Transparency from cotton to counter

A CHAINPOINT SOLUTION PAPER

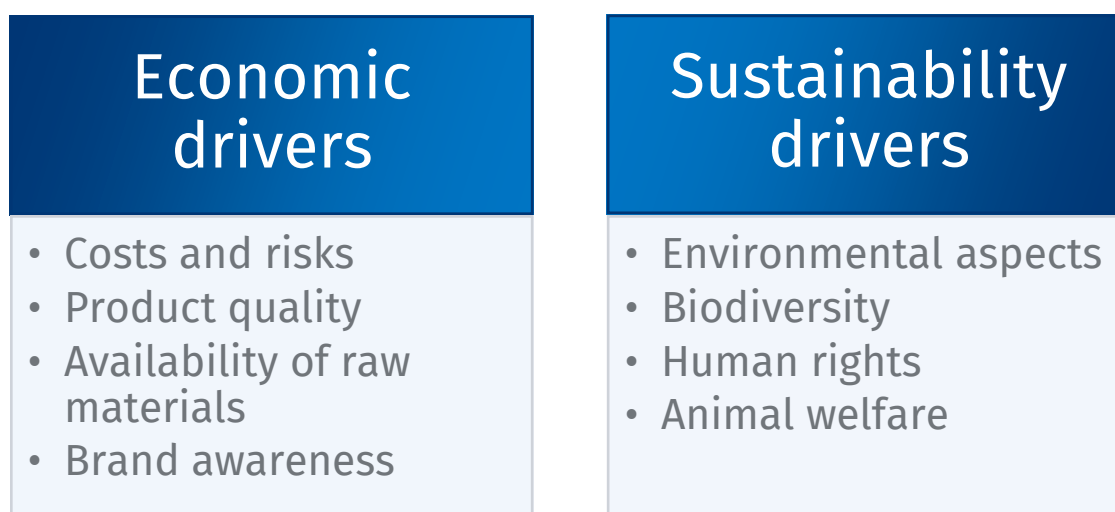# Contents

Challenges in the cotton supply chain

Textile supply chains face many challenges. The responsibility to solve these challenges continuously moves towards the end of the chain, thereby mostly affecting brand owners and retailers. For them, the question is how to identify and resolve the hotspots in their supply chain and how to monitor and improve the effectiveness of all supply chain actors.

Today, managing textile supply chains has become an act of both economic and sustainability drivers.

Economic drivers	Sustainability drivers
• Costs and risks • Product quality • Availability of raw materials • Brand awareness	• Environmental aspects • Biodiversity • Human rights • Animal welfare

Short product cycles and long production lead-times can easily lead to forecasting errors. Fluctuating supply and demand lead to strong price variations, potentially harming both the ability to produce sufficient quantities of finished products as well as bottom line results.

Large brands and retailers deal with hundreds to multiple thousands of suppliers and sub-contractors, which makes hard to track things like the origin of materials, substances used during the production and working conditions.

Ongoing questions about the origin and production of textile products are a reality that the industry will have to face with. Customers expect greater transparency and a responsible attitude towards people and planet from the brands they buy.

External drivers for traceability

Next to the internal drivers that we see in today's supply chains, there are external factors that require transparency and traceability:

Brand protection
Stakeholders such as staff, shareholders, users, customers, suppliers and contractors can put more and more pressure on a company to act responsibly. With the availability of information and the opportunity to move money or assets to another company, organizations feel the pressure to undertake ethical business. The Rana Plaza incident was an eye opener for a lot of consumers who have been demanding sustainable products ever since.

Laws, rules and regulations
Governments and regulatory bodies are developing more and more regulations that require businesses to take action when non-compliances are being found in their supply chains. This does not only affect the textile industry. This has consequences for industries like electronics, cosmetics and timber as well.

Intelligent transparency

Intelligent transparency is instrumental to answering today's textile supply chain challenges. You need to be able to drill down to the relevant hot spots of your supply chain, from the producer of raw material to the ginners, agents, spinners, fabric makers and processors. For cotton you need to be able to trace back up, all the way to the producer for issues like water and pesticide use.

Running an effective sourcing operation is difficult without sufficient insight. Running a sustainable business is impossible without transparency and traceability through the supply chain.

Building a more sustainable textile supply chain

Becoming a more sustainable company can't be achieved overnight. You need to combine a holistic vision with a structured approach and pragmatic execution.

The biggest challenge is how to create transparency. You are looking for ways to map your products back, not just to your direct supplier but to the supplier of your supplier and beyond – all the way up to the source of the raw material.

This does not start with a code on a product. It starts with cooperation, collaboration and information sharing. That willingness to cooperate has to exist, or it has to be enforced. The right processes and people have to be put in place. And you need the proper tooling to combine data and present it in the form of usable information.

Stepwise approach

As with many projects, the credo is: plan big, start small. At ChainPoint, we use the following pragmatic stepwise approach:

1. Define objectives, hotspots and partners
2. Check feasibility
3. Develop a solution
4. Communicate

Define objectives, hotspots and partners

Check feasibility

Develop a solution

Communicate
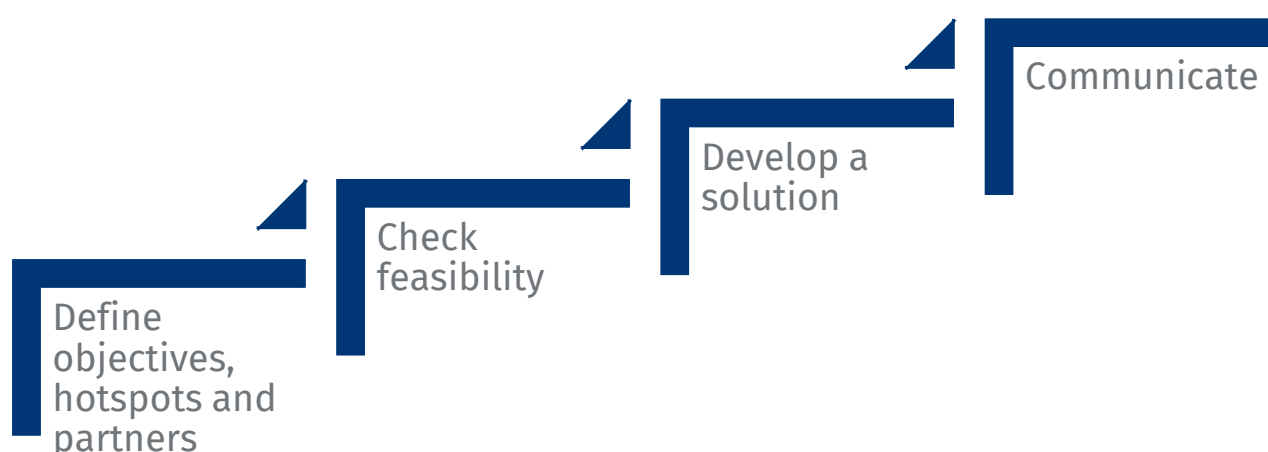
1. Define objectives, hotspots and partners

Objectives

Every plan should start with the end in mind. At the end of the day, what do you want to achieve with your initiative? Examples of objectives some of our clients achieved with ChainPoint are:

- Improved cost effectiveness of their sourcing operation;
- Safeguard product and process quality;
- Insights into capacity and availability;
- Contribution to better working conditions;
- Improvement of communication and relationship with consumers, NGOs and public authorities.

Hotspots

Next, identify any existing hotspots to address as 'quick wins' for your program. These can be production activities, processes or country-specific situations in the supply chain that may be at risk for social, quality or environmental issues.
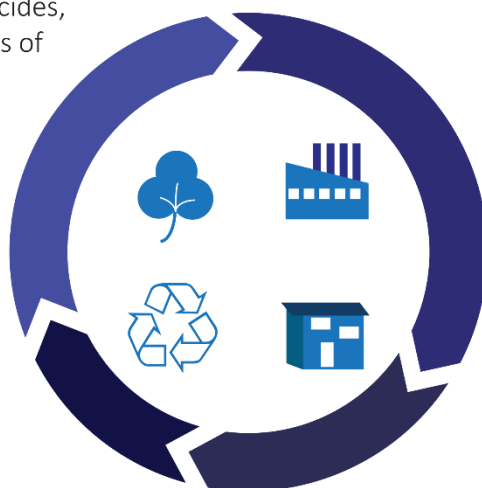
Where are impacts that need to be considered?

1. Raw Materials
Use of pesticides, herbicides, fertilizers and high levels of water usage in cotton fields has an enormous negative environmental impact.

2. Manufacturing
Textile dyeing and finishing is a particularly high-volume, high-impact source of water pollution and CO2.

4. Recycling / C2C
How optimal clothing design can create recyclable fashion, or even full cradle-2-cradle fashion.

3. Consumer Care
Washing clothes in hot water has large environmental costs and dry cleaning requires a toxic, persistent solvent.

Collaboration and partnerships

Working together with industry peers or external specialists can help reduce cost and lead time for the development and implementation of your sustainability program. There are several ways to approach such a project, each with their own benefits.

Individual initiative

As a company, you can individually act to establish transparency in your supply chain. Amongst the companies who have taken this approach are some of the world's leading furniture and clothing retailers. For many smaller companies such a program can be too big and costly to implement.

Joint initiative

Another possibility for collaboration is to establish joint initiatives where multiple companies cooperate in evaluation of their suppliers. Together they strengthen their cumulative power in the market and reach a higher level of standardisation.

A good and recent example of this approach is Fresh.Point, a collaborative monitoring platform for wholesalers and international traders in the European fruit and vegetable sector. It connects traders with food laboratories and supports the workflow of assigning, reporting and analyzing product tests. By sharing this online infrastructure, functionality and knowledge, cooperating traders increase process and information quality, whilst reducing costs of their engagement at the same time.

Associate with existing standards

The third option is to join industry standard schemes and labels. In the vegetables and fruit market the GlobalGAP and QS are well known examples. This is typically a very cost-effective approach to sustainability.

Standards in the textile industry include the organic standards like GOTS and other standards like the Better Cotton Initiative, of which you will find a case study further in this paper.

Partners

Regardless of the approach you take, you will probably need additional partners you can collaborate with in order to achieve your supply chain goals. At ChainPoint we have supported multiple clients in identifying the partnerships they needed. Most organizations were looking for partnerships in the areas of IT, Consultancy, Certification and Monitoring depending on their needs to reach their objectives.

2. Check feasibility

Compare your ideas with existing standards and initiatives to see if you can benefit from adopting them instead of developing your own standards and methodologies. Also check your ideas against limiting factors such as working conditions in the different countries you will source from.

Check whether collaboration with competitors can create added value and reduce costs. Define your basic requirements and best practices. Identify your company specific KPIs and the possibilities for comparison of supply chain actors. Finally, make sure to involve suppliers and local representatives in order to get the commitment you will need to implement your program.

*Some of the existing standards in textile and apparel*

3. Develop a solution

How can you connect your whole supply chain? You will need technology to connect the different systems of your suppliers and the suppliers of your suppliers. It is equally important to find answers on how to motivate your suppliers and channel partners.

Transparency

In order to achieve the desired transparency, the first thing you must do is choose the mapping or/and Chain of Custody model you want to implement. You have to focus on relevant parts and products in your supply chain. Make as much as possible use of existing data infrastructures for faster implementation, higher efficiency and a shorter ROI period.

Hotspots

Use the implemented system to collect data from your predefined hotspots. From that data, create the information you need in order to manage towards improvements. Supply chain analytics can give insight into areas of further improvement over your whole supply chain. And supplier assessments and trainings help drive sustainability and improve product quality at the supplier level.
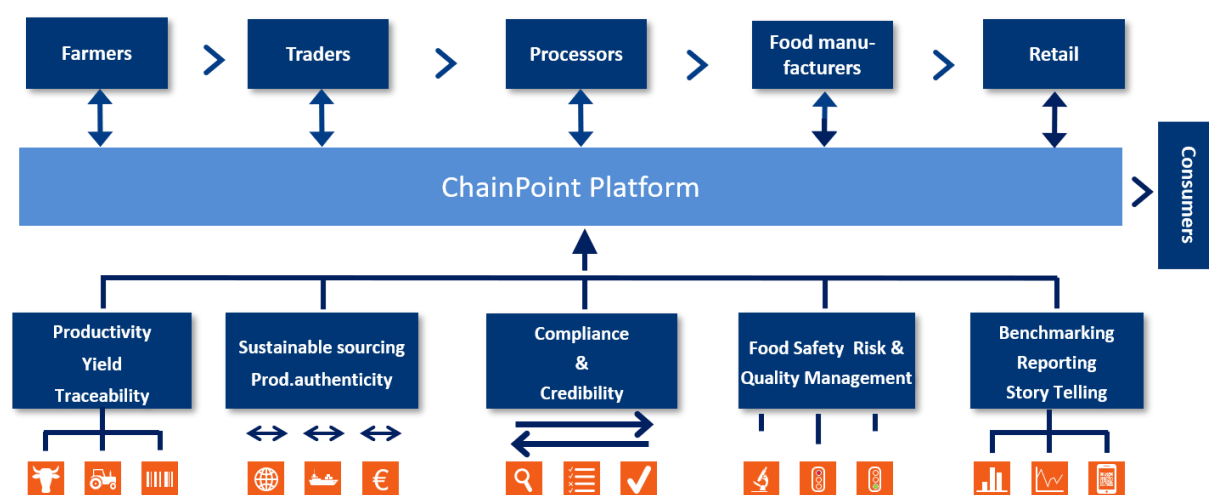
All relevant chain data is interfaced with the ChainPoint database, including data captured by manual entry.

4. Communicate

Is your supply chain 'in shape'? Have you reduced waste and lowered your environmental impact? Do you know precisely where your supplies are coming from, and have you improved product quality too? You have reasons to be proud, so why not tell that to the people who matter most to your brand... your consumers.

You can use smart phone scanning technology to connect consumers to real-time chain information that you can present to strengthen the position and authenticity of your brand. Consumers can use it directly at retail outlets to form a more intimate, trusted relationship with your product by seeing its individual story. Show consumers the environmental impact of an individual scanned product, for example, or the sourcing regions involved in providing its raw materials.

The role of IT in your supply chain

How do you get access to the information you need in order to manage cost, availability, quality and sustainability? A typical textile supply chain spans hundred to thousands of individual companies, each of them using their own administrative tools containing bits and pieces of information about your products. That's where IT solutions such as our cloud based ChainPoint platform come in to prove their value. By connecting the information of relevant parties in your supply chain, you are able to get a holistic view on every critical aspect of your product. Be it the future availability of raw material, the performance of individual suppliers, traceability of used materials or overall performance improvements of your supply chain.

In order to get clear insight into the textile supply chain, such an IT solution must offer at least the following technological capabilities:

- Traceability to help track products from source to consumer;
- Supplier assessments to drive sustainability and improve product quality at the supplier level;
- Auditability as a proof point and a basis for storytelling;
- Collaboration capabilities with for example other textile manufacturers or standards organizations to increase engagement of your supply chain;
- Supply chain analytics to give insight into areas of further improvement over the whole supply chain.
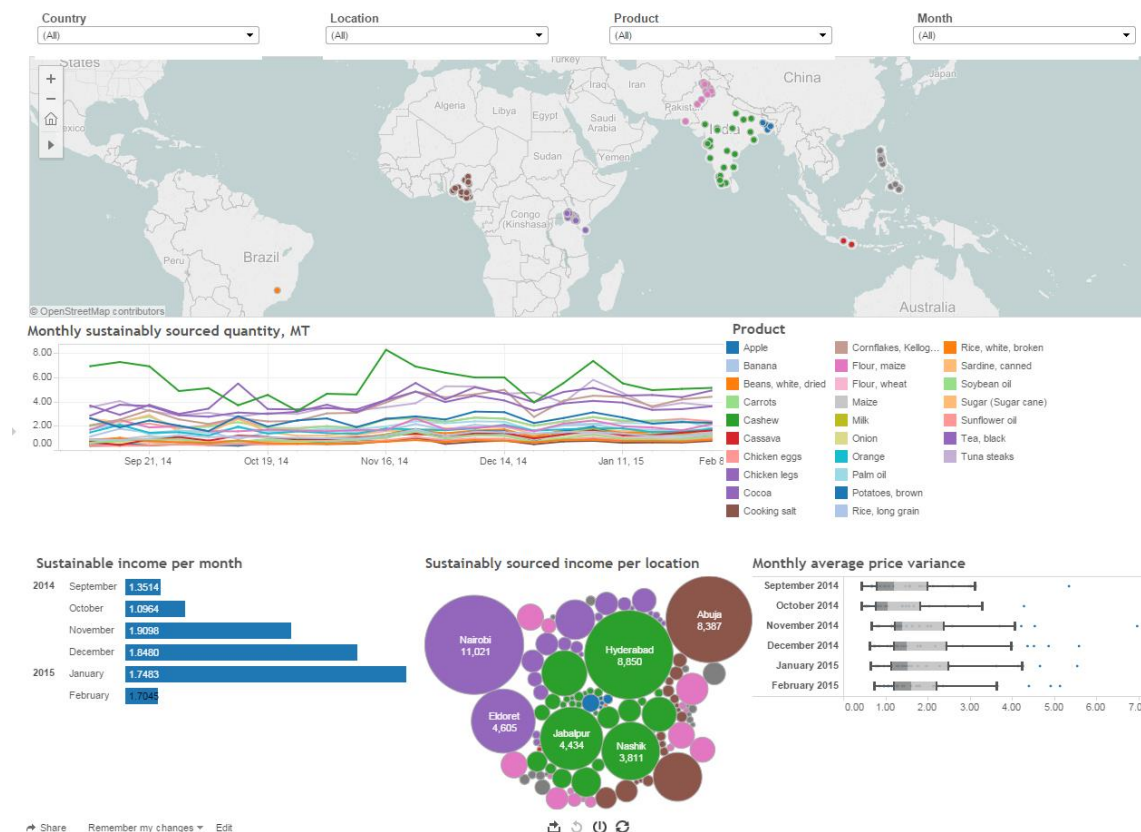
Customer case: Better Cotton Initiative

*"Endorsing a claim for Better Cotton"*

The Better Cotton Initiative (BCI), founded in 2009 and initiated by some visionary organisations including Adidas, H&M, IKEA, Oxfam and WWF, aims to improve the livelihood and economic development in cotton producing areas, reduce the environmental impact of cotton production and secure the future of the sector. For example, it challenges damaging crop protection practices, water abuse, diminishing soil fertility and unhealthy practices such as child or forced labour. To reach this goal, BCI defines what a better, more sustainable way of growing cotton looks like, and, through a network of partners, trains and supports farmers to adapt to the corresponding techniques.

In 2013 680,000 farmers produced 905,000 metric tonnes of Better Cotton. The goal is to increase these numbers to 5 million and 8.2 million respectively by 2020. An important prerequisite for that is the uptake of Better Cotton by the supply chain.

The figure below shows a typical supply chain for Better Cotton. Farmers bring their yield to a cotton gin, where cotton fibres are separated from their seeds and then processed into cotton bales. These bales are traded or directly sold to spinners that in turn supply fabric mills with yarn. The fabric is sold and further processed into consumer products, like clothes, which are then delivered to retailers.
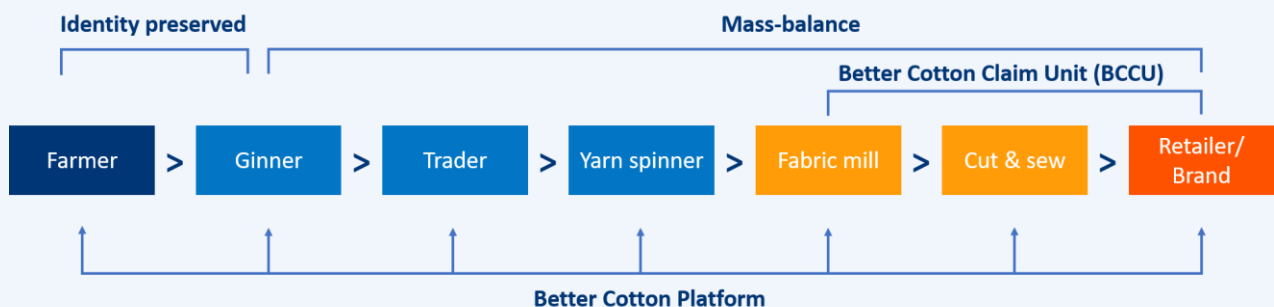
To make certain that retailers and brands can be confident in making claims about Better Cotton, BCI introduced Chain of Custody requirements for the supply chain and developed a tracking and tracing system based on ChainPoint, called Better Cotton Tracer. At the moment this system comprises the supply chain from the ginner to the retailer. It is a mixture of mass-balance administration and the tracing of so called "Better Cotton Claim Units" (BCCU's).
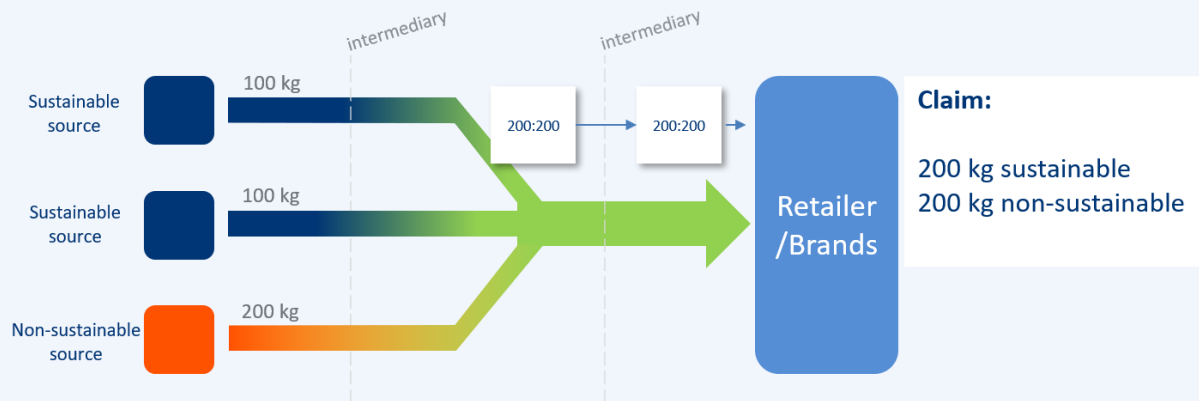
In a mass-balance system, not the physical sustainable product itself is tracked, but the volumes of sustainable product. From the ginners to the yarn spinners this is done by administration in ChainPoint. The Better Cotton Tracer ensures for example that a trader cannot sell more Better Cotton to yarn spinners or other traders than he himself has acquired from Better Cotton ginners or traders.

At the yarn spinner each kilo of Better Cotton is then swapped into a BCCU. Once the Better Cotton continues its journey through the supply chain as yarn, cloth and finally a supply of consumer products it is accompanied by these BCCUs. At the end, a retailer can trace the BCCUs back to the yarn spinner that issued them, by using the Better Cotton Tracer.

BCI is already planning ahead. At the moment BCI and ChainPoint are extending the system with the Better Cotton farmers. After that BCI would like to integrate the processing industry as well, and by so doing "close the gap" in the administrative chain.

Textile Trace

With the work ChainPoint has done for BCI, Textile Exchange, GOTS, Goodweave and others, we've been supporting the textile and apparel industry from multiple angles. We have now consolidated our years of experience in Textile Trace, a platform designed especially for the textile and apparel industry. This extremely flexible solution will benefit anyone working in the industry.

Onboarding suppliers

With Textile Trace you can onboard your suppliers in a very efficient and easy way to the platform. This can be done by simply capturing basic supplier information manually or by interfacing with an existing ERP or other company IT system. Your supplier can then complete and validate information as well as add information for own suppliers.

Adding certifications

Once a supplier is registered in the platform, adding certificates for the supplier is easy. Our platform lets you assign certificates for all standards to a supplier, with scope, certificate number and expiry date. Via the platform you can ask your supplier directly for additional certificate information like a scan of the certificate. The supplier then just follows a link in an email to add the required information into the platform. The platform will also automatically notify you when a certificate is about to expire, so you can be sure your suppliers always have valid certificates.

English | ⌄

Welcome.

Please type your username and password to enter. For further information please contact Textile Trace.

Login here.

Don't have an account? **Contact us**

| User name | yournamehere |
| Password | •••••••• |

☐ Remember me on this computer.   **I have forgotten my password**

Login

Textile
Trace

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CONNECTING SUPPLY CHAINS

Traceability of complex supply chains

Textile Trace makes capturing of your supply chains effortless. Simply register buyer-supplier relationships for each segment, line and season. If required, verify information by requesting documents such as transaction certificates directly from your supplier. As a result, you will gain insight into your supply chains and you can draw on detailed information for every step.

Visualise your supply chain with TraceMap

Our TraceMap visualises your supply chain in a unique way. This interactive feature in ChainPoint lets you navigate through your supply chain from every possible angle. With its intuitive design and versatility, you can gain insights into your supply chain in real time. As soon as information is added, it shows in the map TraceMap makes it possible to visualise your supply chain switching easily from upstream to downstream views, from logical order to geographical.
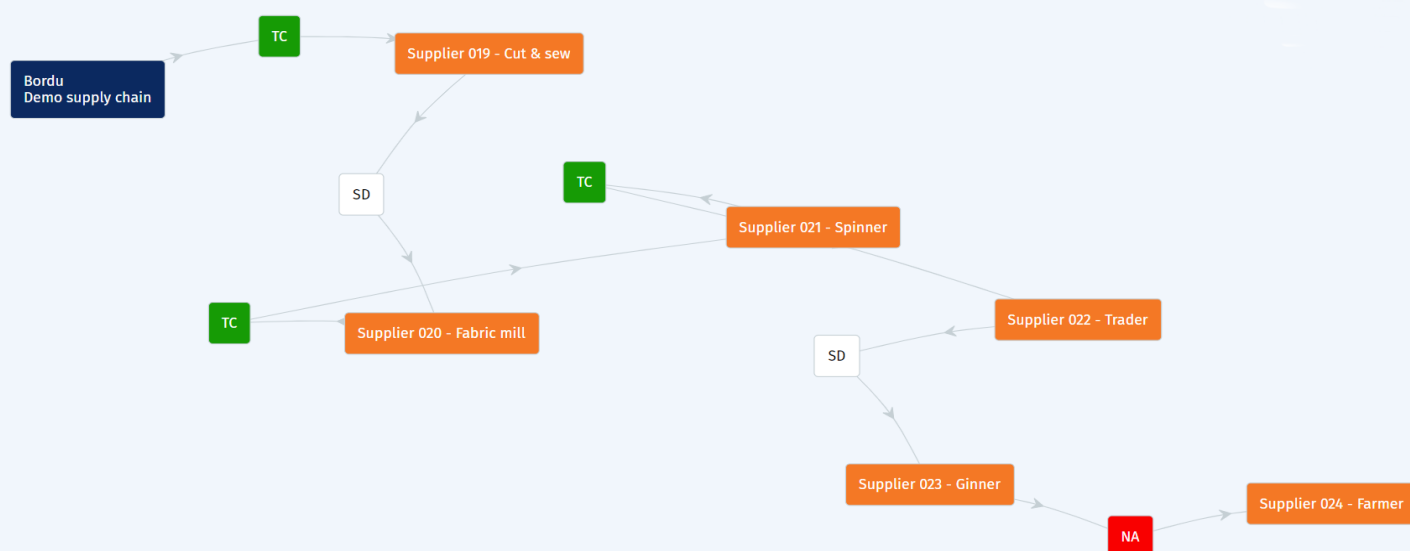
TraceMap is a unique way of visualising your supply chain

Request a demo now!

Do you want more information about ChainPoint, Textile Trace and what we can do for you? Contact us now and we will set up a demo for you as soon as possible.

About the author

Dr. Alexander Ellebrecht is Agricultural engineer and holds a Ph.D. in Agricultural sciences from the University of Bonn (Germany). For more than 10 years he has worked as an expert in Food Chain Management and IT for ChainPoint.
He has been responsible for several international projects to improve sustainability and quality through better collaboration between different stakeholders.

About ChainPoint

ChainPoint offers software for sustainable supply chains. At ChainPoint we believe that collaboration and sharing of information is crucial for the efficient production of high quality, safe and sustainably produced products. ChainPoint is a secure, online software platform to manage and share product, process and supplier information, from raw material to finished product. With our software and services, we help companies improve quality and sustainability whilst reducing cost and risk.