Solving fashion's product returns

How to keep value in a closed-loop system

Credit:
Fashion East

The Circular Fashion Ecosystem Project: Phase 2

March 2023

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Executive summary

In 2020, the British Fashion Council (BFC) launched the Institute of Positive Fashion (IPF) to create a new industry standard for accountability by acting as a catalyst for change in the UK fashion industry. The Circular Fashion Ecosystem Project (CFE) is the inaugural project from the IPF. In 2021, it published the report 'The Circular Fashion Ecosystem: A Blueprint for the Future', documenting the clear environmental case for industry stakeholders to collaborate in multiple, interconnected areas of the fashion ecosystem and achieve greater circularity.

Findings from Phase 2 of the CFE project focuses on creating a roadmap for change by first discussing the issue of fashion returns, which is a very critical challenge impacting the sustainability of the industry.

"To arrive at a circular fashion economy, we need to challenge current systems and mitigate waste across all operations including product returns, which is hugely damaging to both business and the health of the planet. For our first Circular Fashion Ecosystem Phase 2 Project, we investigated the reasons behind returns and explored features and policies that would reduce their need and associated impact. The research led us to two target outcomes which when combined, create a target state where the fashion industry can be held accountable for our products and enable a more responsible future."

Caroline Rush CBE, Chief Executive, British Fashion Council

A sobering reality

The impact of the fashion and textiles industry on the environment has, by now, been well documented: it accounts for 5% of global emissions[a] and consumes 93 billion cubic metres of water annually[b], as well as other non-renewable resources. It is also a source of pollution, releasing 500,000 tonnes of microfibres into the ocean from washing processes each year[c]. However, the part which fashion returns play in the environmental footprint of the industry has not been fully understood until now.

E-commerce, for all the opportunities it brings to the fashion industry, has also resulted in a growing wave of fashion returns, which is an issue that affects the online channel far more than bricks-and-mortar retail. COVID-19 had a part to play in this, as consumers turned to online channels when stores were shut, and retailers extended their returns windows to stay compelling and competitive, e.g., John Lewis (35 days from store reopening), Marks & Spencer (90 days) and TK Maxx (30 days from store reopening)[d]. As such, clothes were no longer tried on in stores prior to purchase, and instead at home, automatically increasing the likelihood of returns. While there are many other reasons for consumers buying online and returning at a higher frequency than before, one thing is for certain: the economic and environmental costs of returns can no longer be ignored.

Although offering free returns has been a way for many retailers and brands to drive sales in the past, the cost of encouraging and processing returns is turning out to be very high. The UK fashion industry is estimated to lose at least £7 billion in 2022 due to returns[e]. However, what is most concerning about returns in the long run is their environmental impact. UK returns are estimated to generate about 750,000 tonnes of CO_2 emissions in 2022, out of which 350,000 tonnes come from reverse logistics processes[f]. There is also a significant amount of waste generated, as fashion returns that cannot be resold, reused or recycled may be sent to landfill or incinerated.

To ensure the sustainability and long-term value of the fashion industry, it is therefore critical that all fashion industry stakeholders come together to set new standards and processes for a less wasteful future. Industry stakeholders need to rethink pre-consumer and post-consumer engagement and address operational topics such as sizing issues, reverse logistics emissions, to accelerate the journey towards a more responsible industry. This could be done through the use of new technologies (e.g., electric vehicles to reduce transport emissions, process automation to make returns handling more efficient), and advanced analytics solutions to truly understand the causes for returns and how to reduce them in the most effective way possible. Retailers and brands can either choose to in-house the implementation of these technology solutions or to work with strategic partners and technology providers to address this agenda. Data solutions are also needed to create transparency across the industry, so that all stakeholders can have a clear view of their emissions at each step of the product journey, including the returns process.

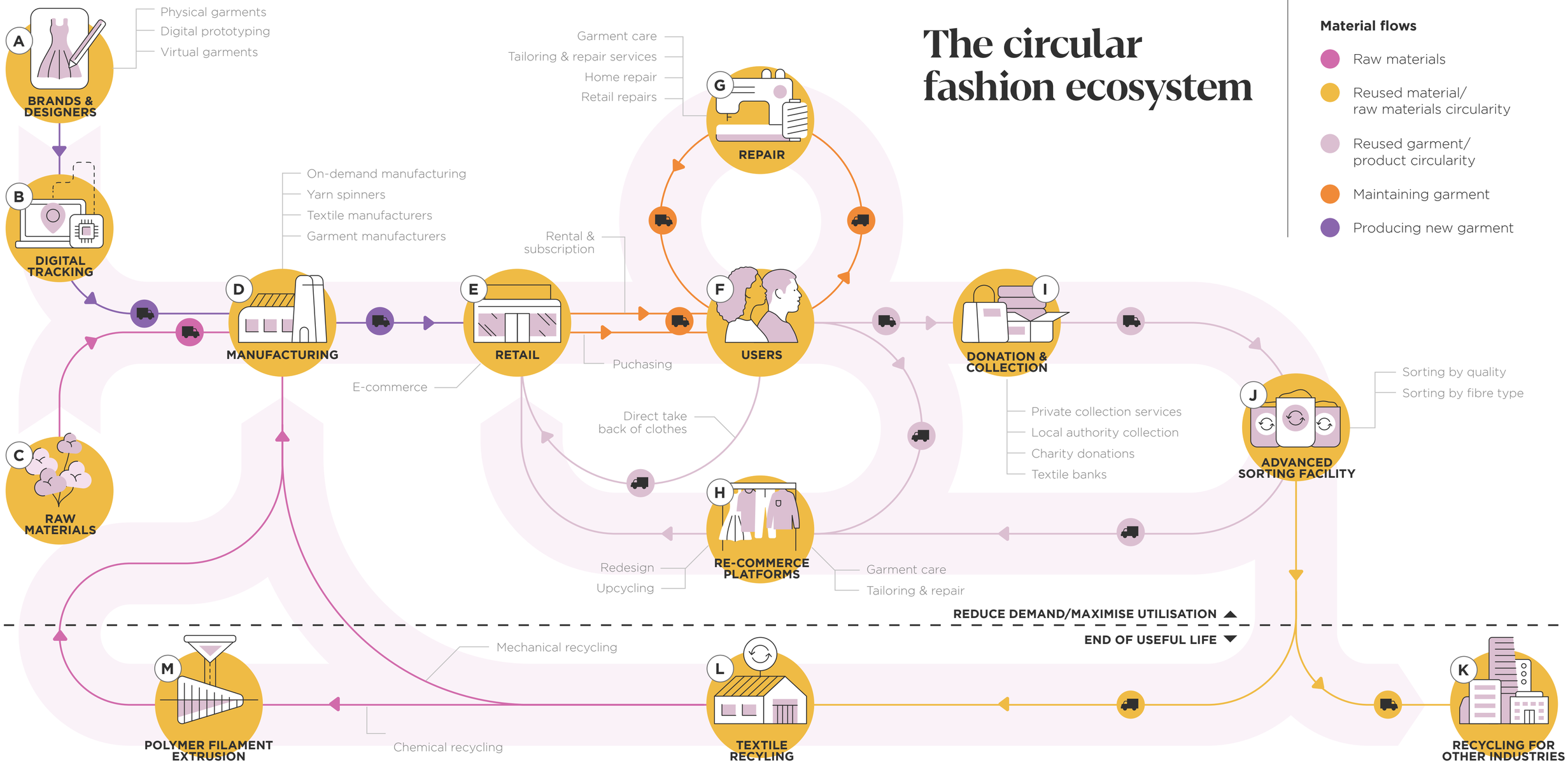

Figure 1: The circular fashion ecosystem overview [9]

Planning ahead, the UK fashion industry should work closely with the UK government, educators, and training providers to ensure the workforce is equipped with the right skills to support this transition. Skills taught should include the operational aspects of making the fashion ecosystem more circular, but also support the overarching technology backbone that will be needed to create transparency and insights. This could entail the upskilling of existing fashion employees, or the development of education or apprenticeship programmes to create a future supply of talent. Leveraging the UK government's pioneering reforms to boost skills and jobs, it could collaborate with educational institutes as part of the Lifetime Skills Guarantee programme to create technical fashion education and Local Skills Improvement Plans, based on what the industry needs, while providing individuals with the training they need to get a well-paid and secure job. Overall, as the fashion industry moves towards a more sustainable future, it is critical that the people who contribute heavily to its success do not fall behind.

This report presents the findings from one of the many Phase 2 projects in IPF's CFE Project, based on research conducted from April to November 2022. The report provides a framework of recommendations for fashion industry stakeholders to explore, both individually and collectively, to begin tackling the volume and environmental, societal, and economic impact of returns and achieve greater circularity.

What we need to do

Presented here are two target outcomes which when combined, create a future target state where the fashion industry will reach a state of minimised returns to support a more responsible and sustainable future for the fashion industry.

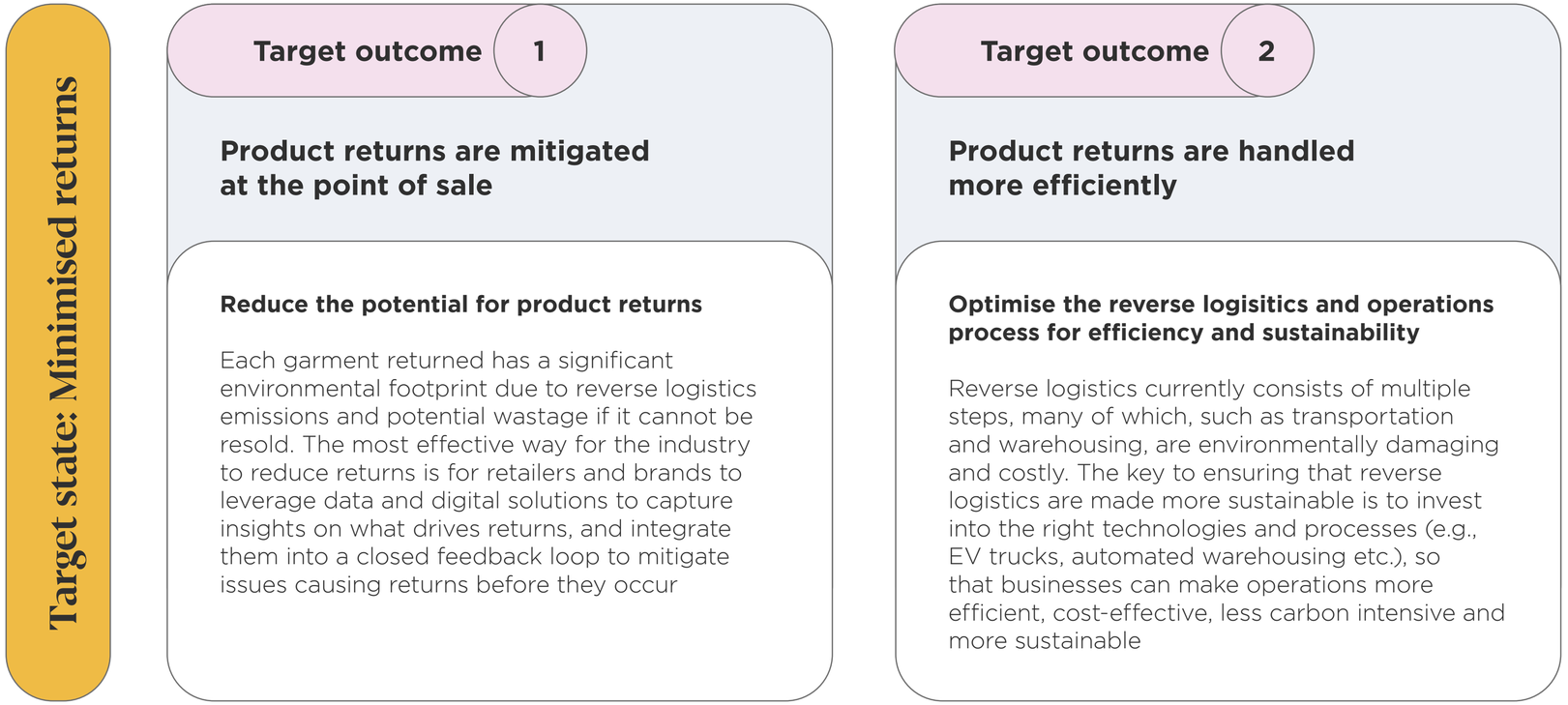

Figure 2: The target state of minimised returns and target outcomes

For target outcome 1, stakeholders need to reduce the number of returns occurred, which will require in-depth understanding of the drivers for returns. This is achievable with advanced analytics systems, which are already on the market. Retailers and brands need to advance and leverage their data systems and analytics tools in order to maximise the value of customer and returns data. Being able to use data to identify customers with high frequency of returns and address the fundamental issues driving returns will help returns rate reduction.

For target outcome 2, efficiency of operations will help to reduce the environmental impact of the processes and journey returns take, using technology and innovation. For example, miles travelled can be reduced by offering local drop-off points such as parcel lockers, or stations within local retailers and post offices, while transportation can be made greener with electric vehicles and smart routing technologies. Returns handling can also be made more efficient and accurate with the use of technology such as digital passports and process automation. Additionally, the afterlife of returns can be made less environmentally damaging with recycling of garments and textiles that cannot be resold.

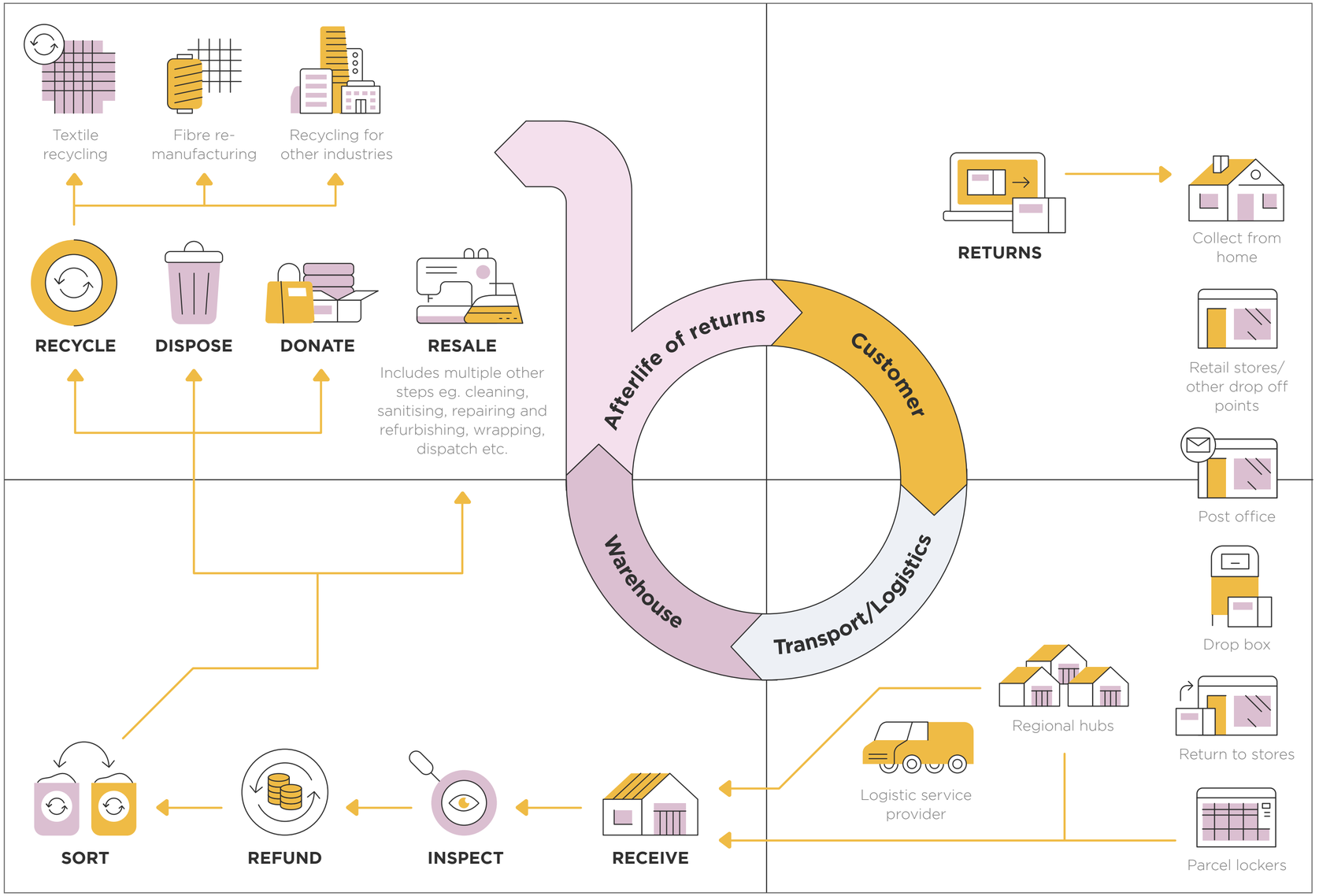

Figure 3: Flow of returns through the fashion ecosystem

Overall, this report identifies ten recommendations, each of which involves efforts across many different stages of the circular fashion ecosystem. Each recommendation has the potential to amplify the effects of others, and jointly, they contribute to the target outcomes. The ten recommendations can be referred to in Section 4: Towards a closed-loop system, and is summarised in the diagram below:

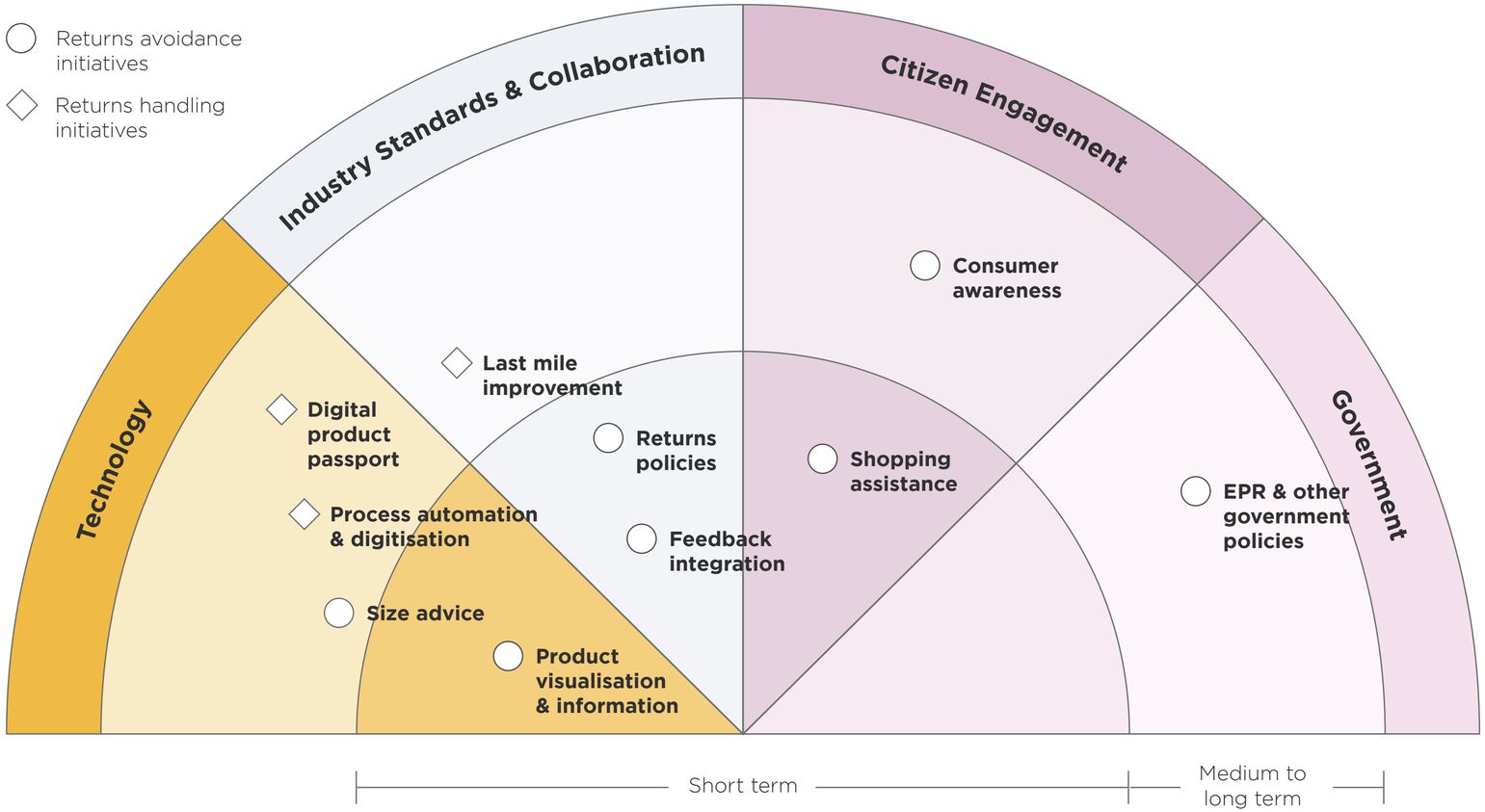

Figure 4: Solutions framework for minimising returns' impact


Credit: Sinéad O'Dwyer

Who needs to act

Successfully putting in place the recommendations will require collective effort from all UK fashion industry stakeholders. Each recommendation under Section 4 identifies the fashion industry stakeholders who will need to act in order to execute the recommendation successfully. Further information regarding stakeholder-specific recommendations can be found in the Appendix.

Overall, industry stakeholders need to come together to ensure the following:

- Brands and retailers should take accountability over the products they put into market and make the impact of fashion returns clear to consumers, while exploring circular and sharing business models and how they can make them more commercially viable.
- Consumers will need to be educated by retailers and brands about the environmental impact of their returns and empowered to act on this knowledge to make more conscious purchases, while also embracing more circular products and services.
- Retail technology and analytics solutions providers should work closely with retailers, brands, and other industry stakeholders to advance their data and analytics systems, and support retailers and brands to maximise the value of data to capture insights.
- The government needs to engage with industry to create the right regulatory frameworks and policies to incentivise the needed business behaviours and appropriate level of transparency.
- Greater collaboration is required from all parties to maximise data traceability and transparency throughout the ecosystem.
- Digital technologies such as automation and digital passports can help to accelerate the transition towards the target state through increased transparency and efficiency.

The actions that will enable the transition towards the target state, as laid out in this report, represent a significant opportunity for climate and circular economy action by the UK fashion industry. Achieving this target state requires the collaboration of all stakeholders and it needs to be done in an inclusive, responsible and future-looking way.

The role of the British Fashion Council and the Institute of Positive Fashion

The British Fashion Council (BFC) has a critical role in accelerating the transition to a Circular Fashion Economy (CFE) in the UK and beyond, acting as the convenor for change across actors in the ecosystem. It is uniquely placed to shape policy and industry regulations, particularly through dialogue with government and industry, as well as all other stakeholders in the fashion ecosystem.

The Institute of Positive Fashion (IPF) sits at the heart of the British Fashion Council. The IPF is helping the British fashion industry meet its goal to be more resilient and circular through global collaboration and local action. The three pillars of the IPF are Environment, People, and Craftmanship & Community. The CFE Project's objective is to create positive change across all pillars, offering a holistic blueprint for change for the British fashion industry.

The British fashion industry is a flagship for creativity, design, innovation, and craftsmanship. The IPF and BFC have a significant influencing power on the global stage and will use their unique position to foster research between industry and academia and become a centre of excellence for innovation, commercialisation, education, and cutting-edge research. Furthermore, the IPF will promote knowledge sharing, the early embedding of circular design amongst the BFC network, and upskilling emerging talents with skills and strategies for their businesses to be future-proofed, responsible, and resilient.

Specifically on the topic of fashion returns, the IPF will use the BFC's convening power to bring together actors across the ecosystem to address this issue. BFC has a key role to play in facilitating the achievement of the target state (minimised returns) and two target outcomes: (1) product returns are mitigated at the point of sale, and (2) product returns are handled more efficiently. This could be achieved through the mediums of task forces, working groups, and research publications.

Credit: Max Zara Sterck

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Section 1

Introduction

Credit: Bora Aksu

Importance of the report

Overall, the global fashion and textiles industry has a major impact on the environment, accounting for around 5% of global emissions[1]. It consumes 98 million tonnes of non-renewable resources and uses 93 billion cubic metres of water annually[2].

One driver of the significant environmental footprint of the fashion industry is emissions from the reverse logistics of returned clothing and handling, such as dry-cleaning and re-packaging. In addition to this, the whole process of restocking and reselling returned clothing is economically costly for retailers, and in some cases, clothes end up in landfill or are incinerated without being worn at all. Combined with the prevalent overproduction of clothes[3], and the fact that more than 70% of emissions are coming from upstream processes such as raw material extraction, yarn and fabric production, and textile manufacturing, it is clear that these excess items have a significant carbon footprint[4]. Reducing the rate of returns, therefore, plays a critical role in the net zero future of the UK fashion industry.

Circular and Shared Business Models (CSBMs), as highlighted in Phase 1, can help to create a closed-loop system by reducing the total number of fashion pieces produced. However, businesses operating these models face similar challenges regarding the environmental impact of reverse logistics, and need to find ways to be profitable and attractive for the mass market. Therefore, applying learnings from returns handling to CSBMs could inspire ways to make these new business models more attractive for fashion businesses.

It is important to remember that the fashion industry is a very significant part of the UK economy, contributing £29 billion to the UK gross domestic product (GDP) and employing 800,000 people[5]. Therefore, finding ways to reduce returns and increase the adoption of CSBMs is also about shaping the future of jobs: new measures and policies will require new skills, hence creating job opportunities in the UK. However, to benefit from this, the UK must be able to anticipate the required skillset and prepare its workforce accordingly. Close collaboration between the fashion industry and educational institutions will be needed to tap into the government's Lifetime Skills Guarantee programme and ensure that future technical fashion education is based on industry needs, while providing individuals with the training they need to get a well-paid and secure job[6].

Credit: Di Petsa

Key concepts

The key concepts as they are defined in this report are detailed below. An alphabetical list of these concepts and other subject specific terminology are included in the Glossary.

Credit: Ancuta Sarca

Bracketing

The practice of purchasing the same item in multiple sizes or colours, and sending back those that do not fit or suit buyer's preferences[7].

Carbon footprint

The total greenhouse gas (GHG) emissions caused by an individual, event, organisation, service, place or product, expressed as carbon dioxide equivalent (CO^2e)[8].

Circularity

The concept of goods, services and systems adhering to circular economy principles and therefore being suitable for consistent circulation within the economy[9].

Closed-loop system

A recycling system in which all the waste materials collected are converted into new materials that are of the same quality as the original input and can be reused in the same applications[10].

Fashion returns

A customer bringing purchased fashion items back to a retailer in exchange for refund, store credit, or similar item[11].

Last mile logistics

The last leg of a supply chain journey comprising the movement of goods from a transportation hub to a final destination[12].

Online fashion

A form of electronic commerce which allows consumers to directly buy fashion goods from a seller over the Internet using a web browser or a mobile app[13].

Product passport

A concept in which a dataset for a product would be maintained to track it throughout its entire life cycle. The dataset would include information concerning components, constituent materials and their sources, disassembly procedures, and recycling procedures[14].

Returns policy

The rules a retailer creates to manage how customers return and exchange unwanted merchandise they purchased. A returns policy tells customers what items can be returned and for what reasons, as well as the time frame over which returns are accepted[15].

Reverse logistics

The process of moving goods backwards from customers back to sellers and manufacturers, where the goods are then processed for resale, recycling, or disposal[16].

Sustainability

The ability to maintain or support a process continuously over time. In business and policy contexts, sustainability seeks to prevent the depletion of natural or physical resources, so that they will remain available for the long term. Sustainability is often broken down into economic, environmental, and social concepts[17].

Wardrobing

The practice of buying items with the intent of posting photos of themselves wearing it, with no intent of keeping the product and returning it after wear[18].

Project scope

The current volume of fashion returns presents significant challenges for the industry and the environment. Today, the industry lacks visibility and transparency over fashion returns, as data is often collected, and initiatives are run on an individual business or stakeholder level. The scope of the CFE Phase 2 report, therefore, seeks to promote industry-wide change in the UK by showing how various stakeholders in the fashion industry can work together and create synergies in solving the returns challenge.

To maintain the practicality and feasibility of our recommendations, this report has taken into consideration the views of various industry stakeholders, including brands, retailers, designers, digital innovators, institutions, industry bodies and third sector organisations, logistics providers, manufacturers, and waste re-processors. Information was collected through an extensive literature review, a consumer survey of 1,503 respondents, over 20 stakeholder interviews, 1 hackathon, 1 panel discussion, and 2 Advisory Board meetings. High-level business cases have also been modelled on selected recommendations to help drive change in businesses. All these inputs were then synthesised to create a view of the target state and outcomes, and a framework for recommendations for minimising fashion returns, as shown in the illustration.

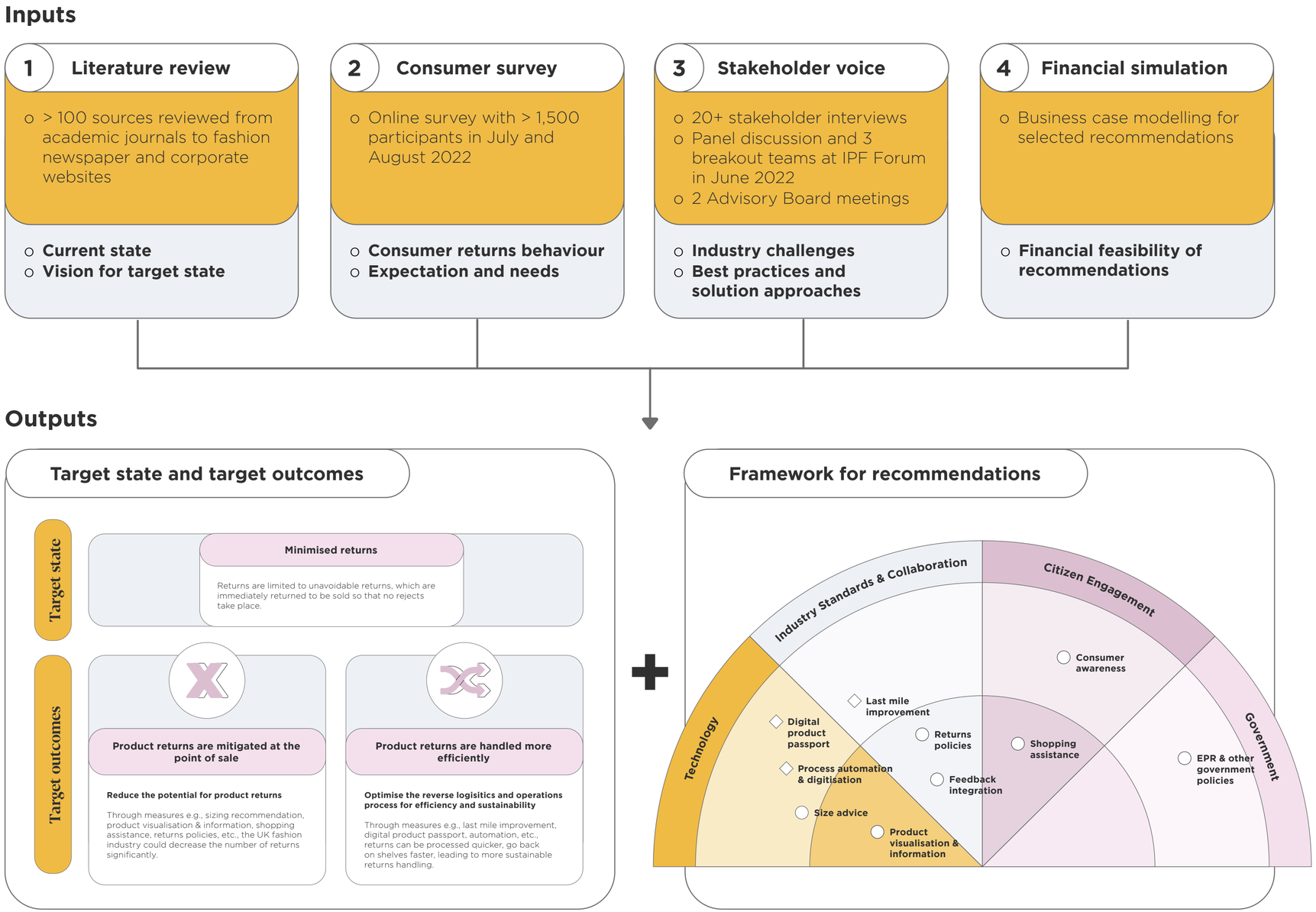


Figure 5: Report inputs and outputs

Further detail on the research methodology can be found in the Appendix, however, the main elements can be summarised as follows:

1. **Literature review:** The relevant academic literature and industry reports were obtained at the beginning of the project through key word searches. Around 100+ articles from 40+ different publications were reviewed to establish an understanding of the current state of the UK fashion returns challenge and hypothesise an initial vision for the target state. The findings around returns and reverse logistics also helped to inform the development of the consumer survey.

2. **Consumer survey:** An online survey was carried out to understand the returning behaviour and needs of UK fashion shoppers. 1,503 responses were obtained between July and August 2022. The survey respondent pool gives specific insights on 'high intensity online shoppers' i.e., shoppers who purchase more than 2 items per month online and returns behaviour. Insights from the consumer survey were then used to develop our recommendations.

3. **Stakeholder voice:** Qualitative stakeholder input was gathered from across the fashion industry through three avenues: interviews, events, and the IPF Advisory Board meetings. Over 20 interviews were conducted between June and November 2022, creating discussion on the current returns challenge, their environmental and social impacts, and any potential solutions.

   In addition, 30 industry stakeholders were invited to the IPF Hackathon on 30 June 2022 to generate ideas on how to solve the returns challenge. After a panel discussion, participants from brands, retailers, digital innovators and logistics providers were put into breakout groups to discuss the following: "Given that wrong size and fit is often cited as the main reason for returns, what does an industry-wide action or collaboration to reduce returns look like, that would also create a good customer experience?". These stakeholder interactions were designed to validate hypotheses on the target state vision, potential solutions, and industry collaboration opportunities.

4. **Advisory Board:** Two Advisory Board meetings were held with industry stakeholders to assess the feasibility of the proposed recommendations.

5. **Financial simulation:** High-level business cases were created to evaluate the benefits of selected recommended measures for brands and retailers. These exemplary calculations support the need for change and illustrate the financial upsides for adoption of these solutions.

Issues that were outside the scope of this report but will require attention and further research in future reports include: (1) reuse and recycling processes when returned items cannot be resold, (2) quantification of the CO_2 footprint of various steps of the reverse logistics process, and (3) product categories outside of clothing and shoes.

Credit: Phoebe English

Section 2

The current state of the UK fashion returns problem

Credit: S.S.Daley

The need for change

The returns rate in the fashion market has grown rapidly, driven by the shift towards online shopping. These returns have a significant negative impact in multiple aspects, as shown below:

Return by channels

30% of items bought online are returned in comparison to **10%** in bricks-and-mortar

2024 is the year that more clothes will be sold in e-commerce than bricks-and-mortar

Financial impact

£7bn yearly cost for business caused by returns processes

50% of returns get discounted with an average of **40%** reduction from the original sales price

Environmental impact

750,000tn of CO_2 emissions due to returns

19.5tn CO_2 / tonne of clothing for the whole lifetime

350,000tn of CO_2 emissions due to reverse transport

3% of all returns are not resold

50% of returned items that cannot be resold are sent to landfill

Figure 6: Fashion returns' impact

The fashion industry was a key contributor to the overall number of online returns in the UK in 2022, with clothing, shoes, followed by bags and accessories being the top 3 categories for online returns[19]. The online channel sees a significantly higher rate of returns compared to bricks-and-mortar, with return rates at about 30% and 10% in 2020 respectively[20,21]. In 2020, the UK government took national measures to reduce rising cases of COVID-19 by closing non-essential bricks-and-mortar stores, resulting in the acceleration of online shopping. Coupled with the expectation that the share of online fashion could overtake bricks-and-mortar sales by 2024[22], high return rates therefore pose a serious challenge that is only growing in scale.

Although offering free returns has been a way for retailers and brands to drive sales, dealing with returns is ultimately a costly business, and is estimated to cost the UK fashion industry at least £7 billion in 2022[23]. While some companies may be more efficient at reducing the cost of returns processing, it costs a retailer approximately 55% to 75% of a product's retail price to process each online return[24]. This is due to the number of labour-intensive steps required to process returns, such as customer care, transportation, warehouse processing, cleaning and sanitisation, markdowns and liquidation, and disposal costs. Typically, the greatest loss of value occurs due to markdowns: around 50% of all returns get discounted at about 40% of the original retail price[25]. Hence, retailers may even lose money by offering returns on products that already deliver low margin, or it may be more profitable to destroy low-margin products rather than process them. Besides the financial aspect, returning items also takes up consumers' time, as each trip to return a purchase takes an average of 32 minutes[26], representing a considerable part of a consumer's lifetime, particularly for high intensity shoppers.

However, what is most concerning about returns, especially in the longer-term, is its significant environmental impact. About 750,000 tonnes of CO_2 was emitted by returns handling in the UK in 2022, including transport, warehousing, repackaging, and disposal. Transportation was the biggest contributor, as it accounted for almost 50% of total CO_2 emissions[27]. This level of emissions is also on the rise due to the race for even shorter online delivery times (e.g., next day or same day delivery), as next day or same day delivery implies smaller parcel sizes and more frequent delivery journeys[28]. At worst, the emissions per trip for a one delivery trip is 35 times greater than that of a trip for a fully loaded van[29]. Other drivers of emissions and waste include the energy required to wash and iron returned items in the warehouse, and excessive returns packaging i.e., single-use plastic packaging and cardboard made available for consumers to pack and return items[30].

While most fashion items can be resold after complex processing, approximately 3% of returns will remain unsold. It is estimated that more than 50% of those returns that cannot be resold are sent to landfill and another 25% are incinerated, with only the remaining 25% being recycled[31]. This level of waste implies that the industry is producing an unnecessarily high volume of clothing items, which coupled with an average CO_2 footprint of 19.5 tn per tonne of clothing for its whole lifetime, suggests a significant amount of emissions and environmental damage[32].

Credit: Klamby

Consumers' returns behaviour in the UK fashion ecosystem

Devising effective solutions to help minimise fashion returns necessitates a comprehensive analysis of consumer behaviour, an analysis that should be based on both literature reviews and real consumer input. As such, a consumer survey was conducted by the Institute of Positive Fashion, Roland Berger, and Dynata to better understand UK consumers' online fashion purchasing and returns behaviour. In the survey, respondents were asked a series of questions, ranging from the types of items recently returned and the principal reasons driving those returns, to the potential measures that would most likely reduce their returns behaviour.

Survey overview and segmentations

The online survey was carried out with a sample of 1,503 UK respondents across genders and age bands of 14 to 75+. In order to understand current online shopper and returner behaviour, only respondents who had purchased at least one fashion item online in the last three months were considered eligible for online shopping behaviour analyses. Of the 1,503 respondents, 1,261 respondents (84%) met this criterion and were eligible for further analysis.

For the purposes of this report, eligible respondents were segmented by age group, classified as Generation Z (born in 1997-2012, aged 10-25 years old), Millennials (born in 1981-1996, aged 26-41 years old), or Over 41s[33]. They were also segmented by gender, with most respondents identifying themselves as female or male, and 11 as other (non-binary, transgender, prefer not to say, other).

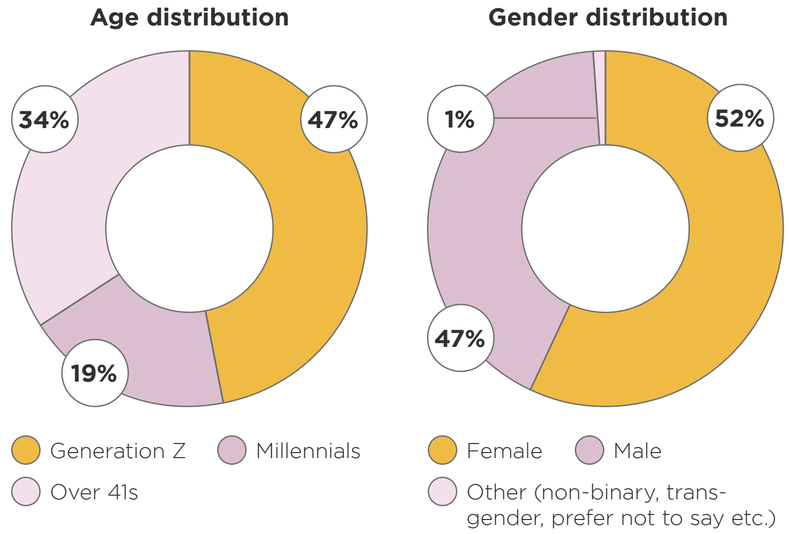


Figure 7: Respondent demographics (% of eligible respondents)

In addition to demographic segmentation, respondents were also segmented by online shopping intensity and propensity to return items, to isolate high intensity returners and identify the measures best suited to address their environmentally damaging practices.

High intensity online shoppers were defined as people who purchased above the average amounts of fashion items online, which is approximately 2 or more items per month on average. High intensity returners were defined as people who had higher than average return rate (~30%)[34].

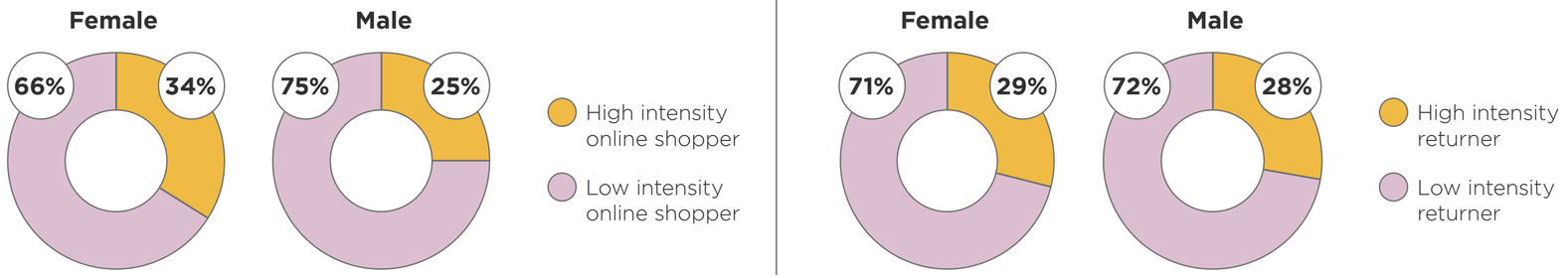


Figure 8: Distribution of high / low intensity shoppers and returners by gender group (% of eligible respondents)

The survey showed that female shoppers tend to have higher online shopping intensity than male, with 34% of females being high intensity shoppers as opposed to 25% of males. For returns behaviour, no significant difference was seen between gender groups.

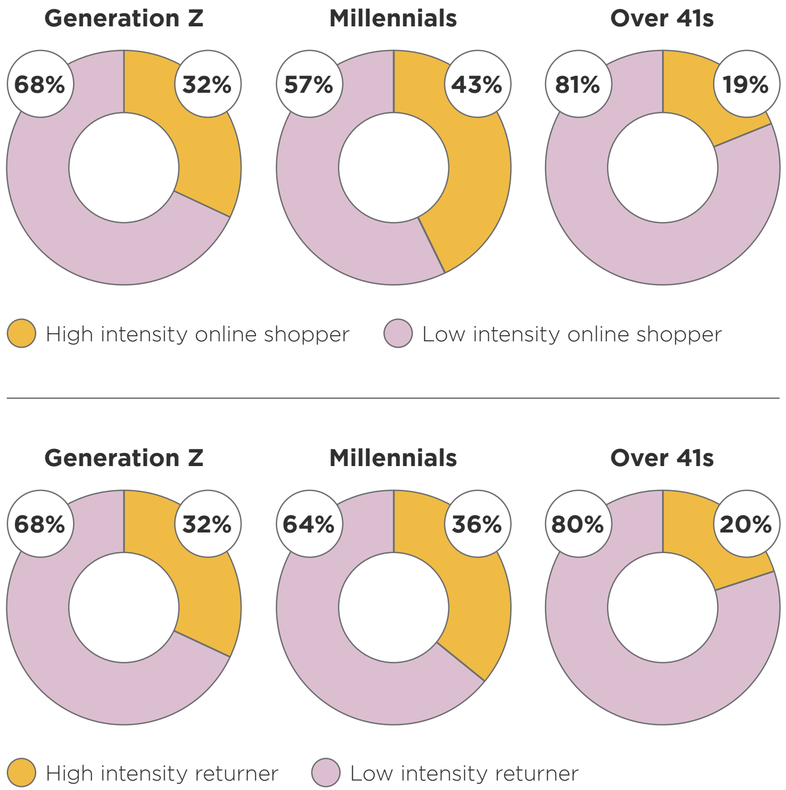


Figure 9: Distribution of high / low intensity shoppers and returners by age group (% of eligible respondents)

Generation Z (born in 1997-2012, aged 10-25 years old)

Generation Z (born in 1997-2012, aged 10-25 years old) 32% of Generation Z respondents were classified as high intensity online shoppers. The same distribution proportion is seen for returns, with 32% being high intensity returners.

Millennials (born in 1981-1996, aged 26-41 years old)

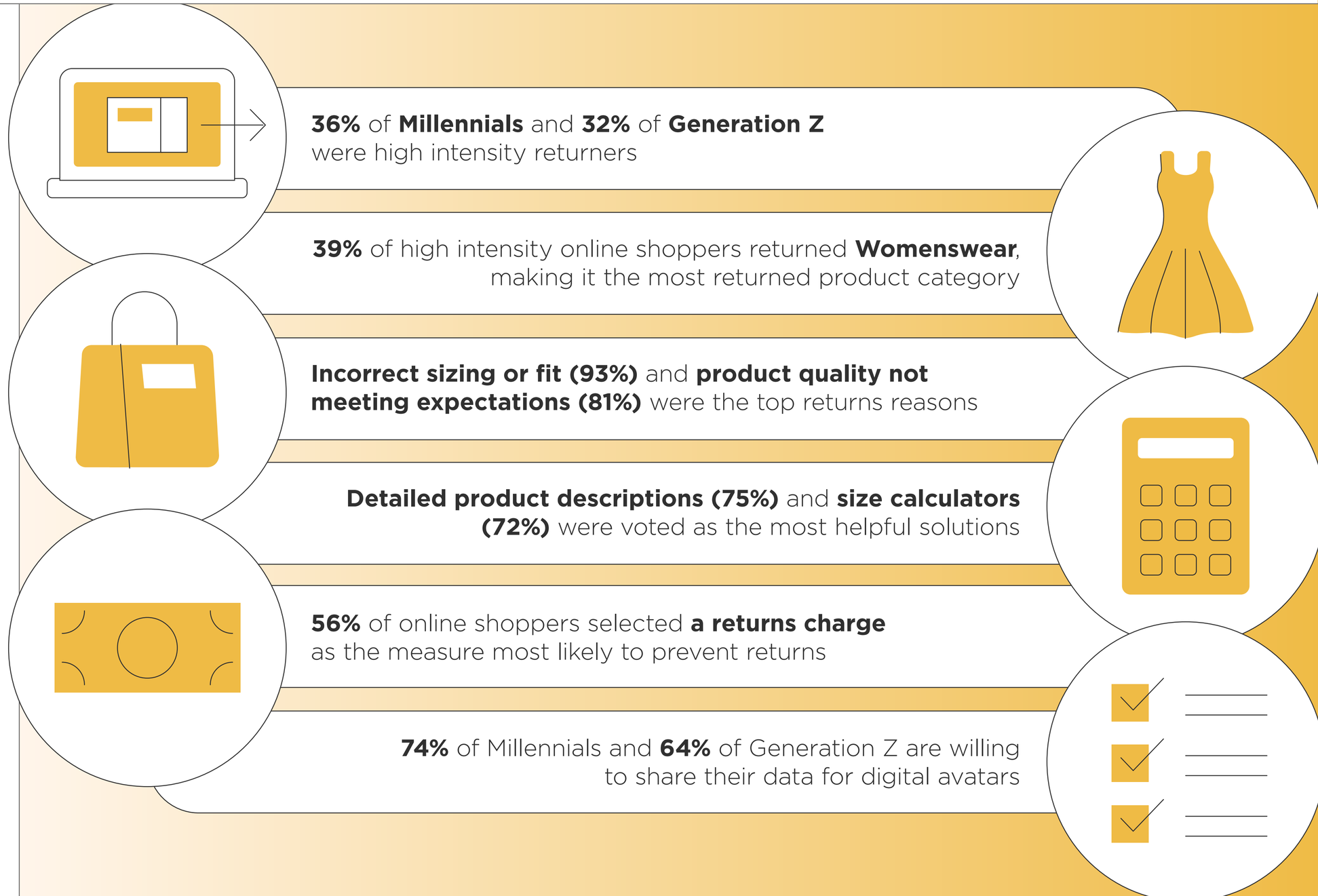
Out of all age groups, the Millennials had the largest share of high intensity online shoppers (43%), as well as high intensity returners (36%).

Over 41s

This group displayed the lowest share of high intensity online shoppers (19%) and returners (20%), with 80% being low intensity returners, suggesting that the older generation is more likely to keep online purchases than younger generations.

Consumer survey headline findings

The survey responses were used to generate insights into online purchasing and returns behaviour, the key reasons driving those returns, and the most effective measures to help minimise returns.



Note: for questions relating to "top returns reasons", "most helpful solutions" and "most likely measures", multiple answers are possible, % gives the share of eligible respondents that selected the answer

Figure 10: Consumer survey key findings

Credit: Bora Aksu

- **Millennials and Generation Z tend to have a higher propensity for online returns**
  Millennials and Generation Z showed a higher share of high intensity returners (36% and 32% respectively), versus 20% for Over 41s.

- **Womenswear was the most frequently returned online product category**
  Women's clothing was the most frequently returned item, with 39% of high intensity online shoppers reporting returning the product category.

- **Incorrect sizing or fit, product quality not meeting expectations, bracketing, and misleading online product display were the top reasons given for returns**
  Wrong size or fit was the most voted returns reason by an overwhelming majority (93%) of respondents who had returned online purchases. This was followed by product quality not meeting expectations (81%), bracketing, and incorrect online product display or description.

- **Detailed product descriptions, size calculators, and 360 degree product views were considered as the most helpful features to avoid returns**
  Detailed product description was the most voted solution for helping avoid returns by 75% of online shoppers. This was closely followed by size calculators based on body measurements (72%) and 360 degree product views (71%).

- **Stricter returns policy or levy appears to be a greater incentive to change returns behaviour than environmental messaging**
  Measures geared towards introducing monetary costs or gains were deemed more effective ways of changing returns behaviours than implementing environmental or time-cost messaging, with returns charges specified as a deterrent by 56% of online shoppers.

- **Most respondents would be willing to share their data for a digital avatar to try on products virtually**
  74% of Millennials and 64% of Generation Z expressed a greater willingness to share information such as body measurements with brands and retailers to build a digital avatar for virtual fitting. This was more so than Over 41s, of which only 56% expressed that they were willing to share data.

Deeper dive on survey findings

To better understand the underlying returns behaviours, those who had shopped online in the last three months were asked a range of deep dive questions, including reasons behind returns, which solutions would be most likely to result in a behaviour change, and their thoughts on a potential returns levy.

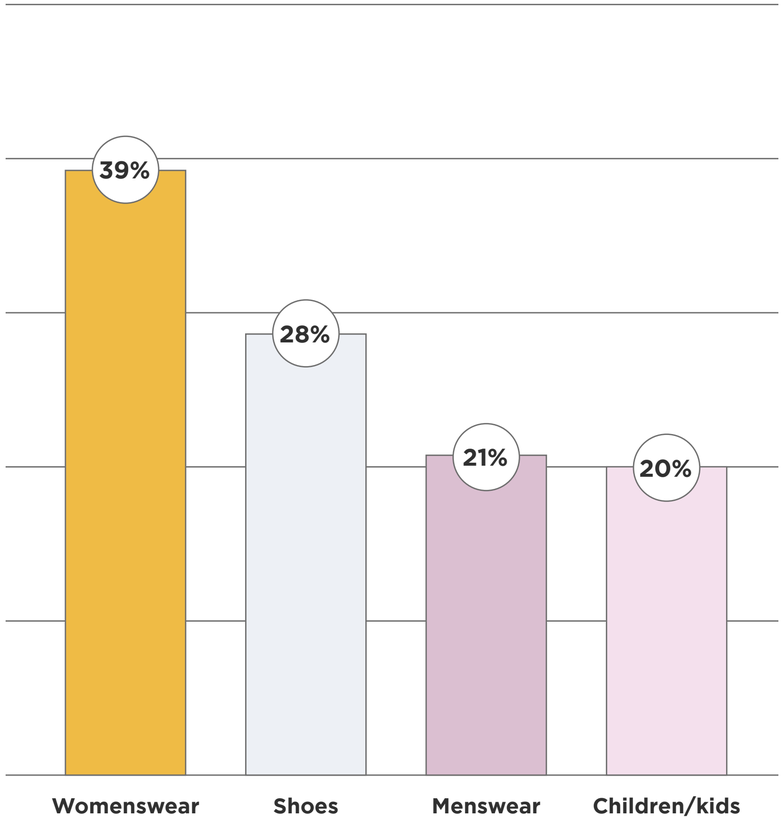
1. Generation Z and Millennials have higher propensity to return online purchases

The consumer survey results echo with findings from existing studies, that the likelihood of returning fashion items decreases with age, with younger generations exhibiting a greater propensity for returning overall[35]. Survey results showed that 43% of Generation Z and 53% of Millennial online shoppers had returned at least one online purchase in the last three months, a big difference when compared to only 27% for Over 41s.

The share of high intensity returners within each age groups is also higher for Generation Z (32%) and Millennials (36%), as compared to Over 41s (20%). As for gender groups, no significant return propensity difference was observed across gender.

2. The most frequently returned product category was womenswear

What kind of product did you return?



Note: numbers do not add up to 100% as multiple answers are possible, % gives the share of respondents that selected the answer

Figure 11: Types of products returned by high intensity online shoppers (% of high intensity online shoppers)

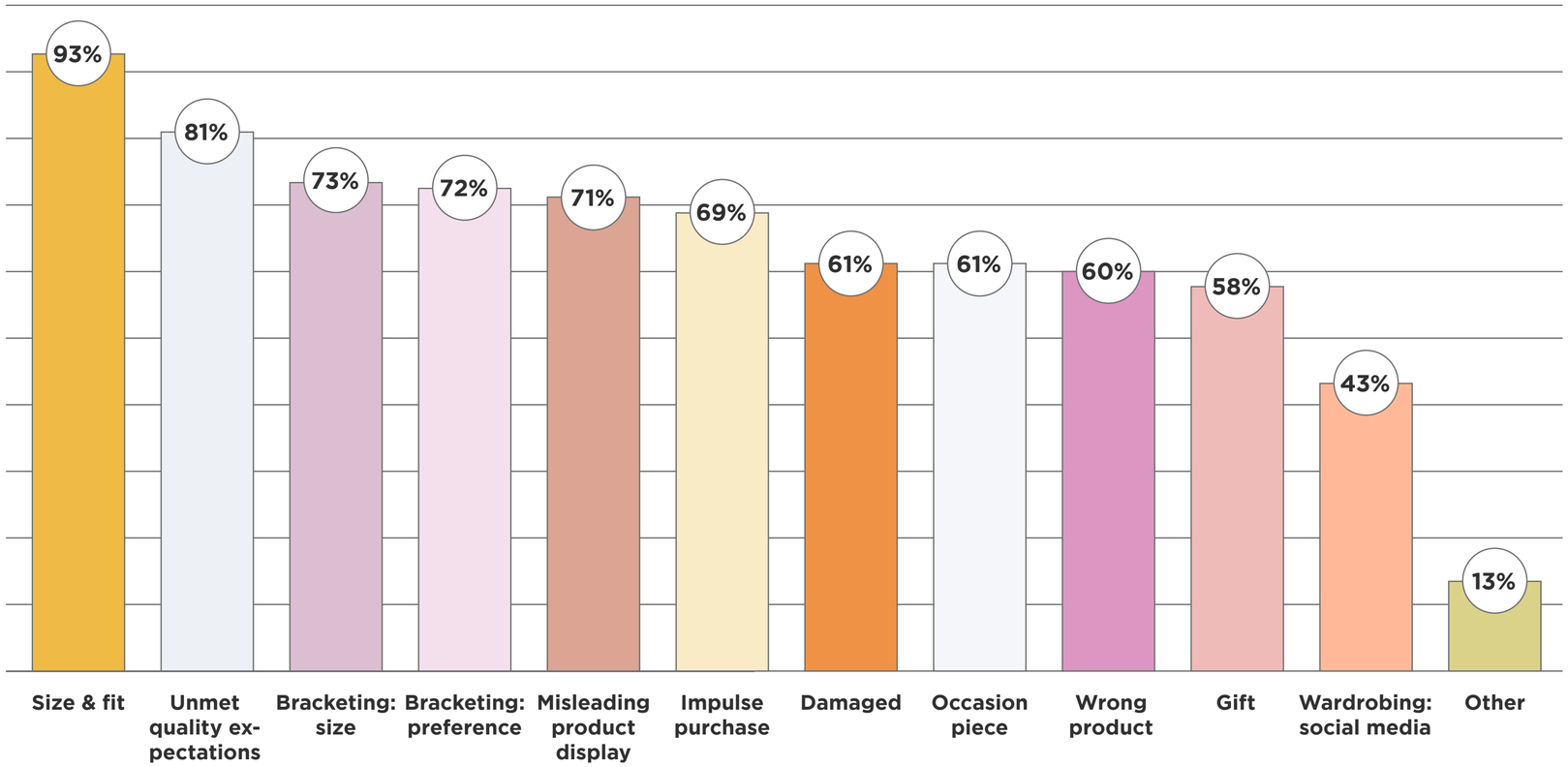
When asked about the types of online purchases returned within the last three months, womenswear was the most selected category, voted by 19% of online shoppers. This was followed by shoes (16%) and menswear (13%). Womenswear was also the most returned item by both high intensity online shoppers (39%) and high intensity returners (49%), again followed by shoes, cited by 28% of online shoppers and 43% of returners respectively. Existing study also stated that, within womenswear, the main products returned are dresses, which is largely due to the fact that dress purchases are put under greater scrutiny and generally need to fulfil stricter requirements, including length, fit to shape, and suitability for the intended occasion[36].

The trend of shoes comprising the second most frequently returned online purchase coincides with Statista's 2022 study, which showed that shoes were the second most returned online purchase in the UK[37]. Out of respondents who had returned online purchases in the last three months, a higher proportion of males (19%) reported returning shoes than females (13%).

The introduction of solutions to better understand fit for online purchases, whether for clothing or shoes, would therefore be likely to help reduce return rates and in turn, returns emissions.

3. Incorrect sizing or fit, followed by unmet quality expectations, bracketing behaviour, and misleading product display, comprised the top reasons behind fashion returns

Reasons for returns in the last three months



Note: numbers do not add up to 100% as multiple answers are possible, % gives the share of returners (who had returned at least 1 online purchased item) that selected that answer

Figure 12: Reasons for returns (% of online returners)

Definitions

Bracketing

The practice of purchasing the same item in multiple sizes or colours, and sending back those that do not fit or suit buyer's preferences[38].

Wardrobing

The practice of buying items with the intent of posting photos of themselves wearing it, with no intent of keeping the product and returning it after wear[39].

Wrong size and/or fit was the most common return reason across all segments, voted by 93% of respondents who had returned online purchases. Difficulties associated with getting the right size for online purchases have also given rise to the phenomenon of "bracketing" (73%), which refers to the practice of purchasing the same item in multiple sizes or colours, and sending back those that do not fit or suit buyers' preferences.

The COVID-19 pandemic aggravated and accelerated the buy-to-try trend, as government policies preventing shoppers from trying on items in-store caused them to increasingly resort to utilising their own homes as personal fitting rooms, increasing returns[40]. The survey results demonstrate that this tendency has persisted post-pandemic as online baskets continue to be filled with identical items in multiple sizes. Measures that rectify sizing issues will be likely to help reduce returns. Other research notes that 84% of consumers stated that they are less likely to return an item if they have confidence the item will fit[41].

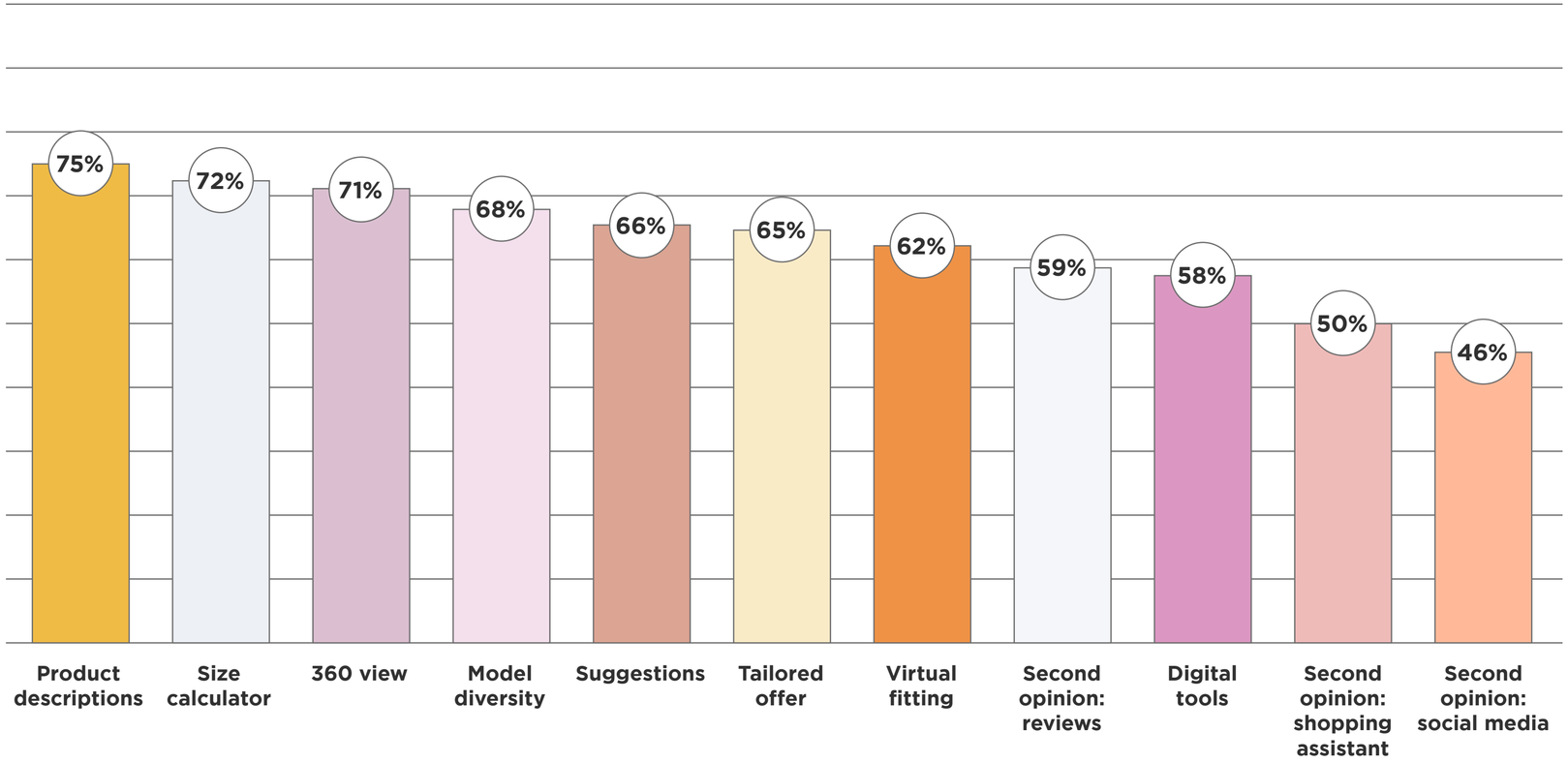
Following sizing and fit, product not meeting quality expectations and incorrect or misleading product displays or descriptions were cited as top reasons for returns, by 81% and 71% of online shoppers who had returned items respectively. This finding coincides with other research that items are returned because of a disconnect between online and offline appearance make up a considerable share of fashion returns[42].

A further reason for returns was "wardrobing", often associated with social media, where shoppers buy items only for posting photos of themselves wearing it, and then return the purchases after photos are taken. Shoppers exhibiting such tendencies may not be aware of the negative environmental and financial implications of their actions, and that returned items are often not sold on. A greater proportion of male (56%) than female online returners (32%) cited buying an item to take a picture for social media and then sending it back. Many high intensity returners admitted to wardrobing (48%), which was also more prevalent amongst Millennials (59%) and Generation Z (45%), compared to Over 41s (20%).

Impulse purchase was also mentioned as a common reason for returns, by 69% of online shoppers who had returned items, with the trend being higher for males (73%) than females (66%), and Millennials (77%) and Generation Z (71%) versus Over 41s (55%). Social media clearly acts as a catalyst for impulse purchases. Research shows that one sixth of Britons admit to having made impulsive purchases as a result of social media platforms like Instagram, and 12% stated that they disliked recycling outfits because of pressure from social media, boosting the demand for new clothes and the return rates for unwanted items[43]. This trend is exacerbated by the rise of buy-now-pay-later schemes: staggering the cost of purchases and reducing the upfront cost inevitably give consumers the flexibility to order items in multiple colours and sizes and return the ones they do not like[44].

4. Detailed product descriptions, followed by size calculators, and 360° product views, were voted by online shoppers as the most helpful features to avoid returns

Features that would be helpful for selecting a product online that doesn't need to be returned



Note: numbers do not add up to 100% as multiple answers are possible, % gives the share of online shoppers that selected the answer

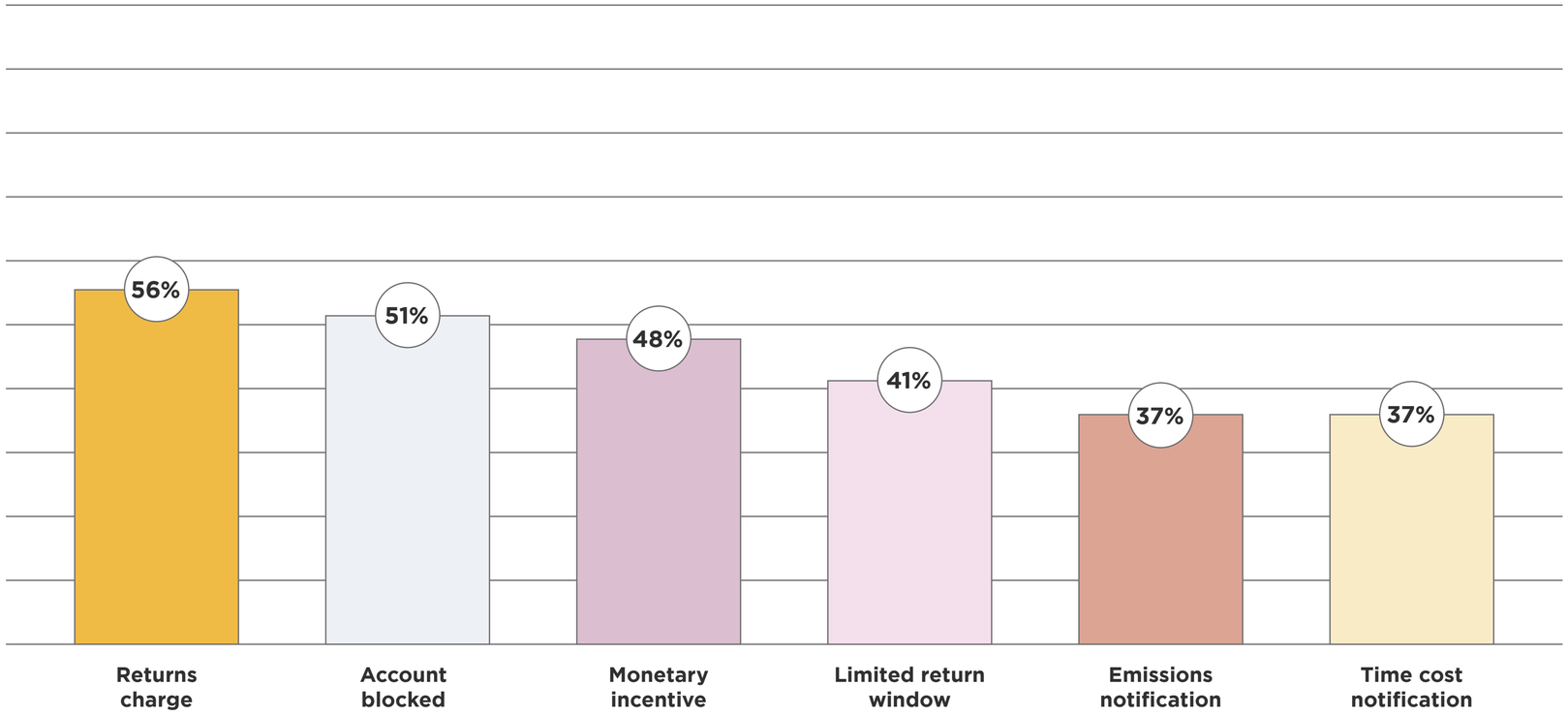
Figure 13: Features that would be helpful for online shoppers to select a product that doesn't need to be returned (% of online shoppers)

More detailed product descriptions was cited as the most helpful feature to prevent return of online purchase, as voted by 75% of online shoppers surveyed. Second to that, 72% of online shoppers voted size calculators based on body measurements as another feature highly likely to help them prevent online returns. This was followed by 360° product views in different sceneries and presentations via video, mentioned by 71% of online shoppers.

For almost all potential features, the likelihood of returns minimisation was comparable across gender and age groups. The only notable difference was that older respondents showed greater scepticism over the ability of digital solutions or social media to help reduce online returns. For Over 41s, only 52% indicated that virtual fittings would be helpful in selecting products online that do not need to be returned, followed by 46% for digital tools that match items with existing wardrobe, and 33% for social media as a source of second opinions. This is in contrast to Generation Z and Millennial respondents, where respectively 64% and 73% indicated that virtual fittings would be helpful, followed by 63% and 67% for digital tools, and 53% and 50% for social media. Lastly, there was a noticeably high desire for greater model diversity, to reflect a wider array of shapes, sizes, ages and ethnicities, especially amongst Millennials (76%).

5. Implementing a stricter returns policy or levy as opposed to environmental messaging proved a greater incentive for shoppers to change their returns behaviour

Measures that would stop respondents from returning online purchases



Note: numbers do not add up to 100% as multiple answers are possible, % gives the share of online shoppers that selected the answer

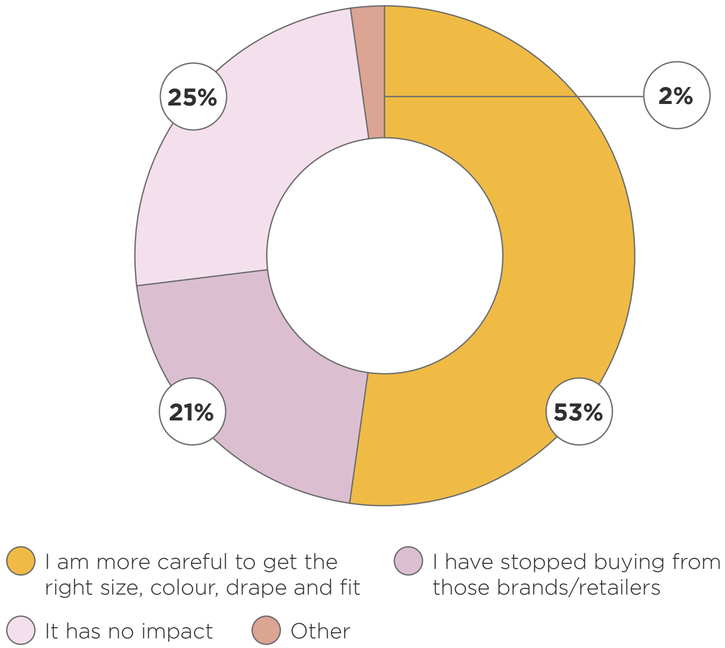
Figure 14: Measures that would stop respondents from returning online purchases (% of online shoppers)

The measure deemed most likely to stop consumers from returning online purchases was the introduction of a returns charge, cited by 56% of online shoppers. Millennials (64%) and Generation Z (58%) were more deterred by a potential returns fee (e.g., £2 per item) than Over 41s (49%). The second measure most likely to thwart returns would be the prospect of an account ban after a customer returns more than half of the items purchased, cited by 51% of online shoppers. It was shown to especially discourage high intensity online returners, with 58% stating that the prospect of an account block would probably stop them from returning, compared to 49% for low intensity returners. Monetary incentives to keep the product was cited as likely to prevent returns by 48% of online shoppers. This measure, which would involve brands or retailers offering rewards or discounts to customers with low returns rates, was particularly attractive to Millennials, 60% of whom selected it as an effective avoidance measure.

Whilst the increasing availability of information online is undoubtedly making consumers more aware of the environmental costs of fashion returns, the survey responses show that there is still work to be done. Only 37% of online shoppers cited that the introduction of an emissions notification, e.g., "1 return causes >800 g CO_2 emissions" equivalent to a 4 mile drive in an average car, would prevent them from returning, compared to 56% citing a returns charge as a deterrent. Despite this, an external study showed that lack of awareness is a key issue, as although 43% of UK consumers would choose a greener or more sustainable returns option even if it resulted in a slower refund, 19% of consumers did not know which carrier or returns options were the greenest[45]. This lack of awareness, coupled with the relatively low share of survey respondents who would be deterred by a potential emissions notification, demonstrates there is a real need for retailers and brands to better promote both the environmental impact of returns and of various return options.

6. Returns charges have the potential to significantly influence returns behaviour, however at a high financial cost to retailers

Do returns charges levied by retailers/brands have an impact on your online purchasing behaviour?



Note: numbers might not add up to 100% due to rounding

Figure 15: Impact of returns charges on online shoppers (% of online shoppers)

When questioned whether charges levied by retailers and brands on returns would impact their online purchasing behaviour, 53% of online shoppers stated that it would make them more careful to get the right size, colour, drape and fit, and 21% indicated that it would make them stop buying from those brands or retailers entirely, only 25% indicated it would have no impact. The relatively high proportion of respondents who would stop buying if charges were introduced indicates considerable consumer sensitivity around this point. For high intensity returners, 64% stated that they would be more careful to get the right size, colour, drape and fit, and only 16% stated that they would stop purchasing from those brands entirely, if there was a charge for returns.

Research shows that women have higher expectations when it comes to returns policies – 47% decided not to purchase an item because they didn't like the returns policy, compared to 37% of men[46]. This correlates with the survey results, as a higher proportion of male respondents (30%) reported a returns fee having no impact on their online purchasing behaviour, compared to 20% for female respondents.

Credit: Ray Chu

7. Most online shoppers would be willing to share their digital size and fit details with brands and retail platforms for a digital avatar

Would you share your existing digital size and fit ('Avatar') details with brands and retail platforms?

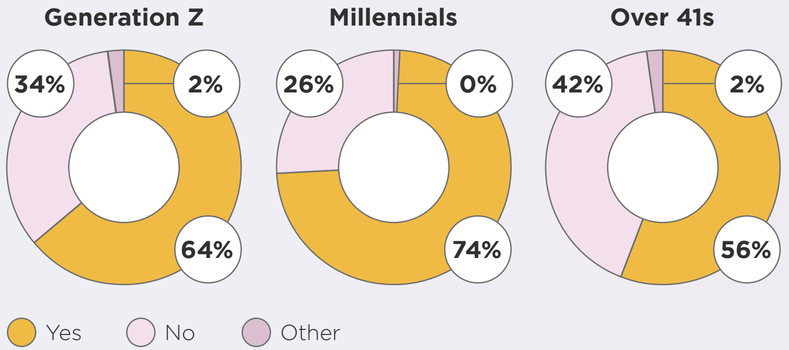


Figure 16: Willingness to share digital size data by age group (% of online shoppers)

Would you share your existing digital size and fit ('Avatar') details with brands and retail platforms?

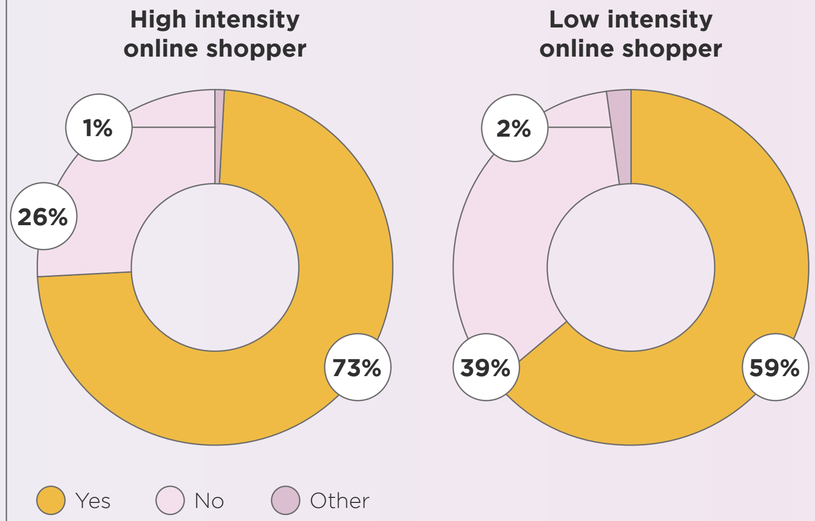


Figure 17: Willingness to share digital size data by online shopping intensity group (% of online shoppers)

To conclude the consumer survey, online shoppers were asked whether they would share their size and fit details with retailers and brands for digital avatars, which are digital models built based on shoppers' measurement details for them to virtually try on clothing.

Overall,

- 63% respondents stated they would be willing to share data, which was also consistent across genders.
- Over 41s displayed a greater reluctance than younger generations, with only 56% agreeing to share data versus 74% of Millennials and 64% of Generation Z. This could be attributed to less familiarity with digital tools and virtual avatars, and a lack of understanding of data privacy and the impact of a potential data breach – older consumers would therefore have to be educated on what this means in order to address their reluctance.
- High intensity online shoppers were also more comfortable sharing size and fit-related data, with 73% answering "yes" compared to 59% of low intensity online shoppers.

Section 3

Stakeholder voice

Credit: Fashion East

Last year we committed to setting Science Based Targets, which will ensure our climate ambitions are verified. Setting SBTs will change our business, because it means we must work with progressive partners who have a carbon reduction plan in place. Everyone in a supply chain leans on each other.

Rosie Wollacott Phillips, Head of Group Sustainability, Mulberry

To understand the nature of the returns challenge and to support driving system wide change, industry stakeholders were consulted through semi-structured interviews, an IPF Forum event, and IPF Advisory Board meetings. Over 20 participants were engaged in stakeholder consultations, spanning all steps of the supply chain, from brands and retailers, to logistics operators, industry and third sector, re-commerce providers and technology innovators. These consultations were designed to:

1. Provide a better understanding of the challenges, barriers and opportunities facing fashion returns
2. Discuss potential solutions and enable cross-industry knowledge sharing
3. Further explore the collaboration and partnerships needed to enable a systemic change

Recurring themes

As part of the consultations, interview participants were asked to give their views on the current fashion returns challenge, elaborate on any barriers to change, and propose solutions that could contribute to a more sustainable post-use ecosystem. The findings of the consultations revealed several recurring themes, which helped to shape the recommendations for moving towards a closed-loop system.

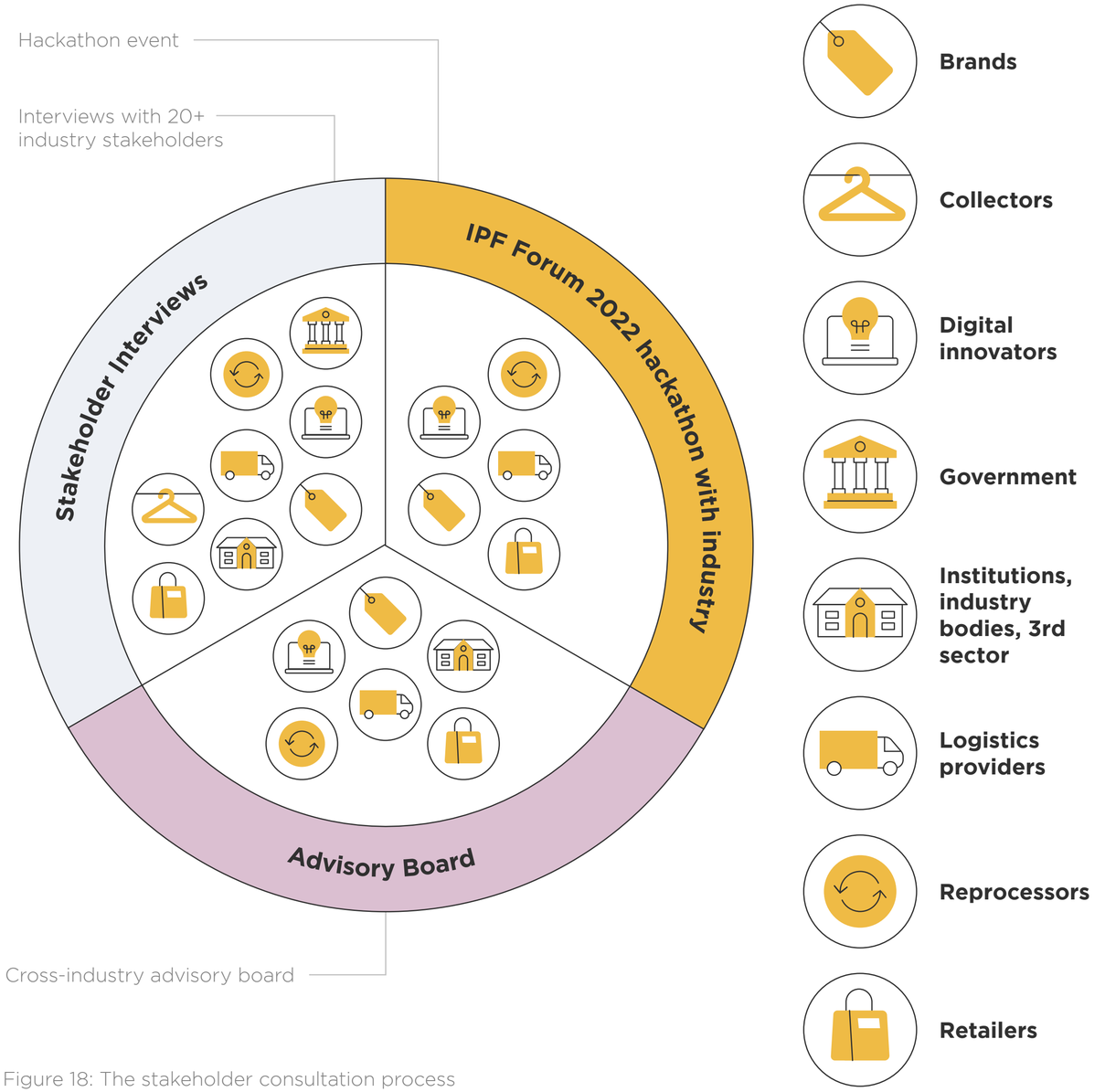


Figure 18: The stakeholder consultation process

1. Reducing the environmental impact of fashion returns is a priority

All stakeholders agreed that finding ways to track and reduce their environmental footprint is a priority, due to the increased pressure coming from government, consumers, and an overall sense of social responsibility.

Commitment to the carbon goals defined within the mission of Fashion Industry Charter for Climate Action of the United Nations (UNFCCC) was clear, and many were aware that substantial efforts were needed for the industry to become net zero by 2050 to keep Global Warming below 1.5 degrees[47].

Tackling the issue of fashion returns was thus recognised by participants to be critical in meeting these goals and building a greener economy for society. While many brands have historically been more concerned about the sustainability of products before they reach the consumer, many are now turning their attention to end-of-life issues such as returns, and cradle to cradle manufacturing due to the huge environmental cost of not doing so.

The environmental cost of fashion returns and the waste it generates is clear: 20% of returns need to be ironed or washed before resale, incurring water use and emissions, while around 2-3% of all returns go to landfill or are incinerated[48]. While greater adoption of CSBMs could reduce the volume of garment waste and extend product lifecycles through resale, rental, and repair, there is an opportunity to focus on reducing associated impacts of reverse logistics and the overall volume of returns.

Every percentage point that we can reduce on the return rate means a lot from both the sustainable perspective and an economic perspective.

Stacia Carr, VP Size & Fit, Zalando

Fashion brands had been focusing on pre-consumer operations previously, such as producing more sustainably, but now the focus is starting to evolve towards other issues such as returns. Brands need to do this as customers' mindsets are changing.

Matt Hanrahan, Co-Founder, Reskinned

Logistics is one of the biggest contributors of environmental impact. People are buying more, getting products sent to their homes more and are sending more back.

Jemma Tadd, Head of Fashion, eBay

As an industry we have to appreciate that the lack of sizing consistency is leading to an environmental issue and customers need to return the products that don't match, although they had expected them to.

Sarah Curran, EMEA Managing Director, True Fit

2. Handling returns is highly complex and financially costly

Many retailers and logistics stakeholders discussed that part of the reason that fashion returns have a detrimental impact on both the environment and a fashion business's financials was because returns are very complex to handle, hence incurring costs and eroding margin.

The typical returns process shown in the illustration demonstrates a complicated, multi-step journey with various decision points along the way, including whether a garment should be cleaned and resold, recycled, or disposed of. After the parcel is returned at the drop-off location of the customer's choice, it is either directly transported to the warehouse or has an intermediate stop at a regional hub. At the warehouse, returned items go through another process of inspection, refund processing, and sorting, where the item is either resold through own channels, sent to the resale market, donated, recycled, or disposed of.

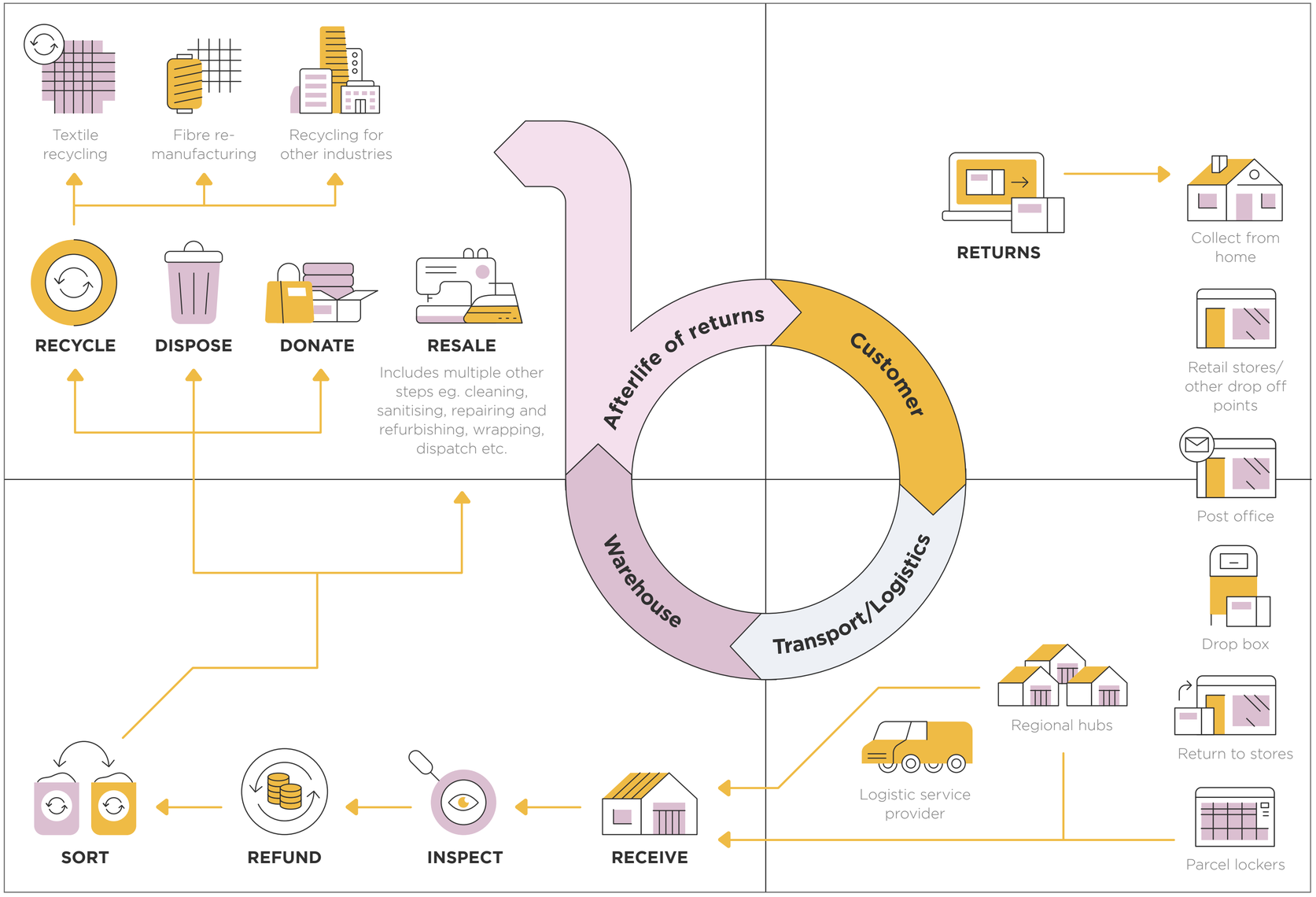


Figure 19: Flow of returns through the fashion ecosystem

Credit: Ray Chu

The sheer number of steps required means cost is incurred, in terms of warehousing space, transportation, and labour. There are also cost elements that are often overlooked, such as the cost of customer care when a customer asks about the status of their refund, the administrative resources required to process a refund, or the cost of other resources, such as energy. Returns are estimated to cost the UK fashion industry approximately £7 billion per year[49], which is likely to only increase as returns volumes rise if no radical action is taken. The growing financial impact of returns, combined with the environmental impact, has the potential to slow the industry's development towards a more sustainable state as suggested by the interviews.

Returns handling is a complex process: When a parcel gets back, you have to receive it, open it, check the item, get a new ticket, fold it, and store it into the rack again. This process eats up all the margin of a mass-market item.

Hans-Peter Hiemer, Managing Director, Assyst

We see an increasing demand for reverse (circular) logistics services in the future that will make an expansion of logistics networks necessary to handle the additional volume.

Franz von Bismarck-Osten, Director Sector Development eRetail & Fashion, DHL CSI

Recent global events have led to a steep rise in supply chain costs and a challenging trading environment - putting further pressures on profit margins. Despite these pressures, the industry will benefit from continued investment in supply chain sustainability – such as the pursuit of alternative materials and wellbeing in the factory workplace.

Dax Lovegrove, Global Director of Sustainability, Jimmy Choo & Versace

3. Product lifecycles should be extended

Brands and retailers noted that one significant way the fashion industry can reduce the environmental impacts of returns is to find ways to extend the product lifecycle. This not only has environmental benefits, but also gave retailers a way to engage with customers even post-sale.

One of the increasingly common ways to do this is to shift away from seasonal collections. Retailer participants discussed that one of the challenges of long returns period was that the retailer had very little visibility of when products would be returned and whether these items could be resold. In fashion segments with rapidly changing collections, this creates a real profitability risk, as products quickly get outdated or out of season. These products must then either be marked down by the retailer, liquidated through overstock retailers, donated, recycled, or disposed of. To combat this, a move to 'timeless capsules' which last longer than Autumn/Winter and Spring/Summer seasons is being adopted. Several high street brands offer a high proportion of essential clothing ranges in their product mix, which can shield them from having to mark down out-of-season garments.

There is a greater move across the sector towards a decrease in seasonal collections and an increase in timeless capsules - aligning with more sustainable consumption and production.

Dax Lovegrove, Global Director of Sustainability, Jimmy Choo & Versace

More than half of what we sell is everyday basics and essentials, so socks, underwear, basic white t-shirts, hoodies and jeans. This means that we don't really need to discount our returns, even when customers return them on the last day of the return window, because they are still current.

Victoria Swain, Quality Lead, Primark

Credit: S.S.Daley

Credit: S.S.Daley

Other ways retailers mentioned they were exploring included:

1. Trying to develop garments that are more durable or more easily recycled to promote circularity,

2. Finding ways to re-use or embed closed-loop, textile-to-textile recycle of fabrics that are already out in the market, or

3. Adopting CSBMs such as rental or resale models to prolong the life and utilisation rates of each item.

However, the consensus amongst participants was that the fashion industry still had some way to go in terms of the technology and skills required to embed circularity of garments or for consumer awareness and acceptance to reach a level where recycled or resold garments were seen as on par with garments that were first-hand or made from virgin materials.

One way to transition towards circularity is by unlocking the value of the garments through customer takeback once they are finished with the garment. If it is re-wearable then give it a new life as a second hand garment, if it is not re-wearable then sort it by fibre type ready for chemical deconstruction in this country. If we can chemically deconstruct at scale, we can put into closed loop.

Joe Little, Head of Technical, Tesco

There is much to be learnt about how to build out repair, renewal and upcycling processes and systems so value can be brought back to lower quality items, and not just high-end items.

Gwen Cunningham, Lead Circle Textiles Programme, Circle Economy

We're working to create more products that are designed with circularity in mind. We're looking at materials that are easier to recycle and working to improve the longevity of our products so that they can have multiple uses.

Catherine Loader, Sustainability Specialist – Circular Economy, John Lewis

4. Fashion businesses need to rethink their strategies and have a unified approach on returns

In the long-term, however, brands know that there needs to be greater alignment within fashion organisations on their strategy on how to balance revenues and the cost of returns.

Participants expressed that because business departments were measured with different KPIs, they tended to have different objectives and work in silos towards the topic of returns. For example, certain departments were purely incentivised by revenue, and any action that could alienate 'Serial Returners' or 'Returning Returners' i.e., customers who regularly return goods but who have, on average, a higher average order value and greater loyalty, would run counter to their agenda, despite their negative environmental impact. A study by Klarna showed that its top 10% of shoppers at partner merchants accounted for 37% of orders and tended to spend 2.7 times more than the average shopper per year[50]. However, these customers also generated almost 50% of all returns, as each customer tended to return 28% of their purchases[51].

Different departments have different goals and objectives, and if they are working in silos with different KPIs, their incentives are likely to be misaligned. This often creates a hurdle to reducing overall return rates especially as growing revenue often takes priority.

Vikesh Shah, New Business Director, Metail

At big fashion houses, only like-for-like sales are discussed but profit and waste are often neglected. Until you change the metric, brands and retailers will continue to grow at any cost and overproduce. EBIT needs to be the main focus.

Sarah McVittie, Co-Founder, Dressipi

Historically, due to the cost of returns handling and the need to prioritise other issues, the topic of reducing returns did not tend to rank highly in retailers' agendas. However, with increasing spotlight on the environmental and financial issues that returns are causing, retailers are starting to make addressing this topic more of a priority.

Therefore, stakeholders emphasised the need for greater organisational alignment between top management, commercial, marketing and sustainability teams, to design KPIs that will enable the company to meet both revenue and sustainability objectives.

Commercial incentive is to save money and not prioritise receiving returns, unpacking, checking, ticketing, folding, returning to logistics etc. However, the environment impact of just disposing it is terrible, as these returns are either dumped or burnt.

Hans-Peter Hiemer, Managing Director, Assyst

5. Consumer expectations will need to shift

On the flipside, brands and retailers have also identified that one of the key challenges to overcome in the long-term is around consumer expectations of returns.

Participants voiced that over the last 15 years, clothing consumerism has increased dramatically, particularly online. In addition, many consumers expect convenient and free returns. COVID-19 aggravated the issue, as most fashion businesses extended the returns period from the minimum of 14 days to 60, 90 or even 180 days to make up for the fact that consumers could not touch and try on product due to store closures. Consumers have therefore become used to the convenience of easily buying clothing online and returning them for free, and around 80% of them still expect returns periods to stay longer than the legal minimum[52]. Retailers therefore face the challenge of trying to make their current operations and returns policies more sustainable while not alienating consumers.

Over the last 15 years, clothing consumption has doubled but at the same time clothing use has declined by 40%. Inevitably, this increased consumption has also corresponded with more product returns, especially post-Covid. We have introduced fashion rental to help combat the returns process and provide customers with an alternative and more sustainable way to shop.

Catherine Loader, Sustainability Specialist – Circular Economy, John Lewis

The true root of the returns problem is that there are no financial consequences for consumers who show bracketing behaviour. We need to re-educate consumers about the value of textiles, but also on the reality of the end-of-life supply chain and of the current returns system.

Gwen Cunningham, Lead Circle Textiles Programme, Circle Economy

Consumers have gotten used to convenience, to ordering online and having their items delivered home. This puts a lot of vehicles on the road. To reduce returns, it would be beneficial to get consumers back into bricks- and mortar stores. Convenient pick up points and returns points in stores are a good way forward - companies could also look at incentivising, e.g. collections and returns in stores are cheaper, free or a voucher to spend in store is offered and the incentive is likely to be paid for by the add on sales in stores.

Anonymous

Credit: S.S.Daley

Participants discussed that some fashion brands have attempted to tackle this issue by charging for returns, and that other retailers are likely to follow suit, although the financial impact on sales is not yet known. Others argued that more consumer education is needed to show the "real" cost of returns.

Many were hopeful that with increasing education, awareness, and transparency on the environmental impact of returns, younger shoppers, who would eventually dominate the industry's customer base, would change their behaviours and support fashion brands who were ethical and sustainable.

Nearly 80% of customers check returns policies pre-purchase, so a difficult or expensive returns policy could cost you the sale. Whilst around half of UK retailers are still offering free returns, several leading brands started charging their customers this year. Many are probably going to follow suit on the back of those retailers.

Al Gerrie, Founder and CEO, ZigZag

The younger generation is completely shocked when they learn what's happening with textiles and apparel. There is hope that people will have a different mindset. We need to do everything we can to help educate consumers.

Hans-Peter Hiemer, Managing Director, Assyst

6. Need for end-to-end transparency

In order to align consumers and retailers on the need to act on the issue of returns, and to enable a response that is most effective, all stakeholders agreed on the need for improved transparency on the topic.

Stakeholders interviewed expressed desire for transparency in two main areas: transparency over the returns pipeline to improve handling capacity and efficiency, as well as transparency over the real cost and impact of returns. For the former, logistics participants highlighted that little visibility on the timing of returns made it difficult for logistics operators to plan their capacities and for retailers to manage their stock. This issue is heightened during specific periods of the year, e.g., in January after the Christmas period, where many retailers see high returns rates, and when more pressure on reverse logistics system can cause greater delays.

For logistics operators as well as for brands, it would be much better to know when returns are coming back in advance as it makes the process of handling returns, unloading, sorting, opening, processing etc. easier and more efficient.

Franz von Bismarck-Osten, Director Sector Development eRetail & Fashion, DHL CSI

All stakeholders voiced that greater collaboration and investment across the industry is needed to create standards and transparency of the CO_2 footprint of the reverse logistics journey. Interviewees agreed that most fashion businesses do not have all the data necessary to make decisions that balance financial and environmental interests, as many organisations are working with legacy systems and/or their people do not know how to use the data available to make those decisions.

With respect to emissions data, many stakeholders discussed that getting accurate information on the CO_2 emissions of the returns journey is challenging as there are components of it that are not under the retailers' or logistics operators' control or knowledge, such as the mode of transport the customer takes to return an item. This means that while Scope 1 and 2 emissions can be tracked, Scope 3 emissions, which tends to be the majority of GHG emissions[53], cannot be easily tracked. Stakeholders therefore agreed that greater cooperation across businesses and organisations is the only way to solve this data gap, as well as earning the trust of customers to help make the calculation more robust. Greater transparency over the returns issue would therefore enable the acceleration of customer awareness, as retailers would be able to better communicate the message, which would help to drive behavioural change.

Honesty is needed in terms of consumer messaging and education. The majority of consumers are concerned about their environmental footprint, but retailers and brands lack transparency. Many people are surprised that items they return are not always restocked.

Cristina Sabaiduc, Senior Sector Specialist Sustainable Textiles, WRAP

Companies don't have transparency or visibility on that data. They're often working with legacy systems, don't have the resources or manpower to change things. People need to start seeing data as a tool set to be the best at their job.

Sarah McVittie, Co-Founder, Dressipi

Tracking CO_2 emissions is difficult, but we have had academic institutions help build a model to track it. We get it independently and externally verified to measure our Scope 1 to 3 emissions.

Anthony Burns, Chief Operating Officer, ACS Clothing

Credit: Sinéad O'Dwyer

7. Leverage technological innovation and automation

Given that some of the biggest concerns all participants had around returns revolved around their current cost and future mitigation, many participants, including logistics operators, retailers and brands, were positive about the use of technology and automation to address these issues.

Using technology and analytics to reduce returns

Stakeholders expressed concerns on returns reason codes that customers input, which often can be unreliable. They stressed the importance of understanding how returns could be avoided before they even occur, and many pointed to using technology and analytics to truly understand customers' reasons for returning specific products and general behaviour. Retail technology stakeholders highlighted how many fashion retailers and brands still do not have, or prioritise having, comprehensive and connected data sets on their products, transactions, shoppers, and returns information, e.g., the link between returns and original purchase order is often not available. The lack of connected data sets and ability to process data is ultimately a hinderance towards understanding the real drivers of returns and preventing returns at the onset. Conversely, having good data quality enables smarter decisions to be made on what products to push to whom and what volumes to order.

One way analytics can be used is to understand the real reasons for returns. Participants noted that the reasons customers gave for returning garments was often inaccurate and that retailers needed to apply digital tools to figure out the real reason. Usually, customers return products due to size or style, and there are analyses retailers can do to understand which of the two is the bigger driver for a specific garment. For example, analysing which customers bought the same item in multiple sizes could be a starting point for identifying size-based returns, while analysing which customers bought multiple options of the same garment category could help with identifying style-based returns. After identifying the drivers for size- or style-based returns, retailers can use analytics to help customers pick products that are likely to fit their size and style.

For sizing issues, retailers can use analytics to understand the fit of a garment and the likely body shape of a customer based on various data points e.g., height, weight, past successful purchases. Retailers can also use size calculators or virtual avatars to help customers make informed decisions. However, participants did note that current size calculator or avatar solutions were not yet accurate enough to reflect the complexities of human size and fit, and that they were only likely to make a difference to return rates in the future.

For style-based issues, retailers can use analytics and predictive tools to create personalised shopping experiences for customers, to ensure they are shown products they are likely to purchase and keep. Therefore, by having transparency on which garments are likely to be returned by specific customers based on size- or style-based factors, retailers will have a better chance of meeting customers' real needs, and hence reduce the cost of possible future returns.

We know that sizing is a big issue and is the one of the main drivers of returns. Greater insights such as these give us a focus to do something to be able to help our customers within their purchase path.

Sinéad Conway, Senior Corporate Responsibility Programme Manager, Burberry

What customers say is not always true. Once brands know what is really driving returns, they should not be showing products to customers who are only going to return them. There are measures brands can take, including stopping emails to them.

Sarah McVittie, Co-Founder, Dressipi

No one has really cracked virtual try on just yet in a way that is accurate and scalable for the market. It could take another 5-10 years for it to reach a stage where it is commercialised at scale.

Vikesh Shah, New Business Director, Metail

Using technology to reduce costs

One of the main cost elements in the reverse logistics process is labour. Several logistics participants discussed the benefits of technology such as scanners and monitors to automate the most manual and repetitive tasks and make efficiency gains. Use of technology and automation can also help to make the logistics fulfilment process more accurate, thereby reducing the number of returns that occur due to wrong products being sent.

Another cost element for retailers is that of markdown and disposal. Participants were supportive of product tracking through RFID, QR codes or NFC tags, as these would enable fashion businesses to know the location of products along the supply chain and direct them to a store where they could be sold quickly. Retailers and brands can plan the journey of products, including returns, in a more efficient and sustainable way. Product tracking via RFID has many established use cases for inventory management, in-store operations, and customer engagement, but it also has the potential to unlock information about the redistribution and resale of products in a CSBM environment. For example, retailers operating CSBM models can use digital tags to understand and market the circularity of their products, raising customers' awareness on the value of extending product lifecycles.

Almost 3/4 of costs of returns fulfilment cost is pure personnel. The biggest innovation is therefore not in fully automated warehouses, but in technology to support the efficiency and accuracy of our staff.

Franz von Bismarck-Osten, Director Sector Development eRetail & Fashion, DHL CSI

Using technology, such as QR codes, we can label products with all the information needed to process returns quicker. It would bring back all the information, so retailers know who the customer is, what is being returned and why, the price, import and export dates, and the amount to be refunded.

Al Gerrie, Founder and CEO, ZigZag

By putting tracking tags on all our products, we are able to scan the garment and it will tell us the best place for that return to go once we have deployed RFID.

John Cooper, Senior Director of Transformation Data and Decision Science, George at ASDA

Digital product passports allow for interoperability between stakeholders, creating a more cost and operationally efficient supply chain system that generates greater value within each product.

Natasha Franck, CEO & Founder, EON

Conclusion

The themes outlined above demonstrate the consistency of thought amongst fashion industry stakeholders, regardless of whether they are a brand, retailer, recommerce operator, logistics operator or technology provider. There is alignment on the returns challenge, including the scale of the issue and the need to act on it. Stakeholders understood that more change was needed, in terms of intra-business alignment between different departments, as well as collaboration across the industry, particularly to create standards and transparency on the CO_2 footprint of different steps of the reverse logistics journey. Overall, digital technology could pave the way for progress to mitigate returns. Greater transparency from retailers can also help their customers to understand more of the impact of returns.

Credit: Fashion East

Section 4

Towards a closed-loop system

Credit: Di Petsa

Target outcomes for a closed-loop system

Insights from the consumer survey, industry interviews and literature review have generated two target outcomes for the UK fashion industry stakeholders to minimise the impact of fashion returns: by (1) mitigating returns at the point of sale before they occur; and (2) handling returns more efficiently when they do occur. Combined, the achievement of these target outcomes would represent the actualisation of a "minimised returns" target state, wherein returns only occur in the most unavoidable circumstances and are efficiently re-entered back into the fashion supply chain to be sold. Furthermore, when returns occur, the returns handling process is optimised to have a lower environmental impact.

Achievement of this target state requires significant change to material flows, industry operations, and consumer practices across the UK fashion value chain and ecosystem. For change of this scale to take place, stakeholders from across the fashion supply chain must take unified action. Each stakeholder has their own responsibility to act. Although sustainability awareness among consumers is rising, brands and retailers have the responsibility to educate consumers on the burdens of returns, equipping consumers with the information necessary to make appropriate behavioural changes. Consumers also have a part to play in acting in a sustainable manner. Additionally, industry stakeholders must utilise new technologies and collaborate with innovative partners to create modern solutions that support the target state. Meanwhile, the government should set a regulatory framework for all stakeholders. An overview of key industry stakeholders can be found in the illustration on the next page.

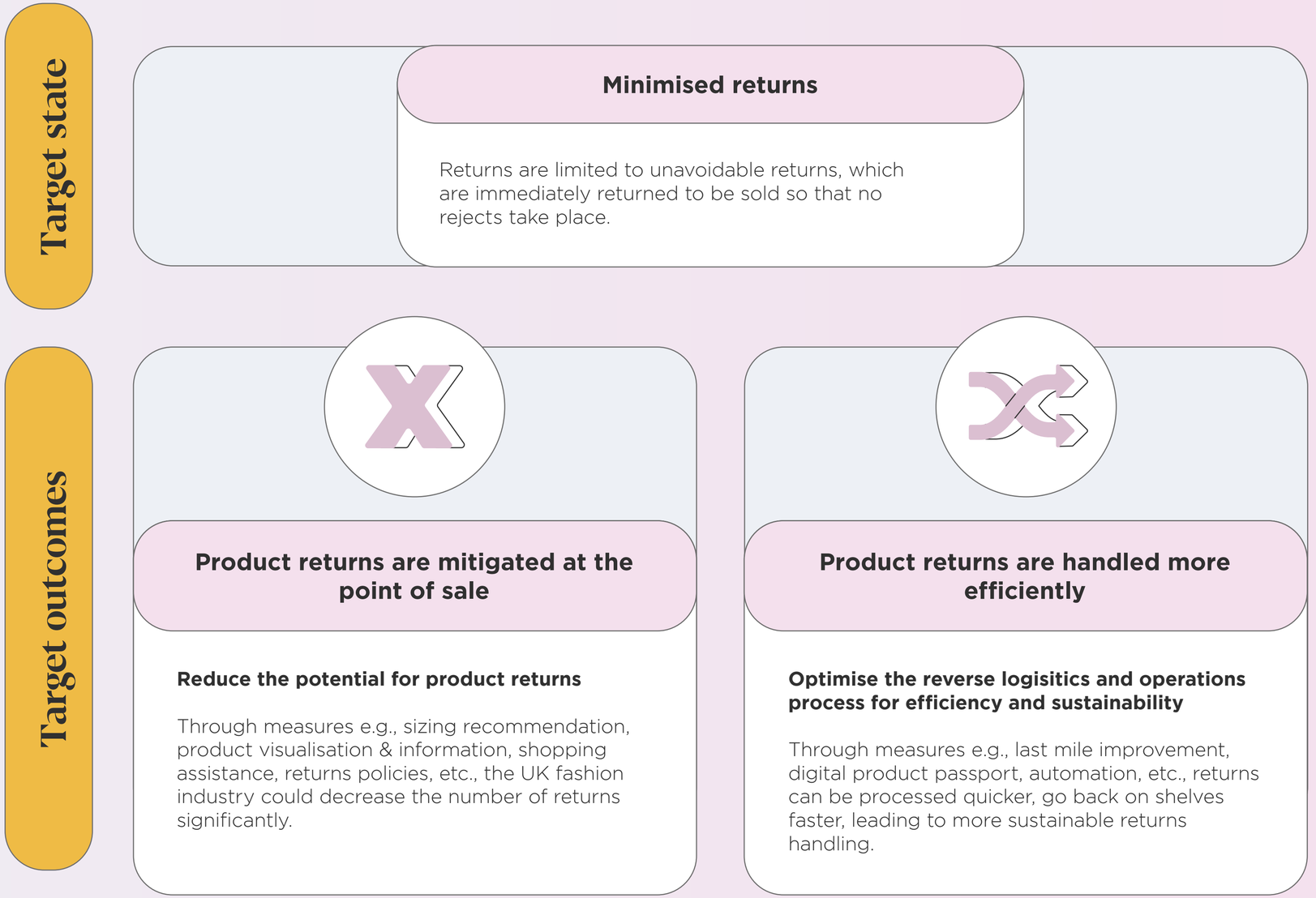


Figure 20: The target state of minimised returns and target outcomes

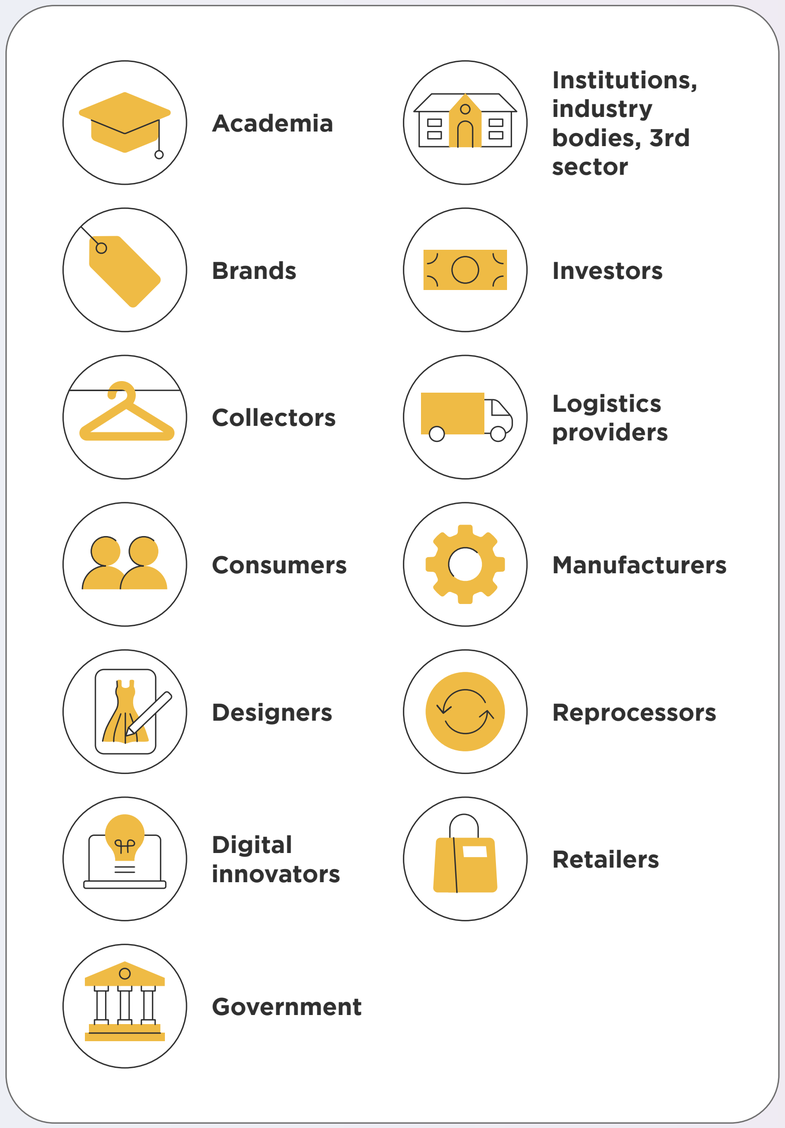


Figure 21: Key stakeholders in the fashion ecosystem

To articulate the different measures that could be used to solve the challenge of fashion returns, a framework was developed, as shown in the illustration below. Various initiatives that help to achieve the two target outcomes, 'returns avoidance' and 'returns handling', are provided. In addition, a time frame is given for each initiative i.e., how long it will take to implement them (short, medium to long term), and the key drivers behind the initiatives (e.g., technology, industry standards & collaboration, citizen engagement, government) are stated. These recommendations have come from synthesising findings from the consumer survey and industry interviews. In the rest of this section, each recommendation will be explained and discussed in greater detail, starting with those that are implementable in the short term (e.g., 1 to 2 years), followed by those for the medium to long term (e.g., 3 to 5+ years).

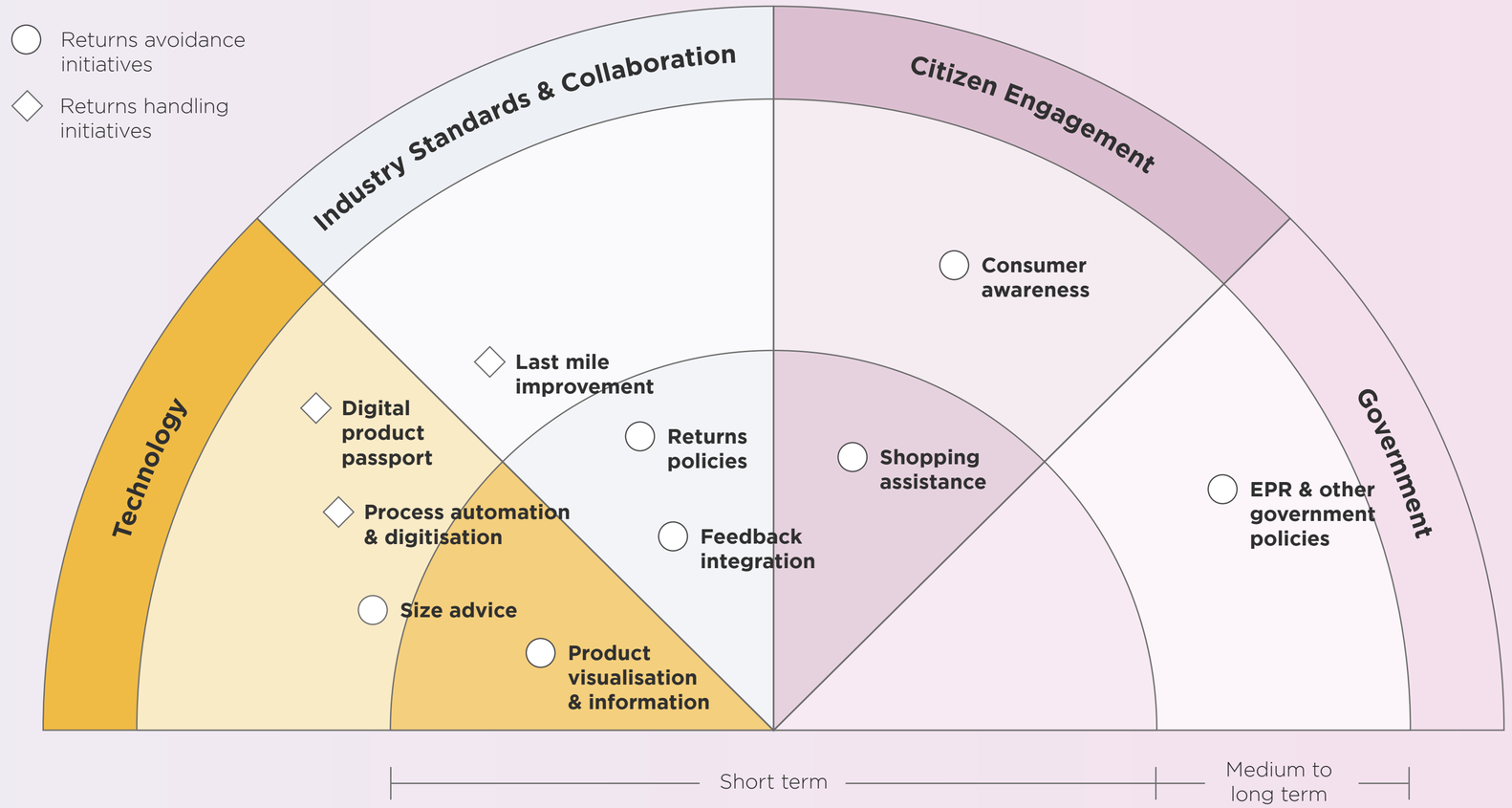


Figure 22: Solutions framework for minimising returns' impact

Recommendations to achieve target state

Short-term recommendations

1. Product visualisation & information

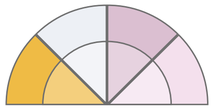
Time horizon

- Short term
- Medium to long term

Target outcome

Returns avoidance

Main driver



Technology

Key stakeholders (lead)

- Brands
- Retailers

Key stakeholders (enablers)

- Consumers
- Designers

Another step towards ensuring that returns are avoided before purchases take place, is to present customers with as accurate a representation of the products as possible in a bid to ensure that items match customers' expectations of colour, fit and quality upon arrival. Brands and retailers should take the lead in providing accurate presentations of their items, leveraging a range of digital options that have the chance to transform the e-commerce experience by portraying items as realistically as possible.

Credit: Klamby

Recommendations

Detailing product descriptions: A detailed product description is important for minimising returns. Information on fabric composition, washing instructions and model measurements, such as height and standard clothing size, all empower customers to make more informed purchasing decisions, increasing the likelihood that products match customers' expectations on arrival and thus leading to less returns. An increasing number of brands are also offering details on the environmental and social impact of different garments and production processes. For example, Mulberry includes information on responsible sourcing and production on each product page and invites customers to view its 'Made to Last' and real Living Wage commitments. It aims to become more regenerative and circular in its supply chain[55], and to ensure its workers and its partners' workers are paid fairly based on the wages that are actually needed to live, rather than the UK Government's national minimum wage[56].

Enhancing product visualisations through 360° product views and videos: High-resolution pictures, 360° view presentations and the opportunity to zoom in on details such as fabric material or garment structure, provide customers with more transparency on the product attributes. Additional "catwalk videos" also allow customers to assess how the product looks in movement. If brands lack the ability to deliver such services, they can outsource to or form partnerships with specialist firms, although the cost of videos may be challenging for low margin items. Companies should also recognise that the product visualisation stage is an opportunity to market their brand to customers. Retailers can engage with the role that customer connection and emotion play in the purchasing decision by showing models in a variety of different settings e.g., on the beach, at a nightclub.

Enhancing product visualisations through model diversity: Deriving from the importance of customers being able to picture themselves in a garment, is the need for diversity. Models in the fashion industry have traditionally been selected by a narrow and homogenous beauty standard that has served as an inadequate representation of the customer base purchasing the products. Though the level of representation among models in fashion is improving, with the rise of curve, plus, petite, tall, etc. lines, retailers need to go further to display different body types, disabilities, ages and races and meet the wider customer demand for representation of "real people" with blemishes, cellulite, and other "flaws" that may traditionally have been airbrushed out. Not only will this lead to a more accurate consumer perception of the garment and thus fewer returns, but it will also increase the level of connection felt between the customer, product, and brand.

It's important to provide solutions that allow customers to have clearer perception of the clothes. Just through the click of a button they can view a different model, whether it's a black female model, or an Asian male model. Moreover, it is important to put the item in different scenarios, socially and environmentally. It's all about social security and confidence.

Hans-Peter Hiemer, Managing Director, Assyst

We are living in an omnichannel shopping experience, where we look for new and innovative ways to connect with customers. For example, we launched an AR tool for our "Lola" handbag range. Customers had the ability to see the different shapes, styles, sizes, colours of the bag next to an outfit, all while being at home.

Sinéad Conway, Senior Corporate Responsibility Programme Manager, Burberry

Some retailers have reduced their in-store plus-sized ranges or made them only available online. This neglects a segment of their customer base and may likely increase return rates. There are small changes that could be investigated to reduce returns, which include re-stocking a wider range of sizes in-store.

Cristina Sabaiduc, Senior Sector Specialist Sustainable Textiles, WRAP

Image courtesy of Metail

Case study: Metail

Metail is a technology and software provider that specialises in three areas: Digitising people, digitising clothes and visualising the two together. Through its EcoShot visualisation tool, Metail enables brands to visualise their 3D CAD garments on real-life models in an accurate and true-to-life way. The result is on-model imagery without the need for a physical sample… an eco-friendly form of a model shot… an EcoShot. EcoShot images can be used to reduce physical samples throughout the product lifecycle, from internal design line reviews, to B2B wholesale selling and even D2C eCommerce.

Metail has also been developing applications for consumers through the eTryOn project. In this application the individual is able to create a 3D avatar of their exact measurements and virtually try on garments. Together with VR and AR technologies, shoppers can recreate at home the experience of buying clothes from a physical store as well as maintaining the comfort of an online purchase.

Credit: Di Petsa

2. Feedback integration

Time horizon

Short term

Medium to long term

Target outcome

Returns avoidance

Main driver

Industry standards and collaboration

Key stakeholders (lead)

Brands

Retailers

Key stakeholders (enablers)

Consumers

Designers

Customer feedback is an invaluable way for retailers and brands to get a detailed evaluation of a product post-purchase, gauge customer satisfaction and understand widespread quality issues that need attention. Feedback also plays a role in the purchase stage, helping customers who have yet to buy an item make a more informed decision. Post-purchase feedback channels will of course not reduce returns from those who have already purchased but can be integrated into the development and post-launch phases as a preventative measure to reduce returns and help achieve the target state.

Recommendations

Incorporating feedback in product development phase: The integration of customer feedback into product design phase will always be an integral step. It ensures that brands stay in tune with developing customer tastes in a rapidly changing industry, and that brands are better positioned to identify systemic quality issues. The wealth of customer data generated during feedback stage would also be invaluable to marketing and sales functions, allowing brands to make more empirically driven decisions on e.g., targeting and positioning.

Implementing closed-loop feedback post-purchase: Brands and retailers could also consider closed-loop feedback, that is, directly responding to or using inputs from customers who have submitted online reviews or returns feedback post-purchase. This integrates the standard benefits of customer feedback highlighted above, but to an even deeper level, with more tailored information given on product satisfaction or dissatisfaction and reasons for returns. This level of engagement is also likely to have a more direct impact on customer satisfaction and loyalty, as businesses who are reactive and quick to engage with customers typically have higher levels of loyal repeat customers. Closed-loop feedback could be gathered in various formats, e.g., via email, social media or text message. Implementing closed-loop feedback would be a reliable way to ensure that customer responses are not lost and have been fully acted upon.

We have recently introduced the capability for customers to leave product reviews as we want to make sure that the quality, style and fit of our products are meeting our customer's expectations, and by sharing feedback, we can keep offering items that we know our customers are going to love.

Rebecca Garner, Established Circularity Partner, ASOS

Part of our durability journey is looking at testing and improving to help products last longer. It certainly supports, but it doesn't make returns inevitable.

Victoria Swain, Quality Lead, Primark

Credit: Bora Aksu

Case study: ASOS

ASOS has implemented various tools to help customers choose the right size from the very beginning. Apart from high-quality static images, products have studio videos that show clothing movement, alongside descriptions of the measurements of the model wearing the garment, to help customers make an informed decision. Its Fit Assistant tool offers customers personalised size recommendations, based on the customer's sizing information and what similarly sized customers have bought. Another tool is a crowd-sourced customer rating feature on each product page that informs customers whether a product is true to size and the quality of the product, as well as a 1-5 star rating and a free text feedback option.

Image courtesy of ASOS

Credit: Bora Aksu

3. Returns policies

Time horizon

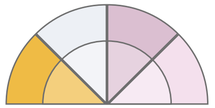
Short term

Medium to long term

Target outcome

Returns avoidance

Main driver



Industry standards and collaboration

Key stakeholders (lead)

Retailers

Key stakeholders (enablers)

Brands

Designers

Digital innovators

Investors

Companies' returns policies play an important role in consumer decision-making processes. Research shows that almost 80% of consumers check returns policies before placing an order[57], and approximately 40% would return less if a retailer charges for returns[58]. Additionally, almost 30% of consumers believe that retailers make it too easy to return items[59], signalling that there may be potential to tighten policies. By restricting returns window and eliminating free returns, thereby making shoppers think twice about ordering items just to 'try out', companies have the power to help the industry reach the desired target state.

A change can currently be seen within the fashion industry, as retailers have started to charge for returns. Several retailers are either charging for online returns or limiting their returns window to the UK minimum legal requirement of 14 days[60]. In our consumer survey, 21% of online shoppers stated that if a returns charge is levied by brands or retailers, they would stop buying from those brands or retailers. Whilst it is likely less limiting for global companies with a loyal and established customer base to charge for returns, it could be much more difficult to do so for smaller businesses, which are dependent upon attracting new customers. Nevertheless, a higher proportion of companies restricting returns might promote real consumer behaviour changes, which will positively impact the environment.

Recommendations

Limiting returns window and/or returns options: To maximise sales during pandemic, many retailers resorted to increasing their returns window, ranging anywhere from 14 to 100 days. Lengthy returns windows render the handling of returns more inefficient and wasteful, as many fashion items quickly go out of style (or season) and the greater the delay of returns, the higher the chance an item cannot be resold. One way to keep this problem at bay is to shorten the returns window. However, this measure is likely to be more effective for retailers that have a large proportion of trendy clothing, and who are therefore at greater risk of product obsolescence, compared to retailers with a large proportion of basic or core items that are less seasonal. For the latter, reducing returns window may have limited impact. Another way would be to restrict the number of returns options at customers' disposal. Primark, with a pure bricks-and-mortar model, has a low rate of returns. This could partially be explained by the fact that customers have to bring returns back to stores. To reduce return rates, retailers could restrict returns options to in store only, or provide incentives to return to store (e.g., via charging for online returns). This could help reduce both the environmental impact caused by transportation of the goods and potentially, the number of returns. Appreciating that this only works for those retailers and brands that have physical stores.

Eliminating or restricting options for exchange: A potential solution to combat the high volume of returns would be to follow the example set by some outlets, as well as online marketplaces such as eBay, where exchanges simply are not possible or very limited due to no alternative size or color options available, making customers more careful at the point of purchase. One of the major reasons behind eBay's exceedingly low returns rate is the fact that there is a very limited opportunity to exchange products. In an outlet context, customers need to be extremely confident at check out, as they are generally buying an item that is one of the last few in stock, and where there is typically no other colour, size, or design available to exchange it for. If retailers drew inspiration from the outlet model, limiting or perhaps entirely removing exchanges from their offering, it might instigate greater levels of consideration and confidence at the point of purchase, which would ultimately reduce the likelihood of returns.

Charging for returns: Up until recently, established online retailers have been able to generate extremely high levels of customer traction by offering free returns. However, given increasing levels of general awareness with regards to the fashion industry's environmental footprint and the rise of eco-conscious consumers, some larger retailers have shifted course and have begun charging their customers for returns, and small to medium-sized retailers are expected to follow suit. However, the speed at which less established retailers implement this policy will likely be slower, due to reservations around customer pushback and losing out on sales targets.

Disincentivising serial returners: The serial returners problem i.e., customers who are caught up in the buy-and-return cycle, purchasing and returning items at an extremely high rate, with little to no consequences for their actions, will need to be directly addressed in order to reach the target state. The first step will be for retailers to raise customer awareness on the environmental damage caused by returns. However, there will be a real need for retailers to implement stricter returns policies to combat serial returners if no positive changes are observed. Retailers could simply stop marketing emails to serial returners, consider implementing fines, or shopping bans, the later of which are already implemented by some more digitally advanced retailers. Advanced digital tools could help with identifying serial returners for the appropriate actions.

Case study: Zara

Starting from 3 May 2022, Zara UK customers have been charged £1.95 when returning online purchases to third-party drop-off points. Customers are, however, still able to return online purchases at any Zara store within the UK free of charge, which is what the majority of its current customers do[61]. Zara's decision to stop free postal returns, which came into effect unannounced, has been met with mixed reactions from customers. Some praised the decision for its environmental impact, stating it was a "great measure to help stop CO_2 emissions", while others expressed their disapproval over now having to pay[62]. It is still too early to tell whether this measure has affected Zara's revenues or profitability, given its recent introduction. However, given its dominance in the market, Zara's returns policy change may influence other companies to follow suit.

Free returns are beginning to go away. That's the biggest initial driver to reduce returns. After free returns have been removed, brands and retailers can start to meaningfully tackle other drivers of returns such as size and fit.

Vikesh Shah, New Business Director, Metail

Awareness will rise and people will start to shop more consciously. Bigger retailers starting to charge for returns will make people think about how they buy.

Jemma Tadd, Head of Fashion, eBay

4. Shopping assistance

Time horizon

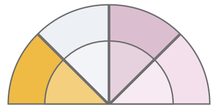
Short term

Medium to long term

Target outcome

Returns avoidance

Main driver



Citizen engagement

Key stakeholders (lead)

Retailers

Key stakeholders (enablers)

Brands

Consumers

Digital innovators

Investors

With the recent trend towards e-commerce, the share of clothing bought in store with friends or family is decreasing and along with it the positive social proof and shopping assistance that a shopper relies on when making purchase decisions. Several studies prove the importance of recommendations from socially credible and close social tie sources such as friends and family[63,64,65]. In place of this social affirmation in store, researchers are finding the increasing role of social media in online purchases. Consumers often use social media platforms, such as Instagram, to gauge social fit and approval of an item or style[66]. Indeed, over 70% of Millennials admit to making fashion or makeup purchases based on social media posts they had viewed[67]. Retailers can hence support customers pursuing feedback on clothes before the purchase is made by providing critical shopping assistance.

Recommendations

Providing customer reviews: On many fashion retailer websites, customers have the option of leaving reviews about their purchases with comments on fit, quality, and design. The offer for customers to leave reviews about their purchases has become particularly important, as customers increasingly relying on online reviews to inform their purchasing decisions. Study shows that 93% of customers use online reviews to inform their shopping choices and decision to buy[68]. Reviews are particularly helpful when customers share information about their height and weight in relation to the product, giving potential buyers more data points to evaluate if they would like to make the purchase or not. By supporting, encouraging, or incentivising reviews, retailers can nudge customers towards making more informed and considered choices with access to honest feedback from peers.

Offering personal assistance online: In the same way that styling or fashion advice may be offered by retailer's staff when customers are shopping in store, retailers can better improve the social affirmation experience for customers online through the provision of online style consultants or virtual styling assistants. For example, virtual chat bots may be implemented to provide suggestions on style and fit based on responses to an interactive questionnaire. Retailers can also facilitate the adaptation of customers' in-store social affirmation processes through family and friends, to online formats e.g., through ensuring compatible sharing functions across social media and instant messaging apps, or by integrating digital wardrobe technologies with social media type sharing and engagement functions.

Recommending curated items: Psychological study[69] showed that a high number of choices could make it challenging for consumers to make decisions. By having items pre-chosen for you and tailored to your style, issues of customer indecision are resolved along with a lower likelihood for buyer's remorse. Personalised shopping, either as a service from a consultation or questionnaire, or an automated suggestion based on historical purchases and search history, may be one solution to consumers' indecisiveness and regret. Whilst this method has been typically initiated by new brands and start-ups, this may be an opportunity for retailers to open new distribution channels with lower risks of returns.

The most helpful tool for both brands and consumers is actually customer reviews.

Al Gerrie, Founder and CEO, ZigZag

It's all about social security. It's all about confidence. It's emotional mistakes such as not fitting my closet or my needs or my social environment and so on that drive a large proportion of returns.

Hans-Peter Hiemer, Managing Director, Assyst

Case study: Burberry

To provide customers with personalised styling services wherever convenient to them, Burberry extended its in-store appointments to cover virtual settings. Customers can reserve a time with an advisor for a virtual fitting and styling session. This ensures a tailored shopping experience that provides each customer with personalised advice on fitting and sizing, helping to avoid some of the most common issues that cause returns. Burberry has also introduced additional social media sharing features for its customers, making it easier for customers to share products online and get instant feedback from peers.

Image courtesy of Burberry

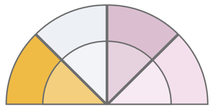
Recommendations to achieve target state

Medium to long-term recommendations

5. Size advice

Time horizon
- Short term
- Medium to long term

Target outcome
Returns avoidance

Main driver

Technology

Key stakeholders (lead)
- Brands
- Institutions, industry bodies, 3rd sector
- Retailers

Key stakeholders (enablers)
- Consumers
- Designers
- Digital innovators
- Investors
- Manufacturers

Incorrect sizing is one of the biggest drivers of returns, as demonstrated by the literature review and consumer survey[70]. Although interview participants all note that there are many reasons driving returns, they all agree that inappropriate sizing is one of the most widespread reasons. Thus, it is an important criterion to be tackled if the industry is to reach the target outcome of returns avoidance. The sizing problem is driven by the complexity of trying to create garments that suit different body types. Sizing today therefore lacks consistency both within and across brands. For example, a size 'Small' in a regular-sized brand is likely to be smaller than a size 'Small' in a plus-sized brand. Alternatively, sizes that seem different with labels such as 'S', 'S/M' or 'S/M/L', all within the same brand, may actually be the same size. These variations hence make size selection akin to a lucky draw for customers. Size discrepancy also drives bracketing, a practice where customers purchase multiple versions of the same item in different sizes, which inherently lead to a higher rate of returns. If returns due to sizing were reduced by 50%, overall return rates would be reduced by 35%[71]. Companies should therefore look to develop methods to guide customers to the right size, minimising returns driven by fit.

Recommendations

Providing size calculator: A size calculator uses information from customers, such as body measurements, historical purchase sizes, or known well-fitting garments or brands, to recommend the most appropriate size. More advanced calculators, such as the Fit Assistant used by ASOS[72], will incorporate data on fit reported by other customers, as well as account for personal preference on how tight or loose the customer would like the garment to be. Within the garment design stage, we already see even more sophisticated technology, such as using full body scanners to 3D model garments and identify potential problem areas relating to fit. In the future, this technology could be utilised by customers through the creation of personal avatars. However, there is work to be done by retailers to get customers to engage with size calculators, as only 20-25% of customers currently utilise size calculator offerings on the market[73]. With technology solutions that require more customer data, further action would have to be taken to tackle data protection and empirical reliability.

Offering digital avatars for virtual try on: The rising development of Web3, metaverse, and new digital technologies comes with a host of new opportunities for the fashion industry. Virtual reality has attracted a lot of attention as a potential mitigant for the widescale returns problem. Conceptually, customers can use virtual reality to create personalised digital avatars by filming themselves and inputting information relating to body size, shape, and appearance. These avatars can then be used to virtually try on clothing, leaving consumers with a better understanding of the garment's size, fit, and suitability with the customer's own aesthetic and style. At present, basic forms of digital 3D avatars exist, however more advanced forms of virtual avatars that can mimic body asymmetry, movements, and posture are not yet readily available[74].

However, looking forward, one potential solution proposed during the IPF Hackathon was that of a "consumer-owned avatar". While the avatar's technology back-end would be financed and maintained by a partnership of brands and retailers, the data behind the avatar would ultimately be controlled by the consumers. Consumers can have confidence that their data is secure, while brands and retailers may have to pay a fee to access their sizing information. The results of the consumer survey demonstrate the possibility of this idea, as most online shoppers (63%), especially high intensity shoppers (73%), are willing to share this data. However, the success of this concept will rely on industry collaboration to ensure successful mainstream adoption. Lessons and inspiration can be taken from existing partnership models. For example, True Fit, a sizing recommendation company, partners with many retailers and brands to collect, analyse, and give accurate size recommendations[75], which helps customers to make informed

Credit: Klamby

choices and reduce size-related returns and provides insights to retail partners based on browsing and purchasing behaviour.

In the long-term, two main challenges exist for adoption of advanced digital avatars. One is consumers' acceptance of the digital representation of their actual body shapes. It is important to find the right balance between 'accurate' representation of consumers' body figures and making consumers comfortable about the 'not-so-perfect-looking' body shape representation. Another challenge is the scale up of 3D representation of garments, which uses 3D design or manual scanning of garments via cameras, which is currently time consuming and not scalable. Future wide-scale adoption of 3D design in the industry will thus significantly improve the efficiency and accelerate take up of digital avatars.

Size normalisation: Another potential solution to mitigate poor sizing transparency would be the introduction of size normalisation[76]. Sizing is currently made complex due to factors such as changing clothing silhouettes and varying fits across retailers. The former particularly impacts womenswear[77], where the pace of style changes is rapid with the onset of new trends. These changes mean that consumers may be unfamiliar with their size when considering a new silhouette, therefore creating a higher likelihood of returns when these styles are bought online. In terms of the latter, the fashion industry also often sees different fits for the 'same size' depending on varying factors, including product, collection, and style[78]. For example, a UK size 10 in a regular-sized brand is not always the same as a size 10 in a plus-sized brand due to the potentially different customers they are serving.

Therefore, the only real way to make sizing more transparent and easily understood is to normalise sizing across the fashion industry. Sizing normalisation refers to the mapping of product sizes across brands and retailers to a common framework, to create a universal size chart that customers can use to easily figure out their size7[9,80]. Companies such as True Fit utilise large amounts of transaction data and advanced size normalisation algorithms to ensure that shoppers who use their retail partner websites are recommended fashion items with the right fit[81], hence reducing the need to return items.

Without a doubt, consumers will own their body data and choose to share it with those brands and retailers who they trust. The rise of avatars and VR enable customers to try items on, see how things work with clothes they already own and how those looks in real time. Then there is the rise of metaverse. In virtual space, customers will be able to wear whatever they want, opening up infinite possibilities as they choose from a myriad of ways to express themselves unconstrained by physical shape.

Sarah McVittie, Co-Founder, Dressipi

Automated size normalisation solutions are revolutionising the industry. Up until recently, size matching has been done manually, either by internal brand teams or by customers, making the process highly time-consuming, inefficient, and inaccurate[82]. However, with the advancement of technology, data collection and processing can be automated, making size normalisation faster and more accurate. Some companies are also able to take this one step further: for instance, to add more accuracy to their sizing model, True Fit has created a customer-facing platform that allows customers to digitally build out a closet of their favourite, best-fitting items. This customer input, in addition to transaction data, enables its size recommendation algorithms to get smarter for shoppers' future purchases on partner retailer websites.

Given the need for retailers, brands, or technology providers to collect consumer data for the purposes of size normalisation, ensuring data privacy and GDPR compliance is essential. Providers such as True Fit enforces GDPR policies to ensure data protection, and tends to process general data points with lower risk, such as age, gender, brand preference, product size, style affinity, rather than identifiable information[83].

Offering tailored products: Alternatively, there is potential for the greater uptake of tailoring. There are several benefits to retailers introducing more tailored clothing or tailoring services. Firstly, tailoring renders bracketing and other size driven returns practices redundant, with garments specifically curated to the customer's size and shape. Secondly, it reduces the scope for accepting returns for a non-defective garment. Thirdly, it generates a closer personal connection between the customer and the garment that will both lead to a lower return rate and increase the garment's lifetime utilisation.

One of the major issues is customers buying multiple sizes of the same product because they're not sure what size to buy. That's usually down to size inconsistency across different brands, particularly womenswear, and sometimes even within the same retailer.

Al Gerrie, Founder and CEO, ZigZag

Sizing is the biggest reason for returns, and especially in e-commerce you're buying things you haven't tried on. Clothing is still in binary sizing whilst people are not binary sizes or heights.

Josephine Philips, Founder and CEO, Sojo

It is difficult for shoppers to shop across brands to buy new styles and it is because sizing differs between brands but also within a brand and the way sizing is denoted to shoppers - there are different size scales whether that is international ones, European, UK and US but also home-grown ones that are confusing for shoppers.

Mike Wood, Global Head of Business Solutions, True Fit

At design stage, we are testing new 3D design software which helps us build the product onto an avatar to visualise the styling and design before producing samples.

Rebecca Garner, Established Circularity Partner, ASOS

Image courtesy of Assyst

Case study: Assyst

Assyst is a solution provider that aims to digitalise the apparel industry. In 2005, the company launched a 3D Vidya and in 2022 the latest release including its "Model Suite" offering that allows the fashion industry to develop and display photorealistic avatars which mimic human beings, patterns, and fabrics. These virtual fitting avatars are optimised for real-time usage scenarios, customisable to individual body measurements and features. Currently available to brands, the "Model Suite" aims to help companies respond better and faster to consumer demands as it reduces the production prototype step. Ultimately, through avatars, collections will be digitally available end-to-end from the first draft to marketing in web stores.

Virtual fitting requires two assets: data that represents the unique body shape of a customer and a representation of how a garment is designed to be constructed and sized. The fashion design process is still quite manual and using cameras to scan garments to create 3D images is not a scalable solution for the long term. We want to support the industry as it continues to adopt and leverage 3D digital design software and workflows to produce fashion. These processes generate digital assets necessary to scale a virtual try-on experience.

Stacia Carr, VP Size & Fit, Zalando

We have created a framework that enables us to compare Brand A and all of its styles directly to Brand B and all of its styles and we have created a universal size scale. Another way of thinking of this is, it is a giant size chart that incorporates all of the brands all of these 46,000 representations of brand sizing and it is onto this universal size scale that we plot the individual garment models, and we also plot the shopper models.

Mike Wood, Global Head of Business Solutions, True Fit

Case study: Sojo

Sojo is a London based fashion start-up with a mission to promote circularity and sustainability in the post-user phase. Its app matches consumers to their local seamsters and delivers items to be altered or repaired so that the user can achieve greater utilisation and longevity of their clothes from the convenience of their own smartphone.

Sojo is currently in partnership with GANNI, a fashion brand, to offer London-based users a hyper-local alteration service. Sojo offers a full integration of its service with the brand's website and e-commerce platform and provides access to its in-house seamstresses, ensuring quality control, and end-to-end logistics of pickup and delivery with electric bicycles. While this service is currently only available in Zones 1 and 2 in London, it plans to expand to the rest of the UK with further partnerships.

Image courtesy of Sojo

Image courtesy of Zalando

Case study: Zalando

Founded in 2008, Berlin-based pureplay retailer Zalando is incorporating a series of advanced technologies to help customers find what fits them the very first time. Today, Zalando makes use of machine learning to 1) predict if items run big or small and 2) create personalized size recommendations using customer purchase return and return history along with reference items. This has allowed Zalando to reduce size-related returns by 10%.

Through its acquisition of Swiss-based startup Fision, Zalando intends to be the first fashion e-commerce platform to offer personalized size advice based on the body measurements of customers.

In addition, the company is already piloting a Virtual Fitting Room in collaboration with its brand partners where customers can see how a garment would fit in a 3D representation of their body shape.

6. Digital product passport

Time horizon

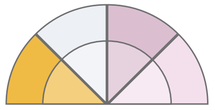
Short term

Medium to long term

Target outcome

Returns handling

Main driver



Technology

Key stakeholders (lead)

Logistics providers

Retailers

Key stakeholders (enablers)

Brands

Digital innovators

Investors

Manufacturers

Digital product passports for clothing refers to the use of tags featuring technologies such as QR code, RFID, NFC. technologies to identify and track the movement of products. Many brands and retailers have already adopted such technologies, e.g., Lululemon, Tesco, Nike, Decathlon.

The use of digital product passports via tags has well-known use cases in the fields of inventory management, store operations and customer engagement. From an inventory management and supply chain perspective, it could be used to make the returns handling process more efficient and reduce garment wastage. From a customer engagement perspective, using digital passports can shift the relationship between retailers and customers from a transactional one that ends at point of sale to a more connected relationship that lasts for the lifecycle of the product. Retailers and customers can thus converse and find ways for the product to be repaired, reused and recycled, ultimately reducing the environmental impact and waste that returns generate. Widescale use of digital passports can also help to bring a greater degree of transparency to the whole industry by making information such as materials, production and transportation available. Based on this, companies and consumers can understand the sustainability level of each garment and work to extend the product lifecycle through repair, resale, reuse, and recycling. However, some consumers might still be hesitating or not familiar with using technologies such QR codes. Research showed that 35% of consumers has never used a QR code, while another 30% don't like using them to access information[84]. Brands and retailers would need to bring consumers onboard the journey of new technology adoption.

Blockchain, tagging and barcode technologies can work well at the front end in tracking a product changing hands from one customer to another. They can also be used to track where the product was manufactured. More practical work needs to be done at the back end to apply these technologies usefully to supply chain tracking and traceability.

Dax Lovegrove, Global Director of Sustainability, Jimmy Choo & Versace

Recommendations

Reducing shipping errors at the onset: Minimise avoidable returns by reducing shipping, picking, and packing errors at the start of the fulfilment process. A study conducted in the US showed that distribution centres are losing an average of US$ 585,000 a year due to mis-picks[85]. Furthermore, a lot of time is then wasted on correcting mis-picks. Investing in digital passports will therefore help retailers save money and time, as employees can easily identify items for picking and packing, ultimately reducing the number of returns a retailer later gets due to wrong products received[86].

Streamlining returns logging: Rather than having store associates log returns into inventory manually, digital tags can simply be scanned, and the process is done automatically in a matter of seconds. A new sales tag can then be attached, and the product can be back on the shelves within hours or days instead of weeks, therefore reducing potential margin erosion[87].

Having the tag scanned in each phase of the supply chain also offers an opportunity to know the history of an item. This streamlines a retailer's backend, and warehouse staff can quickly understand how much an item was sold for, when and why it was returned and check for returns fraud, hence streamlining the returns handling process in the warehouse[88].

Optimising logistics: From the receipt of a returns request, planning the reverse logistics capacity and route required, to real-time tracking of the pallet number, truck position and storage location within the warehouse, creating transparency with digital passports in the overall supply chain during the reverse logistics process can help to optimise the number of truck deliveries and therefore reduce emissions[89]. Combined with other last mile improvement measures, digital passports can be a powerful tool to reduce the environmental impact and cost of returns.

Facilitating information sharing with customers: Separate from supply chain use cases, retailers can leverage digital passports to show customers the impact of returns. Several fashion companies have already experimented with using digital passports to share information about the product and display exclusive content for customer engagement. Retailers therefore have the option to also use this medium to disseminate information about the sustainability of the product and the impact of returns to raise overall consumer awareness on this issue.

We consolidate returns at distribution centres, but we don't move units every week as it's not viable, we do sweeps and mop ups of stock at a point in time when it reaches a certain mass. RFID will help us to make even more improvements to this process.

John Cooper, Senior Director of Transformation Data and Decision Science, George at ASDA

Digital passports unlock the ability to operationalize and scale reverse logistics through a brand's warehouse, such as take back models and sortation, returns management and repairs. Brands can then run these functions at scale while saving on overhead.

Natasha Franck, CEO & Founder, EON

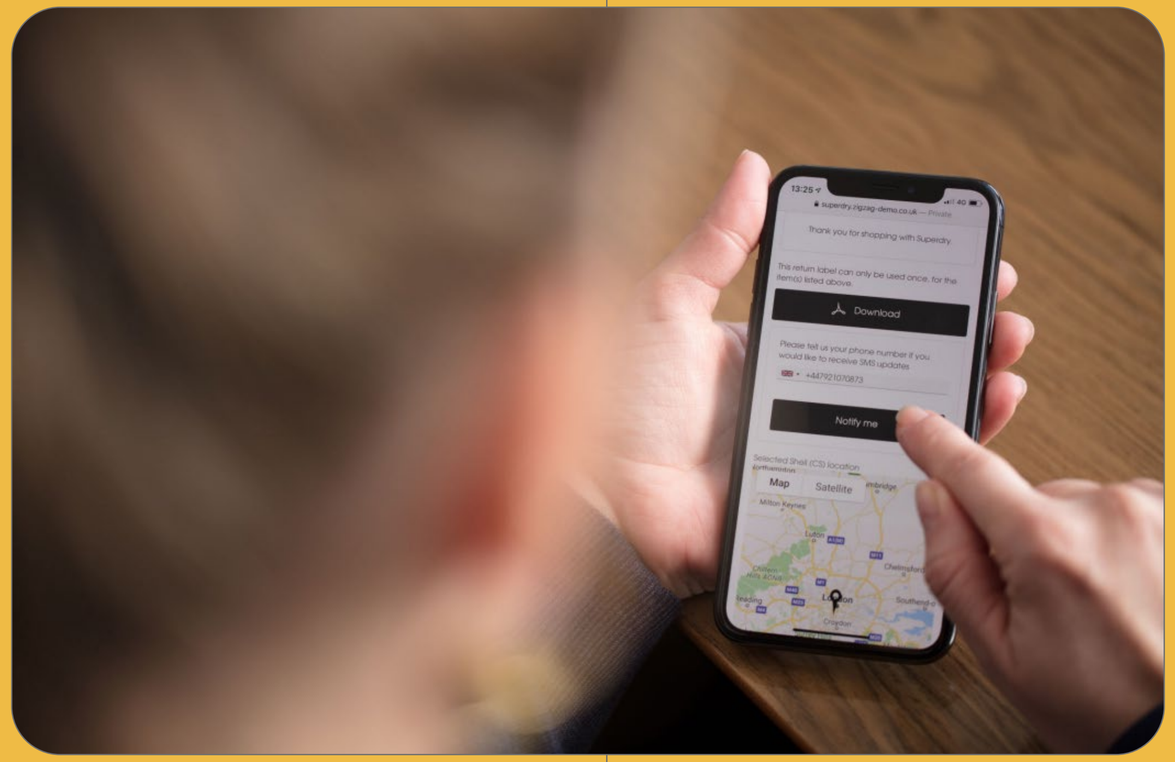


Image courtesy of ZigZag

Case study: ZigZag

ZigZag is a SaaS solution that helps e-commerce retailers manage returns domestically and globally through its platform, connecting retailers to a global network of over 200 warehouses and over 1,000 carrier services in over 130 countries.

ZigZag manages its logistics operations by attaching a digital label to each product that contains information about the item returned, the value of the returned item, transport dates, and reason of return. Knowing the reason of return allows ZigZag to plan logistics accordingly and separate potentially damaged items from the main flow to be either checked or recycled.

Credit: Di Petsa

7. Process automation & digitisation

Time horizon

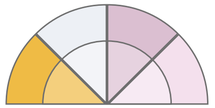
Short term

Medium to long term

Target outcome

Returns handling

Main driver



Technology

Key stakeholders (lead)

Logistics providers

Retailers

Key stakeholders (enablers)

Digital innovators

Investors

Logistics operators can use technology to help process returns more efficiently and reduce value erosion, cost, and waste. By automating and digitising the returns process, or removing the need for customers to fill out returns forms manually, retailers can reduce processing error and shorten the time taken to receive and re-route returns back into a sales channel, which ultimately helps to preserve seasonality and keep stock circulating for sale.

There are various technological tools retailers and logistics operators can use to achieve a greater level of automation. A simple tool can be the use of QR codes and barcodes to digitise the returns process and minimise paperwork and associated printing cost. Another tool that drives automation is the use of artificial intelligence (AI), which gets smarter the more it is used. Once various steps in the returns process have started on their automation journey, the collection of relevant data points (e.g., condition, cost to refurbish) will allow more refined control, eventually making the process smarter. As the processes get smarter and quicker, retailers will start to see improvements in returns process efficiency that will help to reduce the incremental costs of each automation step.

Recommendations

Digitising returns forms: Going digital gives retailers a greater ability to track when, where, why, and how customers are returning. As customers have to scan a QR code or request a return online, any returns made outside of the returns window can be stopped at the onset. Retailers, therefore, can reduce the number of returns they receive by stopping returns that are outside of returns window but would have been sent back if there was a paper returns form in the box. Retailers would thus not have to decide between processing the return anyway or sending it back to the customer, both of which incur cost.

Where returns cannot be avoided, going paperless can reduce the cost and waste returns generate. It is estimated that when retailers include returns paperwork into a parcel, about 70% of paperwork ends up being disposed of[90]. Therefore, digitisation of returns forms is an obvious step for retailers to take. This shift towards paperless in returns process allows retailers to reduce paper usage and waste, with ASOS estimating that by going paperless, it has eliminated 320,000 kg of paper waste in a year[91].

Implementing returns handling systems and fulfilment solutions: Reprocessing goods manually is a complex process that can be extremely costly, both in terms of time and money. The implementation of returns handling systems and fulfilment solutions, in the form of new software and hardware (e.g., machine installation), can alleviate the burden of these processes. Various modules exist for sorting, hanging, checking goods, before cleaning, repackaging, or disposing, which enable high throughput for most goods and allow for more effective reallocation of manual labour to more complex items.

Automating warehouse storage management: Logistics providers can invest into automated storage systems in their warehouses to optimise the usage of space, energy consumption and labour required to run processes and manage stock. Automated storage solutions tend to focus on intelligently calculating all distribution and stock management processes e.g., automated order management, picking, shipping, product storage. They manage order utilisation throughout the day to smooth peaks and lulls, calculate the size of required shipping cartons or pallets, and suggest the right packaging material. This helps the warehouse to avoid waste and increases packing density during transport, enabling fewer trips to be taken[92].

Putting a label into a box is outdated. This should all be fully digitalised. We've seen retailers reduce paper usage by 30 to 40 million pieces a year just by getting rid of the labels in box. Online portals help improve customer retention and provide visibility for retailers over who, what, where, when, and why a product is returned.

Al Gerrie, Founder and CEO, ZigZag

Digitalizing the processing of returns can speed it up significantly, which will have a direct effect on the cost per item returned. The greatest gains can be made just by making it more efficient for staff to process items.

Franz von Bismarck-Osten, Director Sector Development eRetail & Fashion, DHL CSI

On our road map, we will introduce 'intelligent returns', so that when a customer brings back a return, it might be an online return or a store return, we'll be able to digitally scan the item and direct the item at where is the best place for that return to go.

John Cooper, Senior Director of Transformation Data and Decision Science, George at ASDA

Case study: ACS Clothing

ACS Clothing provides an all-round rental, returns and re-commerce service to a number of menswear, womenswear and baby wear retail partners. The company operated a fully automated warehouse that relies on RFID technology to manage flow, as well as automated picking, packing and dispatch of orders. To address the issue of clothes sanitisation, ACS Clothing has replaced its existing manual batch sanitisations chamber with an automated one, increasing the processing capacity from 10,000 garments per day to 3,000 garments per hour with very little human input required. Additionally, the sanitisation chamber uses ozone gas to decontaminate fabrics, which subsequently helps to reduce the use of water and avoid negative environmental impacts from detergent use.

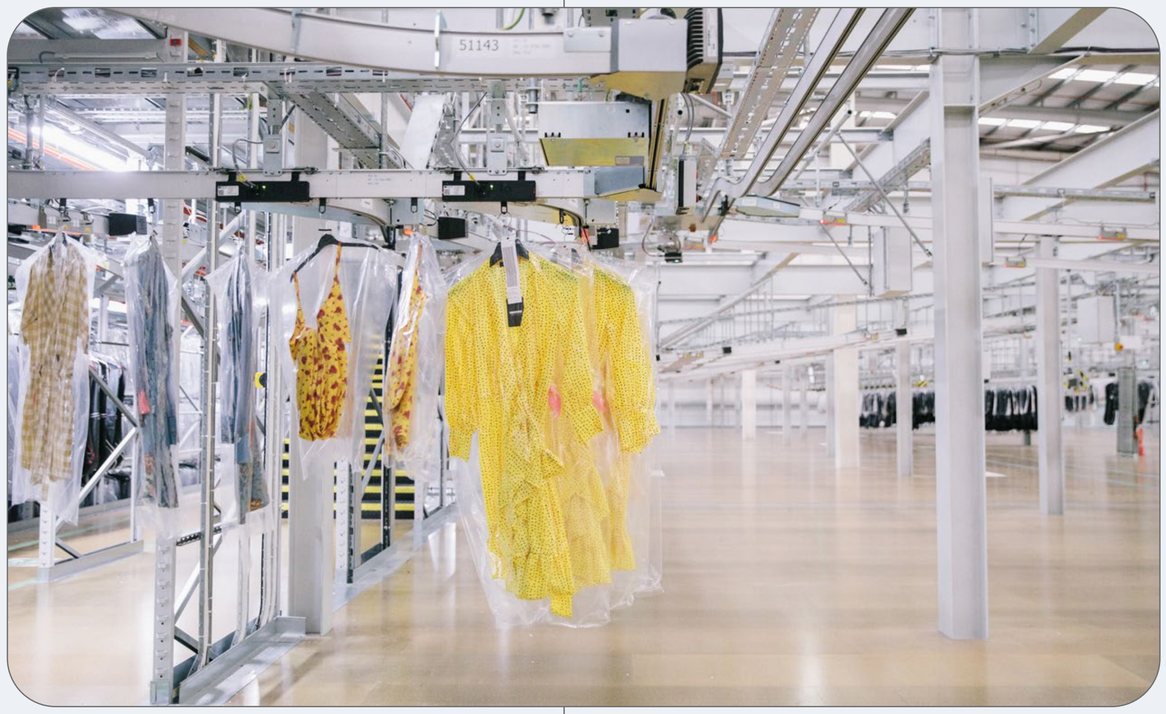


Image courtesy of ACS Clothing

8. Last mile improvement

Time horizon

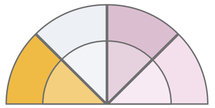
Short term

Medium to long term

Target outcome

Returns handling

Main driver



Industry standards and collaboration

Key stakeholders (lead)

Logistics providers

Retailers

Key stakeholders (enablers)

Brands

Collectors

Government

Reprocessors

In a product's journey from warehouse shelf to logistics provider to end-consumer, the last mile element is a critical final stage of the process i.e., the point at which the product arrives at the customer's door. It is also one of the principal drivers behind emissions in the online e-commerce sector, as the growth of online shopping has fuelled demand for home deliveries, significantly increasing the number of trips needed to be carried out by logistics providers. The last mile's harmful environmental impact is aggravated by several factors, including transport vehicles not being loaded to full capacity for pick-ups and drop-offs, thus increasing the number of trips needed, or deliveries being ordered out to remote rural areas, thus increasing vehicle mileage. In high density city centres, last mile deliveries' negative environmental impact also stems from the heavy congestion and vehicle idling.

Recommendations

Adopting zero-emission transport methods: There are several alternative transport methods that can be adopted to reduce last mile deliveries' environmental footprint, including deploying zero-emission vehicles, drones and electric robots to carry out deliveries.

The current adoption rate of electric vehicles (EVs) and hydrogen vehicles in carrier networks is low, although a long-term shift is expected to take place, given the UK government's announcement in 2019 that sale of new petrol and diesel cars and vans will end by 2030[93], the lower maintenance costs associated with EVs, as well as their reduced environmental footprint. Logistics providers could also consider deploying drones and energy-efficient artificial intelligence robots, which are currently being used by companies in the food industry, to help overcome last mile delivery challenges arising from on-demand expectations. Another cost-effective and sustainable last mile delivery method for logistics providers to adopt for pick-up and drop-off of light clothing items would be pushbikes and cargo bikes. If these zero-emission options are relied on as priority delivery methods, it would greatly reduce the environmental footprint arising from last mile delivery.

Sharing delivery capabilities among SMEs: Small-to-medium sized brands could consider sharing their last mile delivery fleet to optimise vehicle utilisation rates. Collaboration between SMEs would help overcome the issue of having half-full delivery vehicles due to an insufficient amount of returns from one specific retailer. If brands agree to combine their fleet, it increases the likelihood of delivery vehicles operating at optimum capacity, and hence requires less trips, which would significantly help to reduce returns emissions.

Leveraging hybrid stores: Some retailers are redesigning their distribution strategies to create hybrid stores that can function as a sales space as well as a space for inventory management and reverse logistics. This means that a portion of the store's overall footprint would be utilised for storage, packing, shipping, and receiving purposes. If a higher number of retailers adopted the hybrid store model, they would be able to serve as micro hubs for handling returns and collections in store, thereby limiting overall emissions by reducing the need for deliveries fulfilled by third party logistics providers.

A lot of consumers still don't understand the logistics associated with returns and the carbon footprint of both deliveries and returns.

Catherine Loader, Sustainability Specialist – Circular Economy, John Lewis

Case study: DHL

DHL as a global logistics company, has a major part of its operations covering last mile delivery. It has made strides in electrifying its last mile delivery fleet since it began its investment into and collaboration with StreetScooter in 2014. Today, DHL is using 20,000 electric delivery vans, 12,600 e-trikes and 6,700 e-bikes, which are all powered by 100% green energy. As of October 2022, around 20% of DHL's delivery fleet are net zero emission vehicles. This figure is expected to grow rapidly towards 60%, hence supporting DHL in its bid to reduce emissions by 70% over the next seven years.

Image courtesy of DHL

One way to reduce emissions is by reducing the number of miles an item is travelling. To do this, we can consolidate transport e.g., on Regent Street, instead of having 10 vehicles going down the street and creating congestion, why not take all the deliveries into 1 bigger vehicle and just go there once. There is potential for companies to share logistics capacities rather than for a whole group of vehicles to run half full. Even better if we can use more eco-friendly transport like electric vehicles.

Anonymous

We have a hyperlocalised approach with hubs in urban areas and having E-bike riders that are able to collect items from people's homes to be emission free.

Josephine Philips, Founder and CEO, Sojo

9. Consumer awareness

Time horizon

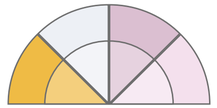
Short term

Medium to long term

Target outcome

Returns avoidance

Main driver



Citizen engagement

Key stakeholders (lead)

Logistics providers

Retailers

Key stakeholders (enablers)

Consumers

Digital innovators

Investors

While the exact level of awareness of fashion sustainability issues remains in contention, it does appear to be an issue that has garnered an increased level of attention in recent times. Among younger generations there has even been a notable behavioural transition to consumers favouring vintage and second-hand shopping, though it is unclear whether this is driven by greater environmental awareness or other influencing trends[94,95]. To ensure that all consumers are aware of the environmental burden of returns, all interviewees agreed that industry stakeholders need to take the initiative to inform and empower consumers. Only when consumers are equipped with the right information can they make informed decisions and powerful behavioural changes towards a more sustainable fashion future. Brands, retailers, and other industry stakeholders have both the ability and responsibility to provide consumers with the right information through integrated reminders, informative campaigns, and other targeted measures.

Recommendations

Displaying information on environmental impacts of returns: The rise of online shopping present industry stakeholders with the opportunity to pursue informational education with an (almost) captive audience. For example, integrated informative notifications or pop-ups can be utilised to show consumers the costs of returns at different stages in the purchasing process. Displays can demonstrate this through altruistic and personally motivated appeals e.g., "1 returned item causes >800g CO_2 emissions" or "It takes consumers on average over 30 minutes to return a product". In the consumer survey, 37% of online shoppers indicated that an emissions notification would likely prevent them from returning online purchases.

Integrating sustainability experiences in bricks-and-mortar: Though a lower proportion of returns originates from bricks-and-mortar sales, retail stores can also be utilised to raise awareness and host campaigns on the promotion of sustainable purchasing practices and the pursuit of a circular economy. Messaging can focus on bringing to life the realities of the returns process, therefore providing transparency to the traditionally opaque process. Features of engagement may include sustainability corners, public workshops, educational videos on in-store displays, to create an in-store experience that teaches consumers about the issues of returns and encourages them to participate in conscious consumerism.

Providing notification of deliveries: To promote more efficient handling of returns through consumer education and empowerment, logistics providers should pursue increased customer compliance for lower rates of failed deliveries. Sending notifications alerting recipients of imminent deliveries, allowing for package tracking, or creating greater transparency will reduce last mile delivery emissions from repeat and delayed deliveries.

Identifying serial returners: With increasing availability of consumer data, the fashion industry has greater transparency on different consumer types. Identifying customers with high return rates can allow for the implementation of targeted education and deterrent based policies, such as compulsory informative videos and invitations to sustainability focused events or even removal of free returns and temporary account bans. As serial returners also tend to have disproportionately high lifetime spends and high levels of brand loyalty, measures that engage with these customers could be very fruitful, promoting both a better understanding and deeper connection between the customer and the retailer[96].

Launching joint influencer and government campaigns: Undeniably, public opinion and societal perception drive many different aspects of consumer behaviour and fashion's returns issue would benefit from informing society and targeted consumers. Drawing lessons from some of the most effective COVID-19 messaging campaigns, we can better understand the powerful impact of a consistent, unified, and purpose-driven approach to public information movements. Through the utilisation of purpose-driven engagement, the general populace can become informed on the environmental impacts of returns, the most common behavioural pitfalls, such as bracketing, and what can be done to bring about positive changes. Similarly, involvement of all stakeholders, from government and corporates, to influencers and activists, will ensure a wide reach and promote consensus. This approach could propagate a new wave of conscious consumer behaviour change in the medium to long term and lower overall rates of returns.

Credit: Alighieri

Brands and retailers have a responsibility to communicate in a clear, concise and consistent way so that their customers understand better. This communication may also need to have an educational aspect. Customers are surprised that items are not always restocked when returned. Aside from product transparency, there needs to be more pre-purchase engagement with consumers about processes.

Cristina Sabaiduc, Senior Sector Specialist Sustainable Textiles, WRAP

If you offer free returns, you're likely to have a large cohort of shoppers who never intended to keep their purchase. These shoppers appear highly engaged and buy lots but also return most items and therefore have overall negative profitability. If you can stop marketing to this cohort of shoppers, your revenue may see a small decrease but will be outweighed by a significant boost in profitability.

Vikesh Shah, New Business Director, Metail

Case Study: The Psychology of Returns study by Elaboratum, Behamics and the University of St. Gallen[97]

To understand how effective consumer education could be, researchers at St. Gallen university, Elaboratum and Behamics conducted an experiment with 100,000 consumers to better understand how nudges can influence customer's returns behaviour. They examined the impacts of the following five policies:

1. Automated size information is given through a display of the size table or a note of personal advice, if the customer appears unsure (i.e., if the customer has several sizes of the same product in the basket)
2. Precise product information is provided such that the product is more likely to meet customer's expectations e.g., the colour and fit is as described
3. Hybrid service offerings are provided to help customers navigate important information i.e., through chatbots or direct person-to-person calls for more complex products
4. Customer reviews are included not only to help shoppers make more considered purchases, but also for retailers to collect crucial data for updating the future products
5. Conscious shopping is incentivised with reward mechanisms i.e., vouchers for users who rarely or never return items

The team subsequently found that if all retailers in Germany implemented these measures there would be almost 16 million fewer returns in Germany every year, corresponding to 13,000 fewer tonnes of CO_2 emissions, equivalent to the planting of 13 million trees.

Case study: Reskinned

Reskinned powers circular solutions for clothing and footwear brands. Reskinned is built on three key pillars: take-back, re-commerce and reuse, and recycling. The take-back pillar encourages consumers to return clothes of a certain partner brand they no longer want for a reward to spend with the brand. Resale is hosted on the Reskinned platform and within brand approved preloved stores on Ebay, where customers can purchase pre-loved clothes that have been repaired if damaged. Clothes that cannot be salvaged are then recycled. On average 40% of all clothing processed by Reskinned is resold, 40% is reused elsewhere and 20% is recycled. Reskinned also runs campaigns in partnership with brands to educate consumers about circular fashion and the environmental benefit of reusing, reselling, and repairing clothes.

Image courtesy of Reskinned

10. EPR & other government policies

Time horizon

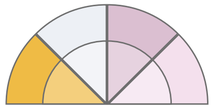
Short term

Medium to long term

Target outcome

Returns avoidance

Main driver



Government

Key stakeholders (lead)

Government

Key stakeholders (enablers)

- Academia
- Brands
- Collectors
- Consumers
- Designers
- Digital innovators
- Institutions, industry bodies, 3rd sector
- Investors
- Logistics providers
- Manufacturers
- Reprocessors
- Retailers

Policymakers play a critical role in creating the right market conditions to promote the reduction of returns and their environmental impact, either through (1) policies directly impacting returns themselves, or (2) by incentivising the reduction of waste and/or emissions, which returns contribute to. While legislation directly addressing returns is still relatively unestablished within the UK, there are several planned policies being introduced to tackle clothing waste, in line with the government's ambition to achieve net zero carbon emissions by 2050.

Recommendations

Extended Producer Responsibility: One of these regulatory mechanisms is Extended Producer Responsibility (EPR), a policy where companies must take responsibility for the treatment and/or disposal of the products they put on the market, incentivising waste reduction from the source. Based on its implementation in other countries, EPR has been recognised as a powerful measure to accelerate the transition towards circular economies, encourage responsible product design, and contribute to the climate change response. In the UK, this policy is set to be phased in from 2024 for selected products i.e., electrical goods, batteries, vehicles and packaging[98,99]. The textiles sector is considered as one of the top five contenders to be included in the EPR scheme in the next 2 to 5 years. Immediate government plans relating to this include the sharing of textile EPR options with fashion industry stakeholders by the end of 2022 to gain their viewpoints and buy-in[100].

EPR generally encourages industry reform, and many fashion retailers are already being impacted by the proposed UK EPR policy on packaging. Under the current packaging policy, on top of fulfilling all other business and accounting requirements, producers with over £1 million annual turnover that handle over 25 tonnes of packaging per year must[101]:

- Pay waste management fees
- Collect and submit data on the packaging handled and supplied
- Buy packaging waste recycling notes (PRNs) or packaging waste export recycling notes (PERNs) to meet their recycling obligations

Similar EPR legislation has been introduced in France and Germany, where many UK fashion retailers operate. France is currently considered to be a pioneer in this space with its innovative and strict recycling laws[102]. French EPR has also been in place since 1975, with further extensions applied over the years[103]. In 2020, France's EPR legislation was developed to promote a circular economy. Under current legislation, any companies bringing in specific goods must pay for the recycling/resale of any waste resulting from the production of these goods[104]. Furthermore, destruction of unsold clothing, linen and footwear via landfill and incineration has also been prohibited since January 2022[105]. In Germany, EPR legislation is similar in nature to that of France[106]. Additionally, parties other than German regulators (e.g., competitors) are also able to issue 'warnings' and demand compensation from other producers deemed to be non-compliant with EPR standards and related administrative requirements[107]. One notable way in which France and Germany's EPR policies differ from the UK is its broader definition of 'companies' to include marketplaces alongside producers of goods, thus making the policy more far-reaching[108].

Given the far-reaching nature of EPR policies, an extension of the EPR policy in the UK to cover textiles or even marketplace 'producers' will imply a greater level of reform and encourage industry stakeholders to find more innovative ways to reduce the level of waste that fashion returns contributes to.

EU Textiles Strategy: Beyond country specific EPR policies, a broader framework for managing textiles and its environmental impact is needed. Developments in EU regulation, such as the EU Textiles Strategy, are particularly pertinent, given the strong interlinkages between the UK and Europe and reasonable likelihood that the UK government would adopt a similar strategy. The proposed EU Textiles Strategy aims to help the EU transition towards a climate-neutral, circular economy through the creation of products that are designed to be more durable, recyclable, reusable and energy-efficient. In addition to EPR for textiles and the use of mandatory eco-modulation fees, the strategy also consists of other pillars to reduce textile waste:

- Set binding design requirements for textiles to make them last longer, easier to repair and recycle, as well as requirements on minimum recycled content
- Introduce clearer product information e.g., circularity parameters, country of origin and manufacturing processes, and a Digital Product Passport for textiles
- Ensure accuracy of companies' green claims
- Discourage the destruction of unsold or returned textiles
- Address the unintentional release of microplastics' synthetic textiles
- Restrict the export of textile waste and promote sustainable textiles globally
- Incentivise circular business models including re-use and repair sectors
- Encourage companies and Member States to support the objectives of the strategy

How retailers and brands should react

To prepare for the potential implementation of EPR and other regulations and stay competitive, fashion retailers should therefore proactively consider how existing business processes, such as product design, online website design, packaging, can be reformed, in order to ultimately reduce fashion returns and other incurred waste. This proactivity would also be beneficial in the longer term, as legislation specifically targeting the sustainability of returns or could be introduced in future. These regulations may cover areas such as:

- Additional taxes to businesses based on the volume of returns generated
- Incentives for businesses with low return rates
- Greater financial support for start-ups tackling the returns issue
- Reduced VAT or corporate tax rates for businesses operating in the resale, rental, repair and remaking activities that keep products in use longer

It is therefore in the interest of all parties, including fashion industry stakeholders and policymakers to work collaboratively to define meaningful measures that help to stimulate the right innovations, CSBMs and environmental outcomes.

The UK needs to mirror or do better than the EU strategy on Textile, otherwise it will preclude many UK businesses from being able to sell their products in Europe.

Anthony Burns, Chief Operating Officer, ACS Clothing

We know that more legislation is going to come in and we agree that it needs to. Hence we've started to establish circular design standards internally. We're trying to get ahead of the curve and make sure that we're ready as there will be a big emphases on repairability and durability.

Catherine Loader, Sustainability Specialist – Circular Economy, John Lewis

Legislation is coming in quickly and it's good to put pressure on the industry to change. In my perspective, brands have two responsibilities: one is to consider sustainability in the design phase to increase the longevity of a product, second is to think about how products can be fed back in the system.

Jemma Tadd, Head of Fashion, eBay

Illustrative business case for adopting selected solutions

While the need to reduce returns or make them more sustainable is clear, what has been less clear for many fashion companies is the business case for doing so. Ultimately, understanding the commercial and financial implications of adopting various measures is critical to ensure widescale buy-in into the viability of the proposed measures.

This report has listed several short, medium and long-term measures that industry stakeholders could adopt. However, as the manifestation and finer points of how these measures are rolled out can vary widely, the report's exemplary business case will focus on the most concrete and achievable measures on a company-level that address the main driver of fashion returns: size and fit. This business case considers two sizing advice measures for illustration: the use of sizing calculators and virtual avatars.

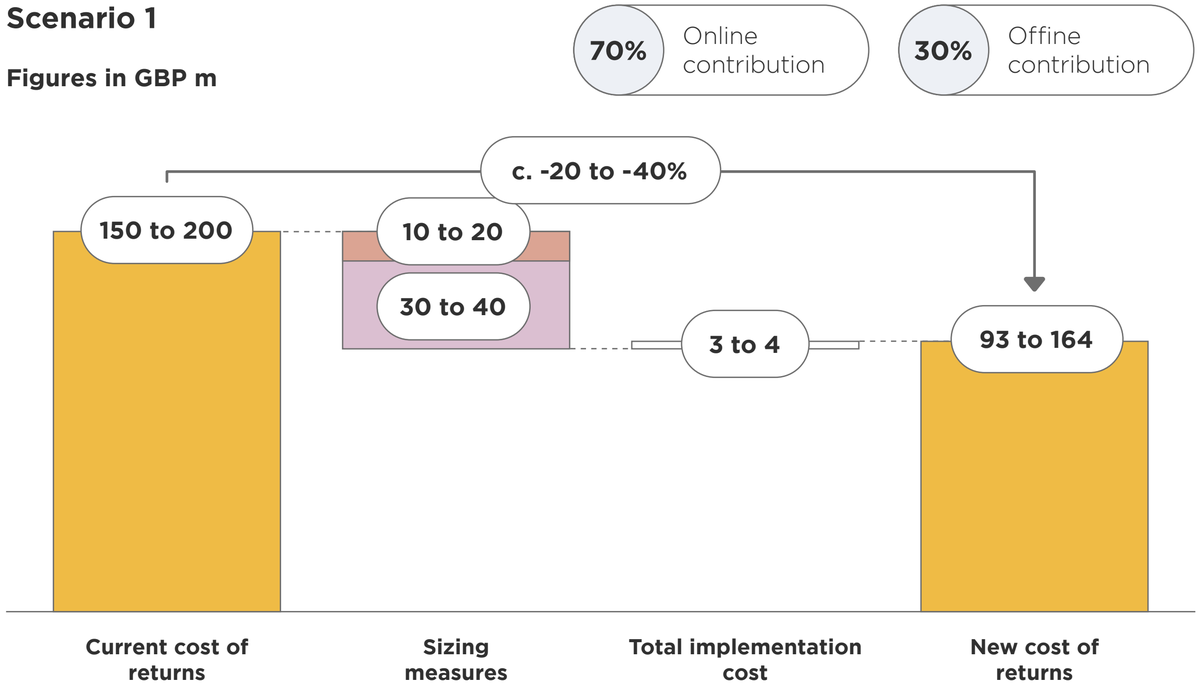
The adoption of sizing calculators is a particularly quick win for many fashion companies today due to the existence of strong technology solutions providers that are already serving several fashion retailers. Virtual avatars are a slightly longer-term play, as they are not yet as widely available and established as sizing calculators. Therefore, while companies facing huge returns issues may now invest in sizing calculators as a quick win solution, they could later replace sizing calculators with virtual avatars when the technology becomes more established, scalable, and accepted by consumers.

To illustrate the benefits of these sizing measures, two scenarios are presented for a fashion company with £1 billion revenue per year, stocking about 20,000 SKUs, and average selling prices of £12 for online and £14 for offline. Scenario 1 depicts a company more geared towards online operations, with 70% of its revenue coming from e-commerce and 30% coming from offline channels, while Scenario 2 depicts the reverse i.e., 70% of revenue coming from offline channels and 30% from online channels. The results can be extrapolated to further understand potential upsides for a pureplay online business.

Credit: Helen Kirkum

Scenario 1

Figures in GBP m



Note that business case figures are high-level estimations created through the triangulation of numerous data points, and should not be used for decision making without further independent validation.

Figure 23: Business case - Scenario 1

In Scenario 1, due to a larger contribution from the online business, the company is more likely to face a greater returns challenge than in Scenario 2. As such, a company profile fitting Scenario 1 may choose to invest first in sizing calculators and later replace them with virtual avatars, as the latter technology gains more traction and is more established. After accounting for the estimated cost of implementation, it is estimated that this exemplary company could cut returns costs by approximately 20 to 40%[113,114]

Scenario 2

Figures in GBP m

Note that business case figures are high-level estimations created through the triangulation of numerous data points, and should not be used for decision making wthout further independent validation.

Figure 24: Business case - Scenario 2

However, for a company profile fitting Scenario 2, which has less of a problem with returns due to a higher offline contribution compared to in Scenario 1, it may choose to only invest in sizing calculators due to its relatively lower cost. This would give it a 3 to 10% reduction in total returns cost in a year.

These may even be further lowered if companies have already invested in foundational technology that sizing calculators or virtual avatars could build up on, e.g., 3D computer-aided designs (CADs). Both these scenarios therefore already show the positive business case of adopting two relatively straightforward measures to solve the sizing issue driving fashion returns. Beyond this, other measures tackling challenges beyond size and fit could also be added in future to further bring down the cost of returns.

Learnings from reverse logistics for Circular and Sharing Business Models

While most of this report has discussed ways to reduce the number of returns as well as their environmental impact before they are returned to the original brand or retailer, the adoption of Circular and Sharing Business Models (CSBMs) is another way to reduce the impact of returns. CSBMs dedicated to fashion are relatively new in the fashion industry but is set to be a significant part of the industry, and the adoption of these models by fashion incumbents is on the rise. Interested companies can glean several learnings from reverse logistics of returns to conceptualise some measures that could help make CSBMs work for them.

Introduction to CSBMs

Within CSBMs, there are three main types of models, which all vary in maturity:

- **Re-commerce:** This is the most mature CSBM and refers to the resale of used, second-hand or vintage garments to new consumers. Primary channels include branded platforms, multi-brand platforms, peer-to-peer marketplaces, and charity shops. While the original growth of this market may have historically been driven by price, consumers are also starting to favour second-hand options due to the perceived uniqueness of wearing vintage 'one-of-a-kind' clothing and growing awareness of environmental issues associated with purchasing new clothing. In terms of uptake, findings from the consumer survey revealed that 26% of Generation Z and 28% of Millennial respondents have already shopped with such resale platforms, and this is expected to increase as the market value of the second-hand market is forecasted to grow by 21% per annum between 2022 and 2030[116].

- **Rental:** This refers to the provision of clothing to consumers on a temporary basis and may be executed on a one-off or subscription basis. As such, consumers could pay significantly less for renting the item than they would if they had bought it. The clothing rental segment for fashion categories other than occasion wear is relatively immature compared to the resale market, due to lower consumer awareness of the existence of these models and the smaller number of rental options available[117]. However, this market is also expected to grow, driven by consumers' increasing preference for sustainable options, and the fact that clothing rental minimises waste and clutter, and potentially saves consumers money.

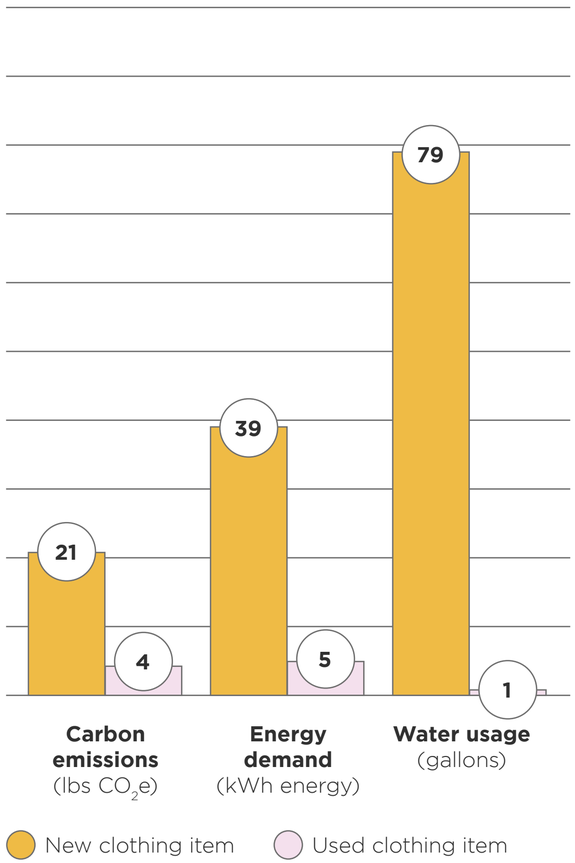
- **Repair services:** These services are increasingly part of an existing fashion retailer's service offerings and refer to the availability of repair or redesign services to extend the lifespan of a garment. Although repairing clothing items such as shoes is nothing new, it has been put in the spotlight as a way of improving clothing utilisation in the fashion industry.

CSBMs are generally seen to be better for the environment, given there are no new products being manufactured and therefore less resource extraction. Although CSBMs do incur carbon emissions due to additional product handling, there is upside from the reduction of environmental impact due to the avoidance of additional production, including raw material extraction, and the extension of the product lifecycle. For example, extending the active life of 50% of UK clothing by nine months with CSBMs could potentially reduce the textile industry's carbon footprint by 4%[118].

When comparing the environmental footprint of resold and rented items versus new items, the difference is clear, as demonstrated in the illustration below. Although the environmental benefits of rental model look modest compared to re-commerce model, and rental model does produce emissions with a higher frequency of reverse logistics and reprocessing, it is important to note that these numbers do not consider the environmental savings gained from producing less clothing, as ownership is substituted by rentals for multiple users. For example, if a top is rented 10 times, it could stop some consumers from buying first-hand items. A displacement rate of first-hand items through the rental of shared garments is estimated to be 30% (i.e., instead of 10 items being bought first-hand, only 7 are now purchased), whereas resale is likely to see a smaller number of owners due to a longer duration of ownership[119].

Recommerce

Footprint of a new vs. used clothing item



Rental

Percentage reduction in footprint of a rented clothing item vs. new clothing item
i.e. the footprint of a rented clothing item is_% less than a new item

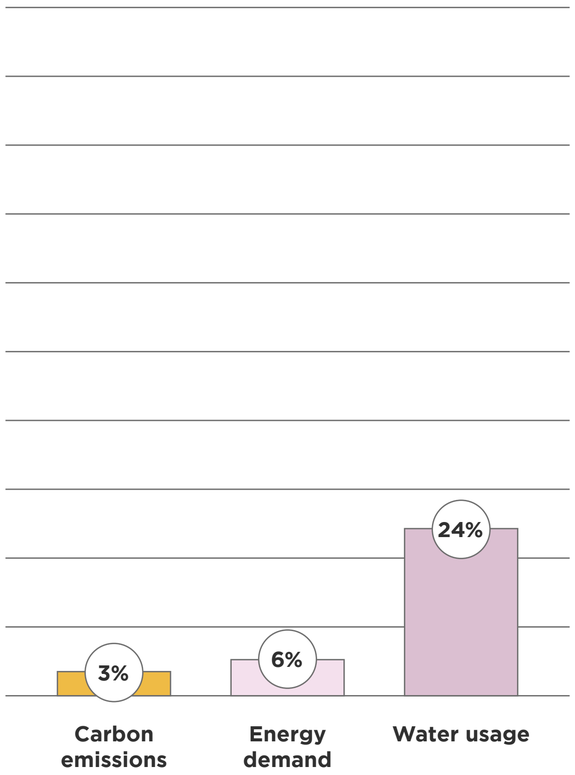


Figure 25: Environmental impact of a new clothing item vs. second-hand item[120,121]

As the sustainability agenda is becoming a key topic at C-suite level, the adoption of CSBMs presents an option for brands and retailers looking to reduce their environmental impact. Although CSBMs may still seem very new, consumer uptake is expected to continue its current growth trajectory in the future. Overall CSBM market is therefore anticipated to grow by 18% per annum between 2022 and 2030, compared to 9% for the global apparel market over the same period[122,123].

Barriers to widespread adoption of CSBMs and solutions

However, despite the strong growth trajectory of CSBMs, more needs to be done to move the needle and make such models mainstream before they can have a real mitigating impact on the fashion industry's environmental footprint. One of the key challenges preventing widespread consumer adoption of CSBMs is the perception of resold or rented clothing being dirty and unhygienic. This perception could have come from the legacy of older resale formats e.g., thrift shops and flea markets. However, many consumers do not consider how many times their supposedly 'new' garments had been touched or worn by others, either during the production or retail phases (where other consumers try them on), and still consider these garments to be 'clean'. Nowadays, the format of CSBMs has also changed and become far more accessible and professional, with some companies enlisting the help of companies that provide cleaning technology such as ozone gas to sanitise clothing before resale or rental.

In addition to adoption barriers from the perspective of consumers, many brands and retailers also feel that CSBMs, particularly the rental model, are most viable for businesses operating in the premium to luxury segment. This is due to the high level of reverse logistics and reprocessing (including cleaning, packing, and sorting) involved in a rental model, at a very high frequency, which generates great operational cost. While companies operating in the premium or luxury sector may be able to withstand such operational cost due to higher average selling prices per item, potential longer product durability or possible value inflation of specific luxury products, those operating in the value segments may struggle to find profitability with such a model.

However, this has not stopped mass fashion companies from trialling rental services[124]. Some brands and retailers have applied circular models only for the more premium portion of the range, created bigger rental orders (e.g., 3-5+ items per rental order), or used store-based fulfilment. Retailers can also consider an approach where customers can add multiple items to a virtual wardrobe, of which only some will be selected to be sent to the customer for a fixed price per month[125], depending on product availability.

Learnings from reverse logistics
To further understand how CSBMs can be better designed for commercial purposes and marketed to consumers, lessons can be drawn from reverse logistics. Looking back to the framework of recommendations to achieve the target state of returns, specific learnings can be gleaned to apply to the areas of consumer awareness, last mile improvement, digital product passport, and process automation & digitisation, as shown below.

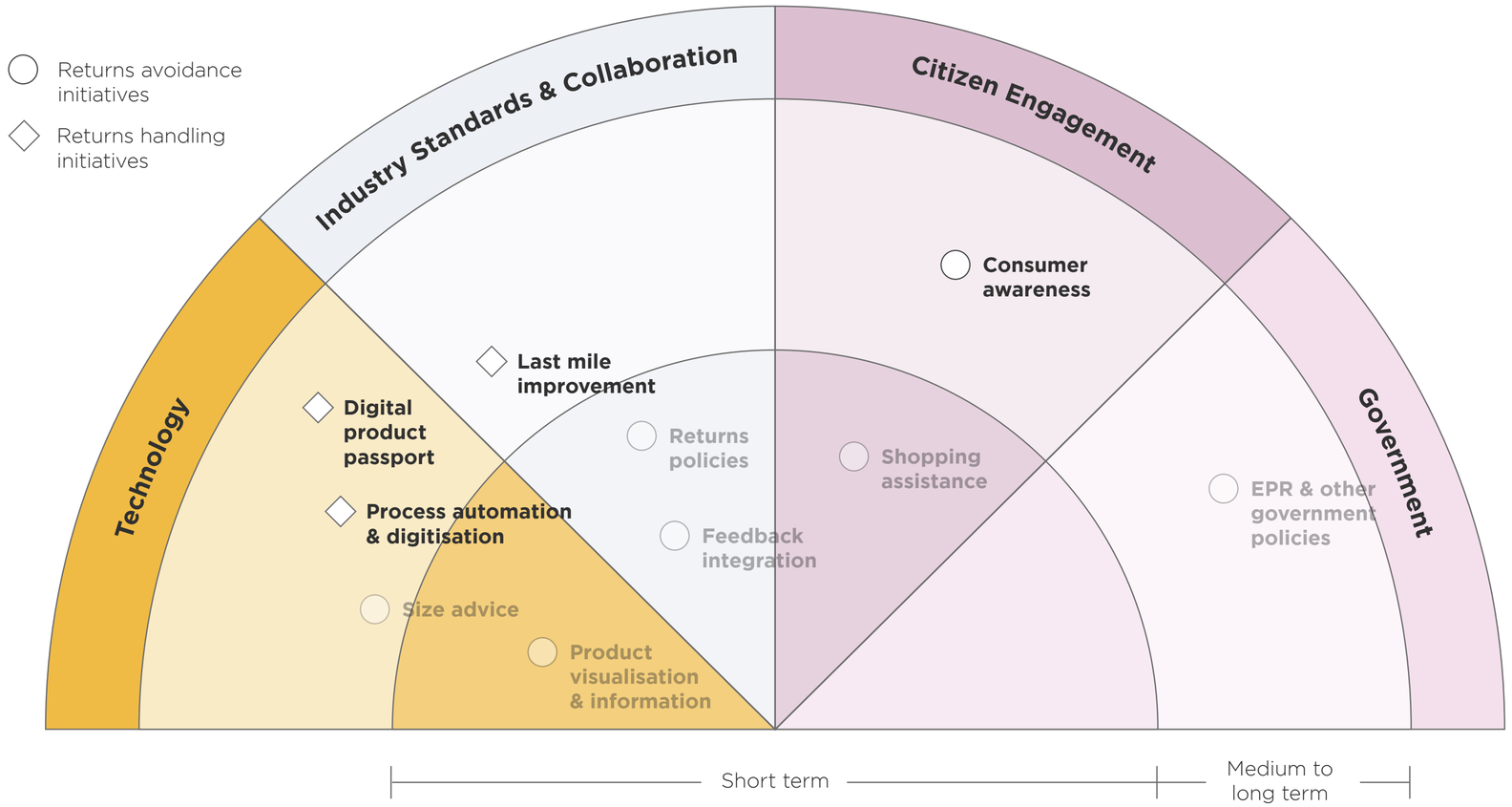


Figure 26: Solutions framework applied to CSBMs

We need take-back / separate collection systems for textiles and clothing, and we need to re-educate consumers about the value textiles have, so that they understand that they should not be disposed of with household waste, but rather kept in the system. But we also really need to get our act together to design the systems that can sort, repair, reuse and recycle the textiles that are collected.

Gwen Cunningham, Lead Circle Textiles Programme, Circle Economy

Digital product passport: Just as many reverse logistics operators use technologies such as RFID, QR code to speed up their product identification and sorting process, CSBM companies can also adopt the use of digital passports for similar use cases. RFID tags can also be used to identify if the products returned are genuine or counterfeits, particularly in the case of luxury accessories. Furthermore, depending on how digital passports can be balanced with data privacy needs, these tags can be used by retailers to track usage and ownership over the lifetime of the garment, to understand the durability of the garment and how to improve it to further reduce environmental impact.

Process automation & digitisation: Many leading logistics and reverse logistics companies are experts in using automation to speed up their processes. From automated warehousing, cleaning, to smart stock management, there are many use cases for automation that CSBM companies can adopt. Rental leaders who have achieved a high level of scale, such as Rent the Runway, are already investing in automation to increase the efficiency of intralogistics[126]. CSBM companies can also outsource various steps such as sanitisation to other companies who have this infrastructure set up.

Last mile improvement: One of the biggest cost elements of CSBMs is the reverse logistics handling, which includes transportation. While this could be somewhat unavoidable cost for companies running CSBM operations online, other companies with an offline presence may be able to utilise their store network to ease the pressures of fulfilment and garment collection. For example, instead of delivering rented or resold items to customers via home delivery, fashion retailers could invite customers to pick up and drop off their delivery in stores. In the case of rentals, retailers could then consolidate returned items to be sent back to the warehouse for cleaning in the same trucks that drop off the day's deliveries, thus optimising its usage. For online-based CSBM providers, collaborations with store-based partners with the right fulfilment setup could also provide similar benefits.

Consumer awareness: Given a key barrier to consumer adoption of CSBMs and their products is consumer perception that rented or resold items are not hygienic, retailers can adopt cleaning and sanitisation best practices from reverse logistics or sanitisation companies to disprove this idea. For example, the University of the West of Scotland (UWS) and Advanced Clothing Solutions (ACS) has developed a sanitisation solution using ozone, which has been shown to kill a large range of germs, bacteria, and viruses in an automated manner[127]. Brands and retailers can also experiment with ways to market the cleanliness and sanitised state of their products, highlighting to consumers the differences of each method. Companies can use strong messaging and dedicated web pages to drive home this point, instead of making it a small point in their FAQ section. This will enable companies to spread stronger messaging and consumer awareness that rented or resold products are still clean, hygienic, and wearable.

One of the barriers to adopting circular models, especially the rental model, is that we have a strong culture of ownership in the UK, which makes people reticent to adopt rental models. It is changing however, as consumers are starting to rent a lot more things such as Spotify.

Anthony Burns, Chief Operating Officer, ACS Clothing

Brands need to act more sustainably because consumers' decision criteria are really changing. If you lose 2% of your customers every year because of environmental concerns, that's going to have an impact on your business.

Matt Hanrahan, Co-Founder, Reskinned

In recent years, searches have gone up massively for pre-loved fashion on eBay. We want to make it clear that buying pre-loved should be as good as buying new, so it's about changing consumer perceptions, driving awareness, and making pre-loved accessible.

Jemma Tadd, Head of Fashion, eBay

We want our customers to have the same quality experience when using the Lifetime Service Centre [Mulberry's repairs centre in Somerset] as they would in store; to feel like they are getting a new bag, even though it's their old bag. All bags which go through the Lifetime Service Centre are quality inspected before they are packaged into a protective care bag and CupCycled carrier bag, and returned to the customer.

Rosie Wollacott Phillips, Head of Group Sustainability, Mulberry

Credit: Klamby

Implications for the UK economy

While the case for change in the fashion industry is clear, it is important to consider the implications for the UK economy and people's jobs. To start, the fashion industry scale and significance cannot be understated: it is the 15th largest industry in the country, and is bigger than the wholesale and retail of automotive, sports activities, chemical manufacture sectors individually, although similar in size to the food and beverage and telecommunications industries[128]. It contributes £29 billion to the UK gross domestic product (GDP) and positively impacts other industries such as tourism, when it organises events such as London Fashion Week[129]. In terms of export trade, the UK is the second largest exporter of used textiles globally, worth £381 million in 2018[130]. Therefore, it is no surprise that the industry plays a pivotal role in the UK employment market as there are over 30,000 businesses operating in the UK fashion and textile sector, employing 800,000 people across retail, wholesale, and manufacturing[131,132].

Although a shift towards a greener fashion industry may cause concerns that jobs could be lost due to automation, this is not necessarily the case. Instead, a transition towards greener reverse logistics and returns minimisation business models creates further job opportunities as the transition would open new roles and make the upskilling of the future workforce necessary. While determining the exact proportion of fashion jobs that can be attributed to returns management or CSBMs is difficult, across all sectors in the UK, this transition is expected to create 200,000 to 472,000 jobs[133], of which an estimated 3-5% could go to the fashion industry based on the number of fashion workers as a proportion of the UK workforce[134].

However, the UK is already experiencing a massive labour shortage across many sectors[135]. To ensure that the fashion industry can supply the needed levels of talent, it should focus on collaborating with educational institutes as part of the Lifetime Skills Guarantee programme to create technical fashion education and Local Skills Improvement Plans[136], based on what the industry needs, while providing individuals with the training they need to get a well-paid and secure job. Only by proactively taking these steps to ensure the future of the fashion workforce will the industry be able to support the transition to a greener state.

Digital technologies will allow us to track and optimise resource use and strengthen connections between supply-chain actors through online platforms and technologies. Therefore, in the future, digital skills will be more important for a circular fashion industry - and in particular, are key enablers of new circular business models.

Gwen Cunningham, Lead Circle Textiles Programme, Circle Economy

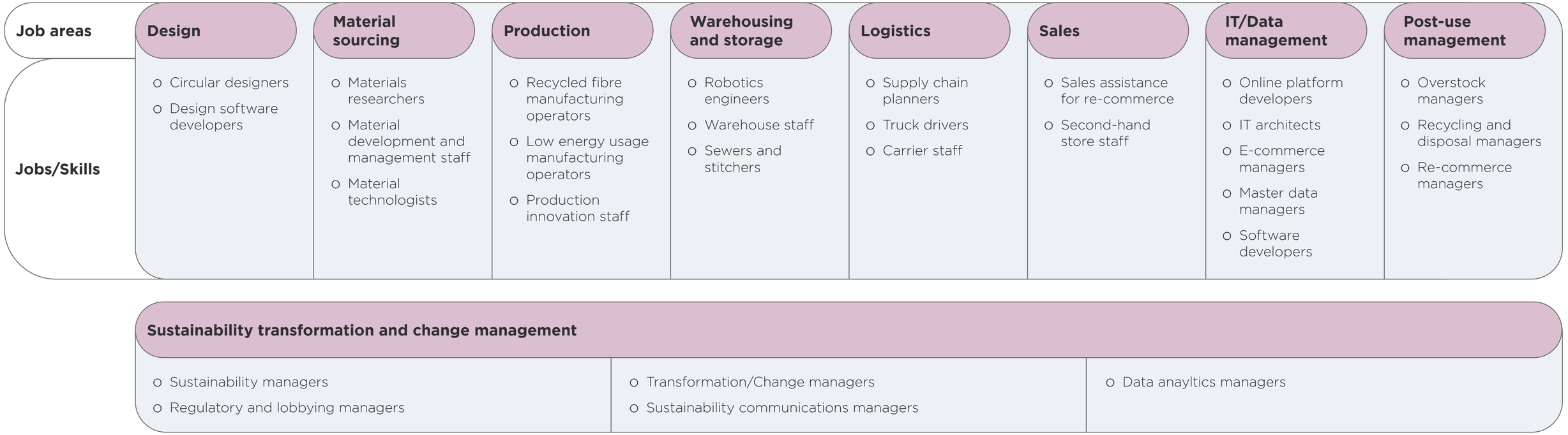


Figure 27: Overview of new skills/roles required in a greener fashion industry (non-exhaustive)

Some of the jobs that could arise to enable this transition will be all along the fashion value chain. Roles will be needed from design, material sourcing, to IT and data management, warehousing, post-use management, as the illustration above shows, to support the transition to more sustainable business models.

At the design stage, new skills will be required to develop designs that have longer durability and repairability built in to allow for CSBMs. As the whole industry moves online, employees skilled in technology and e-commerce, and data scientists will be required to provide, run, and maintain resale platforms or to digitally receive and re-list returned products. Additionally, to implement new virtual features such as sizing calculators and virtual avatars, technology staff will need to either develop the solutions or work with external providers to successfully integrate the technology. Data analysts will also be essential to develop a solid data base and track and steer initiatives in this transformation process.

At the logistics stage, with increasing volumes of online returns and pre-loved items requiring greater handling complexity due to remanufacturing or repair, demand for warehouse operations skills will soar. While companies can invest in robotics and attracting robotics engineers and supply chain planners[137], many handling steps in the process will stay manual and require a significant number of workers to process and repair returns in the warehouse.

From a retail perspective, subsequent product resale will generate many new sales jobs. In 2019, the pre-loved market had a total of 3,765 stores specialised in selling second-hand goods, most of which were fashion-focused, and employed an average of 35,000 people.

Overall, to facilitate this transition towards a greener and more circular ecosystem, the fashion industry, government, and educational institutions will need to adapt their approach and training programmes to deliver on future requirements. A well-founded dialogue and rigorous plan will be needed to deliver the skills required to create a greener fashion industry that is also attractive to all stakeholders[138].

Credit: Max Zara Sterck

There's more the UK government can do to push the adoption of CSBMs. Currently the fashion industry is not seen to have as much weight as some others, based on what apprentices in logistics and textile care are given while they train.

Anthony Burns, Chief Operating Officer, ACS Clothing

The industry realises that we need to invest more time and resources into green jobs and people who have got specific skills in this area.

Catherine Loader, Sustainability Specialist – Circular Economy, John Lewis

Section 5

Conclusion

Credit: Phoebe English

In 2021, Phase 1 of the Circular Fashion Ecosystem Project built a framework for change whereby all stakeholders in the fashion's complex ecosystem have a role to play individually, and together for a wholesale move to circularity. In doing so, there is a clear environmental case for greater circularity and one that needs to be done with a just and fair transition to help reduce the negative impacts of the fashion industry. Its current environmental impact cannot be ignored, as it represents around 5% of global greenhouse gas emissions, consumes 98 million tonnes of non-renewable resources every year, and uses 93 billion cubic metres of water annually[139,140].

In this report, which is one of many Phase 2 Projects from the IPF, we have started to create a roadmap for change by first discussing the issue of fashion product returns, a less looked-at component of the downstream supply chain, but nonetheless a highly pertinent one. The impact of UK returns is not negligible, as they are estimated to generate about 750,000 tonnes of CO_2 emissions in 2022 due to the entire returns handling process[141]. There is also an incredible amount of waste generated, as over 75% of fashion returns that cannot be resold are either sent to landfill or incinerated[142]. The target state is therefore one where returns are minimised, and when they do occur, they are handled in a sustainable way. Therefore, this vision is centred around two target outcomes:

However, for these targets to come into fruition, the industry must come together and align on the actions and standards required to deliver on these targets. Wide-scale collaboration by all parties will be critical if the fashion industry is to move the needle on becoming more conscious of its environmental impact and move towards a sustainable state. Moreover, to achieve the transition to a circular economy, it will be necessary for the industry to take the drivers' seat and push for change, ahead of government or legal requirements, so as to initiate greater consumer awareness.

Target state: Minimised returns

Target outcome 1

Product returns are mitigated at the point of sale

Reduce the potential for product returns

Each garment returned has a significant environmental footprint due to reverse logistics emissions and potential wastage if it cannot be resold. The most effective way for the industry to reduce returns is for retailers and brands to leverage data and digital solutions to capture insights on what drives returns, and integrate them into a closed feedback loop to mitigate issues causing returns before they occur

Target outcome 2

Product returns are handled more efficiently

Optimise the reverse logisitics and operations process for efficiency and sustainability

Reverse logistics currently consists of multiple steps, many of which, such as transportation and warehousing, are environmentally damaging and costly. The key to ensuring that reverse logistics are made more sustainable is to invest into the right technologies and processes (e.g., EV trucks, automated warehousing etc.), so that businesses can make operations more efficient, cost-effective, less carbon intensive and more sustainable

Figure 28: The target state of minimised returns and target outcomes

Credit: Di Petsa

This report provides a way forward to achieve this vision, starting with an encouragement to stakeholders to consider and align on KPIs and goals that support sustainable growth. Stakeholders should look across the entire supply chain and regard it not as linear, but as circular and interconnected. Stakeholders should also leverage each other's learnings and share information on best practices to reduce returns. Additionally, the industry must come together to stimulate a mindset shift for consumers, who are needed to reduce the overall scale of fashion returns. Collaboration could come in the form of a task force, overseen by the BFC, where task force members work in temporary groups to develop case studies, organise workshops and publish guidelines on measures and how to implement them.

To create a starting point, this report has come up with 32 proposed recommendations across ten priority action areas spanning from short-, mid-and long-term time frames. These recommendations drive change across multiple dimensions of the returns process and clearly set out the initiatives different stakeholders should explore.

In pursuing this change, it is also vital to consider the implications on those impacted by the transition and ensure that the move benefits wider society. Jobs can be created with the adoption of circular and sharing business models, and companies should invest in upskilling their existing employees and training new ones to fulfil these roles.

This report therefore calls for all stakeholders in the UK fashion industry to take a decisive first step to reach greater circularity by formulating a response to the fashion returns challenge. With a strong collective effort, the industry will be able to further support the realisation of the United Nations' Sustainable Development Goals[143] and safeguard the environment for future generations.

Appendices: A1. Glossary

The definitions of key terms and concepts as they are used in this report are detailed below. These have been determined based on a range of sources as cited in the list of References.

Term	Definition
Academia	Individuals and institutions involved in higher education and research, e.g., universities[144].
Artificial intelligence (AI)	The use of computer hardware and software to effectively replicate human intelligence and thinking capabilities digitally. The intention is to allow a machine to 'think' like a human being[145].
Automation	The creation and implementation of technology that automatically processes data[146].
Blockchain	A digital database technology that typically functions as a distributed ledger of transactions. A 'block' represents new information that has been input into the system and once this 'block' is complete, it becomes part of a 'chain' of other blocks, which are in chronological order. This blockchain can be decentralised, which effectively means it is stored across numerous nodes in a peer-to-peer network, and therefore, enables full transparency[147].
Bracketing	The practice of purchasing the same item in multiple sizes or colours, and sending back those that do not fit or suit buyer's preferences[148].
Brands	Producers of garments, who are responsible for the design and branding of products for the market[149].
Bricks-and-mortar retail	Retail activities that take place in a physical space, such as a shop[150].
Carbon footprint	The total greenhouse gas (GHG) emissions caused by an individual, event, organisation, service, place or product, expressed as carbon dioxide equivalent (CO_2e)[151].
Circular and sharing business models (CSBMs)	Business models, such as clothing rental or subscription schemes, that minimise the material used and waste produced while maximising the value of materials and products by keeping them in use for as long as possible, if not permanently. These models promote a focus on the triple bottom line – people, planet and profit[152].
Circular economy	An economic system that eschews traditional linearity and is built on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems[153].
Circularity	The concept of goods, services and systems adhering to circular economy principles and therefore being suitable for consistent circulation within the economy[154].
Closed-loop system	A recycling system in which all the waste materials collected are converted into new materials that are of the same quality as the original input and can be reused in the same applications[155].
Clothing resale/ re-commerce	The buying and selling of pre-owned clothing[156].
Clothing rental	A business model in which clothing products are temporarily provided for use in return for a set fee, typically determined by the length of use[157].
Clothing subscription	A business model in which clothing products or services are sold, and revenue is collected by the provider on a recurring basis[158].
Collectors	Businesses focused on collecting waste material throughout the supply chain and selling it on to reprocessors, often for a profit[159].
Consumers	Individuals who purchase goods and services for personal use[160].
Designers	Individuals who produce designs for garments[161].
Digital Innovators	Businesses that provide digital services, including software and hardware[162].
Digitalisation	The implementation of digital technologies and data into previously analog processes[163].
Digitisation	The conversion of data and information from analog formats to digital formats[164].
EBIT	Earnings before interest and tax.
Ecosystem	A dynamic network of interconnected actors operating within a bounded geographical space[165].
Extended Producer Responsibility (EPR)	Extended Producer Responsibility (EPR) schemes make producers responsible for the disposal of post-consumer products and their environmental impact. In this way, they are designed to incentivise producers to reduce waste through design and facilitate better waste management[166].
Fashion returns	A customer bringing purchased fashion items back to a retailer in exchange for refund, store credit, or similar item[167].
Feedback loop	A cause-and-effect system in which the outputs of a system feed back in as inputs and prompt new cycles[168].
Generation Z	The demographic cohort born mid to late 1990s to early 2010s, succeeding Millennials and preceding Generation Alpha[169].
Government	The Government of the United Kingdom of Great Britain and Northern Ireland including policy makers and tax regulators.
Hackathon	An event where people from different backgrounds, skills and interests come together to innovate, brainstorm and solve various predefined challenges within a specified time frame[170].
High intensity returner	Online shoppers who return over the average rate of returns for online purchases in the UK (~30%)[171].
High intensity online shopper	Online shoppers who purchase above average amounts of fashion items online. Approximately two or more items in a typical month[172].

Impulse purchasing/ shopping	An unplanned decision by a consumer to buy a product or service, made just before a purchase[173].
Institutions, industry bodies and 3rd sector	A wide array of organisations, including non-governmental organisations, consultancies, labour unions, community groups, charities, professional associations, and foundation[174].
Investors	Individuals and institutions who invest capital with the expectation of maintaining value or achieving a profit. Such actors include banks, asset managers, institutional investors, and private equity[175].
Last mile logistics	The last leg of a supply chain journey comprising the movement of goods from a transportation hub to a final destination[176].
Logistics providers	Businesses that provide logistics services and management for clients to enable the flow of goods from their point of origin to their point of consumption and potentially, to their end-of-life destination[177].
Low intensity returner	Online shoppers who return below the average rate of returns for online purchases in the UK (~30%)[178].
Low intensity online shopper	Online shoppers who purchase average or below average amounts of fashion items online. Less than two items in a typical month[179].
Manufacturers	Businesses focused on producing fibres, fabrics, or garments at a set cost for retailers, brands, and designers[180].
Microplastics	Plastics less than five millimetres (0.2 inches) in diameter[181].
Millennials	The demographic cohort born in the 1980s as starting birth years and the mid-1990s to early 2000s as ending birth years, with the generation typically being defined as people born from 1981 to 1996[182].
Near field communication (NFC)	A set of short-range wireless technologies, typically requiring a distance of 4cm or less to initiate a connection. NFC allows the share of small payloads of data between NFC tags[183].
Non-renewables	The state at which garments are no longer fit for being worn on the body by consumers and has therefore reached its end-of-life stage[184].
On-demand warehouse	A platform that connects businesses that need to store inventory and fulfil orders on a temporary basis with warehouses that have excess space[185].
Online channel	Any Internet web site or means that derives its revenue from the sale of products or services to consumers[186].
Online fashion	A form of electronic commerce which allows consumers to directly buy fashion goods from a seller over the Internet using a web browser or a mobile app[187].
Online shopper	A person who engages in online e-commerce activities[188].
Overstock retailer	Retailers who buy large volumes of inconsistent stock from brands/manufacturers and sell it at a discount[189].
Platform	A digital environment which enables software, products, or services to be provided and often facilitates the exchange of information and data[190].
Product passport	A concept in which a dataset for a product would be maintained to track it throughout its entire lifecycle. The dataset would include information concerning components, constituent materials and their sources, disassembly procedures, and recycling procedures[191].
QR code	A matrix barcode that is a machine-readable optical label, typically storing information, such as a website URL[192].
Raw material production	The creation, collection, or extraction of raw material for the production of goods and services, especially directly from the natural environment. This includes all activities such as harvesting, mining, lumbering, fishing, etc[193].
Recycling	The process of collecting, sorting, and converting waste materials into new materials in order for them to be reused[194].
Reprocessors	Businesses focused on reprocessing, typically through recycling processes to convert waste material to reusable and re-merchandisable materials[195].
Retailers	Businesses focused on distributing and selling goods to consumers through bricks-and-mortar stores or websites[196].
Returns feed	Feedback of insights from consumer returns data to retailers and brands.
Returns policy	The rules a retailer creates to manage how customers return and exchange unwanted merchandise they purchased. A returns policy tells customers what items can be returned and for what reasons, as well as the timeframe over which returns are accepted[197].
Reverse logistics	The process of moving goods backwards from customers back to sellers and manufacturers, where the goods are then processed for resale, recycling, or disposal[198].
RFID (radio frequency identification)	A wireless technology in which electromagnetic waves are used to communicate between a reader and a tag (which can be passive or active). An RFID tag can store anything from a serial number to an extensive dataset, which a reader can access[199].
Sales feed	Feedback of insights from consumer purchasing data to retailers and brands.
Size normalisation	The mapping of product sizes across brands to a common space in which sizes can be compared[200].
Stakeholders	An individual, group, or party who has an interest in, or who is affected by, the operation and outcomes of the UK's fashion ecosystem[201].
Sustainability	The ability to maintain or support a process continuously over time. In business and policy contexts, sustainability seeks to prevent the depletion of natural or physical resources, so that they will remain available for the long term. Sustainability is often broken down into economic, environmental, and social concepts[202].

Synthetic textiles	Textiles that are produced by using chemically synthesised fibres, as opposed to natural fibres (plant-based or animal-based) obtained from naturally occurring sources[203].
Third party provider	An external person or company who provides a service or technology as part of a contract[204].
Upcycle	Reuse (discarded objects or material) in such a way as to create a product of higher quality or value than the original[205].
Utilisation	The number of times that a product is used by a consumer[206].
Vintage clothing	Clothing that is between 20 and 100 years old that recognisably follows the style of the era in which it was produced[207].
Virtual reality	A computer-generated simulation of a three-dimensional space/environment that a user can interact with in such a way that it feels 'real'[208].
Wardrobing	The practice of buying items with the intent of posting photos of themselves wearing it, with no intent of keeping the product and returning it after wear[209].
Waste	Materials that have deteriorated in quality or been contaminated to the extent that they are no longer suitable for reuse and must be reprocessed within the UK's waste infrastructure[210].

Appendices: A2. Methodology

As described in section 'Project scope' of this report, Phase 2 of CFE's project involved four main strands of research and analysis. The following sections describe the method and approach followed for each of these, in the order in which they were completed.

Literature review
The first piece of research conducted as part of Phase 2 took the format of a desk-based literature review. This included key word searches, a review of academic literature (100+ articles from 40+ different publications), as well as an analysis of secondary data sources including market research platforms such as Statista. The purpose of the review was to:

- Establish an understanding of the current state of UK fashion returns;
- Compile a list of best practice case studies;
- Hypothesise an initial vision for the future 'target state' of UK returns; and
- Use findings around purchasing and returns behaviour to inform the development of the consumer survey.

As the first piece of research in this project, the findings of the literature review were used to shape the approach and focus of the stakeholder interactions, consumer research, and financial simulation.

Stakeholder consultations
Three avenues were explored to collect qualitative stakeholder input from across the fashion industry: interviews, organised events, and IPF Advisory Board Meetings. Over 20 interviews were conducted between June and November 2022, in addition to an IPF-organised Hackathon, which provided further opportunity for stakeholder engagement. A final form of stakeholder interaction comprised a series of IPF Advisory Board Meetings, which assessed the feasibility of the proposed recommendations. The various stakeholder consultations were designed to validate hypotheses on the target state vision, potential solutions, and industry collaboration opportunities. The approach followed for each of the four consultation forms were as follows:

- **Stakeholder interviews:** To test the vision for the target state developed during the literature review, we conducted interviews with stakeholders from the UK's fashion ecosystem. Participants included representatives of leading brands, retailers, NGOs, technology providers, logistics providers, etc. In total, our research consortium interviewed over 20 participants. The interviews followed a semi-structured format that was tailored to the stakeholders and their specific areas of expertise, typically involving a discussion on the current returns challenge, the environmental and social impacts of returns, and their views on potential solutions. All interviews were conducted online through video calls and were recorded. Transcripts were subsequently produced for each interview and analysed to identify key themes, concerns, and takeaways for the report.
- **Stakeholder events:** 30 industry stakeholders were invited to the IPF Hackathon on 30 June 2022 to generate ideas on how to solve the returns challenge. After a panel discussion, participants were put into breakout teams to discuss the following: "Given that wrong size and fit is often cited as the main reason for returns, what does an industry-wide action or collaboration to reduce returns look like, that would also create a good customer experience?". Insights, quotes, and findings from the Hackathon were integrated into the report and helped shape the recommendations outlined.
- **IPF Advisory Board Meetings:** Throughout the project, two meetings were held with the IPF Advisory Board. These meetings involved discussions with industry stakeholders to assess the feasibility of the recommendations.

The interviews were designed to yield greater understanding of the barriers and opportunities for transitioning to the target state and to explore the collaboration and partnerships needed to minimise returns. They informed the development of the vision for the future and the strategic framework for realising it in slightly different ways.

In both the interviews and stakeholder events, participants received a briefing document describing the purpose and conditions of the interview as well as the initial vision for the target state which had been developed through the literature review. The participants were asked to comment on their agreement with the vision and offer additional points for inclusion (if relevant). The original 'focus areas' for the target state could then be adjusted to reflect the consistent messages coming through from these stakeholders. The vision also began to crystallise around recurring themes and recommendations, which were divided into short, medium, and long-term solutions.

The first IPF Advisory Board Meeting was held after the stakeholder interviews were completed. At this point, the original focus areas had been refined into target outcomes and action areas had been defined. During the Advisory Board Meeting, participants were briefed on the key findings from the stakeholder interviews and consumer survey. They were then asked for their opinions on measures to help reduce returns rates, focussing the discussion around the question: "How can the industry collaborate to minimise the returns issue?". At a broad level, the role of the Advisory Board was threefold:

- To support the project direction, to ensure its success to the fullest of each of our ability and passion
- To provide expertise to inform strategic direction of the project
- To advise on issues, challenges, opportunities relating to the topics in the UK and abroad

The output from the session took the form of written notes which were analysed for key themes and takeaways. The insights gained were subsequently used in the refinement of the vision for the target state, including the generation of recommendations, as well as for related areas of the final report.

Consumer research survey
Prior to primary data collection, we conducted a desk-based analysis of existing relevant consumer research to identify potential themes for the consumer survey. Similar to CFE's Phase 1 report, the profiles of high intensity shoppers remained a target group, though with a focus on online purchasing and returns behaviour. In addition to high intensity online shoppers, a second, Phase-2 specific, target profile was identified: 'high intensity returners'.

High intensity online shoppers are defined as individuals who shop for clothes, shoes and/or accessories online and purchase two or more items per month, equivalently to six or more items over the course of three months. There is a larger proportion of this group within the Millennial and Generation Z age groups, and a slightly higher proportion of high intensity online shoppers amongst females compared to males.

High intensity returners, another priority segment identified, due to the environmentally harmful consequences of their actions, were defined as online shoppers who return above the average rate of returns for online purchases in the UK (~30%), and low intensity returners, those who returned below the average rate of returns for online purchases in the UK[211].

Using the findings from our initial desk-based research, a quantitative consumer insights survey was designed for high intensity online shoppers and returners, to better understand existing returns behaviours, how these related to the target state, the main drivers of returns and the receptiveness of this group to proposed measures and solutions. The survey was conducted online from July to August 2022 in the UK with a sample of 1,503 respondents, aged 14 and above. Insights from the consumer survey were used to devise and refine recommendations in Section 4.

Financial simulation

What it covers
To evaluate the benefits of the recommended measures for brands and retailers outlined in Section 4, a high-level modelling of the financial impact of returns and business case was developed. The exemplary calculations further support the need for change and illustrate the financial upsides for the adoption of potential solutions, in particular those intended to rectify size and fit-related issues.

How it works
The model assumed the implementation of two sizing advice measures: size calculators based on body measurements and virtual avatars. The first is a shorter-term solution for brands and retailers to adopt, due to the existence of similar technology already serving many brands and retailers. Virtual avatars, however, are a longer-term measure, as they are not yet as widely available and established as sizing calculators.

What is the basis for the data in the model
Secondary research and industry interviews were used to sense check the model and any assumptions used and ensure robustness of the conclusions.

What do the outputs mean
The model can be used to compare scenarios and answer relevant questions about future markets. For example:

- What are the likely costs associated with implementing sizing solutions, in particular, virtual avatars?
- What would the revenue uplift for a pureplay online business be if it were to adopt sizing solutions?
- Which solution would likely provide the highest cost savings?

Assumptions in the modelling

Scenarios
To illustrate the benefits of sizing measures, two scenarios were presented for a fashion company with £1 billion revenue per year, stocking about 20,000 SKUs.

Scenario 1 depicted a company chiefly geared towards online operations, with 70% of its revenue coming from e-commerce and 30% coming from offline channels.

Scenario 2 depicted the reverse, with 70% of the company's revenue coming from offline channels and 30% from online channels.

Uplift factors
Our model assumes that the implementation of sizing measures would result in a considerable reduction in return costs for a pureplay online business. In Scenario 1, the exemplary company is likely more exposed to a returns problem, due to the bulk of its revenue coming from online activity. As such, our model assumes the company would first implement sizing calculators, and later replace these with virtual avatars, as the foundational technology required for the latter becomes more widely available and scalable.

For a company profile fitting Scenario 2, with a probable lower returns problem due to the majority of its revenue coming from in-store activity, we assumed it may choose to only invest in sizing calculators due to the relatively lower costs associated.

Model assumptions and interpretation

As with all scenario-based modelling, the scenarios in this analysis are reliant on assumptions for certain inputs. Where we were able to collect necessary model inputs from desk-based research and our original consumer research, we have done so. However, some data points and projections in the model are based on estimates and professional judgement. None of the details within the scenarios can be predicted with precise accuracy, nor can the future uptake rates of sizing solutions or price points for virtual avatars be guaranteed. In addition to those noted previously, key modelling assumptions include:

- The average online returns rate of 30% and the offline returns rate of 10% taken from Roland Berger's 'Environmental model on fashion returns in the UK' (2022), with figures triangulated based off a variety of secondary sources

- The average selling price and average cost per return for online and offline stores

- Customer care, transportation, discount and liquidation, production costs for unsold items, disposal costs and secondary sales loss are included in the cost of returns

Outputs should therefore be considered to provide a high-level indication of potential impacts rather than a precise or comprehensive prediction of future states. Outputs should not be used in other analyses without further independent validation.

Appendices: A3. Stakeholder recommendations

Recommendations by lead stakeholder and priority topic

The tables below set out the stakeholder recommendations developed as part of this project. The first table lists recommendations in the sequence set out in Section 4: Towards a closed-loop system per stakeholder group.

No.	Lead stakeholder	Priority topic	Recommendation
1	Brands	Product visualisation & information	**Detailing product descriptions:** Brands to offer consistent and detailed product descriptions of the garments, as well as model measurements, in order to empower customers to make more informed purchasing decisions, increasing the likelihood that the product meets expectations and decreases the likelihood of returns
2	Retailers	Product visualisation & information	**Enhancing product visualisations through 360° product views and videos:** Retailers to make available high-resolution pictures, 360° view presentations and the opportunity to zoom in on details such as fabric material or garment structure, as well as "catwalk videos", provide customers with more transparency on the product attributes
3	Retailers	Product visualisation & information	**Enhancing product visualisations through model diversity:** Retailers to increase the level of representation among models in fashion, displaying different body types, ages and races and meet the wider customer demand for the representation of "real people", so that customers can picture themselves in the garment
4	Brands	Feedback integration	**Incorporating feedback in product development phase:** Brands to gather customer feedback and use it to inform product development, taking into consideration trends and quality issues, as well as to inform marketing and sales functions, allowing brands to make more empirically driven decisions on e.g. targeting
5	Retailers	Feedback integration	**Implementing closed-loop feedback post-purchase:** Retailers and brands to directly respond to or use inputs from customers who have submitted online reviews or returns feedback post-purchase, thus taking advantage of standard benefit of customer feedback, but at a deeper level, with more tailored information given on product satisfaction or dissatisfaction and reasons for returns
6	Retailers	Returns policies	**Limiting returns window and/or returns options:** Retailers to adjust returns windows based on the selection of clothes they carry, with shorter periods for seasonal clothing in order to decrease the risk of the garment being obsolete by the time it is returned; additionally, returns options could potentially be limited, with only in-store options permitted as a means to reduce transportation emissions
7	Retailers	Returns policies	**Eliminating or restricting options for exchange:** Retailers to consider eliminating or limiting the options for exchange, thus guiding customers to make more considered choices at the moment of purchase
8	Retailers	Returns policies	**Charging for returns:** Retailers to investigate the option of charging for returns, however, customers must not be penalised for a return that is needed
9	Retailers	Returns policies	**Disincentivising serial returners:** Retailers to raise customer awareness on the environmental damage caused by returns and if needed, implement stricter returns policies to combat serial returners if no positive changes are observed, such as fines or shopping bans
10	Retailers	Shopping assistance	**Providing customer reviews:** Retailers to provide options for customers to leave reviews about their purchases with comments on fit, quality and design in order for other customers to use these and inform their shopping choices and decisions to buy

11	Retailers	Shopping assistance	**Offering personal assistance online:** Retailers can better improve the social affirmation experience for customers online through the provision of online style consultants or virtual styling assistants, thus giving customers more confidence in their choices
12	Retailers	Shopping assistance	**Recommending curated items:** Retailers to pre-chose items tailored to the customer's preferences, thus giving the customer a personalised shopping experience to reduce the number of unsuitable items
13	Retailers	Size advice	**Providing size calculator:** Retailers to provide reliable and accurate sizing calculators and to encourage customers to leverage the tools
14	Retailers	Size advice	**Offering digital avatars for virtual try on:** Retailers to offer customers the option of owning personalised avatars representing themselves so that customers can virtually try on clothing, getting a better understanding of a garment's size, fit and suitability
15	Institutions, industry bodies, 3rd sector	Size advice	**Size normalisation:** Institutions and industry bodies to facilitate the creation and adoption of size normalisation for clothing, especially for women's, in order to eliminate deviations between brands and increase consumer confidence in their size choice
16	Brands	Size advice	**Offering tailored products:** Brands to introduce more tailored clothing or tailoring services in order to render bracketing and other size driven returns practices redundant, as well as reducing the scope for accepting returns for a non-defective garment
17	Retailers	Digital product passport	**Reducing shipping errors at the onset:** Retailers to invest in digital product passport in order to reduce picking, packing, and shipping errors at the start of the fulfilment process, as digital product passport can help employees easily identify items for picking and packing, ultimately reducing the number of returns
18	Retailers	Digital product passport	**Streamlining returns logging:** Retailers to replace manual operations with automated ones that take far less time to implement so that a product can be back on the shelves within hours instead of days or weeks, thus reducing margin erosion due to obsolete stock
19	Logistic providers	Digital product passport	**Optimising logistics:** Through the use of digital product passport that transmits real-time and accurate data, logistic providers can create transparency along the logistic chain, optimising the number of truck deliveries and therefore reducing emissions
20	Retailers	Digital product passport	**Facilitating information sharing with customers:** Retailers can leverage digital product passport to show customers the impact of returns, thus disseminating information about the sustainability of the product and the impact of returns to raise overall consumer awareness on this issue
21	Retailers	Process automation & digitisation	**Digitising returns forms:** Retailers can digitise returns forms to obtain several benefits, including saving paper and reducing the number of returns they receive by stopping returns that are outside of returns window but would have been sent back if there was a paper returns form in the box
22	Logistic providers	Process automation & digitisation	**Implementing returns handling systems and fulfilment solutions:** Logistics providers to implement returns handling and fulfilment solutions that can streamline and automate these operations
23	Logistic providers	Process automation & digitisation	**Automating warehouse storage management:** Logistics providers to invest into automated storage systems in their warehouses to optimise the usage of space, energy consumption and labour required to run processes and manage stock
24	Logistic providers	Last mile improvement	**Adopting zero-emission transport methods:** Logistic providers, as well as any market players that owns a fleet to increase the adoption of electric vehicles to reduce emissions; additionally, logistic providers can adopt other means of delivery, such as drones and cargo bikes to reduce emissions
25	Retailers	Last mile improvement	**Sharing delivery capabilities among SMEs:** Small-to-medium sized retailers to consider sharing their last mile delivery fleet to optimise vehicle utilisation rates, thus overcoming the issue of having half-full delivery vehicles due to an insufficient amount of returns from one specific retailer

26	Retailers	Last mile improvement	**Leveraging hybrid stores:** Retailers to redesign their distribution strategies to create hybrid stores that can both function as a sales space and a space for inventory management and reverse logistics, creating micro hubs for handling returns and collections and thus limiting overall emissions through eliminating the need for transport
27	Retailers	Consumer awareness	**Displaying information on environmental impacts of returns:** Retailers to integrate informative notifications or pop-ups to show consumers the costs of returns at different stages in the purchasing process, thus determining customers to choose more carefully in order to not have to return items
28	Retailers	Consumer awareness	**Integrating sustainability experiences in bricks-and-mortar:** Retailers can leverage their physical assets to raise awareness and host campaigns on the promotion of sustainable purchasing practices and the pursuit of a circular economy, such as running public workshops or opening sustainability corners
29	Logistic providers	Consumer awareness	**Providing notification of deliveries:** Logistic providers to promote more efficient handling of returns through consumer education and empowerment by sending notifications alerting recipients of imminent deliveries, allowing for package tracking, or creating greater transparency will reduce last mile delivery emissions from repeat and delayed deliveries
30	Retailers	Consumer awareness	**Identifying serial returners:** Industry players to identify serial returners that are responsible for a large volume of returns and implement targeted education campaigns for them as well as brand engagement campaigns or deterrent measures
31	Government	Consumer awareness	**Launching joint influencer and government campaigns:** Government, institutions and industry bodies and industry players to team up and launch a purpose-driven communication campaign aimed at informing the public about the environmental impact of returns
32	Government	EPR & other government policies	**EPR & other government policies:** Government to put in place an end-to-end legislative framework that encourages transition to a circular economy, encourages responsible product design and contributes to the climate change response, via the EPR policy

Recommendations in order of stakeholder

Stakeholder	As Lead	As Enabler
Academia	o N/A	o Launching joint influencer and government campaigns o EPR & other government policies
Brands	o Detailing product descriptions o Incorporating feedback in product development phase o Offering tailored products	o Implementing closed-loop feedback post-purchase o Eliminating or restricting options for exchange o Recommending curated items o Providing size calculator o Offering digital avatars for virtual try on o Size normalisation o Reducing shipping errors at the onset o Streamlining returns logging o Optimising logistics o Facilitating information sharing with customers o Adopting zero-emission transport methods o Launching joint influencer and government campaigns o EPR & other government policies
Collectors	o N/A	o Adopting zero-emission transport methods o Launching joint influencer and government campaigns o EPR & other government policies

Consumers	o N/A	o Detailing product descriptions o Enhancing product visualisations through 360° product views and videos o Enhancing product visualisations through model diversity o Incorporating feedback in product development phase o Implementing closed-loop feedback post-purchase o Providing customer reviews o Offering personal assistance online o Recommending curated items o Providing size calculator o Offering digital avatars for virtual try on o Offering tailored products o Displaying information on environmental impacts of returns o Integrating sustainability experiences in bricks-and-mortar o Providing notification of deliveries o Identifying serial returners o Launching joint influencer and government campaigns
Designers	o N/A	o Detailing product descriptions o Incorporating feedback in product development phase o Implementing closed-loop feedback post-purchase o Eliminating or restricting options for exchange o Providing size calculator o Offering digital avatars for virtual try on o Size normalisation o Offering tailored products o EPR & other government policies
Digital innovators	o N/A	o Disincentivising serial returners o Offering personal assistance online o Recommending curated items o Providing size calculator o Offering digital avatars for virtual try on o Reducing shipping errors at the onset o Streamlining returns logging o Optimising logistics o Facilitating information sharing with customers o Implementing returns handling systems and fulfilment solutions o Automating warehouse storage management o Identifying serial returners o EPR & other government policies
Government	o Launching joint influencer and government campaigns o EPR & other government policies	o Adopting zero-emission transport methods
Institutes, industry bodies, 3rd sector	o Size normalisation	o Launching joint influencer and government campaigns o EPR & other government policies
Investors	o N/A	o Disincentivising serial returners o Offering personal assistance online o Recommending curated items o Providing size calculator o Offering digital avatars for virtual try on o Reducing shipping errors at the onset o Streamlining returns logging o Optimising logistics o Facilitating information sharing with customers o Implementing returns handling systems and fulfilment solutions o Automating warehouse storage management o Identifying serial returners o EPR & other government policies

Logistics providers	o Optimising logistics o Implementing returns handling systems and fulfilment solutions o Automating warehouse storage management o Adopting zero-emission transport methods o Providing notification of deliveries	o Reducing shipping errors at the onset o Streamlining returns logging o Facilitating information sharing with customers o Sharing delivery capabilities among SMEs o Displaying information on environmental impacts of returns o Launching joint influencer and government campaigns o EPR & other government policies
Manufacturers	o N/A	o Size normalisation o Offering tailored products o Reducing shipping errors at the onset o Streamlining returns logging o Optimising logistics o Facilitating information sharing with customers o EPR & other government policies
Reprocessors	o N/A	o Adopting zero-emission transport methods o Launching joint influencer and government campaigns o EPR & other government policies

Retailers	o Enhancing product visualisations through 360° product views and videos o Enhancing product visualisations through model diversity o Implementing closed-loop feedback post-purchase o Limiting returns window and/or returns options o Eliminating or restricting options for exchange o Charging for returns o Disincentivising serial returners o Providing customer reviews o Offering personal assistance online o Recommending curated items o Providing size calculator o Offering digital avatars for virtual try on o Reducing shipping errors at the onset o Streamlining returns logging o Facilitating information sharing with customers o Digitising returns forms o Sharing delivery capabilities among SMEs o Leveraging hybrid stores o Displaying information on environmental impacts of returns o Integrating sustainability experiences in bricks-and-mortar o Identifying serial returners	o Detailing product descriptions o Offering tailored products o Optimising logistics o Adopting zero-emission transport methods o Providing notification of deliveries o Launching joint influencer and government campaigns o EPR & other government policies

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