Improving efficiency and sustainability in the cosmetics and personal care industry

# A CHAINPOINT SOLUTION PAPER





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# Introduction

Cosmetics and personal care products play an important role in modern day society. Personal care products such as soap, shampoo, and toothpaste are part of basic hygiene, while sunscreens and rash lotions play an important role in skin protection. Even products such as mascara and foundations are key in expressing one's image and personality.

Producers of cosmetics and personal care products are however under growing pressure. Less raw material availability, unsustainable production, dependence on oil, rising costs, increasing health concerns and investor scrutiny are just some of the issues facing the cosmetics and personal care industry. Ingredients used in cosmetics and personal care products are coming under growing scrutiny.

From the initial sourcing of raw materials through to consumer use and disposal, the cosmetics supply chain has an impact across multiple stakeholders. And it has issues similar to those of other consumer goods industries, such as consumer health, the sustainable sourcing of raw materials, social and ethical issues, risk management and brand protection.

ChainPoint's software platform is well suited to supply chains in the cosmetics industry. Examples of applications include tracing cosmetic ingredients back to their origin, making sure they are sourced sustainably, or auditing and certifying suppliers and products to give assurance to consumers about the absence of bioaccumulative toxic ingredients.

ChainPoint connects all supply chain stakeholders in one platform, which creates supply chain transparency and visibility, helping to improve operational efficiency whilst reducing costs. A number of Chain of Custody models are available in ChainPoint to assess the overall impact from the very start of the supply chain.

In this solution paper, we will highlight the several issues in cosmetics supply chains and describe how ChainPoint solutions can help solving these issues.



# Key challenges in the cosmetics industry:

From the shea nuts harvested in Africa to Indonesian palm oil or mica from India, cosmetics ingredients have a high impact when sourced unsustainably. In addition, the presence of harmful or restricted substances in synthetic ingredients is increasingly under scrutiny. ChainPoint enables cosmetics companies to have full supply chain insight and visibility in order to make informed decisions. Below we have outlined some of the challenges in cosmetics supply chains, where the use of a Supply Chain Information Management System such as ChainPoint can be of added value.

## 1. Ethical sourcing and origin of ingredients

Cosmetics and personal care products are made from a multitude of natural and synthetic ingredients. Many of these ingredients are sourced from suppliers, who in their turn source from other suppliers. This poses a significant risk of environmental, social and ethical issues such as forced and child labour, unfair remuneration, or environmental damage due to unsustainable production methods. To mitigate this risk, having a clear view of the entire supply chain, beyond the tier 1 suppliers, is needed. Compliance with your code of conducts can only be guaranteed if you know which stakeholders are active in your entire supply chain.

But keeping track of all ingredients and their origin is a daunting task which, without the use of specialized software, is almost impossible to do. Supply Chain Information Management Systems, such as ChainPoint, enable visibility in your supply chain by connecting tier 1,2,3,4, x suppliers together and give you better insight into your impact. This drives improvement programmes beyond tier 1 suppliers, upstream to the origin of the ingredients.



Fish oil is oil derived from the tissues of oily fish, such as sharks, swordfish, tilefish, tuna, or menhaden fish. It is used for external use in cosmetics, as ingredient in moisturizers. Every year, half a billion menhaden are caught for fish oil production, causing visible damage to ecosystems.



#### An example: shea butter

Shea nuts are a traditional crop, sourced by millions of rural women in West Africa. Its end product, shea butter, is used as an ingredient in cooking, to make cosmetics, chocolates (as a substitute for cocoa butter), pharmaceutical applications, and soap.

From April to September, nuts are collected and processed. However, the market is disconnected from production and has limited transparency. This makes it difficult to see the true impact of this commodity.



Sourced by millions of rural women, the shea nut supply chain has zero traceability and very limited transparency. Production and market are disconnected

The millions of rural women only partly benefit from the commodities' popularity, which results in enduring poverty and limits their role in society. Creating more transparency in the shea supply chain and connecting them better to the market will help improve their livelihood and ensure children go to school instead of



Shea butter is used in the cosmetics industry mainly for skin- and hair-related products such as lip gloss, skin moisturizer creams and emulsions, and hair conditioners for dry and brittle hair.



helping with collecting the nuts. Also, by engaging directly with rural women, the quality of the shea butter produced locally can be improved.

#### 2. Organic and sustainable production methods

Cosmetics and personal care products use both natural and synthetic ingredients. Synthetic ingredients are often oil based, which is considered undesirable by an increasing number of stakeholders and consumers. Therefore, more and more synthetic ingredients are replaced by natural ones, but this poses a number of new challenges.

Natural ingredients can contribute to deforestation, loss of biodiversity, cause environmental damage, or are related to social and ethical issues in the supply chain. By helping producers to adopt better agricultural practices, cosmetics brands also become more sustainable, while reducing risks of consumer and regulatory scrutiny. Sustainable production methods during the product manufacturing stage also have a positive impact on water usage, carbon footprint, and waste, important indicators of sustainability. By measuring their material sustainability indicators, companies can evaluate their progress and the benefits of not only their improvement programmes, but also those of all the stakeholders in their supply chains.

The same applies to organic ingredients. Organic ingredients are subject to fraud due to the often higher price. Without measuring and validating ingredients, you run the risk of non-organic ingredients entering your supply chain. Our experience in the organic sector applied to the ChainPoint solution enables companies to assess risks when sourcing organic ingredients for cosmetics. All data is stored in a central database, to be easily used for reporting or alerting in case of fraud.



Soybean oil is mostly used as a moisturizer in skincare products. Cultivation of soy is one of the main causes of deforestation.



#### 3. Green chemistry formulation & consumer health

With personal care and home products increasingly in the spotlight, expectations have grown for more sustainable chemicals and formulations. Consumers want to know more about how the products they buy are made and how natural and synthetic ingredients are used.

As a consequence, a number of governmental bodies and retailers are demanding a new approach to managing chemicals in products. Regulations, guidelines, and rules are used to ensure consumer safety, social and ethical compliance. But how do you know that your suppliers are compliant with these regulations or your own code of conduct to, for example, not include parabens in your cosmetics ingredients?

In order to get the necessary assurance that stakeholders in the supply chain follow the rules, validation of compliance is necessary. Audits and self-assessments are therefore critical. Using a central system with supplier management, audit management, and traceability functionalities streamlines business processes and helps to ensure compliance.

The quality of a cosmetics product is defined by the quality of its ingredients. Therefore the quality of cosmetics raw materials should be known as early as possible in order to prevent quality issues and disruptions. Registration of qualityrelated data should be as easy as possible, using an array of data capture technologies, backed by a central platform. This also includes apps with offline capabilities.



Regulations, guidelines, and rules are used to ensure social and ethical compliance, as well as consumer safety.



#### 4. Risk management

#### Risk of non-compliance

In many countries, regulations affecting the cosmetics industry require companies to improve control over their supply chain. A variety of legislations stipulate requirements for supplier management, including to prevent misconduct of suppliers such as bribery and other forms of corruption, slavery, child labour, environmental damage, financing war-efforts and

misuse of bio-technology. For example, the UK Modern Slavery Act includes a Transparency in Supply Chains section requiring companies to disclose how they are addressing slavery and human trafficking in their supply chain. The California Supply Chain Transparency Act and the French Duty of Vigilance Act have similar provisions. Further government action on supply chain transparency is likely.

#### Risk of disruptive supply

Many natural ingredients used in cosmetics and personal care products are produced by smallholder farmers in global supply chains. Supporting these smallholder farmers is vital in ensuring future supplies of commodities such as shea nuts or avocados. If nothing is done to support smallholder farmers, many of them will stop farming, thus threatening the future supply of many commodities. Actively supporting your stakeholders, and measuring the results of your actions will help in securing future supplies.



In many ways, cosmetics companies can be linked to ethical issues in supply chains such as child labour.



#### 5. Operational efficiency

When reviewing the challenges in the cosmetics and personal care supply chains, it is obvious that they are not limited to logistics. To improve supply chain sustainability and ultimately supply chain performance, companies are forced to collect data from many sources.

Many organisations struggle with the multitude of internal and external systems that provide bits and pieces of information on their supply chain performance. Often Excel is used to glue all data together and to make sense of the information available. Although this solution might work for the short term, it is prone to data errors and duplications, and it requires a lot of time to maintain and operate. This will result in a growing administrative burden and increased cost due to the large quantity of data needed to monitor supply chain quality, risk, and sustainability.

It is therefore very important that cosmetics companies choose a long-term strategy in coping with ever-increasing amounts of data.





#### 6. Fraud and brand protection

The strategic goals of companies are shifting more and more towards taking responsibility for their entire supply chain, from procurement of raw materials all the way down to consumers. This trend, reflecting the fact that consumers are increasingly holding brand owners accountable for all their supply chain issues, can also be witnessed in the cosmetics and personal care sector. Controlling supply chains one-up / one-down is no longer sufficient to reduce risks and prevent brand damage. When companies strive to improve their supply chain, for example for quality and sustainability reasons, all stakeholders in the supply chain need to be included, which means collecting a lot of data. It's about registering, measuring, analysing, benchmarking, sharing and improving on a continuous basis.

#### Retaining consumer trust

Ensuring consumer trust is vital for cosmetics and personal care brands. Companies need to have full visibility of their supply chain if they are to prevent mishaps that can damage consumer trust, such as the use of ingredients that are restricted or that may have adverse effects when used over a prolonged period, or the use of non-organic ingredients in organic products. That extra effort required to achieve full visibility can be leveraged to inform consumers about how the products they purchase have been produced. That is where storytelling comes in. By scanning a QR codes with an app, ChainPoint can collect all relevant data linked to a cosmetics product and display it on a smartphone or tablet. That way the consumer is informed about factors such as the source of ingredients, what journey the product took to get to you and how it was produced, giving confidence to the consumer.



Ensuring consumer trust is vital for cosmetics and personal care brands.



#### Mica, a mineral with a dark glow

One example showing the increased need for brand owners to take responsibility for their entire supply chain is the use of mica, a natural mineral used in blusher, eyeliner, eye shadow, mascara, lipstick, and foundation. The main source of mica is India, where child labour is endemic and more than 75% of India's mica mining is unregulated. This poses significant threats to producers of cosmetics who do not want to be linked with child labour in their supply chains.

In order to tackle the issues in cosmetic supply chains, companies must take steps to introduce visibility and transparency. Only then can companies be in full control of their brand reputation and inform their customers on the sustainability of their products.



Consumers cannot trust that mica-containing cable, paint and cosmetics products are child-labour free



# Solutions to create sustainable cosmetics and personal care supply chains

ChainPoint's solutions can help you address all challenges described above in multiple ways: through supply chain mapping, supplier monitoring and evaluation, to product-level traceability. Cosmetics companies can then communicate on their sustainability programs through ChainPoint's storytelling application. With all these actions, it is key that the collected data can be turned into actionable information through advanced data analytics.

#### Supplier monitoring and evaluation

In addition to periodical supply chain audits, more and more cosmetics companies put continuous monitoring and evaluation programs in place. This allows them to proactively anticipate supply chain risks and take actions to make sure that their quality and sustainability standards are met.

ChainPoint helps companies to assess their suppliers based on their own key performance indicators for quality, social and environmental issues. When we take shea butter, a common ingredient in cosmetics, as an example, we see the following main issues that one could monitor.

- Quality issues: does the harvested shea butter meet the required standard?
- Social issues: shea butter is mainly harvested by women. What are the labor conditions of these women? Are they working in a safe environment? Do they get a fair wage?
- Environmental issues: since shea nuts grow in the wild, environmental issues are not that pressing. However, one must be sure that the local ecosystem is protected.

The ChainPoint platform helps companies make sure key performance indicators that matter to their brands and business are securely and effectively monitored.



#### Supply chain mapping

The next step a company should take to assess its impact is to map out its supply chain. A company should know which suppliers are in its supply chain beyond the Tier 1 suppliers. Who are the suppliers of your suppliers? When you map your entire supply chain beyond Tier 1 and 2 you will also be able to identify at-risk actors and implement corrective measures. With ChainPoint's software platform, you can understand the relationships with suppliers in even the most complex supply chains.



#### Product-level traceability

If you take your supply chain visibility goals one step further, you can choose to integrate traceability functionalities in your ChainPoint solution. With traceability you will be able to track every key ingredient such as shea butter or palm oil up to batch-level. This way you can track products from source all the way down to the consumer. ChainPoint supports a range of industry standard Chain of Custody models including identity preservation, segregation, mass-balance and book & claim.



#### Capturing data

To capture data in your supply chain, whether it is for supply chain mapping, supplier monitoring and evaluation, or for traceability, you will need to cater for many forms of data. Options to key-in data manually, to interface with other systems, to accept Excel uploads and, of course, to use mobile apps should all be considered. Mobile technology is increasingly used to capture data at all stages of the supply chain. Apps are created for specific tasks and need to work both offline and online since internet coverage is limited in many rural regions where cosmetics ingredients are sourced.

All data capture options should be connected to a central, flexible backend platform which gathers, stores and verifies data and turns it into actionable information. The ChainPoint platform is very flexible and can easily adapt to changing requirements. In the case of a mobile app, data collection fields in the app are defined in the back-office platform and can be pushed to mobile devices. Once the device connects to the internet, new items are automatically updated. This enables self-service of forms and form fields, providing full flexibility.



ChainPoint data capture options



#### Analytics

In the end, gathered data has limited value if it cannot be analysed and reported upon. ChainPoint Analytics lets you know exactly where you stand by letting you visualise a rich set of information gathered from across your supply chain. Personalised dashboards present overviews which can be catered to the specific information requirements of various decision makers, whilst automated reports provide detailed results regarding your standard KPIs.

Sometimes, managers need to inspect aspects of their supply chain from multiple, unforeseen angles that are not defined by their core KPIs. ChainPoint's Self Service Analytics lets managers analyse their supply chain data from almost limitless perspectives, without the need of specialist IT staff. It allows data from individual elements of the chain to be grouped, joined, sliced and diced, and presented with stunning visualisations that tell the story behind your chain in ways that everyone can follow.





#### Storytelling

After a company has taken steps to improve efficiency and sustainability in their supply chain, it has every right to be proud. So why not tell this to your customers and consumers? With ChainPoint Storytelling you can display facts and figures about the elements you would like to communicate, including the origin of your cosmetics ingredients and your finished product's journey through the different steps of its value chain. ChainPoint uses smart phone scanning technology to connect consumers to real-time chain information.

Consumers can use it directly at retail outlets to form a more intimate, trusted relationship with your product by seeing its individual story. This helps you strengthen the position and authenticity of your brand.



#### Conclusion

ChainPoint helps cosmetics companies to connect their supply chains and make them more visible and transparent, thereby providing valuable information on how to reduce impact, increase efficiency and reduce bottom line costs. Using advanced cloud based software, ChainPoint connects all stakeholders and data sources in a supply chain to bring them into a secure online platform, enabling full visibility and traceability. ChainPoint can help you integrate data from your existing systems, such as Excel or SAP, into a centralized platform to avoid redundant data entry. Using a supply chain information system, cosmetics brand owners and producers know exactly the impact they have in a supply chain and can act accordingly. Corrective measures and improvement programmes can be managed using the information gathered across the supply chain to fully mitigate risks, improve sustainability and seize new opportunities.





## About the author

Anne Himeno is senior business developer at Chain- Point and has extensive experience in how to leverage IT solutions to make food and consumer goods supply chains more sustainable. She has also developed significant knowledge of the main issues, regulations and business drivers related to responsible sourcing of cosmetics ingredients. Prior to joining ChainPoint, Anne worked for several sustainability software providers including Enablon.

Anne started her career as an environmental engineer. After completing an MBA, she went on to work in ICT risk management at EY, where she acquired a good general understanding of information systems.

# About ChainPoint

ChainPoint is a secure, online software platform to manage and share product, process and supplier information, from raw materials to finished products. With our software and services we help companies improve quality and sustainability whilst reducing cost and risk

#### ChainPoint BV

Mr. E.N. van Kleffensstraat 12 6842 CV Arnhem The Netherlands

#### ChainPoint GmbH

Emil-Nolde-Straße 7 53113 Bonn Germany

**ChainPoint Sarl** 29 Rue Romain Rolland 44100 Nantes France

Phone: +31 (0) 26 84 53 650 Email: sales@chainpoint.com Website: www.chainpoint.com

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