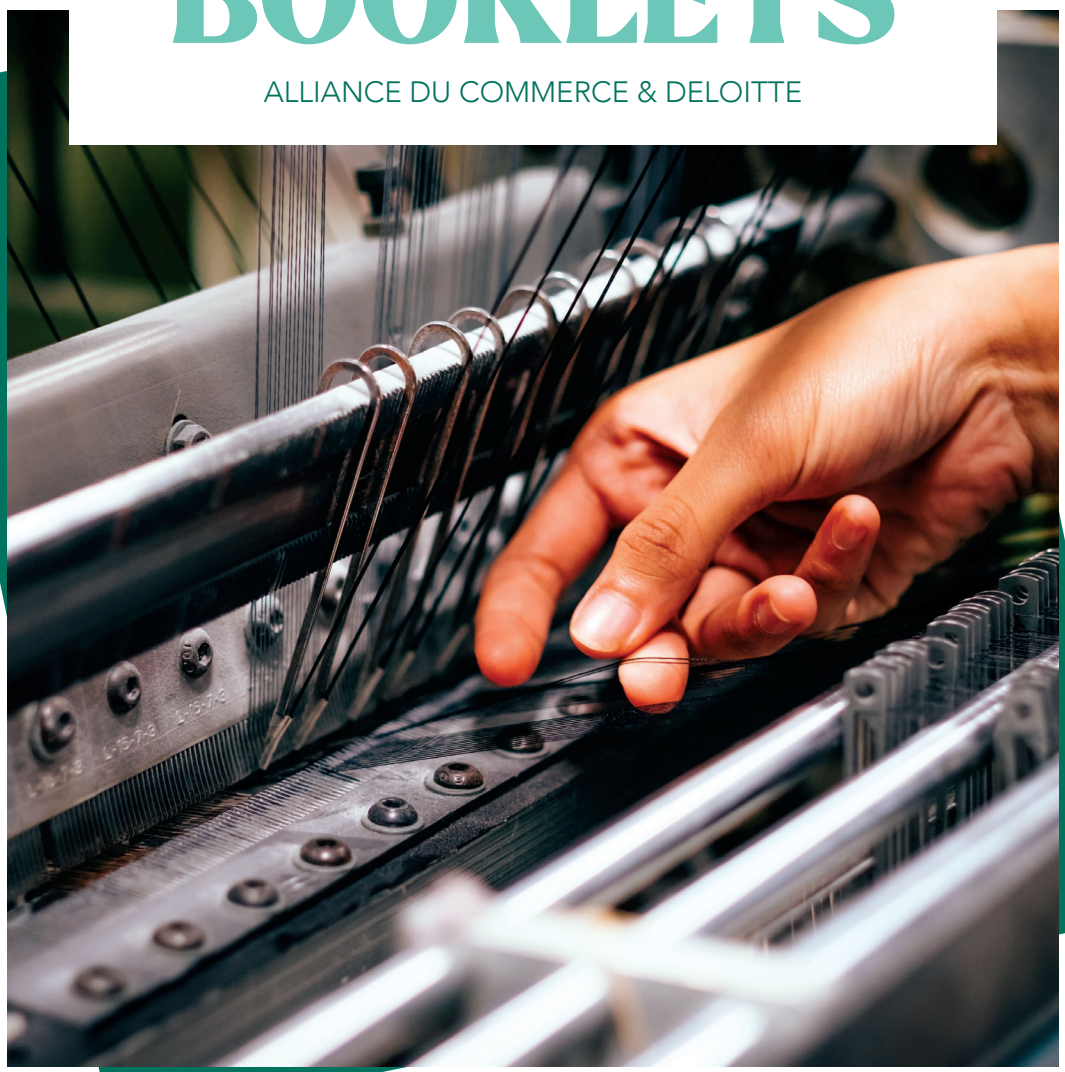


2022

SUSTAINABLE FASHION BOOKLETS

N2

ALLIANCE DU COMMERCE & DELOITTE



Traceability: The Foundation of Sustainable Transformation

CLOSE-UP

Urgent need for supply chain traceability

METHODOLOGY

Traceability approach stages

FEEDBACK

Brands championing traceability

The second edition of the “**Sustainable Fashion Booklets**” collection focuses on supply chain traceability. Ensuring traceable supply chains is an extremely difficult task for fashion companies, which has, in turn, hindered the industry's overall shift towards a sustainable transformation. The challenges faced are largely due to the complex structure of their supply chains, making control and visibility particularly difficult.

Despite these difficulties, brands are moving forward with both industry-wide initiatives and pilot projects, as the development of new tools has increased capabilities to enable traceability. Moreover, French and European legislators have recognised traceability as a key issue within the Fashion sector. In fact, they have started drafting legislation which require companies to improve control over the environmental and social risks associated with product manufacturing.

The following sections consist of a range of analytical and methodological aspects, as well as a presentation of digital tools, sector initiatives and feedback from pioneering brands. Our aim is to inspire consumers and brands alike to advocate for and bring forward new innovations to enable a sustainable future for fashion.

ALLIANCE DU COMMERCE

The Alliance du Commerce, the leading French professional body in the personal goods retail sector, encompasses the *Union du Grand Commerce de Centre-Ville* (Union of City Center Large Retailers, UCV), the *Fédération des Enseignes de l'Habillement* (Federation of Clothing Brands, FEH) and the *Fédération des Enseignes de la Chaussure* (Federation of Footwear Brands, FEC).

The Alliance du Commerce connects department stores, variety stores, garment and footwear brands whose economic and social contribution to the country is significant. Collectively, the member-companies have approximately 27,000 points of sale and employ more than 170,000 people in France.

Deloitte.

Deloitte France's sustainability team supports organizations in designing, financing and rolling out new business models and sustainable strategies across the value chain. It is composed of experts who are passionate about all aspects of the economy, ecological evolution and social issues. Within the sustainability business line, the industry-focused “Fashion Shift” team strives to address the many pressing challenges of the Fashion & Luxury industry, whilst fostering industry-wide sustainable transformation projects and strategies.

TRACEABILITY:

SUPPLY CHAIN TRACEABILITY IS THE FOUNDATION OF SUSTAINABLE TRANSFORMATION FOR THE FASHION INDUSTRY AS A WHOLE. HOWEVER, IT REMAINS ONE OF THE KEY PAIN POINTS FOR GLOBAL BRANDS AND RETAILERS. THE STRUCTURE OF MOST FASHION SUPPLY CHAINS PRESENTS A CHALLENGE FOR IMPLEMENTATION, AS THEY ARE LONG, COMPLEX AND LACK DIGITAL SYNERGIES. WITH THIS IN MIND, AN INCREASING NUMBER OF INITIATIVES AND TOOLS ARE BECOMING AVAILABLE TO BOTH BRANDS AND RETAILERS WHICH SUPPORT THE DEVELOPMENT AND MANAGEMENT OF END-TO-END TRACEABILITY.

Executive Summary —

The FOUNDATION of SUSTAINABLE TRANSFORMATION



UNDERSTANDING SUPPLY CHAIN TRACEABILITY

Traceability within the fashion industry is difficult to manage due to the global fragmentation of many retailers' value chains. This issue is particularly prevalent in the first few development stages of apparel and footwear products, including raw material procurement, textile manufacturing and development. Horizontally integrated firms frequently resort to subcontracting this portion of their supply chain, which makes it increasingly complex to gather insights and maintain oversight over these operations. Additionally, the sector lacks of governance over traceability standards and reporting, while fashion firms also find it challenging to onboard suppliers in traceability projects.

Traceability is a powerful instrument to achieve strategic objectives, as it is often associated with transparency and responsible procurement. Investing in these three components can help build an approach which has the potential to improve practices across the value chain.

TRACEABILITY



is a process by which enterprises track materials, products and the production conditions throughout the supply chain⁽¹⁾. Traceability within the context of supply chains can be split into two main areas. Upstream traceability (pre-distribution) encompasses the stages from raw material to distribution, whilst downstream traceability (post-distribution) refers to the life of the product from distribution to end-of-life disposal.

TRANSPARENCY



is considered the public disclosure of credible, comprehensive and comparable information about supply chains, business practices and impacts of company's activities on workers, communities and the environment⁽²⁾. Establishing and enabling supply chain transparency is crucial to provide stakeholders with information on production conditions.

RESPONSIBLE PROCUREMENT



is a global approach to improve environmental, social and governance practices by integrating social, environmental and societal criteria into procurement processes across the supply chain, but also by encouraging suppliers to adopt this approach. Responsible procurement is a vital first step towards sustainable business transformation.

(1) OCDE (2018): Due diligence guidance for responsible supply chains in the garment and footwear sector. (2) Fashion Revolution (2021) Fashion Transparency Index

WHY ADOPT A TRACEABILITY APPROACH?

Traceability is a key component to achieving sustainability and ESG goals whilst also responding to important strategic challenges that companies in the fashion industry are currently facing.

● INCREASING COMPLIANCE

Supply chains knowledge is essential to meeting current compliance standards. Some national governments have started to establish legislation around supply chain traceability. An example of this is the French Duty of Care law (2017), which requires due diligence disclosure from companies to mitigate human rights risk. In early 2022, the EU drafted a Directive on Corporate Sustainability Due Diligence that will require contractors to implement measures that ensure suppliers are respecting human rights and environmental requirements. The European REACH Regulation and certain national health standards require companies to disclose specific chemicals used in manufacturing processes. Finally, the French Anti-waste for a Circular Economy law announced the gradual introduction of environmental labelling, which will consequently require companies to acquire extensive knowledge on their supply chain in order to comply.

● APPROACHING RESPONSIBLE PROCUREMENT

Traceability is a key step to identify high-risk activities within supply chain operations. For example, data gathered throughout the value chain can be used to assess a garment's environmental impact. Consequently, a corrective action plan can then be formulated alongside individualized support for suppliers, to enhance progress and reduce the levels of varied risk.

● A STARTING POINT FOR END-TO-END TRANSPARENCY

Shifts in consumer sentiment towards transparency as a major purchasing criterion has placed emphasis on traceability as a key lever to meet their expectations. For Garance Osternaud, who leads Carrefour's blockchain program on certain product ranges of the Tex Responsible brand: "Responsible consumers are informed consumers". With a QR code, Tex customers can access information on all product manufacturing steps, origin and certifications.

● ADVANCING OPERATIONAL OPTIMISATION AND QUALITY

Traceability provides an overview of the movement of goods, inventories and orders which could help reduce inefficiencies within a fashion retailer's supply chain. A leading industry example of this is a tool developed by the French Technical Center for Leather, that can automatically identify quality defects on skins and trace the material to its source. The tool allows to implement corrective action plans at the raw material stage of production.

● NEW APPLICATION FIELDS IN DOWNSTREAM TRACEABILITY

Post-distribution traceability offers new opportunities for brands which include the ability to tackle counterfeiting, enable authenticity in the second-hand market, promote consumer awareness, and boost circularity. Downstream traceability is being adopted by some luxury brands through the use of "digital passports." These passports contain data that will ensure products' authenticity in their successive lives and are a positive externality in supporting the development of a verifiable, authenticated second-hand sector. Furthermore, post-distribution traceability can also help bring together customer communities, aggregate data on their expectations, and provide key insights into products post-distribution. The collated data can then be used by companies to further improve the quality, design and functionality of their products. Finally, traceability boosts product circularity. Information about a product's composition, processing, and certification can inform decisions on repairs and alterations that can extend a product's lifetime and improve its appropriate disposal in the right end-of-life channels.

70%

of surveyed customers expect more information on products' origins and manufacturing conditions.

Okaidi "Customer Voice" survey conducted in 2020 with more than 500 respondents

THREE CHALLENGES FOR TRACEABILITY IN FASHION

Although the benefits of traceability in the supply chain are common knowledge, the fashion industry is still struggling to roll out approaches on a large scale, due to the complex nature of their supply chain operations. In 2019, only 6.7% of surveyed companies reported having comprehensive knowledge of their Tier 2 suppliers⁽¹⁾. Brands now need to progress beyond the experimental stage and implement transformational traceability approaches **by addressing three major challenges.**

1. Determining the Right Approach

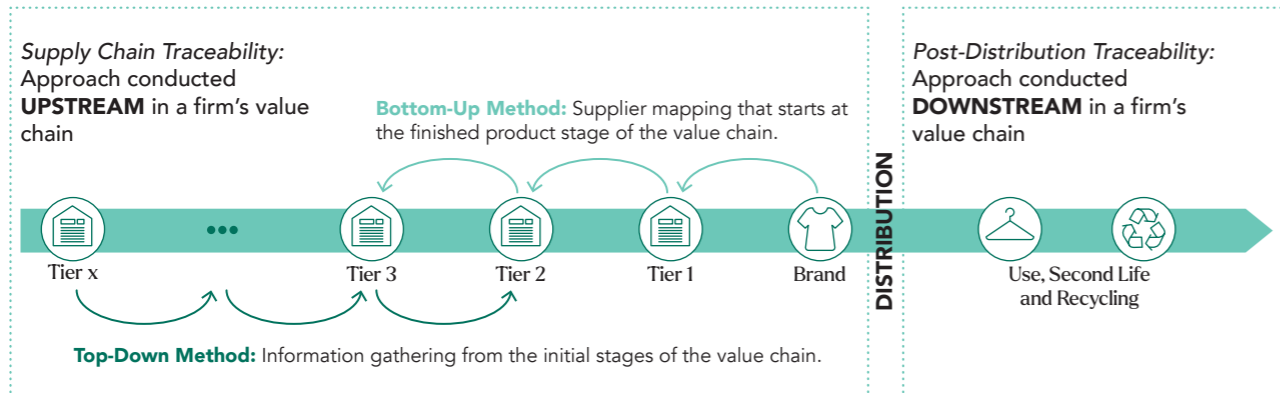
Several traceability approaches exist depending on the supply chain's complexity. Sector type, level of supplier integration, brand model, product volume and data availability are all factors that determine a brand's visibility on the supply chain and therefore the method to be adopted. Three general approaches to supply chain traceability are characterised by the following:

The bottom-up method consists in tracing back the chain, mapping successive suppliers from the finished product to the most upstream production stage possible. This approach requires the cooperation of all suppliers and is relevant for brands having limited visibility over their supply chains.

The top-down method consists in gathering information on a traceable asset from the start of the chain (raw material) to the finished product via data collection platforms or physical markers (laser marking of leather, material markers). This method is suitable for brands with some existing knowledge of their supply chains.

To enable a best-fit, individualised approach to supply chain traceability, a company may opt for a **mixed traceability** approach that would combine aspects of bottom-up and top-down methods.

(1) Alliance du Commerce (2019) Sustainable fashion, a guide for action



TRACEABILITY PLATFORMS FOR EACH APPROACH

BOTTOM-UP PLATFORMS, such as Transparency-One or TrusTrace, are designed to map suppliers using a cascade analysis, with data gathered through questionnaires. Each supplier will ask its own suppliers to report their information in the tool to trace back to the starting point. In the context of the fashion industry, the aim is to trace products all the way back to the origin of the raw material. Information can be analysed (through conducting risk assessments, product life cycle analyses) and then reported in a dashboard or communicated to the consumer. For these tools to be effective, they require a high-level of human engagement and input from suppliers.

TOP-DOWN PLATFORMS, such as CrystalChain, gather information on already known chains. Often based on blockchain technology, they are used to collect, store, secure and analyse reported data.

Both platform types can be used simultaneously, depending on the level of control in the sectors.

TRACEABILITY TOOL: STANDARDIZATION INITIATIVES IN FRANCE & INTERNATIONALLY

The French Fashion & Luxury Industry Strategic Committee (CSF) and the United Nations (UNECE and UN/CEFACT) are spearheading the "Enhancing Transparency and Traceability of Sustainable Value Chains in Garment and Footwear" project, whereby they are developing a set of tools to harmonize traceability standards across the textile industry.

Their aim is to build a methodology, identify tools, and establish a governance system to support traceability in France and internationally. The CSF has produced recommendations in conjunction with sector brands such as Decathlon, H&M and Chanel. The UN has defined a methodology for gathering and sharing traceability data on value chains. A group of international volunteer brands will commence testing in 2022 and provide feedback that will be used to develop the framework for industry-wide standards.

2. Identifying Incentives to Increase Supplier Engagement

The success of a company's traceability approach highly depends on the commitment of supply chain stakeholders. Suppliers in the fashion industry are still unaccustomed and reluctant to share their information as they are concerned with end-brand confidentiality, afraid of being bypassed in the commercial relationship, and face technical or human obstacles such as equipment, language barriers and time investment. In order to maximise cooperation and improve practices in the future, companies can support their suppliers through training, technical assistance, and enhancing reporting processes.

3. Cross-Company Collaboration & Industry Partnerships

It is essential for Fashion companies to establish partnerships and pool their resources in working towards establishing high-quality traceability. Currently, a common methodology, standards and integration of traceability tools are absent from the industry. Major obstacles such as supplier fatigue and solutioning costs can be removed by providing joint feedback, pooling data, and ultimately lead to the future development of data collation and risk measurement tools. Additionally, several promising initiatives to define standards and harmonize industry-wide practices are currently being drafted.



STAGES TO APPROACHING TRACEABILITY

Given the diversity of traceable assets, the complexity of gathering high-quality information and the many tools available, the strategic scoping phase is fundamental to the traceability approach. Once a well-defined traceability strategy is established, companies can then prioritize the essential information to be collected, the assets they want to trace, and deploy the most suitable tools.

	— Key Questions to Consider —	— Illustrations —
1 STRATEGIC SCOPING	Define clear objectives	Regulatory compliance, Transparency with consumers, CSR action plan, Quality Assurance & Management
	Conduct an inventory assessment	Ranges, Models, Materials
	Establish a strategy to collect data	Percentage of suppliers audited, Publication of supplier names, certified material percentage
2 SELECTING ELEMENTS TO TRACE	Identify assets and information to be traced	Procurement model, Supplier turnover, Nature of relationships, Commitment volume and/or duration
	Establish an order of priority	Geographical specificities of suppliers (language, culture), Local correspondents, Communication
	Identify the right tools for the strategy	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; background-color: #e0f2f1;">TRACEABLE ASSETS</div> <div style="border: 1px solid black; padding: 5px; background-color: #e0f2f1;">TRACEABLE INFORMATION</div> </div> <p>↓</p> <p>Material, Finished Product, Batch Production Unit</p> <ul style="list-style-type: none"> • Product: Origin, composition, supplier, batch number • Quality: Audit reports, certifications, defect tracking • Process: Process details, machines, events timestamping • CSR: Audit reports, carbon footprint, certifications
3 CHOOSING THE RIGHT TOOLS	Is the tool adapted to the lifecycle of the asset to be traced?	<div style="border: 1px solid black; padding: 5px; background-color: #e0f2f1;">THREE TRACEABILITY SOLUTIONS</div> <ul style="list-style-type: none"> • “Paper” traceability: Solutions that are based on human verification of the value chain. • “Digital” traceability: Solutions that aim to roll-out the approach digitally and centralize information. • “Physical” traceability: Identification markers that are affixed to traceable assets.
	Is it accessible to suppliers?	
	Is it suitable for the number of suppliers targeted?	
	Can it be customized?	
	Does it guarantee information reliability and security?	

Traceability Solutions

	— Main tools —	— Operation —	— Assessment —	— Examples —
PAPER	Labels/certifications	Validation of compliance with ESG* criteria across the chain, issued by third-party bodies	<ul style="list-style-type: none"> ✓ Control of targeted risks ✓ Guarantees reliability for the consumer ✓ Differentiation factor <ul style="list-style-type: none"> ✗ Restricted scope ✗ Fraud risk 	<p>Labels : Max Havelaar, Oeko-Tex, OCS, Fair Wear Foundation</p> <p>Certifications : GOTS, FairTrade</p>
	Bottom-up traceability platforms	Prospective supplier mapping and targeted information gathering platforms	<ul style="list-style-type: none"> ✓ Selection of information and indicators to be reported ✓ Measurement of ESG risks or impacts (depending on the tool) ✓ Assistance with ESG reporting ✓ Stakeholder data pooling (depending on the tool) <ul style="list-style-type: none"> ✗ Lack of shared market solution ✗ Relies on supplier cooperation ✗ Resources needed to roll-out the approach (particularly supplier support) 	<p>Transparency-One</p> <p>TrusTrace</p> <p>SustainabilityMap</p> <p>SourceMap</p> <p>SupplyShift</p> <p>e-SCM</p> <p>Fairly Made Impact</p>
	Top-down traceability platforms	Information gathering platforms from known chains, most often based on blockchain technology	<ul style="list-style-type: none"> ✓ Data security and ownership ✓ ESG risk measurement ✓ Precise level of detail on traceable assets (e.g., material batch) <ul style="list-style-type: none"> ✗ Prior knowledge of the chain ✗ Blockchain cost 	<p>Footbridge</p> <p>CrystalChain</p> <p>TextileGenesis</p>
DIGITAL	RFID (Radio Frequency Identification)	Chip affixed to an asset for data consolidation and reading throughout its life	<ul style="list-style-type: none"> ✓ Consumer information ✓ Facilitates inventory management <ul style="list-style-type: none"> ✗ Chip cost ✗ Data security and confidentiality ✗ Supplier equipment 	<p>Neyret</p> <p>TexTrace</p> <p>Inotec</p>
	Laser marking	Solution for the unitary marking of leather and the automatic code reading	<ul style="list-style-type: none"> ✓ Quality management of skins ✓ Operational speed and simplicity <ul style="list-style-type: none"> ✗ No link to finished product yet 	<p>Marking developed by CTC (Technical Center for Leather)</p>
	Biomarkers	Reading of information via natural markers or applied to the asset (DNA, pigments, etc.)	<ul style="list-style-type: none"> ✓ Strength and durability of markers ✓ Invisible and harmless <ul style="list-style-type: none"> ✗ Prior knowledge of the chain ✗ Implementation cost 	<p>Haelixia</p> <p>Oritain</p> <p>FiberTrace</p>
PHYSICAL				

*Environmental, Social and Governance criteria



KEY FACTORS TO A SUCCESSFUL TRACEABILITY APPROACH

Secure the process internally

- **Focus** energy on key information before gradually expanding the scope.
- **Internalize** know-how and knowledge of existing chains.
- **Identify** the necessary human resources required.
- **Co-develop** the approach with internal teams and external stakeholders including SMEs, NGOs and consumers.
- **Engage** localised sourcing teams and make them the suppliers' key contacts.
- **Involve** the highest level of the company in the strategy and communicate it to suppliers.
- **Upgrade** data management systems to ensure proper storage and management.

"It is better to secure the gathering of reliable information than disperse efforts over a wide scope of data that cannot be exploited"

Xavier Delcour - Global Sourcing Manager, Okaidi

Adopt a long-term partnership approach and support suppliers in their transformation

- **Convince** stakeholders through positive reinforcement (shared vision, market trends, regulations, consumer feedback, sharing key indicators).
- **Promote** their efforts and highlight their commitments to consumers.
- **Consider** commercial and contractual rewards to foster their investment such as through long-term volume and commitment guarantees.
- **Support** suppliers to build their expertise (by sharing best practices, linking suppliers to expand knowledge...).
- **Facilitate** data reporting as much as possible (tool training, translation, single data entry for several customers, newsletters).

"We should not think about how traceability can promote the brand, but rather how it will promote our partners"

Romain Zanna-Bellegarde - Sustainable Sourcing Manager, Etam Groupe

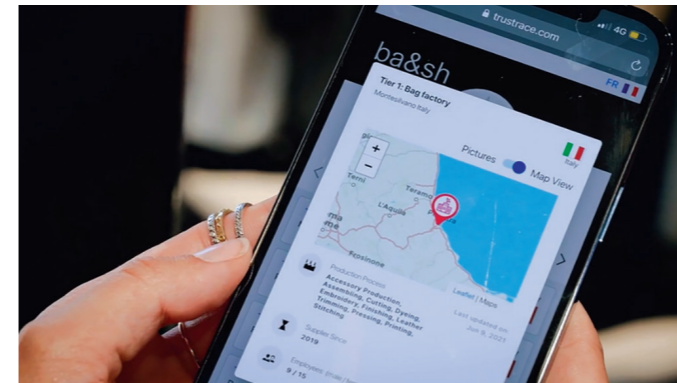
Work with the sector ecosystem around common interests

- **Ensure** a common understanding of traceability issues at sector level.
- **Pool** expertise with other brands to harmonize indicators and develop traceability solutions available on the market.
- **Coordinate** efforts to give more weight to requests made to suppliers and encourage information sharing.

"We promote the sharing of experience with other brands to pool best practices and tools development requests, necessary to adapt to the specific needs of our sector"

Alexandre Iris - Director of Strategy, Transformation and Sustainability, ba&sh

FEEDBACK: BRANDS ACTING FOR TRACEABILITY



THE CARREFOUR GROUP — BLOCKCHAIN FACILITATING ORGANIC COTTON TRACEABILITY

As a part of its transparency approach, the Carrefour group's brand, Tex, started sharing traceability information on the organic cotton used in its childrenswear product offering. With the help of local partners such as the Cotton Connect NGO, Tex traced back existing chains and integrated new suppliers meeting its specifications. They then went on to digitize production information at the material-batch level and centralize it in a blockchain. Consequently, users can now share unforgeable, digitized information accessible via a QR code fastened to the blockchain-backed products.



COLLABORATIVE MOMENTUM TO DEVELOP TAILORED TOOLS

Due to the lack of standards and turnkey traceability tools, companies are joining forces to develop solutions adapted to their needs. For example, ba&sh and ETAM have been working collaboratively to collect feedback which will be used to enhance the TrusTrace solutions tool. In the luxury sector, a consortium has been created to develop a post-distribution traceability solution that links "digital passports" to products (Ariane). Cross-company collaboration has a positive impact on the fashion industry as a whole, and ultimately will continue to enable the rapid development and deployment of digital traceability tools.



ETAM GROUP — INVOLVING SUPPLIERS IN THE TRACEABILITY APPROACH

For the ETAM group, involving suppliers in the traceability approach through positive communication is essential; therefore, they are actively raising awareness around strategic traceability issues whilst highlighting the competitive advantages they can expect. Traceability is also a customer transparency tool that should be used to promote the efforts and know-how of partners in a "win-win" approach. Taking both stakeholder standpoints into consideration, ETAM has therefore mobilized expert associations and customers to validate its traceability approach.

WITH THE SUPPORT OF LE DEFI



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Alliance du Commerce and Deloitte
thank all partners involved in the production of this booklet,
in particular Stéphane Popescu, COSE361 CEO
and coordinator of the Fashion & Luxury Strategic Committee's
"Traceability" working group

Design and production — *Deloitte Sustainability France*
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