity planning, line balancing, and performance management.

By digitising these processes, manufacturers can eliminate subjective calculations and improve accuracy across operations. Factories gain much greater visibility into production performance, helping them identify inefficiencies, reduce non-value-added activities, optimise labour utilisation, and improve production consistency.

In addition, our FastReactPlan solution enables real-time production planning and scheduling, allowing factories to react more quickly to changing order priorities, capacity constraints, and material availability. Combined with accurate SMVs and standardized operational data, this helps improve on-time delivery, reduce overtime, and increase productivity.

Ultimately, Coats Digital helps manufacturers build more agile, efficient, and data-driven operations that support both profitability and long-term competitiveness.



Courtesy: Coats Digital

Textile Today: Bangladesh remains a highly price-sensitive manufacturing market. How do you convince factory owners that investing in digital transformation and manufacturing excellence solutions can deliver measurable ROI and long-term competitiveness?

Md. Rafiqul Islam: Bangladesh has built an incredibly strong position in the global apparel industry through scale, manufacturing expertise, and cost competitiveness. But the market is changing rapidly. Today, brands are not only looking for competitive pricing — they also expect speed, transparency, agility, compliance, and consistent quality performance across the supply chain.

At the same time, manufacturers are facing increasing pressure from rising operational costs, tighter margins, shorter lead times, global economic uncertainty, and growing competition from alternative sourcing regions. As global sourcing strategies evolve, many brands are diversifying their supply chains and looking for strategic manufacturing partners that can deliver reliability, visibility, and operational excellence — not simply low-cost production.

This is why digital transformation is becoming increasingly important for Bangladesh's apparel sector. The industry is moving from a volume-driven model towards a more value-driven and data-driven manufacturing environment, where efficiency, planning accuracy, and responsiveness are critical competitive advantages.

For factory owners, the key question is always ROI — and that is where measurable operational improvements become very important. Digital manufacturing solutions help factories improve SMV accuracy, optimise line balancing, reduce idle time, improve capacity utilisation, minimise overtime, and increase production visibility. Even relatively small efficiency improvements can deliver significant financial impact at scale.

For example, improved production planning and real-time visibility can help reduce costly last-minute schedule changes, excess overtime, and expensive air freight. Scientific costing and standardised methods also help manufacturers negotiate more confidently with buyers by providing accurate, data-backed production benchmarks.

At Coats Digital, we focus heavily on measurable outcomes. Manufacturers using our solutions have achieved productivity improvements ranging from 5% to 30%, alongside improvements in on-time delivery, reductions in operational costs, and stronger overall production efficiency. In many cases, the efficiency gains alone can generate a relatively fast return on investment.

Ultimately, digital transformation provides the very foundation for building resilient, future-ready manufacturing operations. For Bangladesh, this will be essential to maintaining its global leadership position as the apparel industry continues to evolve.