Moving the needle

Threading a sustainable future for apparel
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Foreword

Sustainability is defined as meeting the needs of today without compromising the ability of future generations to meet their own. Consumers are increasingly expecting organisations to take a sustainable approach and consider their environmental, social and economic impact. At the same time, governments are steering businesses towards more sustainable practices through new regulations.

The apparel industry has been behind the curve when it comes to sustainability. While there is a willingness to change and improvements have been made, the adoption of sustainable practices remains a work in progress. Issues such as the provenance of raw materials and the carbon footprint of fashion have emerged in recent years, but are yet to be fully addressed. Working conditions in the industry remain a key area of focus too.

Supply chain transparency is one of the core pillars to create a more sustainable fashion industry. Without visibility of the types of companies involved across the entire value chain, as well as insight into all the materials and components used, it is impossible for consumers and regulators to ascertain the sustainability credentials of an item of clothing. This is exactly why KPMG China and Serai have joined forces to take an in-depth look into the current state of the apparel supply chain and how the industry can move forward.

Moving the needle – Threading a sustainable future for apparel is a research study based on a series of extensive interviews with senior executives in the industry as well as a global survey. It finds that technology will be a necessity if the industry is to gain end-to-end transparency. It also sets out how relationships between brands, retailers and suppliers need to become more collaborative if we are to make industry-wide progress and facilitate the sharing of information across all links in the supply chain.

We hope that this report provides you with valuable insights and we welcome the opportunity to discuss these findings further. We would like to thank all interviewees and survey respondents for their input, which has been instrumental in shaping the discussion on how the industry can achieve a more sustainable future.
Executive summary

Sustainability has become a core theme in the apparel industry. It encompasses many different facets: from working conditions in garment factories to the origins of raw materials and the environmental impact of the wider industry, as highlighted at the COP26 climate conference. It is also an issue that continues to evolve and may yet see other aspects such as water usage and fair wages come under the spotlight in the future.

Pressure for the industry to change has come from three directions. On the one hand, consumers are taking a greater interest in the sustainability credentials of fashion. They are also putting that interest into their purchasing intentions. Meanwhile, governments around the world are introducing new regulations around how clothing is produced and what materials have been used. Lastly, Environmental, Social and Corporate Governance (ESG) factors have become a key focus for the investment community and are impacting the industry too.

Supply chain transparency is an essential component to meet these demands for sustainability. Without visibility of all the companies across the entire supply chain and traceability of all materials and components used, the sustainability credentials of the industry cannot be ascertained.

This report comprises an in-depth study into how the apparel industry is responding to these calls for greater transparency. Based on in-depth interviews with industry insiders, as well as through a global survey among senior executives, we have identified the following trends:

• **Transparency capabilities are still low**
  The overwhelming majority of companies operating in the apparel industry finds supply chain transparency to be an important issue. Yet good intentions have not led to tangible transparency outcomes. Only 19 percent of respondents to the survey claim to have full visibility of all stakeholders operating across the entire supply chain, while merely 15 percent have full traceability of the materials used to produce their products.

• **Fixation on reducing costs has hampered progress**
  Apparel supply chains have prioritised cost minimisation over the last few decades, driven by consumer demand for cheap fashion. This fixation on margins has come at the expense of supply chain transparency, with high
investment costs identified by respondents as the largest barrier towards achieving transparency. A lack of resources is also raised as a major challenge – particularly for smaller brands and suppliers. If industry-wide progress is to be made, cost-effective solutions need to become available for all stakeholders in the supply chain.

- **Dependence on manual systems to track visibility and traceability**
  Entrenched operating practices, low margins and the high degree of complexity in today’s apparel supply chains mean that over half of all respondents still have manual processes in place to track both visibility and traceability. The adoption of digital technologies will be key towards capturing material flows across the supply chain and to gain visibility of the entire network. While more than 80 percent of the industry plans to have a transparency solution in place by 2027, a greater sense of urgency is needed to respond to increased demands for information from both consumers and regulators.

- **Data standards needed to facilitate flow of information**
  Half of all apparel companies struggle to achieve transparency because of difficulties in obtaining and managing information from other stakeholders in the supply chain. Supply chains need to ensure consistency in the way data is collected, shared and consolidated. A consortium of apparel brands, retailers, suppliers and related stakeholders such as government agencies should come together to agree on data-sharing protocols and the technologies that will govern this process. A platform that connects all industry participants will help facilitate standardisation and the exchange of data.

- **Sustainable approach can provide boost to margins**
  Investment in sustainability and transparency is often seen as a cost rather than an opportunity. However, this report finds that taking a sustainable approach can provide a host of financial benefits to apparel companies, including lower costs of capital and reduced insurance rates. Analysis by KPMG finds this could boost net profit by 1-1.5% for apparel brands and by 1.5-2.5% for suppliers. The industry therefore needs to view transparency as a critical component of its competitive advantage.

- **Collaboration is key to a sustainable future**
  Traditionally hierarchical relationships in the industry – in which brands and retailers have the upper hand on suppliers – require a reset. A more collaborative, partnership-based model will create a foundation of trust that can facilitate the flow of information between all stakeholders in the supply chain. Rather than having individual companies focus on the areas that are under their direct control, initiatives need to span the entire length of the supply chain if the industry is to move towards a more sustainable future.
About the study

This report examines how supply chain transparency is going to be one of the key drivers of change in the global apparel industry over the coming decade. It looks at the industry’s current supply chain capabilities and the need for greater visibility and traceability. It also identifies the barriers that are currently holding back supply chain transformation, as well as investment priorities for the coming years as the industry responds to consumer demand for sustainable fashion and increased regulations from governments around the world.

The study draws on the findings of a global survey of 202 senior executives in the apparel industry conducted in August 2021. Respondents represent brands and retailers, suppliers, manufacturers and sourcing agents of varying sizes. Brands and retailers are the final link in the supply chain before products reach end consumers. Suppliers can be subdivided into tier 1 (manufacturers), tier 2 (suppliers that weave fabrics), tier 3 (yarn producers) and tier 4 (producers of fibres and other raw materials).

Respondents are headquartered in Asia Pacific, North America and Europe. They work in a wide range of roles and departments, including c-suite, supply chain management, sourcing and procurement, manufacturing and operations, compliance and risk, technology and sustainability. The largest proportion of respondents are based in Asia Pacific. It should be noted that not all figures add up to 100% due to rounding.

To provide a comprehensive analysis of the key challenges and opportunities facing the industry, and as a basis for the recommendations to build a more sustainable apparel industry, the survey’s findings were supplemented by in-depth interviews with executives at more than a dozen market-leading apparel brands, manufacturers, associations and solution providers.
Regional breakdown of survey respondents

- Asia Pacific: 59%
- North America: 24%
- Europe: 16%

Business type of survey respondents

- Large-sized company (US$1bn or above): 28%
- Medium-sized company (US$500-999m): 30%
- Small-sized company (US$0-499m): 42%

Roles of survey respondents

- Executive level: 34%
- Supply chain management: 20%
- Sourcing/procurement: 16%
- Manufacturing/operations: 15%
- Technology: 7%
- Sustainability: 4%
- Compliance/legal/risk: 2%
- Others: 2%

Annual revenue of respondents' business

- Large-sized company (US$1bn or above): 26%
- Medium-sized company (US$500-999m): 30%
- Small-sized company (US$0-499m): 42%

* Respondents could choose more than one category

Source: KPMG/Serai survey analysis
In recent years, calls for the apparel industry to become more sustainable have grown louder. At first glance, requests for more information on how products are made and the origins of materials seem reasonable. However, that does not take into account the way the global apparel supply chain has evolved over decades to meet one objective: cost minimisation. That push for cost efficiency has come at the expense of transparency. Most companies just do not know who is in their supply chain as they go further upstream.

Underpinning this lack of transparency is an industry that still hinges on physical contact, such as visiting trade shows, walking factory floors and conducting in-person audits. These sorts of business practices have become untenable – not only due to the current COVID-19 pandemic, but also because the complexity of today’s supply chains makes it incredibly difficult to exchange and share all of the required information.

With manual processes still widespread in the industry, it is encouraging to see that this report finds that the majority of brands, retailers and suppliers understand the need to invest in solutions that will achieve greater transparency in their supply chains. Yet, it is also concerning that nearly half are only planning to have a transparency solution in place by 2025 at the earliest.
Transparency tools are not going to be a ‘nice to have’ – they are a ‘must have’. Companies that don’t adopt these will lose a huge competitive advantage. There is also a first mover advantage to be gained by being able to shape the solution, rather than adopting a solution that other people have set the standards for.

It is worth pointing out that achieving supply chain transparency will not require futuristic technology that does not exist today. At Serai, we have built a platform that is plug-and-play and allows companies to interface with existing solutions. This means the cost of adoption is much lower than it has been historically. It is also a scalable platform that can easily be expanded across use cases.

Moving forward, I would urge the industry to work together as it transitions to a more transparent supply chain and build more sustainable practices. Brands and retailers must incentivise suppliers by giving them more business if they are able to provide full transparency and are aligned together in their mission for sustainability in the long term. Network benefits need to be realised for those companies that are willing to work together. Collaboration across the supply chain is key for success.

Businesses also need to think strategically. Today, the major issue impacting the industry is cotton traceability, but tomorrow it will be carbon footprints or water consumption. Solutions need to be able to grow with the industry’s needs, as opposed to adopting something that is unable to cope with tomorrow’s issues. This will also help increase the resiliency of supply chains.

If the industry is unable to pull together all the different data that exists across the ecosystem, it will be impossible to solve the underlying problem of transparency. This in turn becomes an existential threat, as having bad actors in the supply chain has the potential to derail an entire business. Companies must act now if they are to meet the growing demands placed on the industry.

"Businesses need to think strategically. Today, the major issue impacting the industry is cotton traceability, but tomorrow it will be carbon footprints or water consumption. Solutions need to be able to grow with the industry’s needs."
Transparency – a prerequisite for sustainability

Sustainability within the apparel industry has come under the spotlight in recent years – and not without reason. The fashion industry is estimated to be responsible for 10 percent of global carbon emissions, according to the United Nations. Its environmental impact on the planet includes pollutants from dyeing processes, the use of large volumes of water to grow cotton and the release of micro-fibres from synthetic materials into the ocean.

Scope 3 emissions have also become an area of concern. These represent all indirect emissions generated by supply chain partners upstream and downstream of an organisation.

Walking the talk on sustainability issues is something that apparel companies can no longer afford to ignore. Consumers nowadays have so much more information on the sustainability credentials of products, as well as the companies behind them and their impact on the wider community. The COP26 climate summit has also highlighted the need for the industry to change. Greater transparency means that brands will be held accountable, however it also opens up opportunities to better manage inventories, introduce more agility and achieve greater collaboration across the entire supply chain.

Anson Bailey
Head of Consumer & Retail, ASPAC, KPMG China
To their credit, many retailers, brands and suppliers have started to implement change. As far back as 2010, 19 businesses launched the Sustainable Apparel Coalition (SAC), which is now the world’s leading organisation committed to cleaning up the fashion industry. And since its release in December 2018, more than 100 companies have signed the UN’s Fashion Industry Climate Charter, with its call for the industry to have net-zero greenhouse gas emissions by 2050.

Consumers continue to shape the industry

Changing consumer attitudes are a major reason why sustainability has risen up the agenda for many apparel businesses. There is a growing amount of research that points towards increased consumer interest in the origins and sustainability record of fashion – particularly among the young. Consumers are also increasingly willing to pay more for sustainable products, so it can be potentially lucrative for brands to differentiate themselves this way.

This trend appears to have accelerated during the COVID-19 pandemic, with consumers having taken the opportunity to reassess their consumption habits. For instance, a KPMG study in 2021 found that since the beginning of the pandemic, 68 percent of Hong Kong consumers and 65 percent of those from Greater Bay Area cities in mainland China have become more conscious of a product’s origins. However, there are still differences between purchase intentions and actual behaviour of consumers.

The industry itself is also showing concerns about the impact of transparency on corporate reputation, with over half of the 200-plus companies surveyed for this report indicating this as the main driver for transparency. This is particularly the case for retailers and brands in North America and Asia Pacific, who are keen to manage the downside risks to their corporate reputation if they are found to have problems in their supply chain.

Brands want to be able to tell a story about the garment you’re wearing, right down to what material is in the button, to all the individual parties involved in creating the collection. This won’t be possible if we don’t have a holistic view across the end-to-end supply chain. The leading brands of tomorrow will be collaborative and value transparency, not just on the production line but in everything they do.

Sandy Lau
Chief Growth Officer, Serai

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1 Retail’s Realignment, KPMG, 2021
Suppliers on the other hand are more motivated to improve supply chain transparency as part of their business goals, as this could open up business opportunities with brands and retailers that are positioning themselves as sustainable or need to comply with stricter regulations.

It should also be noted that corporate reputation is closely linked to customer expectations (mentioned by 31 percent of all respondents as a key driver for transparency) and demands from investors and shareholders (25 percent). Environmental, Social and Corporate Governance (ESG) factors have become a key focus for the investment community. This is expected to strengthen further over the coming years and is yet another driver for greater supply chain transparency.

“Developing closer relationships across the entire supply chain does not only make sense from a transparency point of view. COVID-19 and the associated disruption across global supply chains have highlighted the need for greater collaboration in the industry. Having strong partnerships across our entire supply chain allowed us to weather this storm as a team. The PUMA Vendor Finance Program – which is a financing programme that rewards suppliers’ sustainability performance – was very valuable in allowing us to work closely together with our manufacturers and customers to overcome any challenges that they were facing during this period.

Anne-Laure Descours
Chief Sourcing Officer, PUMA
Drivers of supply chain transparency

Percentage of respondents that selected a driver among their top three

Source: KPMG/Serai survey analysis

Breakdown of respondents that ranked corporate reputation among their top three drivers of supply chain transparency

Source: KPMG/Serai survey analysis
Regulatory environment is also a major driver

Alongside consumer demand for greener fashion, government regulations on sustainability will inevitably tighten. The apparel industry’s sustainability performance has historically been under-regulated. Up until now, the majority of efforts to clean up the sector have been voluntary. Mandatory enforcements, on the other hand, are becoming increasingly prevalent.

For example, Sweden is planning to impose a tax on apparel products containing harmful chemicals that may cause cancer or allergies. France passed a law to prohibit the destruction of excess apparel products and it also intends to enforce ‘carbon labels’ on products as part of a Climate Bill. In Germany, a due diligence law will come into effect in 2023, which requires large companies to conduct human rights and environmental due diligence on their direct suppliers.

Apart from taxation and due diligence regulations, import restrictions are also being introduced in some markets if products do not meet certain requirements. For instance, the Withhold Release Order, implemented by the United States Customs and Border Protection (CBP) agency, prohibits the importation of goods that are determined to involve forced labour.

“
Transparency around working conditions in the fashion industry has already been an issue for years. Retailers and brands are now requiring more transparency around the source of fabrics and their environmental impact. That’s the side where I expect there to be a lot of evolution over the coming years.

Pallak Seth
Vice Chairman, PDS Multinational Group
”
The Withhold Release Order (WRO) has made importing apparel products into the US market increasingly difficult. Importers need to submit over 50 documents per shipment to United States Customs and Border Protection (CBP) to show proof of origin as well as information on the facilities that products were manufactured in, regardless of manufacturing country.

Failure to comply means that shipments could be withheld at the border for several months. In early 2021, a major global apparel brand had a shipment detained at US borders because of insufficient documentation on the origins of its raw materials and manufacturing facilities. As submitted documents did not satisfy CBP’s requirements, the products had to be either exported or disposed under supervision. The entire process took nearly six months from when the shipment was detained to the ruling by the CBP.

Increased attention by governments on sustainability issues is part of a global trend and not just restricted to Europe and North America. In its 14th Five Year Plan, covering the period up to 2025, China set growth targets for its apparel and textile industry and promoted a shift towards smart manufacturing and the introduction of green textiles. Vietnam is taking the environmental impact into account when granting approval for foreign direct investment in textile projects. Other major apparel manufacturing countries such as Sri Lanka are expected to follow with tighter regulations of their own.

Lastly, the regulatory environment in the finance sector is also impacting the apparel supply chain as regulators are requiring more oversight of ESG factors. This means financial institutions need more clarity about the business activities and sustainability performance of their customers, which is driving the need for more transparency. Financing may become more expensive for businesses that are not pursuing a sustainable agenda.
Supply chain transparency defined

Supply chain transparency is key to meeting the challenges of tightening regulation and growing consumer pressure for companies to extend sustainability measures beyond their own operations.

A company has supply chain transparency when it fully understands what is happening at every point in its supply chain. Ideally, this means putting in place processes and mechanisms that allow a business to be able to monitor and evaluate all relevant information.

There are two main components of transparency – visibility and traceability:

**Visibility:** when a company has a comprehensive view of all parties that play a role in its supply chain, from farms and other suppliers of raw materials used in its products, through to the companies responsible for processing, manufacturing, distribution and logistics.

**Traceability:** when a company is able to trace all the materials and components used in a product from their origins, through each step of processing and manufacturing, to the final good sold to a purchaser.

Supply chain transparency should not be associated with having to disclose all information to everyone. Ultimately, it remains up to each company to decide what data should be disclosed to whom.

The fashion supply chain

![Fashion supply chain diagram]

Source: KPMG
Industry recognises importance of transparency

External pressure from consumers and governments has not gone unnoticed in the apparel industry. In the survey conducted for this report, two-thirds of respondents stated that supply chain transparency was "extremely important" for their business, and nearly a third said it was "somewhat important".

### Importance of supply chain transparency

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<tr>
<th>Region</th>
<th>Extremely important</th>
<th>Somewhat important</th>
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<tbody>
<tr>
<td>Asia-Pacific</td>
<td>70%</td>
<td>28%</td>
</tr>
<tr>
<td>Europe</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td>North America</td>
<td>67%</td>
<td>33%</td>
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*Level based on how often an issue was ranked among respondents’ top three issues*

*Source: KPMG/Serai survey analysis*

### Top supply chain issues to be solved in next 3-5 years

- Gaining end-to-end transparency: 30%
- Getting value from data: 18%
- Regulatory and compliance: 16%
- Quality control and defects: 13%
- Brand reputation: 7%
- Optimise cash flow: 7%
- Resilience to unexpected events: 4%
- Shorten lead times: 4%
- Exchange rate and foreign transaction costs: 1%

*Level of importance*

*Level based on how often an issue was ranked among respondents’ top three issues*

*Source: KPMG/Serai survey analysis*
However, the findings suggest that transparency is a more pressing issue in North America and Asia Pacific than it is in Europe. This could be due to recent regulatory moves in the US that place greater transparency requirements surrounding how apparel is produced, with suppliers in Asia Pacific keen to meet those demands so as not to lose business opportunities. Regulation in Europe is expected to catch-up to the US.

Through in-depth interviews with key industry players such as brands and manufacturers it was found that many apparel firms still have limited visibility on the factories and plants that work further upstream in the supply chain. It is therefore not surprising to see that the survey indicates that gaining end-to-end transparency is the major issue that needs to be solved in the medium-term.

Executives interviewed said that obtaining transparency will enable their companies to monitor compliance with current and future regulations, as well as give consumers the information they require before making a purchase. An added benefit would be that transparency could help identify areas where efficiencies could be improved.
CIEL Textile, the garment and textile manufacturing arm of Mauritius-headquartered CIEL Group, has been promoting sustainability across its operations since the middle of the last decade. In 2017, it joined the Sustainable Apparel Coalition (SAC) and a year later was a founder member of the team that produced the UN’s Fashion Industry Charter for Climate Change.

Sustainability is recognised as a key driver of innovation across its business, so CIEL set up supply chain sub-committees in each business unit that looked at waste emissions, traceability and compliance with labour laws. To date, the company’s production operations in Mauritius, Madagascar, India and Bangladesh all have Higg Index scores of 80 percent or above, indicating a good sustainability performance.

The company’s sustainability initiatives were initially driven by its own managers rather than external pressure, according to Bertrand Thevenau, Group Chief Executive Officer of CIEL’s Tropic Knits and Chairman of its Sustainability Committee. “But now consumers and regulators are demanding far greater supply transparency and it is more important than ever to ensure that our supply chain is ethical and aligned with our core values,” he says.

One major challenge for CIEL Textile to achieve transparency was that multiple systems and solutions are in use across the business. The diverse range of raw materials used during manufacturing also makes achieving transparency further upstream difficult.

To solve these issues CIEL entered into a partnership with Serai in 2021. “We chose to work with Serai as their solution grants us the ability to trace the origin of raw materials and it integrates with global standards to monitor our suppliers’ sustainability performance,” says Thevenau.

“Serai’s Traceability solution lets us access and unify complex supply chain information from multiple sources to gain full visibility over our global supply chain. Having this system in place also allows us to collect and analyse data to help us achieve our sustainability goals.”
The path to end-to-end transparency

In the age of social media and the 24-hour news cycle, managing corporate reputation is key as negative reports can have a significant impact on revenues and brand value. A majority of respondents to the survey acknowledge that reputational risks are an important driver for greater transparency in the supply chain.

Linked to this, companies operating in the apparel industry are willing to be open about their transparency efforts, with 65% of all respondents disclosing their traceability policy to the general public. This is especially true for suppliers in North America and Europe, which are at a cost disadvantage to suppliers in Asia Pacific and may use their sustainability credentials to differentiate themselves from lower cost competition.

Disclosure of supply chain traceability policy

Breakdown by region and business type of respondents that disclose their supply chain traceability policy and results to the general public.

Source: KPMG/Serai survey analysis
Full visibility and traceability are rare

Despite this willingness to be open about their supply chains, both the executives that took part in the survey and those that were interviewed for this report were candid in admitting the overall degree of transparency in the apparel industry remains low.

Less than 20 percent of respondents said they currently had full visibility across their supply chain, while only 15 percent said they had full traceability. Breaking this down by company size, it is generally the larger companies that have more advanced capabilities in traceability as they will have more clout to demand information from their suppliers.

On the other hand, there was a higher proportion of smaller companies that had full visibility. This reflects the fact that such companies may have less complex supply chains to manage and find it easier to gain an overview of all the different parties along the supply chain.

Current state of visibility and traceability in the supply chain

- 19% of respondents have **full visibility** in their supply chain
- 15% of respondents have **full traceability** in their supply chain

*Source: KPMG/Serai survey analysis*
Lack of resources and costs are barriers to achieving transparency

This study has identified several factors holding back the industry towards greater transparency. Top of the list is cost, which was stated by over half of all respondents as one of their top three barriers.

Low profit margins are prevalent in the sector, therefore many transactions are based on meeting a buyer’s specifications at the lowest price. Historically, buyers in the apparel industry have been judged and rewarded on short-term financial metrics. This means that it has been very difficult to work on long-term structural issues such as transparency.

Investments are also prioritised for initiatives where operational efficiencies can be improved to lower costs and preserve margins. That said, achieving operational excellence was previously found to be the third biggest driver of supply chain transparency – so this is clearly not the case for all players in the industry.

Linked to the issue of costs is a lack of resources. This reflects the industry’s commodified nature and history of investing only in production rather than looking for innovative sources of value. With the exception of brands, almost all businesses in the apparel industry work on the basis of limited short-term financial benefits. Tight production deadlines also hamper the ability of many suppliers to take a longer-term view.
Low digital capabilities were also highlighted by many respondents. However, this should not necessarily be an impediment to improving transparency. Transparency does not require significant investment in technology. There are technology platforms, for example, where stakeholders across the entire supply chain can easily provide and access information on their companies and how items or materials were produced.

Moreover, it should not be forgotten that human connections are also a critical ingredient to foster trust and encourage the flow of information down the supply chain. Trust is essential in giving all stakeholders the confidence to collaborate and work towards a common goal.

“There is a level of connection that people need to understand when it comes to supply chain transparency. It is not just about mapping and digitising a supply chain – it’s about connecting everyone in that supply chain. You cannot take out the human connection that is needed to build trust for people to send you data."

*Anouschka Jansen*
*Director Sustainability Solutions, QIMA*
Top ranked barriers to achieving supply chain transparency

Percentage of respondents that ranked a factor among their top three barriers

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<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
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<tr>
<td>Hard to obtain and manage data from other players</td>
<td>51%</td>
</tr>
<tr>
<td>High initial investment to implement system</td>
<td>54%</td>
</tr>
<tr>
<td>Insufficient resources to manage traceability</td>
<td>47%</td>
</tr>
<tr>
<td>Limited near-term financial benefits</td>
<td>42%</td>
</tr>
<tr>
<td>Low level of technology and digitalisation</td>
<td>39%</td>
</tr>
<tr>
<td>Fear that disclosure of information will undermine competitive edge</td>
<td>27%</td>
</tr>
<tr>
<td>Lack of incentive to change current operations</td>
<td>36%</td>
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Source: KPMG/Serai survey analysis

The fashion supply chain is complex

Executives interviewed for this report frequently cited the complexity of the fashion supply chain as a key barrier towards greater transparency. Supply chains typically comprise multiple tiers of suppliers spread across different countries and sometimes continents. There will also be layers of agents, contractors and sub-contractors.

Cotton yarn, for example, is often made of cotton from multiple sources over a cycle that may have started six to 12 months earlier, then stored in a warehouse for up to two years before being shipped to a spinning mill. In addition, there are multiple components to a piece of apparel product that go beyond fabric such as trimmings, buttons and packaging.

In addition, there is complexity resulting from the use of different systems that are not able to talk to one another. The industry is often hampered by poor quality and inconsistent data and this is not helped by the amount of handoffs of information that need to take place throughout the process to meet compliance with different regulators, customs requirements and with banks.

This sort of complexity makes it incredibly difficult to establish visibility and traceability across the entire supply chain, particularly for brands and retailers at the end of the chain. Moreover, there is also a lack of technical expertise on manufacturing at the brand and retailer level because those activities have not been done in-house for generations. Without this knowledge, it can be a challenge to judge the sustainability of a supply chain.
Many brands are now focused on consumer-facing activities such as marketing, branding and retailing. They have outsourced all other activities like manufacturing, logistics and distribution and may no longer have deep understanding in-house in these areas. But that’s where the industry’s carbon footprint lies.

Edwin Keh
CEO, The Hong Kong Research Institute of Textiles and Apparel (HKRITA)

Complexity of the apparel supply chain

Source: KPMG analysis
Capabilities needed to deliver transparency

The result of the industry’s entrenched operating habits, low margins and high degree of complexity is that a majority of companies continue to rely on manual intervention for supply chain visibility and traceability. Particularly in developing countries – where much production takes place – levels of digitalisation are low. Many companies, especially upstream suppliers, still rely on paper forms, spreadsheets or fax machines for their operations.

Among those polled in the survey, only 14 percent stated that they have fully automated transparency systems in place for visibility and 13 percent for traceability. Meanwhile, over half of all respondents still have manual processes in place for those two components – more so for smaller and medium-sized businesses.

Larger businesses will generally have more resources, such as dedicated sustainability teams, and have already invested in IT systems to capture the data they need. These larger companies also face greater scrutiny over their supply chain practices by consumers and NGOs. However, if the industry as a whole is to achieve a greater level of transparency, it will be critical to find cost-effective solutions for smaller brands and suppliers to monitor visibility and traceability.
Supply chain transparency systems currently in use

- **Visibility**
  - Manually tracked: 58%
  - 23% No capability
  - 35% Manual tracking of supply chain
  - 25% Manual tracking supported by system
  - 14% Semi-automated system with low degree of manual intervention
  - 3% Fully automated system with no manual intervention required

- **Traceability**
  - Manually tracked: 54%
  - 27% No capability
  - 27% Manual tracking of supply chain
  - 28% Manual tracking supported by system
  - 13% Semi-automated system with low degree of manual intervention
  - 5% Fully automated system with no manual intervention required

*Source: KPMG/Sera! survey analysis*
What systems are currently in use?

The companies that have invested in supply chain transparency systems over the last two years, have used a variety of approaches. Nearly half of the solutions implemented (44%) comprised the addition of new capabilities onto existing ERP systems, while just over a third represented custom-built internal architecture. Third-party systems were used least frequently (21%).

These findings tie in with the previous chapter, which found that return on investment and costs are important considerations in the apparel industry. It is also notable that larger apparel companies are most likely to have invested in their own solution and are least likely to use a third-party solution – suggesting that financial and IT resources are more constrained for smaller players.

Going forward, third-party systems are expected to increase their share as more solutions become available, filling gaps where internal solutions or ERP systems cannot meet transparency needs. Due to systems limitations or technical debt, the trend for specialist smaller vendors looks set to rise.

Use of manually-tracked systems by company size

| Small-sized companies  
(revenues of less than US$500m) | Medium-sized companies  
(revenues of US$500m to US$999m) | Large-sized companies  
(revenues of US$1bn or more) |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Visibility is tracked manually</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>Traceability is tracked manually</td>
<td>57%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Source: KPMG/Serai survey analysis
Range of transparency solutions available in the market

Companies in the apparel industry that are looking to work with third parties for their transparency solutions have a range of options to choose from. These broadly fall into two categories.

- **Digital tools** which allow for uploading, tracking and managing of data.
- **Technical** solutions that enable the monitoring of physical items such as raw materials and semi-finished goods as they transition through the supply chain.

Among the providers of digital tools are Serai, which offers a platform where companies can collaborate with their supply chain to gain a comprehensive view of business partners in a single place, with the goal of allowing companies to understand and manage their supply chain risks. Digital platforms like Serai are plug-and-play and have a low cost of adoption – they do not rely on advanced technologies that will be out of reach for smaller companies.

Textile Genesis is a notable example of a technical solution that uses blockchain technology to track and verify the use of sustainable fibres in garments. It combines this with the GS1 global traceability standard that is used in the food and healthcare industries. Another player in this space is Oritain, which uses forensic science to verify a product's origin by measuring the chemical composition of soil, water and other feeds used in its raw materials.

Another promising solution is FibreTrace, which embeds pigments on fibres at the raw material or spinning-mill stage and then tracks the presence of those pigments at every further stage of the supply chain.

Companies are experimenting with hybrid approaches of digital and technical solutions, in addition to their existing ERP or custom-built systems. There is no one size fits all approach. Companies need to experiment to see what works best for them. However, it would appear that the age of a single monolith system providing the golden source of truth in terms of transparency are truly over.
Brands and suppliers prioritise transparency differently

When asked about their priorities for supply chain transparency, companies overwhelmingly named either traceability or having greater visibility of their supply chain partners – findings which point to the growing demand from regulators in end markets for information about the source of products, their inputs and the labour conditions under which they are made.

Traceability ranked highest, with 43 percent of respondents marking this as their top priority. Not far behind was being better able to understand the companies and other parties involved in the supply chain, picked by 38 percent. Given upcoming regulations such as Germany’s Supply Chain Due Diligence Act, companies will need to fully understand who their partners are to ensure compliance.
One interesting point is that brands and suppliers have different views on priorities. Suppliers place higher priority on traceability than brands, who prioritise visibility. This highlights the need for suppliers to prove origin of products as they are normally the ones who need to provide such documentation to customs; whereas brands face reputational risks if their suppliers are found to violate regulations.

Only 14 percent of respondents named collecting Environmental, Social and Governance (ESG) information as their most important reason for supply chain transparency. However, this is expected to become a more prominent factor as investors and regulators increase their demands on information on sustainability and the trend for sustainable finance gathers pace. As noted previously, shareholders and regulators were identified by respondents as a driver for transparency.

**Top priorities for supply chain transparency**

<table>
<thead>
<tr>
<th>All respondents</th>
<th>Brands/retailers</th>
<th>Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trace products to raw materials and facilities involved</td>
<td>43%</td>
<td>4%</td>
</tr>
<tr>
<td>Understand companies/partners involved along the supply chain</td>
<td>38%</td>
<td>12%</td>
</tr>
<tr>
<td>Collect and map ESG data from supply chain</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Disclose supply chain information externally</td>
<td>14%</td>
<td>40%</td>
</tr>
</tbody>
</table>

*Source: KPMG/Serai survey analysis*

**“Consumers are asking more questions about not just the place of manufacturing of a product, but also the raw materials that were used and where these came from. Being 100 percent transparent will lead to more orders for suppliers.”**

**Edgar Tung**

COO, Esquel Group
Majority of companies plan to have a transparency solution in place by 2027

Supply chain transparency tools are expected to become table stakes, with companies using these solutions to build insight and even perhaps foresight to drive competitive advantage. Among the executives surveyed for this report, the need to invest in transparency solutions is broadly accepted. However, the divide is over exactly when action will be taken.

Just over a third of brands and suppliers said they expected to implement a transparency solution within one to three years. Another third of both brands and suppliers said they would be doing so in four to six years. With 18 percent of brands and 17 percent of suppliers having already put a solution in place, that means that more than 80 percent of the industry should have a transparency solution in place by 2027.

The question is whether that is fast enough. There is a first mover advantage in adopting a solution sooner rather than later. Companies that have traceability and visibility solutions in place are already able to differentiate themselves through their transparency credentials. With consumer demand for sustainable brands expected to intensify over the coming years, it could be too late for companies to wait until 2027 to gain transparency.

The majority of companies intend to invest less than US$1m in supply chain transparency solutions over the coming three years. In terms of those committing to more than US$10m in investment, this is mainly done by larger retailers. These types of businesses will have more financial resources at their disposal, but also face direct pressure from consumers for greater disclosure on their supply chains.

“Transparency tools will become table stakes to play in apparel. Companies will then use these solutions to create insight and perhaps even foresight to drive competitive advantage. There is no one size fits all approach though. Companies need to experiment to see what works best for them. However, the age of a single monolith system providing the golden source of truth in terms of transparency are truly over.”

James O’Callaghan
Head of Technology Enablement and Technology Consulting,
KPMG China
Expected timeframe to implement a transparency solution

<table>
<thead>
<tr>
<th></th>
<th>Already implemented</th>
<th>In 7-9 years</th>
<th>In next 3 years</th>
<th>In more than 10 years</th>
<th>In 4-6 years</th>
<th>No plan to implement transparency system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brands/retailers</td>
<td>18%</td>
<td>37%</td>
<td>32%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>17%</td>
<td>35%</td>
<td>31%</td>
<td>9%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: KPMG/Serai survey analysis
Planned investment in building supply chain transparency over next three years

Sustainable approach can transform businesses and boost margins

Taking a sustainable approach can bring a number of benefits to organisations across the supply chain:

- **Forge stronger relationships.** The gathering and sharing of structured information could result in increased trust and help the industry to move away from the purely transactional relationships that have long dominated the industry, to more collaborative and strategic ones.

- **Improve decision-making:** Companies will be able to generate new insights based on their deeper understanding of their supply chains, leading to better decision-making and supplier management, greater competitiveness and, possibly, new business opportunities.

- **Enhance risk management:** It will become easier to spot the use of materials from unidentified or sanctioned sources. Combined with a strong general business awareness, this could help companies take a more proactive stance in anticipating changes in regulations or trade regimes and also react faster when such changes occur.
• **Increase orders and sales.** All things being equal, brands and suppliers should expect to see increased orders and sales. Brands will be able to reach consumers that are willing to pay a premium for sustainable products. A study by KPMG showed that 13 percent of consumers are willing to pay a premium of 25 percent for sustainable fashion items.² This demand will also trickle down to suppliers that are able to produce sustainable fashion.

• **Improve profitability.** Research indicates that businesses with higher sustainability scores have a lower cost of capital, while improved risk management arising from greater transparency lowers both insurance rates and the risk of being fined or subjected to other regulatory penalties. According to analysis by KPMG, a sustainable apparel business can expect to have an average increase in their net profit of 1-1.5% for brands and by 1.5-2.5% for suppliers.

**Impact of investing in transparency on net profit**

<table>
<thead>
<tr>
<th>Source: KPMG analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected increase in net profit</strong></td>
</tr>
<tr>
<td><strong>for brands</strong></td>
</tr>
<tr>
<td>1.0 ~ 1.5%</td>
</tr>
</tbody>
</table>

Gap Inc.’s commitment to sustainability is to empower women, enable opportunity and enrich communities. We aspire to complete transparency throughout the value chain. The challenge, and our opportunity, is to integrate transparency and collaboration into all upstream elements from textile manufacturing, to processing and finishing. We will continue to connect with other retailers, industry partners, public partners and tech companies to set goals and measure progress.

**Christophe Roussel**

EVP, Global Sourcing, Gap Inc.

² Sustainable Fashion, KPMG, 2019
A few years ago, supply chain transparency was not high on the agenda for apparel companies. It has now become a norm in the industry, says Sunil Daryanani, joint CEO of Epic Group, a Hong Kong-headquartered apparel manufacturer and design services corporate group.

Demands from consumers that stores and brands provide transparency and disclose information are cascading up the supply chain to manufacturers, says Daryanani. The reason: with all industries becoming more digital and being able to gather and share data efficiently, the public now sees having access to that information as a right.

Dinesh Virwani, joint CEO, points out that consumers’ aspirations have changed. They want to understand how and where the products they are acquiring are made. Global issues such as climate imbalance and COVID-19 have accelerated this trend. Consumers and retailers alike are now making efforts to evaluate the impact of their purchasing on sustainability.

“A tool that consolidates and centralises communication and moves data onto a single platform boosts collaboration along the entire supply chain.”

*Sunil Daryanani*

Joint CEO, Epic Group
With many regulators around the world demanding increased levels of information regarding the origins of materials and the companies involved, supply chain transparency has become a must for the industry. While the form of a roadmap for sustainability development is starting to take shape, progress cannot be seen on the day-to-day transaction level. People will need to take a step back and look at the industry with a holistic view in order to move forward.

A key challenge for companies is that traceability and visibility are still largely tracked through manual processes. Currently, Epic Group uses an internal system to track its dealings with its suppliers. This process still relies largely on the manual operation of gathering and controlling a large number of documents and then collating the information in spreadsheets and shared folders.

By using Serai, Epic Group can integrate and consolidate all its relationships and data onto a single platform, saving a considerable amount of time in having to manage and verify the information. It also meant the company did not have to spend time and resources on developing its own automated system.

It also gives Epic Group the confidence that there is no hidden or lost information. A tool that consolidates and centralises communications and moves data to a single platform enormously helps collaboration, comments Daryanani.

By working with Serai, Epic Group no longer needs to send through a large number of documents to its customers and can simply give access to the platform to share the required information. Aside from reducing its workload, Epic Group will be able to differentiate itself through the completeness and timeliness of the information that it can provide to its customers.


 Consumers want to understand how and where the products they are acquiring are made. Global issues such as climate imbalance and COVID-19 have accelerated this trend. Consumers and retailers alike are now making efforts to evaluate the impact of their purchasing on sustainability.

Dinesh Virwani
Joint CEO, Epic Group
Supply chain transparency is a cornerstone of the apparel industry’s efforts to become more sustainable. It is therefore not surprising to see that the survey has found that gaining full transparency throughout the end-to-end supply chain is the single biggest issue that executives want to solve in the short to medium-term. While there are certainly good intentions, actually transforming operations and realising the strategy has proven to be a major challenge.

For the industry to move towards a sustainable future, companies need to adopt a comprehensive, structured and systematic approach to change. As a starting point, the following five considerations should be taken into account:

1. **Internal alignment**
   
   Aligning a company’s internal vision, definition and direction on transparency within the corporate strategy is the first step to achieving genuine transparency. Gaining acceptance and cross-functional alignment of the company’s strategic transparency goals, including a general approach and timeframe, is critical. This will facilitate communication and collaboration with both internal and external stakeholders.

   It is important that companies align every relevant process, function and relationship in the business towards the achievement of sustainable growth. Business stakeholders across the entire organisation need to be involved in setting enterprise-wide aligned transparency goals.
2. Implementation framework

Once a company’s overall vision for transparency has been defined, a strategic framework to implement transparency needs to be designed. Different departments should be able to disseminate this framework easily, allowing for a consistent approach. Before actual implementation, a detailed and practical approach on how to achieve the desired goals is also key. For example, data structures and formats need to be drawn up and minimum data requirements set, the type of solutions needed should also be agreed on and potential partnership or outsourcing requirements laid out.

With a clear implementation framework in place, action plans should be set and then strictly followed by key stakeholders to ensure processes are aligned with overall goals.

3. Build a fact-based supply chain

Companies should start by gathering information that will illustrate the origins and network flows of all materials, highlight their supply chain trading partners and how they work together. The fact base should also be able to ascertain credentials for trading partners, whether farms or businesses, and show how their facilities contribute to environmental and social issues that concern the industry.

This information would form the basis of a detailed supply chain map. It should be noted though that mapping is a continuous process that is never finished as supply chain relationships constantly change over time. The process of connecting with related parties can be highly impactful in building trust and strengthening relationships across the supply chain, which in turn will facilitate the willingness of stakeholders to share information.

Today, leading businesses are focused on how to make the supply chain much more transparent, in order to understand who is in their supply chain up to the raw material. That’s where every company needs to start. Supply chains in the future are going to get a lot more streamlined, open and data driven, thanks to technology. This data can then be instrumental in helping businesses not only make more informed decisions, but more sustainable decisions. Supply chain technology must support the evolving needs of both risk mitigation and opportunity development – you have to be able to play both offense and defence at the same time.

Lindsey Hermes
Head of Enterprise Solutions, Serai
4. Data collection and consolidation

The gap between strategic intent and achieving tangible transparency outcomes is driven to a large extent by a lack of access to quality and consistent data. The adoption of digital technologies can help capture the necessary material flows and illustrate the extent of the network. This will provide the visibility and traceability that is needed to create transparency.

Companies need to identify where and how data is collected – both in internal systems and externally – and storage/sharing rules. This will clear the way for data to be processed, consolidated and accessible by all participants operating within the supply chain. To ensure the effective consolidation of information, it is essential that data-sharing protocols are established and that this governance is supported by technologies and tools.

5. Data analysis and risk management

Once data is consolidated, companies should have the information they need to generate actionable insights. Clear protocols at this point will allow for the transformation of information gathered into actionable business insights and improved risk management. Companies can also utilise tools from both third-party solution providers or in-house systems to incorporate the collected data into risk management processes.

“Executives have had transparency on their radar for a long time, but there is still a big gap between strategic intent and achieving tangible outcomes. Companies must become connected organisations and align every functional process, related data and systems, and relationship in the business towards the achievement of sustainable growth. If stakeholders are not aligned to enterprise-wide transparency goals, a wrong decision or misguided action could undo all the goodwill that an organisation has created.”

Peter Liddell
KPMG Partner, Global Leader Operations Centre of Excellence (Supply Chain, Procurement, Operations Excellence)
Strengthening capabilities

The findings of this report underline that apparel companies need to build their capabilities in several key areas if they are to achieve their goals for improved transparency in the supply chain. These are as follows:

- Changed mindset and ways of working. Both brands and suppliers will need to embrace the urgency of reaching full transparency in their supply chains. This means transparency needs to shift from being a ‘nice-to-have’ concept to making it a critical component that will ensure business survival. This change needs to be led by the leaders of the business.

- Aligned data standards. To put in place the necessary data collection mechanisms, and to ensure the data collected is of an appropriate quality, companies will have to work with supply chain partners to establish and apply data consistency. An intermediary could be in charge of facilitating the collection and exchange of data across the supply chain. It is also possible that this is done by a consortium of stakeholders, regulators, government agencies and solution providers.

- Use of digital technologies. A basic level of technological capabilities will be needed to collect and share information. At a minimum, companies will need to replace manual processes with dedicated supply chain information systems or platforms. They need to ensure these systems are capable of sharing data with other parties in the supply chain.
• Enhanced relationship management capabilities. In order to work with all partners along their supply chains, companies will have to strengthen their ability to build and manage relationships with government officials, partners, industry bodies and related businesses such as transport providers. Historically, large brands and retailers have had the power to initiate change. To achieve an industry-wide shift towards transparency, hierarchical relationships need to become more balanced.

• Organisational capabilities. Companies need to build up talents who understand transparency and reporting requirements against relevant standards, certifications and technology platforms. Talent should also have experience with emerging sustainability challenges such as living wage and circular economy textiles. Upskilling across the industry will be an important driver for change.

Achieving a sustainable future

Supply chain transparency has the potential to bring multiple benefits to companies across the apparel industry. It can be a tool for identifying areas where efficiency can be improved. It can be used to provide consumers with the information about products that they want to know before making a buying decision. It can be used to monitor compliance with existing and future regulations.

This report finds that while there are certainly strong intentions in the industry to become more transparent, the actual outcomes of initiatives are still falling short. There appears to be a lack of urgency by many companies to deal with a range of issues. Companies are not realising that this could ultimately impact their competitive position.

Apparel companies that have already invested in improving transparency in their supply chains are finding that there are clear first-mover advantages in doing so. Consumers around the world are demanding more sustainable fashion and – crucially – are willing to pay more for such products. As highlighted in this report, there are myriad financial and organisational benefits to be gained by becoming more sustainable.

If the fashion industry is to move forward, supply chains will need to become more forward-looking, customer-driven and predictive. They should not only be able to deal with the issues impacting the industry today, but also build resilience to deal with tomorrow’s sustainability challenges.

Transparency initiatives also need to become more impactful by spanning the entire length of the supply chain, rather than merely focusing on areas that a company can directly control. Traditionally adversarial relations between retailers and brands on the one side, and suppliers and manufacturers on the other, should give way to a more collaborative and partnership-based approach. By joining forces, the industry will be able to build the necessary capabilities to achieve a sustainable future.

In a world moving towards a low carbon economy, achieving visibility and traceability throughout the supply chain will be critical to understanding the carbon footprints of apparel items. Technology to capture this data is a must going forward. ESG performance will be a factor in a company’s access to and cost of capital.

Pat Woo
Global Co-Chair, Sustainable Finance, KPMG China
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Serai is an online B2B platform with a mission to simplify global trade.

Today, over 16,000 buyers and suppliers across 110 countries are on the Serai platform, leveraging the power of our secure solutions to find and trade with new partners, and learn more about their existing network.

Serai’s supply chain solutions empower brands and manufacturers to make data-driven risk management decisions while promoting transparency and trust.

Learn more at www.seraitrade.com

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