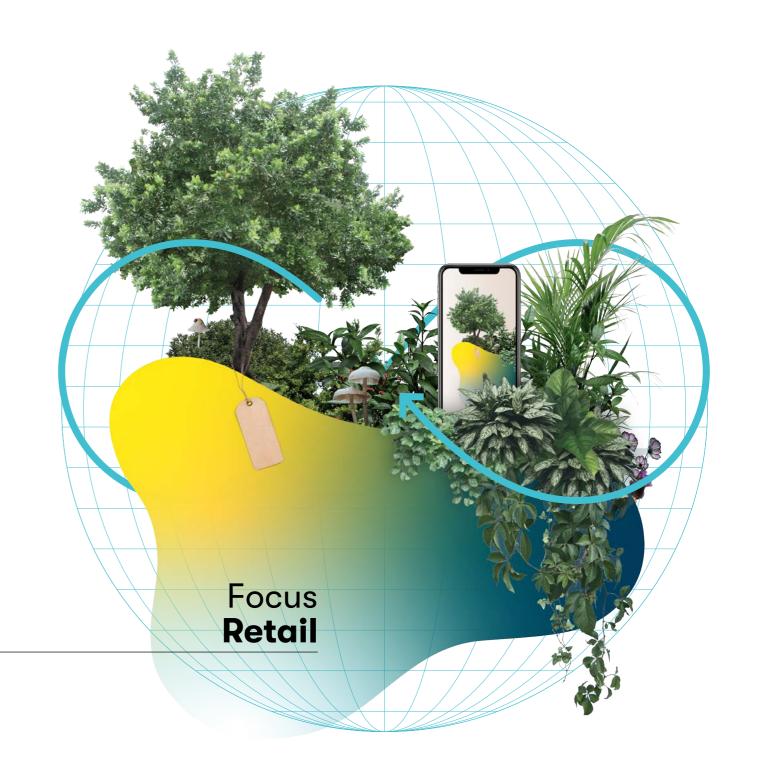


# CIRCULAR ECONOMY SPOTLIGHT 2023





Bending linear – Read more on page 6

# Unleashing the potential of circular retail

The retail sector holds great innovation potential as it represents the connection of suppliers, manufacturers, distributors, and consumers. Our feature investigates how supply chains and complete business models can go circular, with a deep dive into the Swiss circular shoe company On, where we discuss not just their business model, but also the future of retail at large.

Impact Hub Berlin and circularity .......Page 4
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Running a circular experiment at scale....... Page 10



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# Collaboration case study: Miele

Together with Miele, we explore the benefits and roadblocks on the way to a successful startup collaboration.

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# **Startup spotlight**An exploration of key circular startups ranging

along all the different development stages and parts of the whole value chain.

Page 30

Trend statistics
Why does circularity
matter? And where are
we at right now? We dive
into the key facts and
figures in the industry.

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NOTES FROM THE LEADERSHIP

# Impact Hub Berlin & circularity

At Impact Hub Berlin, we are deeply committed to the transition to a circular economy.

We believe that there is a pivotal role of impact entrepreneurs and their innovative ideas in the world's transition to circularity. A regenerative economy values cascading functionality and closing the loop across the lifecycle of a material, and therefore touches all industries along its value chain. The need for collaboration has never been higher.

The retail sector has a particularly transformative power in this context: This sector is the link between upstream and downstream value chain, and the first junction that immediately validates user demand for new innovations, which in turn makes it the perfect place to gauge user adoption of new business models, and also a great place to influence downstream product journey.

For our first Spotlight Report, we decided to take a deep dive into the circular economy movement in the retail landscape, which you can read in our feature. We further explore a great example of collaboration for circularity in the feature's interview.

With startup spotlights, case studies, and exploration of the regulatory framework, this report is geared towards offering an unbiased view of the circular economy ecosystem in the DACH region.

I hope that this report will be a useful tool on your journey to greater circularity and will inspire you to keep innovating!

"We believe that there is a pivotal role of impact entrepreneurs and their innovative ideas in the world's transition to circularity"

Leon Reiner



Leon Reiner
Co-founder and Managing Director
Impact Hub Berlin



# BENDING LINEAR Unleashing the potential Petail has been often considered the poster To capitalism, consumerism, and since the pulse of the market for The smodels. The pulse of the market for The smodels.

We have to acknowledge that circular economy asks for a lot, by making businesses change the only way they know to do business; from the moment material is extracted, throughout its journey through the supply chain and use case, until the way it is disposed.

Changing world orders takes time, commitment, urgency and several loops of cascading collaboration.

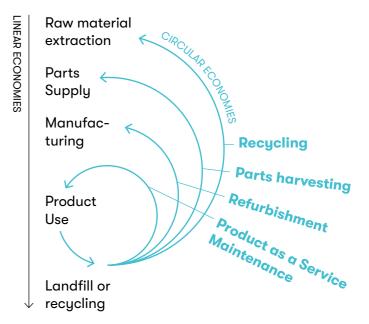
So what does retail have to do with this? Retail is, in an overly simplified way, the collective voice of the

# Operating in a contradictory world order

After the great recession of 1929, a guy called Simon Kuznets invented a policy tool to help US-American policymakers estimate the economic situation of their country: the Gross Domestic Product that we know today. It is the sum of all values of all products and services produced by a country in a specific year. This makes the GDP a brilliantly easy tool to estimate the size and power of a country's economy. However, Kuznets warned already in 1934 that one should not focus too narrowly on the GDP, in order to determine a country's success1.

The opposite happened in the following decades. GDP became the number one indicator to measure a country's success. And while there is a wide acceptance of the fact that the race to the bottom of the barrel needs to stop, how do you emphasise reduce, when the world economy runs on produce? The systems in place are designed to enable the creation of **new products and services** depending on the extraction of natural resources. The very opposite is what a circular economy strives to achieve: how much we can **reduce the manufacturing** of new products and extraction of raw materials, while valorizing the existing material in circulation, or like enthusiasts call it, closing the loop.

# Linear versus circular economies





"GDP tells us about aggregate consumption, but it does not tell us about personal well-being. It tells us about production, but not about the pollution that comes with it, or the depletion of natural resources it requires. It tells us about government expenditure and private investments, but not about the quality of life they generate."

World Economic Forum, 2021

# The emerging business models

Entrepreneurs have risen to the challenge of rethinking traditional business models when large corporates took a beat to validate and calculate their next move. The past few years have seen a major uprise in alternate business models that alter the way we consume. Rent instead of buy, resell instead of throw, pre-owned instead of fresh goods, share instead of own, repair instead of buy, remanufacture instead of manufacture, and take back instead of dispose. Worldwide, a great number of startups have touched one or more links in the value chain of a product, in order to extract maximum value from a ready product before proceeding to valorize its waste.

These changes in consumer behaviour trickle up to manufacturers, retail chains, and policymakers, and down to waste managers and remanufacturing facilities.

For example, German supermarkets already lived through a **change in identity** from a sole usage as a point of sales to a collection point (like we see, for example, in deposit return schemes for bottles).

But contradiction follows us here. For example, if the business model allows a product to be leased for 10 years while making 150% of the Minimum Retail Price (MRP), how do the manufacturers pay out the suppliers in the short term? Collaboration might just show us the answer: could they potentially take a leaf from the age-old playbook of the real estate and construction market that relies on an intermediary financial vehicle to match the pace?

# The business case for circular economy

Currently, a lot of factors do not go in favour of a circular economy. The unit economics do not add up, making the more sustainable options marginally more expensive. A few of these factors include

- High cost of recyclates vs. virgin material
- · Unreliable availability of recyclates at scale
- The cost of remanufacturing/refurbishment is a lot higher than fresh production
- Updates in energy, technology, and regulations make several components too outdated to reuse

But the 10-year overview looks a little different. As the world moves towards resource shortage, the cost of virgin material is set to overtake the cost of recyclates. Alternate business models such as rental or leasing increase product use cycle, and eventually even offer a bigger payout.

There is a strong case for subsidized labour backed by policymakers at remanufacturers to reinforce cascading material use.

# The new consumer

The world has waited with bated breath as Gen Z begins to enter the workforce. While millennials are still loyal to brands they grew up loving, Gen Z has no such affiliations and has demonstrated a demand for more conscious companies, that are inclusive and mindful of their carbon and ecological footprint.<sup>2</sup>

This also means, that several novel concepts such as clothes rentals, resell platforms and sharing economy have now become mainstream. Vinted and Swapfiets are just two of many day-to-day examples of linearity showing signs of a bend.

There are very strong reasons for a complete system overhaul. Who knows, a decade from now, GDP would have evolved into something more inclusive, that accounts for growth and the environmental and quality-of-life cost of that growth as well. But while that change arrives, these miniature steps taken by visionary stakeholders are slowly building the critical momentum that the industry needs to pave the way for a fully realized circular economy.







# **INTERVIEW**

# Running circular retail at scale: An experiment

We spoke previously about the need for bold and forward-thinking people to seize circular opportunities. We decided to speak to one such innovator who has risen to the challenge of implementing circularity. Let's hear how practicing circularity in real world looks like.

One of these bold people is Georg Singer, who is an innovation business strategist at On. On wanted to create a fully recyclable shoe and quickly realized that the best way to ensure it actually gets recycled at the end of life is to make it available in a subscription model to the consumer. Even though a subscription-based shoe seems very much out of the box, the novel business model has become a great success. Georg unveils more about how On practices circularity in retail in an interview he did with Aline Laucke, who is the chief impact officer at Studio Nima, a social innovation and circular economy consultancy from Munich that is also a very close collaborator with Impact Hub Berlin.

**Aline Laucke:** How did you develop the idea of producing and selling a completely circular shoe with the Cyclon™ Collection?

Georg Singer: The initial idea for Cyclon™ started back in 2019 with the question if we could produce a Speedboard® — that's the plastic plate in the sole that allows for a more explosive take-off when running — out of recycled material. After giving it a second thought, we were wondering if we could create an entire shoe from recycled material. This was when the real challenge began a regular running shoe consists of different materials and components like foams in the sole, a thermoplastic Speedboard®, yarns for the textile uppers, shoelaces, etc. And becoming fully circular meant that we had to develop all these components using recyclable materials. This resulted in a shoe made from one family of partly bio-based materials, so that we can regenerate the material through a mechanical process and put it back into the production cycle. The entire process took us two years of hard development work (which is incredibly fast in the chemical industry for a project like this) and culminated in the first model of the Cloudneo, which we launched in a subscription model. With the subscription model, we can ensure that we get the shoe back at the



**Georg Singer** is part of the Innovation Business Strategy team at On



Aline Laucke is Chief Impact Officer at Studio Nima







end of its lifecycle. This way we can guarantee that the material remains in circulation and serves as a component for new shoe parts.

**Aline Laucke:** Is the Cyclon™ collection a success?

Georg Singer: We see it as a great success given that at the moment of the first announcement of a circular shoe, in 2020, we didn't have the product ready to go to market. We were still in the prototyping phase after going through a few iterations. To put it to test, we opened a pre-subscription with a down payment, comparable to a Kickstarter campaign. The subscribers who made a down payment could get their hand on a pair only two years later. We were able to identify two major drivers for consumers to sign up: On the one hand, people for whom sustainability and circularity are close to their heart, and, on the other hand, ambitious runners who like the idea of the subscription model.

Aline Laucke: The Cyclon<sup>TM</sup> Collection is not yet representative of the way how On mostly sells shoes, namely either direct-to-consumer or through retail. What are your thoughts now on how to transfer the gained insights and the idea of circularity to On's core business?

Georg Singer: We set certain limits on the number of different materials used in our products. If possible, we try to use as few materials as possible, which in the case of the Cloudneo resulted in a shoe that can be recycled without prior separation. However, this is not easily possible in all product groups, because certain requirements in terms of design and performance also apply. But if we then use different materials, you have to consider separability already when starting with the design of the product, i.e. that the materials can be separated from one another at the end of the product's life. For example, for the "uppers" - the textile upper part of the shoes - we have now set ourselves a target that they should contain a certain threshold of recycled polyester, which can then also be re-introduced into the cycle at the end of its life.

The Cyclon™ program can be considered an experiment at scale. And as we already have significant quantities on the market, we want to roll out the Cyclon™ as a circularity program to a wider product range.

**Aline Laucke:** Does that also have implications for On Shoe's business model? Which changes in the business model - beyond the subscription model - are particularly interesting for On's circular ambitions?

# ABOUT CYCLON™

A fully recyclable running shoe made from castor beans. Lightweight, agile and super responsive, it's engineered to perform. And you'll never own it, because it's only available via subscription. Learn More.



Georg Singer: We currently offer the Cloudneo as a shoe within a subscription model. But we also sell a circular t-shirt within the Cyclon™ program. This is currently offered to Cyclon™ subscribers at a one-time fixed price. Why? The reason for this is that within six months, the shoe of an average runner will reach the end of its product life cycle. With a T-shirt, the lifespan is significantly longer and far less predictable - maybe 1 to 2 years or even longer. That's why we offer customers the option to return the product when the shirt's useful life has actually ended. This is now the first step in exploring different approaches and encouraging consumers to be part of circularity.

**Aline Laucke:** Does the take-back flow of products go directly via On or can consumers also return products via retailers?

Georg Singer: In the current setup the return is handled by us, but here, too, we are exploring different methods. It depends on whether we are talking about a product that can be directly recycled for producing new components or a classic multi-component product that requires disassembly.

The question is always: do we want to keep ownership of the material or do we follow a mass-balance approach? And that's where we see the essential role of retail. Our B2B business still accounts for a significant proportion of the total sales volume of On. Retail can thus play a decisive role when it comes to raising consumer awareness and nudging towards circular behaviour. From an operational point of view, it is of course complex to integrate retailers into our daily processes when it comes to circularity. But we also see great potential here. When it comes to collecting end-of-life products, retailers can be strong partners.

**Aline Laucke:** It's also demanding for customers to send all their different products back to individual brands. But what can a collaboration between retailers and fashion brands look like? Do you have any concrete ideas or plans?

**Georg Singer:** Basically, we need to find the right incentives to make a cooperation advantageous for our retail partners. In the beginning, maximizing the positive impact on the environment has priority but eventually, this also has to yield financial benefits.

I think that retailers could potentially act as a catalyst to drive a cross-brand collection of end-of-life products.

**Aline Laucke:** Are you at On also working on multi-brand alliances to promote circular transformation?

Georg Singer: Yes, we are talking to other brands and are active in consortiums. And we also look at already established collection systems in different countries. Municipalities or regions can also be a driver towards circularity as well as legal regulations. Often it is about finding out how you can bring it all together so that you don't build parallel universes, but rather use the resources that are already there and optimize them if necessary. We see - also with our retail partners - that the motivation is very high to be part of circular solutions and to collect products or send them back. For retailers, there is also a huge opportunity to bring walk-in customers into the shops.

**Aline Laucke:** Thanks for the interview, Georg!



I think that retailers could potentially act as a catalyst to drive a cross-brand collection of end-of-life products. Georg Singer





COLLABORATION CASE STUDY

# Miele's journey to foster startup collaboration

So how does collaboration with a corporation play out for startups, and what kind of benefits, but also hurdles lay in the way of such a collaboration? We explored these questions with our ecosystem partner, Miele.

Collaborations between startups and corporations can be lucrative for both parties: Startups help larger companies with fast innovation cycles and bring a culture of new work and fresh energy. Startups, on the other hand, can benefit from working with larger corporations by achieving faster proof of concept and having access to a large pool of potential users.

# Miele at a glance

The German home appliances business is a true giant: With 15 production plants and an annual turnover of 5.43 billion Euros, Miele employs roughly 23.000 people across its core brand and 50 subsidiaries. While Miele is also innovating in-house, they are always on the lookout for sustainable

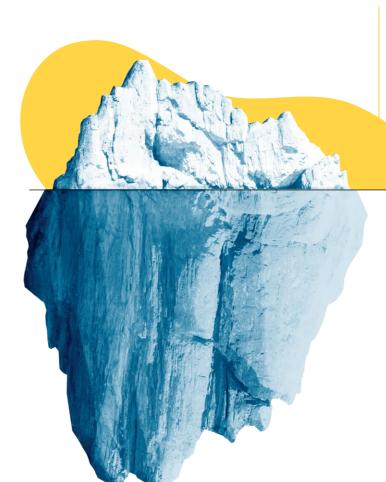
and circular innovations in the startup landscape worldwide. In 2022, Miele's Scouting and Innovation team received 46 scouting assignments from other departments resulting in the execution of 20 Proof-of-concept trajectories.

# Startup scouting at Miele

Miele scouts internationally, with more networks in some countries and less in others. Currently, Miele is well-connected to the startup scene in Germany, Sweden, North America, Israel, Singapore, Malaysia, and China. Active outreach happens through fairs and conferences. Miele complements this outreach through collaboration with different network partners such as Impact Hub Berlin.

# Miele scouts by taking two approaches:

The pull approach: Operating on a need level, Miele captures problem definitions and hurdles from their various business units and scouts for startups based on these insights.



# THE ICEBERG

of Scouting & Technology 2022

PoC's done by Scouting & Technology

1238 Entries in Miele's Database

450 Startups presented internally at Miele

120+ Pitches by startups

**Search orders**have been requested

**12** Events visited by Miele



The push approach: By focusing on the trend level, Miele actively observes new solutions and technologies in the market which might become relevant for applications and integrations in the company.

Most often, first contact gets initiated by Miele. Currently, only a few startups reach out proactively to the corporation. For interested startups, Miele has developed further resources on their website.

# What Miele is looking for

Collaborating startups should provide new applications, solutions or technological advancement for Miele. The most important requirements are open communication, honesty and a clear set of expectations. An open mindset and understanding of policies in large companies are helpful to start processes as fast as possible. When creating use cases, criteria are also established to note when collaboration will not occur or a project will fail. This is very individual and can, for example, be of a technological, organisational or even financial nature.

There are no hard KPIs for initial scouting at Miele. Most importantly, a certain level of technological maturity is necessary so that a proof of concept (PoC) can be developed together with the startup. Initial pilot projects or first experiences in cooperation with other companies are very helpful. In general, startups should therefore not be too early-stage.



Which steps can startups expect when starting a collaboration with Miele?

"When it comes to working with startups, we focus on the strengths both parties add to the collaboration.

Startups enable open innovation, corporates often benefit from new market ideas. On the other hand, corporates help startups grow on concrete use cases. Key is on learning from and growing with each other."

Peter Hübinger Senior Vice President Smart Home/Electronics

- The first appointment: This is a meeting about getting a better picture of the startup and understanding what they do in more detail. This leads to an initial assessment whether a collaboration makes sense or not.
- Collection of use cases and ideas for a collaboration: Ideas are developed together with the startup. Initially, Miele works purely at the PoC level, which is about understanding the potential of the innovation and its technical limits.
- **PoC selection:** For the selected PoC, an offer is submitted by the startup, which is discussed and adjusted if necessary. As soon as all parties are satisfied, the PoC starts and is usually processed within a period of 3 to 6 months.
  - Development of follow-up collaboration: If the PoC is successful, subsequent collaboration options are developed. Possible options are, for example, a development partnership or a minority shareholding. Only then do hard KPIs come into play and Miele looks at existing investors, the financial valuation of the startup, the development roadmap, technical limitations of the technology (compared to Miele standards) and existing or planned revenues. At this point, extensive technical and financial due diligence is carried out. In some cases, opportunities do not arise directly after the first call, but they may become relevant for Miele in the future.



# The challenges

For corporations, scouting itself is not as trivial as one might think. First of all, it is difficult for corporations to define what exactly they are looking for and which topics are in scope or out of scope. A constant challenge for Miele's scouting department is not to make the scouting funnel too wide to have to filter too much, but also not too narrow to miss input. So defining what information is required and how to translate this into incisive keywords are examples of challenges Miele encounters.

Startups might also face their own challenges. While Miele aims to design their internal processes as quickly as possible, Miele is still bound to develop roadmaps in specific departments and cannot act as flexibly or keep pace as the startup itself. This can lead to longer decision cycles in securing PilotPoCs. Being a company that is committed to developing high-quality products in the premium sector, Miele often has technological demands that are higher than originally set by the startup. So as a startup, practising patience with certain processes is key.

# Where scouting and sustainability meet

Through collaboration with startups, Miele can not only foster open innovation but also increase sustainability and make an impact together with their collaboration partner.
For circular startups,
there is a real opportunity to significantly contribute to Miele's three
sustainability pledges:

- 1. Make sustainability happen at every step
- 2. Build appliances that won't leave a mark
- 3. End waste by giving our appliances a new life

Even though the topic of circularity is a large field of activity for Miele, much attention

is currently focused on implementing pilot projects and gaining experience in the areas of reuse and recycling. Miele has set itself a target to increase the number of recycled plastics in their appliances to 7,500 tonnes per year by 2025.

One specific challenge is reducing the amount of plastics and increasing the amount of recyclables in appliances, while at the same time keeping a high

level of quality and meeting certain design demands of customers. In addition, legal requirements add another layer of complexity to the implementation. Miele hopes that the collaboration with circular startups will provide valuable insights that help Miele move forward in reaching their sustainability targets.

# INCLUSIVE S SUSTAINABLE INNOVATION AT SCALE

# Key takeaways for startups

Collaborating with a big corporation can be challenging. However, if startups consider these key takeaways, it can get easier:

- Investigate the needs and challenges of big corporations, to fully understand how your innovation can benefit them and what the corporation can bring to the table
- Use industry-standard keywords to describe your innovation on different channels, such as your website and social media, as this might help to be found by respective scouting managers
- Attend conferences and put your ideas out there by joining networks and initiatives that can help you make the right connection
- Pro-actively approaching scouting managers might be unconventional, but can be beneficial
- · Stay true and honest every step of the way



# MILESTONE

Launched MVP product with core customer journey achieving initial traction immediately at the beginning of 2023

SEED PRE-SEED PRE-SEED

# Cardino

Cardino brings circularity to the EV industry by providing a seamless platform for selling used electric cars.

# **FOUNDERS**

Lukasz Pajak, Henrik Sachs

# **YEAR FOUNDED** 2022

# MARKETS ACTIVE

Germany, Austria, Switzerland, Nordics

# **INDUSTRY**

E-Mobility / Automotive Marketplace

# **FOUNDERS**

Ivana Perbi-Ohlheisers

# **YEAR FOUNDED** 2021

**MARKETS ACTIVE** Germanu

# **INDUSTRY**

Circular Fashion

# **KEY TREND**

"The German market does not seem to be fully ready for fashion rental, so we see a lot of pivots in the field lately which will show what the circular fashion future will hold for Germany" - Ivana Perbi-Ohlheiser

# **KEY TREND**

ESTONE
roduct
rurney
rotion
it the
1023

PRE-SEED PRE-SEE "More and more companies are realising that if

circular, multifunctional kitchen mixer that works with the glass jars people have at home, is customisable and built to last.

# **FOUNDERS**

Paul Anca, Ken Rostand

# **YEAR FOUNDED** 2022

# MARKETS ACTIVE

Europe, United Kingdom

# **INDUSTRY**

Consumer Electronics

# Circulee

Circulee is a B2B provider of premium, pre-owned IT hardware, with the mission of making Green IT simple for businesses leading to significant environmental impact.

## **FOUNDERS**

Thomas Gros, David Block, Fozy Khoury

# **YEAR FOUNDED** 2022

MARKETS ACTIVE Europe

# **INDUSTRY**

MILESTONE

projected CO2 saved by

circulee's customers in

less than a year.

More than 600,000 kg of IT Hardware

# Startup spotlight

Who is currently setting an example for circular business models and practices in retail? We identified nine key circularity startups with various business models across different development stages, with a common goal to bring circularity into retail and reshape the ways customer consumes.

23





# Send Me Pack

send me pack is the first tech based circular first tech based circu economy system for pre existing shipping packages

# **FOUNDERS**

Philip Bondulich, Michelle Reed

**YEAR FOUNDED** 2022

MARKETS ACTIVE Germany

**INDUSTRY** 

E-commerce packaging

SIR

available to end-consumers, which would otherwise have become waste.

**FOUNDERS** Raphael Fellmer

**YEAR FOUNDED** 2017

MARKETS ACTIVE Germany

**INDUSTRY** Food & Beverage

MILESTONE
Operating in 146 countries, it is Europe's largest platform for second-hand fashion

MILESTONE
Raised 750.000€ Pre Seed
Round, Clients include:
Outfittery, 1. FC Nürnberg, SHARE, Avocadostore

Sirplus

MILESTONE
Operating in 146 countries, it is Europe's largest platform for second-hand fashion

FAGE GROWTH STAGE GROWTH STAGE GROWTH STAGE GROWTH STAGE EXPANSION STAGE

NORNORM:

NORNORM:

Sirplus

MILESTONE
Operating in 146 countries, it is Europe's largest platform for second-hand fashion

FAGE GROWTH STAGE GROWTH STAGE EXPANSION STAGE

NORNORM:

NORNORM:

Sirplus

Sirplus

# **FOUNDERS**

Johanna Bialek, Pascal Haaf, Carl Frenkel, Fridolin Pflüger, Felix Schulz, Jonas Tuttlies, Jonas Götz, Matthias Röder

**YEAR FOUNDED** 2020

MARKETS ACTIVE Europe, North America,

Australia & New Zealand

**INDUSTRY** Plastic Recycling

Anders Jepsen, Jonas Kiellberg

**YEAR FOUNDED** 2020

MARKETS ACTIVE Europe

**INDUSTRY** Office furniture

Vinted operates a C2C online marketplace intended to make second-hand the first

## **FOUNDERS**

Milda Mitkute, Justas Janauskas

**YEAR FOUNDED** 2008

Europe, North America

**INDUSTRY** Fashion

# **MARKETS ACTIVE**

# **KEY TREND**

"The subscription economy has come a long way since its early days in the software industry. More recently, we have seen the continuous rollout of sharing instead of owning also in the physical world, see for example car sharing models." - Anders Jepsen



## **COLLABORATION CASE STUDY**

# circular.fashion × Zalando

Let's now look at how a corporate collaboration looks like from a startup's perspective. We explore how fashion-tech startup circular. fashion has collaborated with Zalando to adapt and scale the Circular Design Criteria, a documented guidance for circular product design in the industry.

# Scope of partnership

In this section, we explore how fashion-tech startup circular fashion has collaborated with Zalando to adapt and scale the Circular Design Criteria, a documented guidance for circular product design in the industry. The framework consists of three main strategies and several sub-strategies that address specific design criteria for each fibre type. The collaboration led Zalando to integrate the criteria into their existing Sustainability Criteria to provide consistency of requirements for brands.



Founded: 2008 Employees: +14,000 Location: Berlin



circular.fashion

Founded: 2017 Employees: +20 Location: Berlin

circular.fashion is a sustainable innovation agency creating product and system innovation for a circular economy in fashion and textiles. The company develops services, softwares for circular design and closed-loop recycling to enable a transparent flow of information between material suppliers, fashion brands, consumers and recyclers.



# Collaboration timeline

circular.fashion is founded by Ina Budde and Mario Malzacher.

circular.fashion trains several cohorts at Zalando to equip the private label teams with the necessary knowledge and skills to embrace circular design principles.

Zalando launches a circular economy pilot empowered by circular.fashion. As part of the "redeZIGN for Circularity" project, each collection item is designed to meet the principles of the circular economy and the recycling criteria. In the product label, customers can find a QR code that takes them to the respective product site. There they can learn more about the production, the materials, as well as care instructions and how they can either recycle the product or trade it in.

Building on the success of the virtual training from 2018, Zalando and circular.fashion holds an in-person workshop in January 2023. This workshop brought together employees from different roles, including design, product development, and buying, creating a collaborative environment for exploring circular design further.

2023

2017

2018

2020

27



# Synergies and pitfalls

circular.fashion agrees that the collaboration with Zalando presents several synergies. By partnering with a leading fashion retailer, circular.fashion has the opportunity to scale its Circular Design Criteria to a wider audience, providing clear guidance to designers and brands on how to design for circularity. Additionally, the collaboration allows circular.fashion to validate its framework with a major player in the fashion industry, providing evidence of its effectiveness and potentially attracting more partnerships with other companies.

However, there are also potential pitfalls when working with a corporation, especially for a startup. The bureaucratic nature of a large company may slow down decision-making or implementation processes. To overcome these challenges, circular fashion recommends establishing clear communication channels and expectations from the beginning, including how decisions will be made and how conflicts will be resolved. Finally, startups should be prepared to adapt their approach to meet the needs of the corporate partner, while still staying true to their own mission and values.

"Collaboration is essential for driving circularity in retail. By working together, retailers can leverage each other's strengths and resources to overcome the challenges of implementing circular practices, and create a more sustainable future for the industry."

Irma Ahmeti Communication and circularity.ID® Operations

## Circular design criteria – apparel MULTIPLE STRATEGIES SUBSTRATEGIES CRITERIA Made from safe, recycled Safe inputs and renewable inputs Recycled or Renewable Inputs **Made to be** Designed for Durability used more Designed for Repairability Designed for Digital Product Passsport Made to be Designed for Recycling made again MINIMUM **Overall Product** OR BETTER **Assessment Result** LEVEL

A STORY IN 5 ACTS

# **Trend stats**

43% of German re-

spondents state:4 "I have extensive knowledge and I actively participate in circular actions." This is high compared to other countries such as France (30%) and Norway (31%)

Only 5 to 10% of urope's private sector has adapted circular business models.

I panies across at industries and his say that they analyzing or discussing circularity.

ON THE ONE SIDE, THESE ARE CHARLEST ARE CHAR

5 to 10%

Only 5 to 10% of

1.9%

The share of remanufacturing products compared to new manufacturing is just 1.9%.6

only 8.6% of raw material input.6

8.6%
Recycled material

+50%

XXXXXX XXXXX

15%

For sources go to page 47



### REGULATIONS & CIRCULARITY

# How regulations are paving the way for a circular economy

When the outcomes of innovation are not profit-driven, politics has to take the front seat. Legislations can be complex and slow - yet they are proving to be a key driver for circularity in the retail sector.

There have been many positive moves in regulations in recent months, and we investigate both the German and larger European regulatory advancements and their influence on the retail sector.

# **Europe**

# European Green Deal & Circular Economy Action Plan (CEAP) (2020)

The Green Deal is an umbrella strategy under which a number of transformative policies have been decided, such as the Circular Economy Action Plan (CEAP)<sup>13</sup>. The CEAP incorporates a strategy for sustainable and circular textiles, a Sustainable Products Initiative, including the proposal for the Ecodesign for Sustainable Products Regulation and

the revision of the Packaging and Packaging Waste Directive. These regulations will stimulate retailers to increasingly focus on circular products (packaging) which incorporate principles such as reduction, reuse or recycling of materials.<sup>14</sup>

# EU Taxonomy for Sustainable and Green Finance (2022)

This tax mechanism potentially develops a shared language which will help to shift investments in circular technologies and products. It will help companies within the retail sector to make the right investment choices, and incentivise entrepreneurs and established companies alike to incorporate circularity in their operations.<sup>15</sup>

# Right to Repair Proposal (2023)

The European Commission has laid a milestone for refurbishing and repair aiming to incentive retailers to focus on take-back and refurbishing services of used products.<sup>16</sup>

# **Green Claim Legislation (2023)**

With circularity and sustainability becoming a marketable product features, the EU has also agreed on a set of more stringent rules regarding the advertisement of such features. Adopted in March 2023, this regulation will help retailers and consumers alike to identify truly sustainable products and services and will prevent greenwashing through unbacked claims and labels.<sup>17</sup>

# EU Corporate Sustainability Reporting Directive (2023)

This new directive establishes harmonised reporting criteria to achieve plausibility and comparability of data. This is a clear motivation for the retail sector to walk the talk - and to ensure that environmental claims are backed up by actions.<sup>18</sup>



# **STARTUP SPOTLIGHT - CIRPLUS**

Circular plastics startup cirplus proves that through collaboration, regulation doesn't have to come top-down: They initiated a new industry standard for recycled plastics. Through a consortium with 15 other partners from the industry, they have established the standard DIN SPEC 91446 for recycled plastics besides PET in 2021. This standard is the first of its kind, and will help to strengthen the recyclates trade through harmonized classification criteria.<sup>24</sup>



# Germany

The circular economy has arrived on Germany's political agenda - again. In comparison to Germany's stellar reputation in the late ninties due to its progressive waste management policies, progress in the German circular economy has been rather slow in the past 20 years.

# Act on Closed Cycle Management and Waste (1994, 2012)

The act represents one of the first groundbreaking circularity regulations in Germany and covers the avoidance, disposal, reuse and recycling of waste.<sup>19</sup>

# ProgRess (2012, 2016, 2020)

This resource efficiency program aims to stimulate companies to use resources more efficiently, as well as influence consumers in their purchase decisions. The ultimate goal is to decouple economic growth from resource use as far as possible.<sup>20</sup>

# Electronics Act (2012, 2022)

Motivation for circularity is also created lower down the value chain. From 2022, even food retailers are obliged to take back old appliances if they offer electrical and electronic appliances for sale. Through this, retailers are extending their role as a point of sale, and take on another role as take-back centres, effectively fostering circularity.<sup>21</sup>

# Mandatory Offering of Reusable Packaging (2023)

This legislation only addresses retailers in the food and beverage sector but acts as a learning ground for the incorporation of the circular economy principle of reuse on a broad scale.<sup>22</sup>

Further, the German Institute for Standardization has recently published a standardization roadmap for the circular economy. Standards help to create transparency and precision for businesses through harmonization and unification of terminology. Focussing on the key sectors of digitalisation and business models, electronics, batteries, packaging, plastics, textiles and construction, the roadmap will give guidance and clarity to businesses and entrepreneurs operating in these sectors.<sup>23</sup>

**Key takeaways for future business opportunities** Startups and corporations that are pioneering sustainable and circular ways of doing business will future-proof their firm for years to come. The future will see policy focus more and more on the incorporation of circularity already at the design phase of a product or service. It is likely that more attention in policies will be laid on how private actors use raw materials – and whether they are of primary or secondary sources. Secondary raw materials will be favoured over primary raw materials, and more and more non-circular products will be banned. It is likely that primary raw materials will be heavily taxed, and secondary raw materials will be cheaper in the future.

Working on a thorough circular business model can also pay off more obviously, as investments in the circular economy will increase – a key trend that can already be observed today by stricter reporting.

And lastly, think collaborative, not competitive – allowing cross-industry knowledge transfer through initiatives between, for example, small startups and big corporations will foster a seamless transition from linear to circular.

"The essential link between the circular economy, legislation and standards is that a true circular economy cannot function without legislation and standards. For a successful circular economy, we need stronger regulations, clear norms and standards that help value chains to build reliable supply chains worldwide. This is why we initiated and funded DIN SPEC 91446. It aims to capture exactly which recyclate grades the market really needs and to actively drive the standardisation of plastic recyclates for higher value applications and digital transformation.

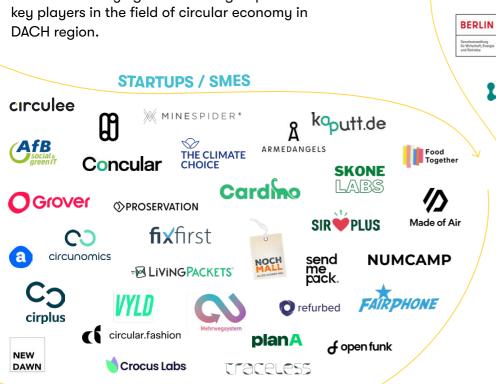
**Christian Schiller,** Co-Founder and CEO, Cirplus



# KEY ECOSYSTEM PLAYERS IN THE DACH REGION

# Stakeholder map

Over the last year, Impact Hub Berlin has mapped a landscape for the circular economy sector in Germany. The following stakeholder map represents a non-exhaustive overview identifying stakeholder groups with key players in the field of circular economy in DACH region.

















ACADEMIA

institute of Waste Management

**Wuppertal** 

**ETH** zürich

and Circular Economy







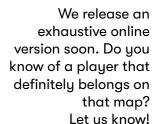


UNI

TECHNISCHE UNIVERSITÄT BERLIN











Approximately 60% of the materials and products used are repurposed, recycled or natural. These metal grids already served years before getting here.

Easy maintenance and repair by design, so heavy use does not lead to waste.

Many parts of our

floors have been

walked on before.

All cables and pipes were mounted to enable easy access and repair.

We repurposed wooden coffins from a famous art exhibition to serve as our meeting booths.

# **Circular Construction**

The CRCLR House is a manifestation and ongoing exploration of circular construction methods, such as reuse and flexibility of building components, recycling material, facilitating future usage changes and creating versatile structures. High-quality reused and new sustainable materials were used as they are while damaged or uneven things were treated and upcycled.

We reused the sliding doors from the

made from recycled plastic.

former Impact Hub Berlin office, which are

We got the lockers from a notorious Berlin nightclub.

We collected countless wood offcuts from local carpenters.

Preference for natural materials such as wood, clay, lime and hempcrete helped avoid limitations of oftentimes uncertified second-hand materials.

Mix of second-hand. vintage and rental furniture.

Product and material passports enable repurposing after disassembly.



CIRCULAR ECONOMY ECOSYSTEM

# **Enabling the** transition to a circular economy

Impact Hub Berlin's Circular Economy Ecosystem is our initiative to engage all key players that are active in Circular Economy in DACH region, and bring them on the road to collaboration. We organize a range of activities to inspire, enable and connect all stakeholders. Because we believe that impact does not happen in isolation; it needs collectve action.

Ecosystem and programme partners provide expertise and viable financial support.

# **COMMUNITY**

Diverse Impact Hub Berlin members from startups, think tanks, public- and corporate players to non-profits form the rich ecosystem community.

## **VENTURES**

Design the solutions the ecosustem needs. They learn, grow and thrive through the programmes and partnerships it offers.

# IMPACT HUB BERLIN

Impact Hub Berlin has been actively supporting the circular economy since 2018, when we launched the first edition of the Circular Together Incubator. Harsha Jagasia, Head of Circular Economy Ecosystem, and her team of 6 people ensure the success of the ecosystem activities.

## **PARTNERS**

SKONE

Cardino

# **EVENT Circular Economy** Hackathon

A three-day Hackathon for circular solutions with expert input from Impact Hub Berlin's team and partners.

# **EVENT**

PARTNER

Miele

# Stakeholder Workshops

We engage various stakeholders by bringing them together in practical workshops, such as Circular Appliances Workshops and industry roundtables.



X ESF



# **EVENT**

# Matchmaking & Dealflow

With 500 new CE startups added to our pipeline every year. we are a source of dealflow to our partners. We also organize cofounder, investor and corporate matchmaking events.







**IMPACT HUB BERLIN** 

# Get to know us

Impact Hub Berlin helps entrepreneurs and their partners to create products and services that make the world a better place, since 2014.

With a focus on strategic partnerships, community building and networking, Impact Hub Berlin connects the impact scene and provides tailored support, so impact ventures succeed in building socially, financially, and environmentally sustainable businesses.

In its incubator programmes, innovation ecosystems, community events, matchmaking-formats and within its circular coworking space, Impact Hub Berlin fosters innovation through radical collaboration between startups, corporates, and public organisations to build an impact economy in service of people and the planet.

25.000+
Members

111+
Locations

68+.
Countries

# The Impact Hub Network

# Locally rooted, globally connected

We are the world's largest network focused on building entrepreneurial communities for impact at scale — home to the innovators, the dreamers, and the entrepreneurs who are creating tangible solutions to the world's most pressing issues.

**30.000+**Supported Entrepreneurs

**47.000+** 

Jobs created



**IMAGINE 2033** 

# Your future shopping receipt

Imagine it's 2033: in the last ten years, many new sharing concepts, rental platforms and subscription models have emerged. You barely know anyone who owns their office furniture or even their own car. Most of your clothes are second hand, however if you do need something tailor made, you buy from brands that keep their materials in the loop. New regulations encourage investing in a long product lifetime rather than in resource-intensive products and services. All appliances in your apartment support single charging solutions, and repairing your electronic devices has never been that local and convenient.

So, what's on your shopping receipt?



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