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Digital Solutions and Challenges in the Textile and Garment Sector

The textile and garment sector uses several digital solutions to improve traceability and transparency. The majority of solutions are built based on blockchain technology because it employs a decentralised, network-distributed ledger of transactions. That improves traceability, quality, compliance and decreases losses from counterfeiting and grey market operations. Organisations use blockchain to record product sourcing and transaction information, verify and manage supplier relationships and contracts, comply with industry rules, track customer records, and authenticate customers.

SOLUTION PROVIDERS

Chainpoint | **TrusTrace** | **InnoBlock** | **Everledger**

BENEFITS

Enabling traceability of entire supply chains and boost confidence about transparency for various stakeholders.

Easing compliance for stakeholders.

Hybrid solutions (distributed and federated ledger) allow data to be shared openly, but also privately for sensitive data.

CHALLENGES

Data

Data collection is challenging. The control over data collection decreases the wider the connection between supplier and buyer. Even when data is available, the quality is oftentimes lacking.

Price

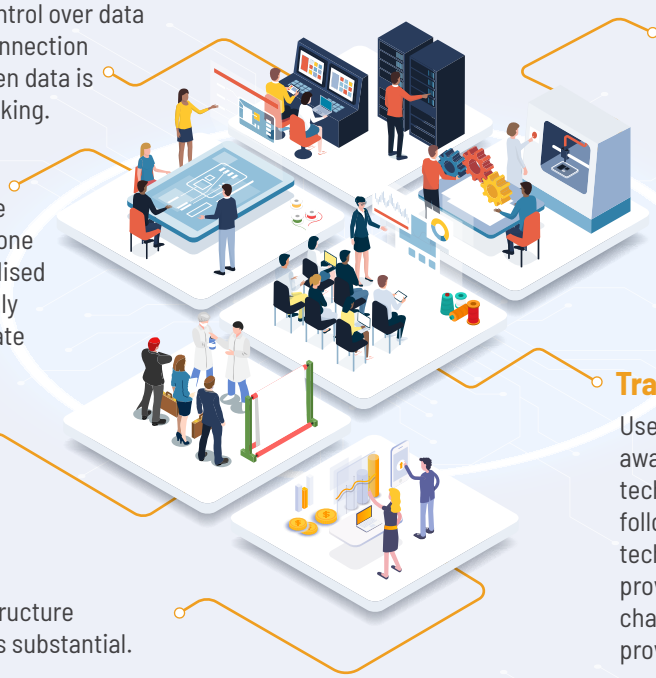
Price negotiations with customers are challenging because costs vary from one customer to the other due to personalised solutions. Customers are often not fully aware about the solutions and adequate prices.

Human resources

Scarcity of human resources, which also impacts inquiries by customers.

Investment

Financial investments into the infrastructure and the development of the solution is substantial.



Customisation

Because of the various ways of client operations, the solution must be customised. Solution providers are facing technical challenges when customising solutions to customers' needs and requirements. Related customised training and onboarding are required for users, which might lead to more resource investment.

Training

Users are not adequately or entirely aware of the process of how the technology runs, therefore, training and follow-up sessions are required. Due to technology changes from the solution provider and constant requirement changes from users, trainings need to be provided and updated frequently.

RECOMMENDATIONS

Standardisation of data requirements and other aspects by policymakers, e.g. certifications, is needed.

SOLUTION USER

Texcoms | **Cute Dress** | **Smart Chain** | **Haitan**

Companies use blockchain-based solutions as an addition to their already existing in-house tracking and traceability systems. Blockchains are additionally used to track a product's journey form the origin of its basic components to the hands of the customers.

BENEFITS

- Increasing data integrity, security, traceability and transparency and therefore gain trust of customers.
- Mitigating potential risks along the supply chains.

- Increasing efficiency during data collection process.
- Attaining a competitive advantage over other industry players.

CHALLENGES

Training

Use of different systems to track transparency and traceability leads to time-consuming training, especially in large companies with a changing workforce. Digital literacy of employees varies widely, which makes it difficult to find a suitable training approach. Employees find it difficult to adapt to ongoing training due to required software updates, which hinders them from using the service initially.

Human resources

Different tools that cover different transparency and traceability areas require an efficient IT team that works on coordinating and connecting the solutions to ensure that traceability and transparency goals can be sustained.

Costs

Sophisticated technological implementation entails substantial cost. Mapping the process and setting a competitive budget for the services is a constant challenge.

Complexity and scalability

Although trainingst are in place, it takes time to understand the technology and the tool itself. The complexity hinders the wide usage along the supply chain.

RECOMMENDATIONS

Public intervention

As large brands and textile companies are using digital solutions to ensure traceability, governments should look into the textile and garment sector to encourage and incentivise suppliers to provide data. In the meantime, government intervention in monitoring traceability nationally is needed so that the textile industry and all the other consumer sectors can be tracked and traced with utmost transparency.

Training

User's digital literacy must be kept in mind when designing digital traceability software – the more user friendly, the more likely its being used.

Collaboration

Suppliers need to be more cooperative when it comes to collecting and sharing quality data. Conducting awareness trainings to suppliers to show them the benefits of using digital tools can increase their future engagements.

Pricing

Pricing strategy should be optimised according to the user's size and infrastructural requirements. Higher prices of a software often discourages companies from using a solution, eventually leading to lack of traceability or no traceability.