GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Applications in the Textile and Garment Sector

KEY TECHNOLOGIES

Blockchain

Artificial Intelligence

CORE TOOLS

TRACK & TRACE TT CHAIN
TTChain

TTGREEN
TTGreen

SOLUTION PROVIDER

InnoBlock

InnoBlock nurtures a vision of applying Blockchain and Artificial Intelligence technology in several industries to increase efficiency and effectiveness in business operation.

https://www.innoblocktech.com/

HOW DO THE KEY TOOLS WORK

InnoBlock uses its flagship tool - TTChain - to trace a product throughout the whole supply chain.

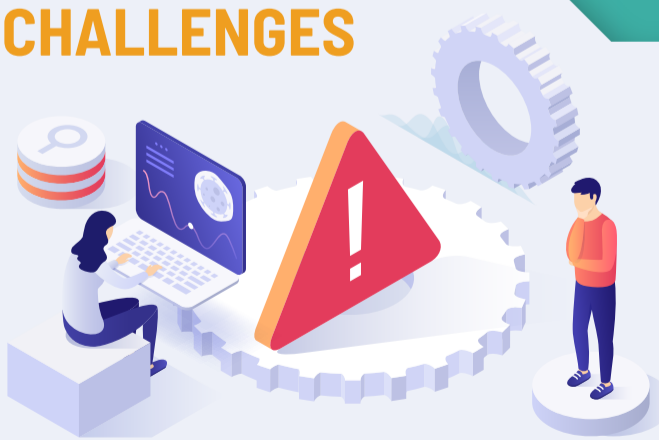The tool is built based on blockchain technology, and it can monitor the entire process.

All of products information and ESG related data can be accessed through specific QR codes.

InnoBlock published another tool in 2022 – TTGreen – for ESG reporting and performance analysis. It can also support the process of green finance by aggregating ESG results.

For example, TT Chain is used in the textile and garment industry in a cashmere project. All key information can be traced and recorded on blockchain nodes and accessed by relevant stakeholders.

Wool & DNA Extraction

Yarn Manufacturing

Wool Inspection & Certification

Garment Manufacturing

Retails

CHALLENGES

Pricing negotiation

The cost varies from client to client as InnoBlock offers personalised solutions. Clients often want to haggle over the prices without being fully aware of the solutions.

Training to customers

Users are not adequately or entirely aware of the process of how the technology runs. Innoblock needs to set up training sessions and follow-up sessions when troubleshooting needs take place.

RECOMMENDATIONS

Awareness raising
Traceability and transparency awareness should be built towards the upstream suppliers of clients so that the whole process of applying the digital solutions can be conducted smoothly.

USER
RETAILER

Smart Chain specialises in the supply chain management in the apparel industry. They can provide more than one-stop solutions.

Smart Chain uses TTChain to guarantee end-to-end secured information. They have several in-house tools such as Comlink[i], Software Suites[ii], RFID[iii], etc. that are jointly used with TTChain for creating a digital, traceable and transparent supply chain.

USER
MANUFACTURER

Haitan is a manufacturing company that primarily offers ready-made garments to the market. Haitan facilitates transparency by bringing together all key stakeholders on a single platform to better trace and monitor products and service activity along the supply chain.

TTChain helps record product sourcing and transaction information, verify and manage supplier connections and contracts, comply with industry regulations, maintain customer records, and authenticate customers.

BENEFITS

- Increasing **transparency and traceability** in operation.
- Increasing **efficiency** during data collection process.
- Ensuring **data integrity and security.**

- Ensuring **transparency** within the supply chain management system and mitigate potential risks.
- Attaining a **competitive advantage** over other industry players.
- Gaining better **confidence and trust** of clients.

CHALLENGES

Cost
Sophisticated technological implementations entail substantial costs. Mapping the process and setting a competitive budget for the services is a constant challenge.

Communication
Communication with the clients regarding the literacy and understanding of using a digital solution.

Complexity and scalability
Although trainings are provided by InnoBlock, it takes time to understand the technology and the tool itself. The complexity hinders the wide usage along the supply chain.

RECOMMENDATIONS

ESG data criteria
More metrics regarding the ESG compliance data collection criteria are expected.

Collaboration in the supply chain
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.

Government support
Government should look into the textile and garment sector to encourage and incentivise suppliers to provide better data.