

MAKING THE LEAP TO CIRCULAR FASHION

INSIGHTS FROM LEADING ASIAN
FASHION MANUFACTURERS DRIVING
CIRCULAR INNOVATION

MAKING THE LEAP
TO CIRCULAR
FASHION

**FORUM
FOR THE
FUTURE**

ABOUT FORUM FOR THE FUTURE

Forum for the Future is a leading international sustainability non-profit with offices in London, New York, Singapore and Mumbai.

We specialise in addressing critical global challenges by catalysing change in key systems.

For over 20 years, we've been working in partnership with business, governments and civil society to accelerate the shift toward a sustainable future.

Together, we are reinventing the way the world works.

Find out more at
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ABOUT CIRCULAR LEAP ASIA

Major fashion brands are making commitments to advance circular fashion solutions, but there is a clear gap when it comes to implementing them at scale. Supported by Laudes Foundation as part of the Bridging the Gap initiative, Circular Leap Asia is an opportunity for upstream actors in fashion to explore how they might proactively offer solutions to brands who have an interest in circularity. Helmed by Forum for the Future, the programme has worked with three pioneering manufacturers to identify circular fashion challenges each is best placed to lead, and engage with brand partners and solution providers to design and deliver innovative prototypes in response to the challenge. A Summit Series at the end of the programme brought the three sets of partners together for cross-learning and distillation of the system change needed to further enable manufacturers to drive circularity.

CIRCULAR LEAP ASIA PROGRAMME PARTNERS

Manufacturing Partners



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A STATEMENT FROM MANUFACTURING PARTNERS OF THE CIRCULAR LEAP ASIA PROGRAMME

By all standards, 2020 has played out like a bad dream for the fashion industry. The COVID-19 crisis has triggered unprecedented supply chain disruptions and drastic drops in consumer demand for fashion products. Brands and shops we know well and love may soon cease to exist.

As manufacturers in the fashion supply chain, we are caught in the eye of this storm. Yet this unfortunate pause has also given us the opportunity to reflect on the vulnerability of the current system, and the role we must play for the fashion industry to truly “reset” and embark on a sustainable and circular transformation.

The pandemic has made clear the discretionary nature of most fashion purchases, and exposed, once again, the precarity of livelihoods dependent on the fashion industry’s existing model.

A truly socially and environmentally sustainable future for fashion has to go beyond models that rely on producing “cheaper, faster, better” products without consideration for the real needs of consumers.

As manufacturers who are committed to the longevity of our businesses and of the industry, we believe that circular business models offer an exciting pathway to this future. But we must stop believing that a more sustainable industry will come about simply by adjusting business-as-usual. Instead, we need to rethink why and how we produce.

Brands and retailers, who have led the

conversation on circular fashion to date, have the responsibility to include manufacturers and other supply chain actors, in collective industry efforts that reimagine how we design, make, sell and use fashion products and services.

With the support of Forum for the Future, we are learning to realise the promise of circular fashion by investing in new knowledge, capabilities and networks of trusted relationships. The change ahead will be uncomfortable, but we are ready.

It is our hope that this report and our efforts on the Circular Leap Asia programme will inspire fellow manufacturers to step forward as drivers of circular innovation. We also urge stakeholders across the fashion industry to invest in new approaches that build trust and equitable partnerships, so that we may unlock the full potential of the supply chain.

EXECUTIVE SUMMARY

Making the Leap: Unlocking Asian fashion manufacturers' capacity to drive circular innovation

Recent years have seen industry leaders rallying around a shared vision for circular fashion. Brands have made ambitious commitments and multi-stakeholder initiatives have galvanised industry stakeholders towards the benefits of circular transformation.

Yet a clear implementation gap persists. Despite the clear opportunities presented by circular models, fashion manufacturers lack the incentives, agency and enabling environment to take the lead on circular innovation.

Circular Leap Asia was designed as an innovation programme which foregrounds the needs and perspectives of actors in the supply chain. Our work with three pioneering manufacturers in Asia has

informed the following key messages we outline in our programme report:

- Leading manufacturers recognise that they hold the key to practical implementation of circular transformation at scale, and are willing to rise to this challenge.
- The COVID-19 crisis presents a tough setback, but also represents an opportunity to calibrate industry power dynamics, positioning manufacturers as equal partners to brands and retailers in experimenting with new circular business models.
- Brands, designers and industry bodies must challenge industry norms by stepping up efforts to include supply chain voices in reimagining how fashion items are designed, made, sold and used.
- There is a lack of circular fashion knowledge and capability-building that is tailored to the needs of manufacturers. Working with industry partners, Forum for the Future is planning to release a ***Manufacturers' Guide to Circular Fashion***.
- Ultimately, effective industry collaboration relies on trust and social capital across a network of stakeholders with complementary skills, expertise and shared ambition. Our final chapter focuses on how different fashion stakeholders can act now to invest in networks of relationships that create tangible and intangible value.

How can you act now to build a collective circular future for fashion?

Brands and retailers can:

- Evaluate points of interaction with supply chain partners that inhibit collaboration.
- Engage supply chain partners at the problem scoping and ideation stage.
- Make learning and innovation central to supply chain partnerships.

Manufacturers can:

- Move from a 'market taker' mindset to a 'market maker' mindset.
- Connect with peers to learn, support and share new innovations.
- Build capacity within your organisation to engage with circularity.

Research and innovation ecosystems can:

- Strengthen local networks while staying globally connected.
- Leverage position to inform decisions of funders and policy makers.
- Articulate expectations and resources needed from supply chain actors.

Supporting stakeholders such as investors and financiers, philanthropic and development organisations, industry non-profits and policy makers, must also act to create enabling conditions.

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CHAPTER ONE

THE CHALLENGE

What is stopping
manufacturers from
leading the transition
to circular fashion?

FASHION ON THE BRINK: FRAGILE AND WASTEFUL SYSTEMS MUST CHANGE

Even before the economic fallout triggered by the COVID-19 pandemic, the fashion supply chain was struggling with the unenviable task of delivering high-volume, low-cost fashion products in an environmentally and socially responsible way.

The urgent need for industry transformation is clear. Can a transition to a circular economy present fashion manufacturers with new opportunities for value creation?

Fashion has the unsavoury reputation of being one of the most wasteful industries in the world. In the span of a few decades, the industry has shaped a culture of consumption and production that results in the average consumer throwing away 31 kg of clothing annually, and 13 million tons of unwanted textile being produced each year.¹

The COVID-19 pandemic has dealt an unprecedented blow to the global fashion industry, disrupting supply chains and crushing consumer demand. In particular, the crisis has exposed the vulnerability of manufacturers and factory workers in the fragile system that is the fashion supply chain. In Cambodia alone, 400 factories have suspended operations, leaving 150,000 workers unemployed.²

Yet, the pandemic has simply revealed long-existing cracks in the system. Fast fashion trends have fuelled wasteful industry practices that prioritise speed and cost, delivered by complex and fragmented supply chains, with the bulk of the value captured by dominant brands and retailers who control access to the end consumer.

Businesses in the fashion supply chain have long experienced the pressures of business models predicated on producing high-volume, low-cost fashion products.

In recent years, industry leaders have rallied around a shared vision for circular fashion - a new economy which is regenerative by design, aiming to limit clothing consumption and prolong the use of clothing, textiles and fibres before they re-enter the economy, never ending up as waste.³

Critically, this transition must be underpinned by a shift to models that are more equitable, with a more balanced distribution of value and expectations across all actors in the system.

For manufacturers across all stages of the fashion supply chain, **a circular fashion system presents opportunities to imagine alternative modes of value creation.**

WHAT IS STOPPING MANUFACTURERS FROM LEADING THE TRANSITION TO CIRCULAR FASHION?

Even as manufacturers recognise the critical role they must play in transitioning to a circular fashion industry, few are incentivised to take on the disproportionate risks that driving radical change will entail.

Together, the fashion industry must find ways to share the risks of investing in transformational change, or bear the sector-wide consequences of inaction.

Manufacturing networks in Asia are fast-moving, adaptive and accustomed to delivering practical solutions at scale. Given the right conditions, fashion manufacturers have great potential to drive industry-wide transition to circular models.

Despite the clear benefits of circular models, manufacturers find that they are not positioned to contribute effectively to the creation of new, sustainable industry models. Conversely, brands and retailers who look for partners with the manufacturing expertise to conceptualise and experiment with circular solutions, often find that even high performing supply chain partners stop short of taking the lead, and expect brands to show the way.

How has the fashion industry arrived at this impasse, where a common ambition for circular transformation is thwarted by a lack of incentives for individual actors? At the heart of this lies the unequal power dynamic in existing supply chain relationships,⁴ which limit the influence that manufacturers have on business models at the brand and retail stage.

Fashion supply chains today are heavily influenced by the top 20% of fashion businesses.⁵ The supply chain is optimised for mass production at high volumes, high speed, and low costs. Analyses show that the clearest path to profitability for a brand lies in improving scale and speed, while setting expectations for their supply chain partners to maintain or drive down costs.⁶ Manufacturers are constantly squeezed, left to juggle short-term contracts while living with the constant threat of being swapped out for a competitor who is able to offer lower prices.

Against this backdrop, investing time, energy and cash into circular solutions, whether in the form of new technology or business practices, presents high risks to manufacturers. There is little guarantee that investments will reap a return in the long run as they are not rewarded with guaranteed orders.⁷

EQUITABLE PARTNERSHIPS TO UNLOCK CIRCULAR INNOVATION

Significant progress has been made on the fashion industry's environmental and social sustainability performance, through brand-led initiatives that drive manufacturers to comply with global standards.

However, circular transformation will require manufacturers to share the driver's seat, taking proactive action with agency and intent. To enable circular transformation, the industry must commit to longer-term, equitable partnerships across the supply chain.

Brands have significant leverage in the fashion industry today, through their role in allocating resources, and setting requisite standards that their suppliers must meet. For this reason, consumers and NGOs have rightfully raised the expectation for brands and retailers to take greater responsibility for upholding social and environmental standards across their supply chains.

Having achieved significant progress and quick wins via a compliance-driven approach, it is tempting to expect brands to drive circular transformation using similar methods. Yet the current sustainable fashion movement has also had the unintended consequence of reinforcing a culture of control instead of equal partnership.⁸ Decades of compliance-driven management of supply chain sustainability has perpetuated the belief that manufacturers have little ownership and agency over what defines sustainable fashion, nevermind charting an industry-wide path to circularity.

In practice, it is not plausible for brands to hold the full picture, or have all the answers to the complex challenges that stand in the

way of circular transformation. Brands today work with a complex network of suppliers, but rarely hold in-house expertise when it comes to the actual manufacturing processes of fashion products.

While the transformation of an entire system means that there are clear areas where brands should take the lead (such as the transformation of consumer relationships to fashion products), they must also work shoulder to shoulder with manufacturers to re-calibrate the supply chains that will deliver on these new business models and consumer experiences. It will take investment and commitment from all parties to steer away from the goal of “cheaper, faster, better” supply chains.

Ultimately, the depth and scale of industry transformation required is too much for any singular part of the supply chain to drive on its own. **Leading brands must find ways to effectively empower manufacturers as equal partners to lead circular transformation.** This may mean walking back some existing practices that have shown results, but stand in the way of open and trusted partnerships across the supply chain.



CHAPTER TWO

A WINDOW FOR TRANSFORMATION

What could a transformed circular future look like?

HOW WILL FASHION BE REINVENTED IN A POST-COVID WORLD?

In July 2020, at the end of our two-year programme, we asked our Manufacturing Partners what key messages they would like the wider industry to take on board in terms of enabling circular innovation.

There was a long pause, before one brave person said: "There is not one single brand or retailer who isn't suffering in this crisis."

Another voice chimes in, more hesitant, "But, could this new reality for the fashion industry actually be a more sustainable one?"

The COVID-19 crisis has disrupted business-as-usual. Uncertainty looms large in the future, but there is the rare opportunity now to ask the toughest of questions: **What true value should the fashion industry bring to people's lives?**

Our conversations with industry stakeholders indicate three landscape-level shifts that could potentially transform the way the industry delivers value, and the relationship between brands and supply chain actors.

- **Lockdown has drastically reduced demand for fast fashion products: Will the fashion industry continue with current production models?** As consumers de-prioritise discretionary expenditure and exercise greater discernment over fashion purchases, questions arise for the continuity of current business models in the fashion industry.⁹ Even online sales have declined across Europe, the US and China.¹⁰ Faced with excess inventory, fashion brands and retailers are under pressure to fundamentally rethink business models that depend on pushing out high volumes of seasonal products. Some brands have begun to turn towards seasonless designs. As the ranks of retailers going out of business swells, the risk of inaction is real.
- **Fashion retail experiences are now primarily digital: Will supply chain actors play a role in engaging consumers?** As the role of digital channels expands under pandemic conditions, fashion products are increasingly differentiated by the "origin stories"

that sit behind them. *Who made or designed this piece of clothing? Where and under what conditions?* Brand and retail marketing teams are entering the unfamiliar territory of working with supply chain partners to shape authentic, online fashion experiences. As supply chain information becomes more valuable, will the industry move beyond price, speed and quality as the primary measures of success for manufacturers?

- **Analysts expect a wave of acquisition and consolidation across the fashion industry: Will we see a shake-up in supply chain ownership?** Financially robust players have the opportunity to make investment decisions that will position them for success in the fashion market that emerges from the current crisis. Stronger brands and retailers (including e-commerce giants who have developed significant fashion retail portfolios) may see benefit in regaining partial control of the supply chain, to drive business model and technological innovation in production. In the same vein, supply chain actors have the opportunity to acquire new assets and human talent that will allow them to offer services beyond production. Might we see a renewed industry where resources and know-how for sustainable innovation are increasingly concentrated in the hands of fewer, vertically integrated industry leaders?

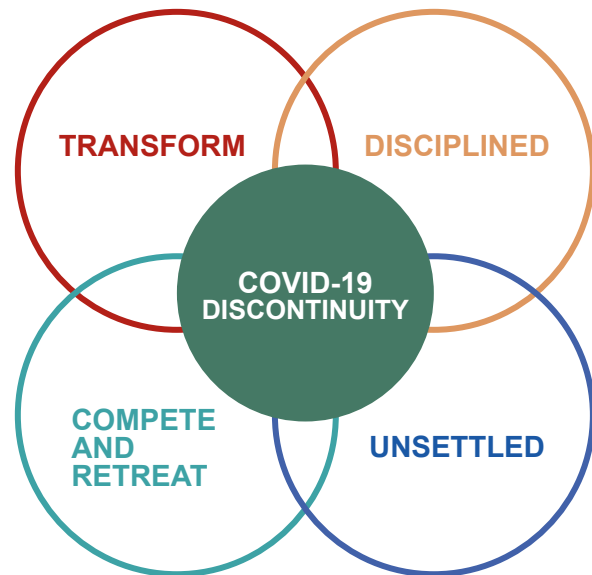
MOVING FROM DISRUPTION TO TRANSFORMATION REQUIRES DECISIVE ACTION NOW

By now, we can be certain that the deep disruptions caused by COVID-19 will ensure there is no returning to “business-as-usual” for the fashion industry. What is less certain is that actors across the industry will use this opportunity to “build back better” and set the foundations for a more sustainable fashion industry, with circularity as a core driving force.

At Forum for the Future, we see four distinct trajectories emerging from the discontinuity caused by COVID-19 across the world. Read about the four trajectories in detail [here](#).

The **Transform** trajectory sees us take full advantage of the disruption we are experiencing, to emerge into a more regenerative, resilient and sustainable world - one that fundamentally recognises that planetary health equals human health. While we strongly believe that this trajectory must prevail, we also recognise that it is far from guaranteed. It will require strong and decisive action across business, government, the philanthropic sector and civil society.

How might the fashion industry reimagine a transformed, circular future and begin to invest in this future collectively?



COVID-19 trajectories: Learn more about the four trajectories at <https://www.forumforthefuture.org/covid-19-trajectories>

WANTED: COMPELLING VISIONS OF THE FUTURE SUPPLY CHAIN

“We read these future visions or scenarios of a circular fashion industry, and yes, it is exciting to think about the possibilities, and being part of this future. But as a manufacturer, it can be really difficult to imagine what our role is in helping the industry to get there, or even how our business will look like in these future scenarios.”

To be honest, it makes me think that maybe the writers did not interact much with the fashion supply chain, or only had limited exposure to a relatively simple picture of it.”

Circular Leap Asia
manufacturing partner

“A New Textiles Economy: Redesigning fashion’s future”, published in late 2017 by the Ellen MacArthur Foundation, ignited the imagination of the industry. It made a strong case for the transition from fashion’s take-make-dispose model to a circular economy, and galvanised the industry around four clear ambitions.

This seminal report painted an inspiring vision that catalysed industry-wide initiatives and laid the foundation for subsequent publications which further flesh out elements of a circular fashion system, notably The Future of Circular Fashion by Fashion for Good, Fashion Futures 2030 by Forum for the Future and the recent 2020 Resale Report by ThredUp.

Yet future visions for the fashion industry typically describe the role of the supply chain in a limited manner.

In working alongside manufacturers to understand how best they can contribute to a circular future, we found that most pieces focus on the transformation of the consumer retail experience, and the role of product design. Rarely does one find compelling descriptions of how the supply chain has been reconfigured, in order to

deliver on the promise of these new product, services and retail models.

The deep and fundamental change that the fashion industry so urgently needs, is portrayed as a movement catalysed and led by entities with direct access to the end-consumers - brands, retailers and the designers who work with them.

For the supply chain, the emphasis is usually on the adoption of better technology, leading to reduced resource use and pollution, or improving employment practices. In sum, the role of the supply chain is limited to “do less bad”.

Can we really reimagine the fashion industry, if we focus on what products are made of, how they are designed and sold, but fail to re-conceive exactly how they are made?

Circular Leap Asia did not set out to be a visioning exercise, but we want to demonstrate a compelling story from the future, of a circular fashion business model and the drastically transformed supply chain that enables it. Based on informal, generative conversations with supply chain stakeholders, we have created a sense of the possible with this story from 2030: *“TailorMe: A modern day digitally enabled tailor service”*.

TailorMe: A modern day digitally-enabled tailor service

Think back to your hazy memories of visiting the tailor. Perhaps you had your first suit or evening dress made in the 1990s. When was the last time you had a fashion item made for you from scratch?

Now, imagine yourself at the start of 2030, thinking about Lunar New Year celebrations, which are a few weeks away. You need something “new” to wear on the first day of the Year of the Dog.

This imaginary story from the future is based on informal, generative conversations that Forum for the Future had with supply chain stakeholders throughout the duration of the Circular Leap Asia programme.

You typically shop on secondhand platforms now, but it is always nice to get something new for Lunar New Year. Logging into the TailorMe app, you are presented with a **fabrics menu**, with a prompt to view a Lunar New Year special palette curated by one of your favourite designers, LaurelX.

The app allows you to **filter fabric choices** by functional properties (waterproof, sweat-absorbent, anti-microbial, anti-shedding) and **sustainability credentials** (100% renewable energy, recycled, fairtrade and organic standards). You also consider some of the more eclectic options, such as offcuts from Christmas jumpers, or ‘rescued’ fabrics from a vintage luxury brand.

Having made your fabric selection, you receive an AI-generated collection of **make-to-order design options**, including selections from LaurelX. You select a bright sundress and a **local seamster** with positive reviews. Checking that your **tailoring measurements** are up to date, you consider whether to have the made-to-order piece delivered to a nearby fitting and alteration centre, or **directly to your home**.

On the payment page, TailorMe registers that you have leftover credits in your account, earned from when you last contributed your father’s old wool sweater to the ReWool campaign. TailorMe has a partnership with the new local fabric startup ReWool to run a **used wool fabric collection drive**, turning used fabric into an exciting palette of recycled wool fabrics for the regional fabric library. Perhaps you could look out for ReWool fabric options on your next TailorMe purchase!

You place your order and take a screenshot of the **digital designer’s impression** of the \$100 custom-made dress you will receive in about 20 days’ time. Not a bad deal for a new, personalised piece, especially as the alternative would be expensive off-the-shelf options that may not fit as well.



This personalised and relatively affordable digital tailor service in 2030 is enabled by a fashion manufacturing ecosystem that is fundamentally different from the industrialised mass production supply chain of 2020.

Yarn and fabric mills have gone through a period of consolidation. Controlled by a handful of global conglomerates, they continue to operate at scale, meeting stringent environmental and social standards through chemical and technological innovation.

Increasingly, fabric produced for the fashion industry goes towards meeting the inventory needs of fabric and trim libraries found in cities around the world. **Fabric libraries** track and digitise the source and material properties of all fabrics. These real time data-sets directly inform designers who take pride in creating collections from locally available materials. The data is also submitted to recyclers who regularly offload dead stock from the libraries.

Tech-driven consumer platform services such as TailorMe plug into a network of fabric libraries. When a custom-order is placed, the platform places an order with

fabric libraries carrying the required stocks, and arranges for delivery of the materials to an assigned independent tailor with the appropriate skill level to complete the job. Quality checks are performed digitally before the finished piece is delivered to consumers. Rising costs associated with global freight mean that platform algorithms are optimised to match fabric libraries, tailors and consumers in close geographical proximity.

Responding to consumer preferences for customised products and fully transparent supply chains, garment manufacturers have moved away from pursuing fully-automated mass production lines, working instead to build **networks of tailors and seamsters** who receive localised orders on demand, via platforms like TailorMe.

Established tailoring platforms provide regular online classes for tailors keen to learn new skills. Some provide the option for tailors to **lease high-value or specialised machines** for unique jobs. Local business councils support the development of micro enterprises through loans and subsidies. Now the norm, the 'gig' or 'platform' economy is regulated to ensure labour standards are met, with

manufacturers contributing to social security provisions for tailors accessed via their platforms.

Many tailors and seamsters are also members of **virtual design co-operatives**. Commonly used 3D visualisation software allow designers to draw live data from fabric libraries and generate seasonal designs with relative ease. Design files are uploaded onto platforms like TailorMe, and designers are **paid a licensing fee** when consumers select their designs for production.



TAILORME

10m ago

TAILORME

You have a new order.
Let's start sewing!



TAILORME

5m ago

TAILORME

You order has been accepted by LaurelX.
Thank you for choosing TailorMe!

MANUFACTURERS ARE READY TO SHAPE A NEW REALITY FOR FASHION

“A circular economy for the fashion industry is really not just about closing the material loop. We need an economy where incomes in the supply chain are not reliant on producing and selling more products to consumers who do not need them.

COVID-19 has made what was already true even more obvious: It is time for a fundamental rethink.”

**Circular Leap Asia
manufacturing partner**

The Business of Fashion and McKinsey estimate that revenues for the global fashion industry will contract by 27 to 30 percent in 2020 year-on-year.¹¹ The stark reality for the industry is that 2020 will see some well-loved brands disappear, and many production facilities along the supply chain put up the shutters permanently.

For manufacturers, orders are coming in smaller batches, and less frequently. Uncertainty looms large in the future, but there is the rare opportunity now to rethink product development and production cycles.

Now more than ever, manufacturers are in position to shape the future of the fashion industry that emerges from the crisis. It will entail stepping forward with the stories that sit behind the fashion products and services we buy, in the same way that farmers have begun to reclaim the narrative for food.

Manufacturers hold the key to practical execution of industry transformation.

New technologies and business models must be tested and scaled, and their impact on the future workforce considered, in order to move the industry equitably towards circularity.

This can only happen if brands, designers and industry bodies step up efforts to include supply chain voices in reimagining how fashion items are designed, made, sold and used. The compliance-driven approach to manufacturing innovation that the industry is accustomed to, is unlikely to achieve the deep transformation that is needed.

When we embarked on the Circular Leap Asia programme two years ago, we thought that the job at hand would entail convincing manufacturers to step up to the plate. What we learnt was that many manufacturers are more than ready to think and do things differently. The COVID-19 crisis has dealt a strong blow to the industry. But it opens a window of opportunity for change, with the possibility of a transformed, circular future on the other side.



CHAPTER THREE

INSIGHTS FROM OUR JOURNEY

What have we learnt
working with
manufacturers on
circular innovation?

A CIRCULAR INNOVATION PROGRAMME DESIGNED FOR MANUFACTURERS

Launched in 2018, Circular Leap Asia is a two-year innovation programme aimed at empowering fashion manufacturers in Asia to lead the adoption and scaling of circular solutions.

Why manufacturers?

- Leading brands have made ambitious circularity commitments, and niche innovators are introducing new technologies and business practices. Yet a clear implementation gap persists.
- Implementing circular solutions requires a cohort of pioneering manufacturers who participate in the innovation process, and operationalise circular solutions at scale.
- Manufacturing networks in Asia are fast moving, adaptive, and operate at scale. There is great potential to harness these abilities to accelerate sector-wide transformation.

Our programme approach:

- Work with manufacturers to address internal mindset barriers, as system change is first and foremost a social transformation, rather than a technological one.
- “Circular economy” as a concept has to be made tangible to manufacturers. Innovative pilots as an outcome of the programme ensures that ideas are rooted in reality.
- Build a learning and support network in Asia, by connecting like-minded manufacturers with each other and plugging manufacturers into regional and global research and innovation ecosystems.

Project #1

1 to 1 Diagnosis

Innovation Programme

Project #2

1 to 1 Diagnosis

Innovation Programme

Project #3

1 to 1 Diagnosis

Innovation Programme

Circular Leap Asia Summit Series

Forum for the Future worked with three manufacturing partners to identify circular fashion challenges each is best placed to lead, then designed custom innovation programmes to support manufacturers in engaging stakeholders with relevant and complementary skill sets.

A Summit Series at the end of the programme brought the three sets of partners together for cross-learning and distillation of the system change needed to further enable manufacturers to drive circularity.

WHAT CAN MANUFACTURERS DO TO TAKE ACTION ON CIRCULAR FASHION?

Discussions around circular fashion often centre on the role of designers, brands and retailers. Manufacturers who are keen to engage can find it difficult to understand their role: “Is it just about increasing recycled content?”

Drawing on our experiences working with manufacturers, Forum for the Future has developed five sets of circular economy (CE) actions from the perspective of actors in the fashion supply chain.

Leading manufacturers understand that radical transformation is needed, but may not know where to begin when it comes to achieving circularity.

There is a need to identify practical opportunity areas that manufacturers can dedicate limited sources towards, depending on existing strengths and capabilities. There is also some level of confusion on how existing environmental and social sustainability efforts relate to circularity. To this end, having a list of possible circular economy actions on hand is a good place to start.

Working alongside supply chain stakeholders on the Circular Leap Asia programme, Forum for the Future has arrived at five categories of circular economy actions. The list builds upon reports from the Ellen MacArthur Foundation and China Water Risk, and integrates our insights from the programme.

The following page captures the list of circular economy actions that fall into five categories:

- 1. Increase use of fashion products and reduce overall volume of production**
- 2. Eliminate release of harmful substances**
- 3. Reduce resources required in textiles production**
- 4. Optimise recycling of textiles at all stages of the supply chain**
- 5. Shift to renewable inputs**

5 SETS OF CIRCULAR ECONOMY ACTIONS FOR THE FASHION SUPPLY CHAIN

Building on the work of the [Ellen MacArthur Foundation](#) and [China Water Risk](#), Forum for the Future has developed a list of circular economy actions for supply chain actors, reflecting our experience working with manufacturers.

We are working with industry partners to test this preliminary list with a wider set of leading manufacturers in Asia. This will inform a ***Manufacturers' Guide to Circular Fashion*** slated for publication later this year. The guide will support manufacturers in evaluating where they are on their circular journey and identify actions most relevant to them.

A. Increase utilisation of fashion products and reduce overall volume of production

1. Support introduction of rental or subscription retail models that increase the utilisation (number of times worn) of fashion products
2. Collaborate with retailers to utilise user data to improve demand planning (e.g. manufacturing on demand) and drastically reduce dead stock
3. Support customisation and personalisation of fashion products to increase utilisation (number of times worn)
4. Introduce product care and repair services for end users
5. Experiment with new revenue models where manufacturers are rewarded for product durability (e.g. for functional product categories like uniforms)

B. Eliminate release of harmful substances

1. Eliminate use and release of hazardous chemicals
2. Adopt non-harmful chemical inputs (e.g. environmentally friendly dyes and additives)
3. Reduce shedding of microfibres through innovation in material design and production processes
4. Improve transparency on substances used across the entire production process

C. Reduce resources required in textiles production

1. Reduce energy and water use in producing raw materials
2. Reduce energy and water use in manufacturing textiles
3. Invest in next-generation technologies that drastically reduce resource use (e.g. waterless dyeing)
4. Reduce resource and textile waste through improved design and sampling processes (e.g. digital sampling)
5. Reduce resource and textile waste through improved demand and production planning
6. Reduce resource and textile waste through improved production processes (e.g. no-waste design)
7. Implement zero-waste programmes for waste materials (including packaging waste) generated at production facilities

D. Optimise recycling of textiles at all stages of the supply chain

1. Design products to optimise recycling
2. Increase use of recycled materials or recycled content in materials
3. Implement collection and sorting infrastructure and technologies
4. Invest in recycling technologies to improve quality and efficiency
5. Recycle or downcycle textile waste from production

E. Shift to renewable inputs

1. Shift to renewable energy sources in production and distribution
2. Shift to bio-based or cellulosic raw materials
3. Shift to incentivising sustainable farming methods for cotton and viscose production
4. Shift to alternative materials that convert agricultural waste streams (e.g. pineapple, banana) into fibres

PROTOTYPING SOLUTIONS FOR THREE CIRCULAR FASHION CHALLENGES

Working with our Manufacturing Partners, we learnt that identifying a meaningful entry point to circular fashion was not a simple task.

In order to narrow down the circular fashion opportunities each manufacturer is best placed to take the lead on, there was a need to assess existing unique strengths or “superpowers” and the reach of their influence within the value chain.

Forum for the Future facilitated an innovation programme that supported Manufacturing Partners in scoping priority circular challenge areas and identifying potential industry partners with complementary skills, networks and resources to co-build and deliver prototype solutions.

Ramatex Group **#1 Reduce microfibre shedding through manufacturing innovation**

Investigating opportunities to reduce apparel microfibre shedding via textile design & manufacturing innovation

Manufacturer superpower

- Vertically integrated facilities that allow for control and oversight of tier 1 to 3 processes (garment, fabric and yarn)
- Existing technical excellence in a closed loop wastewater management system
- Ability to study how design and manufacturing processes across all stages impact microfibre shedding of final products

Selected circular economy action area
B. Eliminate release of harmful substances

Yee Chain **#2 Tackle invisible fabric waste in footwear manufacturing**

Addressing systemic fabric wastage caused by inefficient product development & purchasing practices

Manufacturer superpower

- Ownership of dyehouses and responsibility over the sustainability of fabric sourcing and development processes
- In-house fabric development capabilities provide the technical expertise and field data to support re-examination of sampling and development workflows for sources of waste

Selected circular economy action area
C. Reduce resources required in textiles production

Cobalt Fashion **#3 Enable post-consumer textile waste to re-enter manufacturing**

Prototyping and testing reverse supply chain solutions to enable clothing-to-clothing recycling

Manufacturer superpower

- Oversight and influence over a wide network of supply chain partners from yarn to fabric and garment manufacturing
- Strong logistics and supply chain capabilities as part of the Fung Group, and ability to bring new partners into network
- Influence over product design and fabric choice for brand and retail customers

Selected circular economy action area
D. Optimise recycling of textiles at all stages of the supply chain

REDUCING MICROFIBRE SHEDDING THROUGH MANUFACTURING INNOVATION

CASE STUDY 1: RAMATEX GROUP

Investigating opportunities to reduce apparel microfibre shedding via textile design & manufacturing innovation

“Circularity is an area where, as manufacturers, we can take the lead to figure out sustainable pathways with brands. We are familiar with eliminating microfibre release to the environment using our water treatment systems. Currently, we do this from a factory health and pollution standpoint. But there is the opportunity to apply these relevant skills to fabric and garment design and manufacturing processes, with the aim to reduce microfibre shedding from final products.”

Keith Ma
Strategic Director, Ramatex Group

THE CHALLENGE

Microfibre shedding from clothing into waterways and eventually into the oceans has become of increasing concern as they are easily ingested by marine animals that end up in the food chain. Fashion businesses are now under growing pressure from concerned consumers to act urgently in reducing microplastic leakage into the oceans.

Research has shown that textile properties and design can influence the degree of microfibre shedding when the product is used by consumers.

Although momentum for action has increased, brands have yet to announce design-based solutions to addressing the issue. The game-changing product design and manufacturing solutions needed require the attention of both brand actors and their manufacturers.

WHAT WE DID

The project brought together a progressive apparel manufacturer and one of their leading brand partners, to arrive at a meaningful scope for studying and piloting product design and manufacturing innovations that have the potential to significantly reduce microfibre shedding.

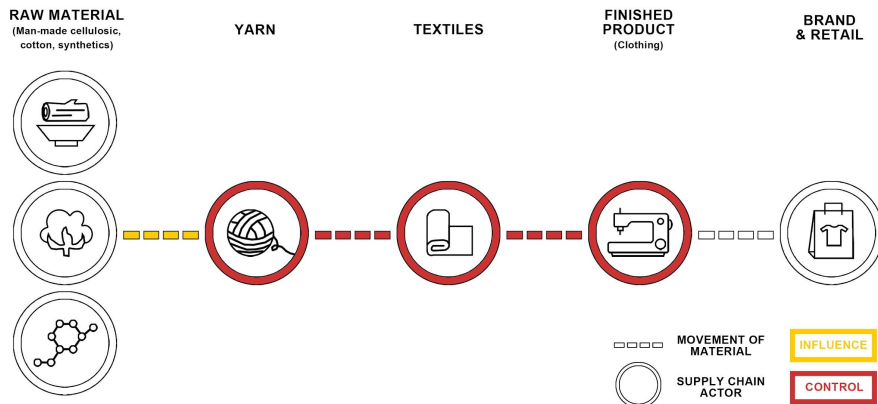
It is seeking to develop a tightly-scoped piece of industrial research to understand the impact of selected manufacturing processes on microfibre shedding.

As a manufacturer-driven project, Ramatex is at the heart of decision-making: consulting with their brand partner in finalising the research scope. Ocean Wise Conservation Association provides microfibre research expertise.

ABOUT THE MANUFACTURER

Established in 1976, Ramatex Group is a Tier-1 manufacturer of apparel products headquartered in Singapore, serving some of the world's leading global sportswear and fashion brands. With operations across Malaysia, Cambodia, China, Jordan, and Vietnam, Ramatex drives innovation from its vertically integrated textile parks in Malaysia and China.

As a vertically integrated manufacturer, Ramatex directly controls processes across garment manufacturing, fabric production, yarn spinning and fibre processing. It is well positioned to drive positive impact on water-related challenges, leveraging the company's technical capabilities in industry-leading wastewater treatment systems and closed-loop water recycling systems. Currently, Ramatex recycles more than half of the water used in both its Malaysia and China textile parks.



LEARNINGS FROM THIS PILOT

- **Vertically integrated manufacturers have greater leverage to experiment with circular solutions** and may be a comprehensive partner for brands that are keen to set an ambitious circular strategy. They have the opportunity to act across all 5 sets of circular economy actions, at every stage of the production process. Ramatex, as an end-to-end manufacturer, went beyond associating circular fashion with closed-loop recycling, and found they could work on a wide range of solutions for the (brand) customers that they have established relationships with.
- **Establish credibility through research and innovation partnerships** - For manufacturer-driven innovations to gain prominence beyond the immediate industry stakeholders they typically interact with, building public credibility with stakeholders in the wider fashion ecosystem is essential. Partnerships with research institutes at the early stages of industry-led innovation can help to strengthen credibility within the scientific community, and validate the impact of technical solutions. Ultimately, this supports manufacturers and brands' ability to share compelling "origin stories" behind the products that consumers purchase.

NEXT STEPS

The next phase of the project sees the implementation of the research and decision-making plan, studying the selected manufacturing and design processes and their impact on microfibre shed rates. Results will be shared at appropriate pre-competitive cross-industry platforms with a multi-stakeholder audience.



TACKLING INVISIBLE FABRIC WASTE IN FOOTWEAR MANUFACTURING

CASE STUDY 2: YEE CHAIN

Addressing systemic barriers to reducing fabric material waste in the footwear supply chain

“Fabric manufacturers (tier-2 suppliers) are uniquely positioned to drive circularity as we are the part of the supply chain that holds conversations with brands from sourcing to material choice, and the sustainability of it all. We are in a good position to influence brand choices, perhaps even influence design for circularity.”

Martin Su
Sustainability Manager, Yee Chain

THE CHALLENGE

The fashion industry is enormously wasteful. While end-consumer waste and dead inventory have come into the crosshairs of those seeking change, the invisible waste of the supply chain is rarely addressed in industry-wide conversation. It tends to be “systematically underreported”.¹²

Yee Chain recognises that the ability for fabric manufacturers to drastically reduce waste is limited by current business practices within the fashion supply chain, from design and sampling processes, to buying and procurement practices from the brands. Any solution aimed at reducing supply chain waste will benefit from the inclusion of brand partners at the ideation table. This means developing an approach to engage customer brands in productive conversations on the issue.

WHAT WE DID

The project started off with establishing a high-level understanding of the company's material waste streams, water, energy and chemical use, with the intention of partnering with a customer brand to design solutions that tackle the root causes of waste.

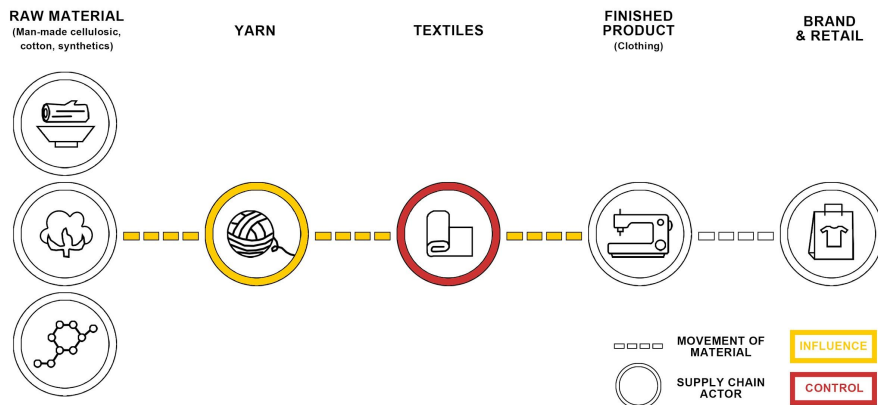
Armed with new data in the form of waste hotspots, Yee Chain was able to unlock conversation with a customer brand using a solutions-oriented approach to a long-standing issue.

Processes and decisions that contributed to material waste are being examined to shape potential opportunity areas for action, looking into the current business/relational practices that affect the adoption rate of materials at the stages of sampling.

ABOUT THE MANUFACTURER

Yee Chain International is an established manufacturer of high quality performance fabrics for globally recognised footwear brands. Founded in 1997, the company has over two decades of experience in responding to external trends, and innovating to meet customer requirements.

Yee Chain is looking to take proactive leadership in addressing critical environmental sustainability challenges in fabric manufacturing, and has recently put in place a new sustainability team to drive circular innovations. As a tier-2 fabric manufacturer, it is in a unique position to make change through their engagement with the brands from sourcing of materials, design of the textiles to sustainability requirements.



LEARNINGS FROM THIS PILOT

- Brands may not have governance structures suited to addressing systemic challenges** - While most brand businesses have set sustainability KPIs for different teams and departments to achieve sustainable outcomes, KPIs are often not developed to address systemic root causes, such as the existing business practices that are causing sampling waste. Brand sustainability teams with defined KPIs may not have the authority and influence to align internal departments in re-examining business and cost-related practices. Identifying an internal champion within the brand with the right level of influence may take time.
- Complementing and moving beyond audits for transparent brand-supplier communication** - Giving manufacturers the opportunity to approach their (brand) customers with a solution-oriented programme opens up space for conversations on issues within the supply chain that audits will not detect (such as invisible supply chain waste and its sources), encouraging the level of transparency that brands are seeking from their supply chain partners.

NEXT STEPS

Yee Chain will collaboratively design process solutions with the brand partner's development and design teams, and will support them in piloting efforts.

In order for the brand partner to establish which aspects of the pilot with Yee Chain can be applied to other suppliers in its footwear supply chain (and adapt it to its apparel supply chain), Yee Chain and Forum will develop a set of principles guiding the brand on how to best enable supplier partners to adopt and implement changes.

ENABLING POST-CONSUMER TEXTILE WASTE TO RE-ENTER MANUFACTURING

CASE STUDY 3: COBALT FASHION

Prototyping and testing reverse supply chain solutions to enable clothing-to-clothing recycling

“We have discussed circularity with customers for some time. But only by attempting to execute a solution, will you surface the practical challenges that must be overcome for a reverse supply chain to work. The beauty lies in bringing all the right partners together - retail, logistics, recycling and back into production.”

Roger Chan
Chief Operating Officer, Cobalt Fashion

THE CHALLENGE

Global clothing production has doubled, with and garments are being worn less and discarded more quickly. Valuable materials are being sent to landfill or incinerated, as waste and recycling infrastructure struggles to cope.¹³

The fashion industry recognises the need to introduce new business models and technologies that increase clothing utilisation, and ensure used fabric and fibres re-enter the economy, creating a circular apparel value chain. Potential business models span rental to repair to reuse/resale models, and closing the loop on clothing-to-clothing recycling. To introduce and mainstream these models, the development of reverse logistics and supply chain management services is critical.

What has been missing is an actor that can integrate logistics solutions with existing supply chain activities along an entire supply chain.

WHAT WE DID

The project aimed to prototype a one-stop solution for retailers seeking to build a circular fashion offering around garment take-back, reuse and recycling.

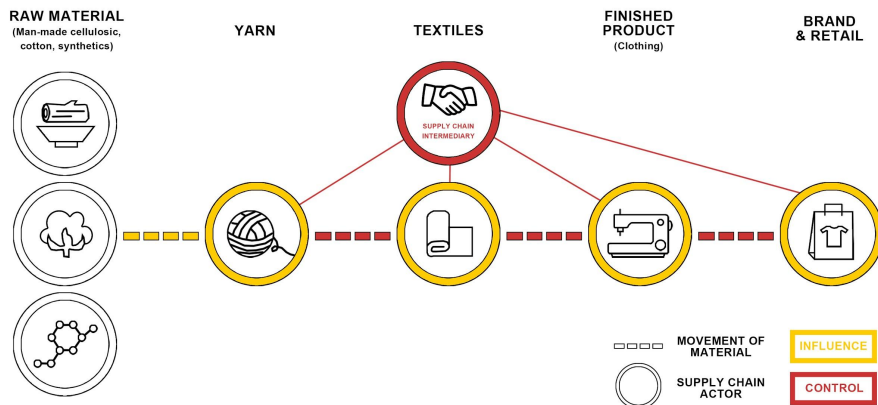
A diverse project team was formed to leverage Cobalt Fashion's fabric and knitwear design capabilities and the wider Fung Group's strengths as a leading supply chain management company. Representatives from sales, materials, factory liaisons, sustainability, quality and compliance worked together through two Innovation Sprints to develop a pilot implementation plan.

Cobalt Fashion developed a customer engagement plan and identified success metrics for the pilot, including ongoing tracking and assessment of the social and environmental impacts of the solution.

ABOUT THE MANUFACTURER

Founded in 1906, Fung Group represents one of the most influential supply chain businesses in the world today, with diverse businesses across the global supply chain for consumer goods including trading, logistics, distribution and retail. Based in Hong Kong, Cobalt Fashion is the knitwear specialist within the Fung Group, serving leading brands and retailers worldwide.

With a focus on digital innovation, Cobalt Fashion provides a “one-stop solution” through an in-house design and materials team, and access to an exclusive network of yarn, textiles and garment manufacturing facilities across Bangladesh, Cambodia, China, Egypt, Turkey and Vietnam. It recognises the potential to apply its strong network and digital capabilities to deliver circular knitwear offerings for positive social and environmental outcomes.



LEARNINGS FROM THIS PILOT

- **Understanding the practical possibilities across multiple stages of the supply chain** is a powerful ingredient for conceiving new supply chain configurations that enable circularity. This, coupled with influence over actors in the supply chain, and long-lasting trusted relationships with brands and retailers, allows Cobalt Fashion to identify the right mix of partners with the complementary skills necessary to bring new opportunities to fruition.
- **Suppliers perceive that brands want easy, convenient and low-risk solutions.** In developing circular fashion solutions, there remains a strong assumption on the part of supply chain actors that brands are risk averse, and would be more amenable to solutions that are not too disruptive to regular operations. It remains to be seen whether the shock of the COVID-19 pandemic will trigger a more fundamental relook at retail models, and push brands to consider deeper collaboration with supply chain partners on innovative circular fashion offerings.

NEXT STEPS

While supply chain partners have been identified and in-principle agreements are in place to collaborate, the pandemic has thrown a spanner in the works for plans to launch the circular textile pilot in 2020.

Additional effort will be required to address health and safety concerns surrounding the collection and sorting of used clothing. However, pandemic conditions have brought sustainability to the fore for raw material selection, and Cobalt Fashion is committed to make sustainable and recycled yarn core to its future product offerings.

SUPPORTING FASHION MANUFACTURERS ON CIRCULAR INNOVATION

In working closely with Circular Leap Asia manufacturing partners to identify and take the lead on circular fashion pilots, we found a number of common barriers that manufacturers face when embarking on their circular economy journey. Fashion industry stakeholders who seek to support manufacturers on circularity should invest in three sets of enablers: New Knowledge, New Capabilities and Value Networks.

Forum for the Future has developed a preliminary list of enablers that support fashion manufacturers on their circular economy (CE) journey. Based on our working experience with manufacturers on the Circular Leap Asia programme, the enablers fall into 3 categories.

Fashion manufacturers are enabled by:

- A. **New Knowledge:** Understanding what CE means for our industry and business, and how it relates to existing sustainability initiatives.
- B. **New Capabilities:** Learning how to identify CE opportunities, new ways of organising to generate solutions and back them up with data.
- C. **New Value Networks:** Establishing networks of relationships that create tangible and intangible value through dynamic exchange between individuals, groups and organisations.

In particular, the importance of Value Networks tends to be underestimated at the start of the journey. Circular Leap Asia partners shared unanimously that being plugged into diverse value networks allowed for new exchange of ideas and the emergence of complementary partnerships.

We are working with industry partners to test this preliminary list of enablers with a wider set of leading manufacturers across Asia. This will inform a ***Manufacturers' Guide to Circular Fashion*** slated for publication later this year.

3 KEY ENABLERS TO SUPPORT FASHION MANUFACTURERS ON THEIR CIRCULAR ECONOMY JOURNEY

NEW KNOWLEDGE

- **Understand CE in practice:** What does it mean for the fashion supply chain, and what risks or opportunities does it present for our business?
- **Understand CE priorities of brands and retailers:** What goals and commitments have our customers made around circularity? How will it translate into expectations for the supply chain?
- **Understand the relevance of existing sustainability efforts to CE:** How do existing sustainability initiatives relate to the circular economy (e.g. Higg Index)?

NEW CAPABILITIES

- **Keep abreast of CE trends:** How can we track the latest relevant innovations, industry and policy incentives and regulatory changes?
- **Analyse data to identify CE opportunities:** How can we better collect, analyse and present our data to identify opportunities for change and make the case for change?
- **Apply existing strengths to CE innovation:** How can our existing capabilities and assets be applied to conceptualising and implementing circular solutions?
- **Introduce new ways of organising internally:** How can we change organisational structures and practices that are limiting our potential to introduce CE solutions?
- **Identify gaps in existing skills to drive CE solutions:** How do we assess our internal capacity to implement CE solutions, and develop skills we lack, or seek external partners?

NEW VALUE NETWORKS

- **Manufacturing peers:** How can we regularly connect with other fashion manufacturers to exchange ideas and best practices for CE implementation?
- **Brands (non-commercial partnerships):** How can we go beyond the buyer-supplier relationship with brands to make strategic joint investments in CE solutions?
- **Industry players with complementary skills for CE implementation:** How can we identify and partner with existing or new industry players, who have the skills, credentials and networks we lack?
- **Research and innovation ecosystems:** How do we gain exposure to the latest thought leadership, industry research and solutions that challenge our thinking?
- **Impact-oriented investors and financiers:** How can we access investors and financiers who can support our circular economy goals? How might we inform their impact evaluation and investment strategies?
- **End-users of fashion products:** How might increased digitisation allow us to keep in touch with the changing attitudes and expectations of consumers/ end-users of fashion products?
- **Policy-makers and regulators:** How do we enter into dialogue with regulators, and advocate for policy changes that will remove barriers and incentivise circularity?



CHAPTER FOUR

MAKING THE LEAP

How can you act now to
build a collective circular
future for fashion?

INVESTING IN TRUSTED VALUE NETWORKS TO BUILD A COLLECTIVE CIRCULAR FUTURE

At the end of the day, collaborating on circular innovation comes down to trust between partners.

In the words of an industry expert, “If we need a handful of NDAs in place before we even start a conversation, I begin to have doubts about how far we are going to get.”

In this final chapter, we address how brands and retailers, research and innovation ecosystems and manufacturers must begin to invest in the value networks that will catalyse circular innovation. We also touch on the role of other ecosystem actors such as investors and financiers, non-profits, philanthropic and development organisations and policy makers.

Forum for the Future designed the Circular Leap Asia programme to foreground the needs and perspectives of fashion manufacturers motivated to drive the transition to circularity. Working with **manufacturers**, we engaged with **brands**, **research organisations** and **innovators** to collaborate on specific circular fashion challenges.

We found that, beyond clear alignment in interests and a shared recognition that each partner brought different but complementary skills and expertise to the table, **the key ingredient to unlocking collaborative circular innovation projects, is the existing trust and social capital** established between partners over time.

There is widespread agreement across the industry that making the leap to a circular future requires leaders across today's fashion ecosystem to make the shift, together. Yet the collective incentive to do so has remained

elusive. COVID-19 presents not simply a moment of opportunity in crisis, but also a source of common adversity that the fashion industry must face up to collectively. It is clear that finger-pointing will present no solution to the current crisis.

Actors across the fashion industry must invest the time and energy it takes to build trust and social capital across a network of relationships that create tangible and intangible value - what we call **Value Networks**.¹⁴

We have witnessed how new relationships and exchanges between industry stakeholders fire up the imagination of industry old-guards who are otherwise skeptical of change. How can brands, manufacturers, innovators, investors and financiers invest in Value Networks that will inspire and catalyse new approaches to transforming the fashion industry?

BRANDS AND RETAILERS

***Key reflection question:** How might we change our existing practices to better allow for impactful and rewarding partnerships with key actors in our supply chain?*

As the de facto driver of sustainable innovation in the fashion industry today, brands and retailers have the responsibility to actively consider whether current patterns of interaction with their supply chain partners contribute to building trusted value networks.

Brands and retailers have significant leverage in the fashion industry today, through their role in allocating resources, and endorsing sustainability standards that suppliers along the supply chain must meet. For this reason, brands will continue to be a natural magnet for the latest innovative thinking, alongside scrutiny from consumers and NGOs.

While brands are rightfully expected to take responsibility for the actions of their supply chain, it has become clear that navigating the path to circularity will require manufacturers to share the driver's seat. How can brands work to recognise and bring the full diversity of perspectives and strengths from supply chain partners, to address circular fashion challenges and create new circular fashion offerings for consumers?

Three ways brands and retailers can act now to build trusted value networks:

- **Evaluate points of interaction with supply chain partners that inhibit collaboration.** Brands and retailers may not be fully aware of the conflicting messages they send to supply chain partners when different teams within a brand (product development, purchasing, sustainability and quality) interface with the same supplier. Manufacturers experience difficulty trying to gain access to stakeholders within brands who have the remit to make

decisions around supply chain collaboration to achieve circular economy outcomes

- **Engage supply chain partners at the problem scoping and ideation stage.** In working with manufacturers to engage brands, it became clear that organisational structures largely uphold a “top-down” model where brands lead the problem scoping, then bring the challenge statements to their suppliers in search for solutions. Moving away from this will require investment of time and resources to build up trusted, strategic long-term partnerships with key supply chain partners. For brands newer to this process, neutral platforms facilitated by third parties such as Fashion for Good, Ellen MacArthur Foundation's Make Fashion Circular initiative, and Forum for the Future provide a safe space to discuss potential collaborations outside of a commercial setting.
- **Make learning and innovation central to supply chain partnerships.** Many brands already have programmes aimed at building capacity within their supply chains to comply with social and environmental standards. Brands should begin to consider how existing programmes can work to align their own teams and supply chain partners on common circular goals, and build capacity in that direction. This should also involve finding opportunities to provide supply chain partners access to knowledge and research ecosystems that have the potential to catalyse circular innovations.

In reviewing their plans to engage with the supply chain, brands should regularly revisit the question: **Are we investing in trusted value networks to build a collective circular future?**

MANUFACTURERS

***Key reflection question:** How might we better equip ourselves with the language and capacity to connect with and begin to lead the global conversation on circularity?*

For manufacturers, identifying a meaningful entry point to circular fashion poses the greatest challenge. Manufacturers have to step back, assess where they sit within the fashion ecosystem and recognise the formal and informal influence they have on value networks they are part of, before determining which circular fashion challenges they are best placed to take the lead on.

A handful of leading manufacturers have begun to demonstrate leadership on the global stage, introducing circular solutions and articulating long-term sustainability ambitions. Currently, these leaders represent outliers in a wider landscape of fashion manufacturers, most of whom are only beginning to understand how they can contribute to a circular future for the fashion industry.

Three ways manufacturers can act now to build trusted value networks:

- **Move from a ‘market taker’ mindset to a ‘market maker’ mindset.** In the context of the fashion industry, most manufacturers see themselves as market takers, working towards product standards and price points set by brands. Manufacturers who are looking to drive the introduction of circular solutions will need to see themselves in more of a market maker role, working alongside designers and retailers to reshape fashion offerings to meet the changing needs and expectations of consumers.
- **Connect with peers to learn, support and share new innovations.** This seems obvious, but we have found that the operational nature of manufacturing businesses mean that connecting with peers requires a conscious

investment of time and effort, and is often overlooked. Beyond the opportunity to keep in touch with best practices and identify partners with complementary skill sets, manufacturers must also recognise that transitioning to circular models will be a complex process where the support of like-minded peers who share common goals will be critical to staying the course.

- **Build capacity within your organisation to engage with circularity.** There remains a gap for tools that support manufacturers to “move from talking to doing”. Until manufacturers gain clarity on where they can act on circularity, and how investing time and resources translates into future business value, they will not bring the full weight of their supply chain expertise to the transition that the industry so urgently needs.

In the previous chapter, we introduced a preliminary set of circular economy actions and enablers that begin to form the building blocks for a **Manufacturers’ Guide to Circular Fashion**. If you are a manufacturer keen to embark on your circular journey, please get in touch with us at a.muller@forumforthefuture.org.

RESEARCH AND INNOVATION ECOSYSTEMS

Key reflection question: How might we create safe spaces for industry collaboration, while leveraging our understanding of the innovation landscape to inform policy and investment decisions?

Ecosystem actors are playing a critical role by bringing together cutting edge innovators and solutions providers with the fashion supply chain, creating a safe space for collaboration. We see the need for innovation ecosystems to become more rooted in local contexts while staying globally connected, and to play a greater role in directing funder interest to projects that fill critical market gaps for circular fashion innovation.

When the Circular Leap Asia programme was first conceptualised in late 2017, **Fashion for Good** stood out as a fresh-faced beacon of hope, unique in its position as an innovation platform with a mission to make the industry a force for good by connecting and inspiring actors across the entire fashion ecosystem.

Three years on, Fashion for Good has grown from strength to strength, kicking off its South Asia Innovation Programme in early 2020, with a greater focus on supply chain solutions and direct involvement from pioneering manufacturers. Ecosystem platforms such as Hong Kong-based **The Mills Fabrica** and India-based **Circular Apparel Innovation Factory** have also emerged to serve as local nodes, helping to connect and grow local and regional circular fashion ecosystems. State-supported research institutions such as the **Taiwan Textile Research Institute** and **Hong Kong Research Institute of Textiles and Apparel** are aligning research priorities around circular textiles with direct industrial application.

Three ways research and innovation ecosystems can act now to build trusted value networks:

- **Strengthen local networks while staying globally connected.** When it comes to testing and implementing circular economy actions on the ground, feasibility is often

directly affected by the local policy and regulatory landscape, as well as the ability to find players in the local market with the right capabilities and skills. Ecosystem building will increasingly need to be rooted in specific local contexts, especially as the world grapples with changing supply chain configurations accelerated by geopolitical tensions and the COVID-19 crisis. At the same time, local ecosystems must remain globally connected to keep abreast of the latest technological breakthroughs and maintain alignment with international industry standards.

- **Leverage position to inform decisions of funders and policy makers.** Innovation ecosystems are on the pulse of the future that is emerging, and understand what types of enabling policy and financing environment will help to accelerate the change. There is the opportunity to inform decisions being made by funders (philanthropic and institutional investors, impact funds and financiers) who recognise the impact and business opportunity in circular fashion, and policy makers who need the cooperation of the fashion industry to meet ambitious sustainability targets.
- **Articulate expectations and resources needed from supply chain actors.** Innovation platforms are a relatively new model for the fashion industry, particularly for supply chain actors. Research and innovation ecosystems provide value and meet a clear gap in the market, but success also relies on the readiness of industry players to engage meaningfully. Ecosystem platforms should remain open and inclusive, but also set out clear criteria for supply chain actors who are seeking to engage more actively.

At key moments of growth and strategic decision making, revisit the question: **Are we investing in trusted value networks to build a collective circular future?**

SUPPORTING STAKEHOLDERS

Key reflection question: *How might we derisk and incentivise innovative industry models and solutions that truly disrupt business-as-usual, allowing for a new fashion system to emerge?*

This report has emphasised how industry actors must drive circular transformation. However, industry commitment can only be sustained and translated into practical implementation in an enabling environment.

Stakeholders such as investors and financiers, philanthropic and development organisations, industry bodies and non-profits, and policy makers, can act to shape new value networks by strategically channelling resources.

Investors and financiers

- Introduce innovative financial mechanisms that de-risk and accelerate the testing and implementation of circular solutions at scale.
- Shift investment portfolios and influence portfolio businesses to adopt circular economy strategies, by injecting capital for infrastructure investment.
- Work with industry experts and non-profit partners to establish impact metrics for investment and financing strategies, in order to track progress towards circular transformation.

Industry bodies and non-profits

- Actively include manufacturers and supply chain actors in sustainable fashion industry platforms, especially at the problem scoping and ideation stage.
- Shift from compliance-driven, single-issue advocacy to a holistic approach towards supply chain sustainability.
- Move from a focus on increasing recycled content to circular solutions with positive social and environmental outcomes for stakeholders in the supply chain.
- Act as neutral convenors for industry players and other ecosystem actors, providing a safe space for pre-competitive collaboration needed for circular transformation.

Philanthropic and development organisations

- Provide access to patient, risk-tolerant capital that supports supply chain actors in building capacity to lead circular transformation.
- Support industry-applied research to test the feasibility of new circular solutions and business models that can be adopted across the fashion supply chain.
- Support ecosystem actors who are taking a systemic approach to change and plugging market gaps.
- Consider how funding and support for a transition to circular fashion can be structured to allow for flexible project plans and outcomes, recognising the nonlinear nature of circular transformation.

Policy makers

- Generate lead demand for circular fashion solutions via government procurement policies that prioritise sustainable materials or encourage new retail models (e.g. leasing or subscription models).
- Design sustainability criteria into economic recovery stimulus packages, directly incentivising the redesign of retail business models through subsidies and tax rebates.
- Implement land use policies that account for infrastructure and industrial flows that directly support a circular economy.
- Implement policies that hold industry accountable for negative externalities, via both incentive and punitive approaches.
- Engage beyond incumbent industry leaders with clear vested interests, to include agile and innovative smaller players, and ecosystem actors who bring perspectives from the edge.

CLOSING REMARKS

Re-inventing the future of fashion in a post-pandemic world

A favourite quote of mine from the Circular Leap Asia interviews was an answer in response to the question, “How will the sector emerge from the impact of COVID-19?”. “Well,” he said, “you know, people only have two feet, how many shoes do we really need?”

Zing.

This speaks directly to a question we could all-too-easily sidestep in our rush to rejuvenate ailing economies: Will we return to models sustained by driving endless consumption while pushing for ever lower costs of production, or will we take this unprecedented moment to reimagine how we define progress?

To challenge the way we have always done things may feel counter to some of our most immediate priorities, such as providing jobs for those that need them.

But the recovery from the pandemic will not

be a neat or linear one. And just as new business models like Airbnb and Uber took to the mainstream off the back of the 2009 global financial crisis, so may new models emerge from this crisis. Can we take this opportunity to introduce business models where value is measured, not in the number of shoes sold, but in how consumers who purchase footwear products or services contribute to creating a more sustainable and just world?

One thing is for sure: This potential for re-invention will remain untapped if actors across the global fashion value chain do not act now to ensure disruption leads to transformation.

So, what are we doing next?

As we build on the momentum gained from the Circular Leap Asia programme, Forum for the Future is looking to engage with industry and ecosystem partners on the following opportunities:

- **Envisioning a just transition to circular fashion:** Working with stakeholders across geography-specific fashion ecosystems (e.g. India or Indonesia) to build future scenarios of circular fashion systems. The purpose is to shift from a focus on waste management and closing material loops, to new models of production and consumption that place social and economic justice at the heart of circularity.

- **Mapping the circular leadership journey for manufacturers in Asia:** In developing the *Manufacturers' Guide to Circular Fashion*, we seek to support manufacturers in assessing which circular economy strategies and actions they are best positioned to lead, and pinpoint circular economy capacity building gaps for manufacturers, which sustainability service providers should seek to meet.

- **Financing systemic interventions that enable the transition to circular fashion:** Finally, we will explore how the financial sector can adopt strategies that incentivise and enable the deep, systemic change needed to achieve a just and circular fashion industry in Asia.

We hope you will join us.

Ariel Muller
Managing Director, Asia
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For questions on the report or further discussion, please get in touch at
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To find out more about Forum for the Future's work on Circular Leap Asia:
www.forumforthefuture.org/circular-leap-asia

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DEFINITIONS

Circular fashion - A fashion industry based on circular models is one in which waste and pollution are designed out from all stages of the life cycle of the product, products and materials are kept at their highest value during use, and where natural systems are regenerated. A circular model also ensures sustainable production: that the 'take' and 'make' elements of the value chain are sustainable and renewable. These are the principles and goals that would underpin its core business models.

Fast fashion - Quickly-changing low-cost fashion where fashion products are purchased and rapidly discarded. This has adverse implications on supply chain operations.

Sustainable - Describes a dynamic process which enables all people to realise their potential and to improve their quality of life in ways that simultaneously protect and enhance the Earth's life support system.

Supply chain - Used in this publication to refer to the set of actors and series of steps involved in the fulfillment of a fashion product for end consumers.

Value chain - Building upon the concept of the supply chain, the value chain encapsulates the full set of business activities which add value not just to the final fashion product for end consumption, but also to the actors involved in the chain. These can include R&D, product development and marketing.

Value network - A network of relationships, which creates both tangible and intangible value through a complicated dynamic exchange between individuals, groups and organisations. Value networks are needed to tackle challenges that are too large for individual businesses to realise on their own.

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