

CITIZEN INSIGHTS

# **CLOTHING LONGEVITY AND CIRCULAR BUSINESS MODELS RECEPTIVITY IN THE UK**

Key Findings Report



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## About WRAP

WRAP is a climate action NGO working around the globe to tackle the causes of the climate crisis and give the planet a sustainable future.

Our core purpose is to help you tackle climate change and protect our planet by changing the way things are produced, consumed, and disposed of.

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**Front cover photography:** Colourful clothes on hangers in wardrobe

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# Executive summary

The insights outlined in this report are based upon two large scale pieces of online consumer research commissioned by WRAP in the autumn of 2021.

## 1) Clothing Longevity

The objective of this work was to estimate clothing longevity for a wide range of clothing items and understand how these estimates are influenced by key factors like demographics, acquisition route and in-use behaviours. These estimates provide an update of WRAP's last comprehensive research in 2013<sup>1</sup>.

6,000 interviews were conducted online with UK citizens who purchase clothing for themselves at least once a year, with quotas set on age and gender (interlocked) and region to match the profile of the UK population. The research led to insights about a total of 44,807 items of clothing.

## 2) Circular Business Models (CBMs)

The objective for this work was to understand current citizen behaviours and receptivity to CBMs for clothing.

2,100 interviews were undertaken online with UK citizens who purchase clothing for themselves at least once a year, from 11-18 November 2021, with quotas again set on age and gender (interlocked) and region to match the profile of the UK population. Five CBMs were tested with consumers: subscription; rental (pay per use); pre-loved (resale); upcycled (re-manufactured); and repair.

## Key findings

### Purchase behaviours and clothing outlooks

- Almost half (45%) of UK citizens purchase clothing at least once a month (with around one in eight (13%) purchasing clothing weekly). Age is a key factor, with over four in five (81%) 18-24s purchasing clothing at least once a month. Clothing purchase frequency also increases with rising household income.
- Around one in four (23%) say they regularly buy clothing with the intention of using it for a short amount of time, highest among 18-34 men and 35-54 women.
- Just over half (54%) of UK citizens say they are happy to purchase second hand/vintage, compared to 46% who say they deserve better. Women are more comfortable with second hand than men; and those aged 65+ are least comfortable.
- Close to two in five (39%) say their wardrobes are disorganised and it can be difficult to know what is there, increasing among 18-34s (46%) and those with children (43%).
- Almost three in five UK citizens (59%) say they go to a lot of effort to maintain their clothes, compared to 41% who do not. A similar proportion (57%) say that they look for ways to repair damaged items. However, there is only a weak overlap between these groups, indicating that maintenance and repair are two discrete behaviours.

### Estimating clothing longevity

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<sup>1</sup> <https://wrap.org.uk/sites/default/files/2021-04/Clothing%20Longevity%20Report.pdf>

- Estimated clothing longevity is highest for non-padded coats and jackets (6.3 and 6.1 years, respectively) and lowest for underwear and bras (2.7 and 2.6 years respectively).
- Where direct comparisons are possible with the 2013 research, the results indicate that predicted longevity of clothing items has increased. This is true, for example, of jeans (estimated to be 3.1 years in 2013 and 4.1 years in 2021), dresses (3.8 vs. 4.6 years) and Tshirts/polo shirts/jersey tops (3.3 vs. 4.0 years).
- Items purchased second hand/vintage have a higher estimated longevity than items purchased new (5.4 years compared to 4.0 years).
- There is a strong association between longevity and repair – with the results suggesting that a repair adds 1.3 years to the life of a garment, on average.
- There is no association with gender (with men and women reporting similar estimated longevity across their items) and only a weak relationship with age.
- Longevity is relatively consistent across different brands/retailers.

### Items owned and in use

- UK citizens report an average of 118 items of clothing in their wardrobe (according to the items in the study). Of these items, UK citizens report that, on average, 31 items (just over a quarter at 26%) have not been worn in the past year.
- Skirts and dresses are the items most likely to be owned but not worn in the past year (44% and 43%, respectively). Utilisation is higher for other items like underwear (12% of those owned were not worn in the past year), socks (17%) and bras (20%).
- Key reasons for owning but not wearing items include:
  - *The item is for occasions only* - this is dominant for dresses and frequently cited for skirts, shirts/blouses, formal trousers and coats/jackets.
  - *The item is no longer a good/comfortable fit* - this is often cited for jeans, formal trousers, skirts, shorts, T-shirts/polo shirt/jersey tops, bras and underwear.
  - *I like the item but it is not a priority* - this is cited for knitwear, sweatshirts/ hoodies, Tshirts/polo shirt/jersey tops, jeans, coats/jackets and underwear.

### Wash frequency

- Wash frequency varies considerably across different items of clothing. Padded jackets/coats are – on average – likely to be worn 17 times in between washes, followed by jeans (5.5). Wash frequency is notably higher for skirts/blouses (an average of 2.3 wears in between washes), Tshirts (2.6) and dresses (2.6).
- In addition to the overall average, the range of responses is also notable – with a significant proportion of UK citizens in the survey washing all items after a single wear. 18-34s are consistently more likely to wash items after fewer wears.

### CBMs

- Recognition and levels of use/purchase for CBMs are currently low. It is highest for pre-loved clothing, which two in five (40%) are aware of and close to one in five (19%) have already purchased. It is lowest

for the repair and subscription models (recognised by 20% and 23%, respectively, and already used by around one in ten).

- There is a potential mainstream market for all CBMs. Two in five (40%) UK citizens who say they are likely to use the subscription service, increasing to three in five (58%) for the repair service. Furthermore, among those who have already engaged with the model (or similar), the majority say they would do so again.
- Younger citizens and higher frequency/higher spend shoppers are the most likely to have already engaged with the CBMs and the groups most receptive in future.
- Cost is a key motivator and most frequently cited for the pre-loved, rental, upcycled and repair models. It also manifests as a way of accessing brands that is cost-effective, and this is particularly true for the subscription, rental and pre-loved models. Lower environmental impact is also a frequently cited motivator, particularly in relation to the pre-loved, upcycled and repair models.
- The main barrier for those who say they are unlikely to consider the CBMs is psychological and rooted in self-identity, for example the idea that it is 'not really me'. For those who are receptive to any degree, the barriers are focused on practical considerations, as follows:
  - Cost is a potential barrier, with 'too expensive' appearing in the top five barriers for all CBMs - particularly the repair, upcycled and subscription models.
  - The key barriers for both the rental and subscription models are concerns about damaging the items, as well as the size/fit of the items.
  - For both the pre-loved and upcycled models, the size/fit and condition of the items are key concerns. Another potential barrier is a perception that it would be more difficult to return items.
  - For the repair CBM, a key concern is if the item will still look as good/fit the same after the repair has been done (and therefore justifying the cost of attempting a repair).

## Conclusions and opportunities

- The longevity of a range of clothing items has increased since 2013, presenting a key opportunity to increase the sustainability of clothing.
- The research confirms that the behaviours and models that WRAP want to promote – whether repair, second hand/vintage or alternative methods of acquisition – can help towards environmental impact reductions. On average, repairing an item of clothing adds 1.3 years to its life.
- However, there remains plenty of scope for improvement of these behaviours, and a clear business case for CBMs. Two in five UK citizens purchase new clothing every month and yet a quarter of clothing in wardrobes not in use, on average.
- There are opportunities for brands and retailers to reduce the impact clothing has on the environment by designing for circularity in key product categories. Findings support the need for changes in design, but considerations need to be made to understand how products can be designed for circularity.
- Similarly, the research confirms a clear and mainstream potential market for all surveyed CBMs. Although, the size of the potential varies for each CBM. The groups most receptive to CBMs are exactly the ones that we need to focus on (i.e. higher consumption /frequency purchasers).

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- There is the potential to build on existing behaviours but also create new habits - many people still do not know there is an alternative to buying new. Recognition of the CBMs is currently low, with levels of use/purchase even lower.
  - There is potential to ease citizen 'pain points', particularly around unorganised and over full wardrobes, or reluctance to maintain or repair clothes.
  - There are key operational considerations when setting up CBMs, including a need to focus the offer on monthly trends, as well as considering cost as both a motivator as well as a potential barrier. Citizens' pain points must be considered early enough in the planning stage of a CBM or within the marketing of the range or service.
  - Designing for circularity and CBMs need to work together to have the biggest impact reductions.

What next?

- By understanding the predicted longevity of different clothing categories, the factors that effect this, and the reasons for not wearing, Textiles 2030 can support businesses to make design decisions that will extend the life of clothing in the UK.
- While CBMs are growing in scale, breadth of services and market share, changes will not happen overnight. Any behaviour change takes time and businesses need to consider that they may be moving from selling a product to selling a concept change.
- Understanding what your customers' issues and pain points are will help develop the opportunities. Is it skill building, is it a nudge or awareness?
- Recognising that there is still significant scope to support and encourage citizens to care for clothing (so they last longer) through improved care and repair will be one of the key behaviours to focus on for Textiles 2030.

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Executive Summary

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# Introduction

The insights outlined in this report are based upon two large scale pieces of online consumer research commissioned by WRAP in the autumn of 2021.

## 1) Clothing Longevity

Improving the longevity of clothing is a key focus for the Textiles 2030 Circularity Pathway, which has set milestones to agree good practice design principles for durability in key product categories, as well as communicating consistent citizen messaging on garment durability.

The objective of this work was to estimate clothing longevity for a wide range of clothing items and understand how these estimates are influenced by key factors like demographics, acquisition route and in-use behaviours (e.g. wear intensity, repair). These estimates provide an update of WRAP's last comprehensive research in 2013<sup>2</sup>.

A total of 6,000 interviews were conducted with UK citizens who purchase clothing for themselves at least once a year. The survey was undertaken online using a dedicated market research panel, with quotas set on age and gender (interlocked) and region, to ensure that the sample matched the known profile of the UK population.

To account for the impact of seasonality on clothing choices and to ensure a robust spread of the sample across a range of clothing items, fieldwork took place in two phases: 12–27 October 2021 (wave 1) and 18–26 November 2021 (wave 2). The former was milder and favoured summer and autumn wear; the latter was colder and favoured the use of knitwear, jackets and coats.

Respondents answered about specific items of clothing that they had most recently worn in the context of five categories of clothing:

- Casual clothing for everyday wear (at home or informal occasions outside the home) • Smart clothing for everyday wear (including clothes for work)
- Smart clothing for social occasions, including meals/evenings out, parties and formal functions
- Functional clothing to wear to work, including uniforms, safety overalls etc. that were purchased by respondents themselves
- Sportswear/activewear (e.g. gym, swimming, running, football, hiking and walking)

The research led to insights about a total of 44,807 items of clothing.

## 2) Circular Business Models (CBMs)

CBMs are a key workstream within the Textiles 2030 Circularity Pathway, which has set the ambition that each signatory must pilot circular business models as appropriate to their product ranges, share learnings,

<sup>2</sup> <https://wrap.org.uk/sites/default/files/2021-04/Clothing%20Longevity%20Report.pdf>





and develop large-scale implementation to extend the lifetime of clothing in the UK – decoupling business growth from the use of virgin resources.

Therefore, the objective for this work was to understand current citizen behaviours and receptivity to CBMs for clothing, including existing levels of awareness, experiences of using a

model like this before, occasions they could be useful for, garment types of most interest, the impact on new purchases, and then key motivations and barriers.

A total of 2,100 interviews were undertaken with UK citizens who purchase clothing for themselves at least once a year (either in-store or online), from 11-18 November 2021. The survey was again undertaken online using a dedicated market research panel, with quotas set on age and gender (interlocked) and regions across the UK to ensure the sample matches the known profile of the population.

Five CBMs, decided by the Textiles 2030 CBM Working Group, were tested with consumers:

- Subscription
- Rental (pay per use)
- Pre-loved (resale)
- Upcycled (re-manufactured)
- Repair

The full descriptions that were used to describe these models to survey participants is outlined in Annex 1. These descriptions were subject to cognitive testing<sup>3</sup> prior to the survey to ensure that they were described in a clear and accessible way and well understood by citizens. Following the cognitive testing, changes were made to improve them ahead of the survey. In the survey, respondents were randomly allocated to see three of the five CBMs, to reduce cognitive load and respondent fatigue. Market Intelligence

Both of the above studies, in addition to their core focus, also generated broader key insights. This includes clothing purchase frequency, average monthly clothing spend, brand/retailer mix and outlooks (including attitudes towards second hand purchase, wardrobe management and maintenance/repair). These are covered in this report.

#### Statistical significance

The surveys involve large and robust samples of UK citizens. However, given that a sample has completed the survey (rather than a census), the results are subject to statistical margins of error. Therefore, statistical tests have been performed to assess whether an apparent difference in the survey data (i.e. across years or between sub-groups) is statistically significant or not<sup>4</sup>.

These tests have been undertaken to the '99% confidence' level (i.e. 99 times out of 100 the observed difference will be real compared to 1 time out of 100 it will have happened by chance).

<sup>3</sup> 10 qualitative depth interviews were conducted online via Zoom, lasting between 30-60 minutes. Interviewees were asked to read one CBM description on screen at a time. Then they answered a series of questions designed to assess: immediate reactions; model association;



completeness of model; comprehension and clarity of text; and ability to answer survey questions. This process was then repeated for each CBM. The order of the CBMs tested was varied across the interviews to counter sequencing biases.

<sup>4</sup> Statistical tests are only valid when the survey method has used random probability sampling. While the market research industry routinely applies the same logic to non-probability samples, this must be done with appropriate caveats. For example, if the data reported throughout this report was generated from a random probability sample then the confidence intervals discussed in the report would apply. However, as the data were generated from a quota sample, confidence intervals are – strictly speaking – not possible to calculate.

### Analysis by different audiences and groups within the population

In addition to the results for the UK as a whole, analyses have also been undertaken according to a range of socio-demographic variables (e.g. age, gender, children in the household).

### Structure of the report

The key findings outlined in this report are structured into four sections:

- (1) Key market intelligence
- (2) The longevity of clothing
- (3) Assessing the potential for CBMs
- (4) Conclusions and opportunities



# 1.0 Key market intelligence

## 1.1 Frequency of purchase and average spend

Almost half (45%) of UK citizens purchase clothing (either in store or online) at least once a month (Figure 1). Around one in eight (13%) purchase clothing weekly.

Both age and household income are strongly associated with frequency of purchase. Around four in five (81%) 18-24s purchase clothing monthly, compared to 21% of those aged 65+. Over half (56%) with an income of £40,000+ purchase clothing monthly, compared to 33% of those with an income up to £20,000. Average monthly clothing spend is £76.53 (increasing to £133.06 among those who purchase clothing monthly).

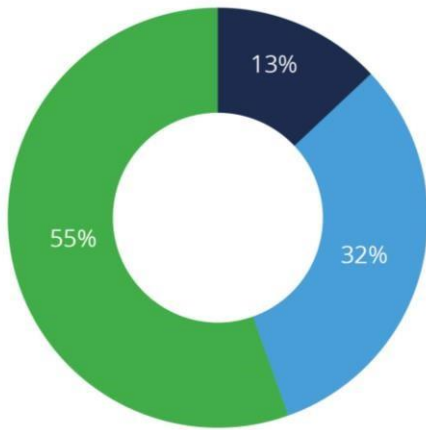


**Figure 1. Clothing purchase frequency and average monthly spend**

Q. How frequently do you typically purchase clothing for yourself? We are interested in clothes only, not shoes and accessories  
 Q. How much, on average, would you say you spend on clothes (for yourself) each month?

Base: 2,100 UK adults who purchase clothing for themselves at least once a year. Nov 2021

Combined frequency of clothing purchase, either in-store or online.



- Weekly
- Once or twice a month
- Less than monthly (every 2-3 months or 1-2 a year)

**At least monthly**  
**45%**

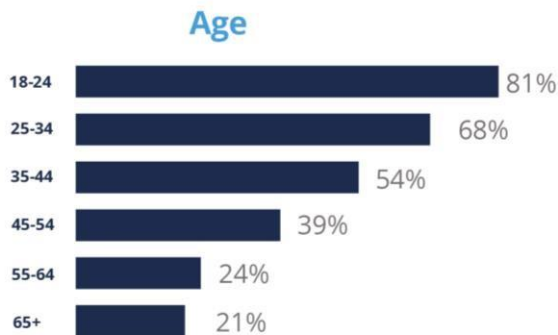


**Average monthly clothing spend: £76.53**

(Increasing to £133.06 among those who shop for clothes at least every month)

### DIFFERENCES IN FREQUENCY OF PURCHASE BY SUBGROUP

Percentage of each cohort who purchase clothing at least once a month





## 1.2 Brand-retailer mix

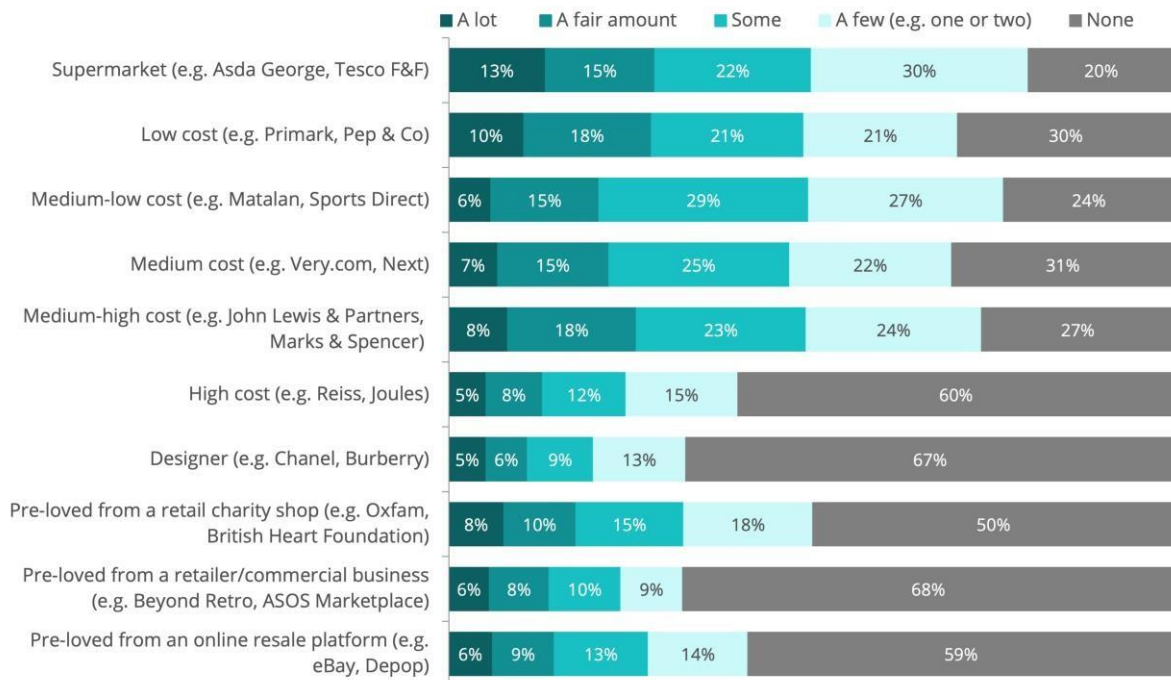
UK citizens purchase clothing from a wide range of brand-retailer channels<sup>3</sup> (Figure 2). Four in five (80%) buy at least some of their clothing at a supermarket, followed by medium-low cost retailers (76%), medium-high cost retailers (73%) and low cost retailers (70%). Two in five (40%) purchase at least some clothing from higher cost brands/retailers, while one in three (33%) buy from designer brands/retailers.

Half of UK citizens (50%) say they purchase at least some clothing pre-loved from a retail charity shop, followed by online resale platforms (41%) and retailer/commercial businesses (32%).

**Figure 2. Brand-retailer mix**

Q. How many items of clothing do you purchase in each of the following groups of retailers and brands

Base: 2,100 UK adults who purchase clothing for themselves at least once a year. Nov 2021



## 1.3 Clothing outlooks

There is significant variation in UK citizens outlooks in terms of how they shop, manage, and maintain their clothing (Figure 3).

<sup>3</sup> Prior to the main survey, WRAP undertook research with a sample of 2,000 UK citizens to understand how they would classify a range of retailers/brands on this scale. This then informed which examples were used in the survey to exemplify the categories.



### Purchasing outlooks

Just over one in three UK citizens (36%) say they go shopping with the intention of creating unique styles and identities. There is a clear association with age, with almost half of 18-34s (49%) saying this is true of them, compared to 23% of those aged 55+.

Close to one in four (23%) say they regularly buy clothing with the intention of using it for a short amount of time. This is highest among men<sup>4</sup> aged 18-34 (41%) and women aged 35-54 (31%). It is also notably higher among those in London (33%) and among those with children (33%).

A similar proportion of UK citizens (22%) say they consciously avoid clothing from last season. The sub-groups are very similar to those who say they purchase clothing with the intention of using it for a short amount of time – with men aged 18-34 (40%), women aged 35-54 (35%), those in London (32%) and those with children (29%) all more likely, on balance, to say this.

### Outlooks towards second hand/vintage clothing

There is a roughly even split between those who feel they deserve better than to purchase second hand/vintage clothing (46%) and those who say they are happy to purchase second hand/vintage (54%). Women are, on balance, more comfortable with the idea of second hand/vintage than men (60% vs. 48%). Those aged 65+ are also less comfortable compared to all other age groups.

### Clothing management outlooks

Close to three in five (61%) say their wardrobes are well organised and tidy, with everything having its own place. By contrast, close to two in five (39%) say the opposite and that it can be difficult to know what is in their wardrobes. 18-34s are more likely on balance to say that their wardrobes are not well organised (46%), as are those with children (43%).

There is also a strong association with some of the other outlooks, with over half (56%) of those who say they purchase clothing with the intention of using them for a short amount of time reporting that their wardrobes are also not well organised.

### Repair and maintenance outlooks

Almost three in five UK citizens (59%) say they go to a lot of effort to maintain their clothes, compared to 41% who do not. This is most likely to be true of women aged 55+ (68%) and least so men aged 18-34 (53%).

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<sup>4</sup> Survey respondents were asked to select their gender, with the options of 'male', 'female', 'other (write in)' and 'prefer not to say'. The majority of respondents selected male or female (with the question allowing this section to be based on either their biological gender at birth or how they chose to identify). Throughout this report we refer to 'men' and 'women' on that basis. The sample size of those selecting 'other (write in)' is too small to comment on in a statistically meaningful way.



A similar proportion (57%) say that if their clothes get damaged, they always look for a way to repair them. This is highest among women aged 55+ (68%) and women aged 18-34 (60%); and lower among men in general.

There is also only a weak relationship between maintenance and repair – those who say they go to a lot of effort to maintain their clothes are only somewhat more likely to say they seek out repair. In other words, maintenance and repair appear to be two discrete behaviours that are not practiced by the same cohort of UK citizens.



### Figure 3. Clothing outlooks

*Q. We'd like to know your views about managing your clothes at home. Please give a score that relates to each of the pairs of statements below (where 1 = I agree much more with the statement on the left and 4 = I agree much more with the statement on the right)?*

Base: 6,000 UK adults who purchase clothing for themselves at least once a year. Oct-Nov 2021



## Citizen Insights: Clothing Longevity and Circular Business Models receptivity in the UK



My wardrobes are well organised and tidy – everything has its place.  
**61%**



My wardrobes are not well organised and it's often hard to work out exactly what's in there.  
**39%**

I go shopping with the intention of creating unique styles and identities.  
**36%**



I don't go clothes shopping with the intention of creating unique styles and identities.  
**64%**

I never buy clothes with the intention of using them for a short amount of time.  
**77%**



I regularly buy clothes with the intention of using them for a short amount of time.  
**23%**

I consciously avoid wearing clothes from last season.  
**22%**



I'd be very comfortable wearing clothes from last season.  
**78%**

My wardrobes are full and it would be hard to fit more in.  
**59%**



I have lots of spare wardrobe space.  
**41%**

I deserve better than buying second hand/vintage clothing.  
**46%**



I'm perfectly happy to buy second hand/vintage clothing.  
**54%**

I go to a lot of effort to maintain my clothes (e.g. dry clean, wash on correct cycle, buy and use stain removers).  
**59%**



I don't go to any special effort to maintain my clothes.  
**41%**

If my clothes get damaged I always look for a way to repair them.  
**57%**



If my clothes get damaged it's time to dispose of them and buy a replacement  
**43%**

## 1.4 Clothing item audit

The longevity project collected a wide range of contextual information about the 44,807 clothing items asked about in the survey. This includes if the item was purchased new or second hand, online or in-store, and whether it has ever been repaired.

This contextual information, in addition to being significant in understanding how estimated longevity varies according to these factors, provides a wealth of information about clothing items, both in terms of purchase and in-use behaviours (Figure 4). For example:

### Acquisition type

Almost nine in ten (87%) items were purchased new, compared to one in ten (10%) second hand. The proportion purchased second hand is notably lower than the proportion of UK citizens who say they buy at least some items second hand (see Figure 2). This potentially suggests that, even where UK citizens are purchasing second hand, it still accounts for a relatively small proportion of the overall number of items that they purchase.

Where items are purchased second hand, the dominant purchase channels are commercial retailers (accounting for 41% of all items purchased second-hand) and retail charity shops (37%). Online resale platforms account for a smaller proportion of second-hand items (18%).

### Retailer/brand mix

Relatively few items (6%) were purchased from high cost and designer brands/ retailers. This is notably lower than the proportion of UK citizens who say they purchase from these retailers and brands (see Figure 2). This potentially suggests that purchases from high cost and designer retailers account for a relatively small proportion of the overall number of items that they purchase; and also that UK citizens are mixing and matching purchases across a range of retailers and brands.

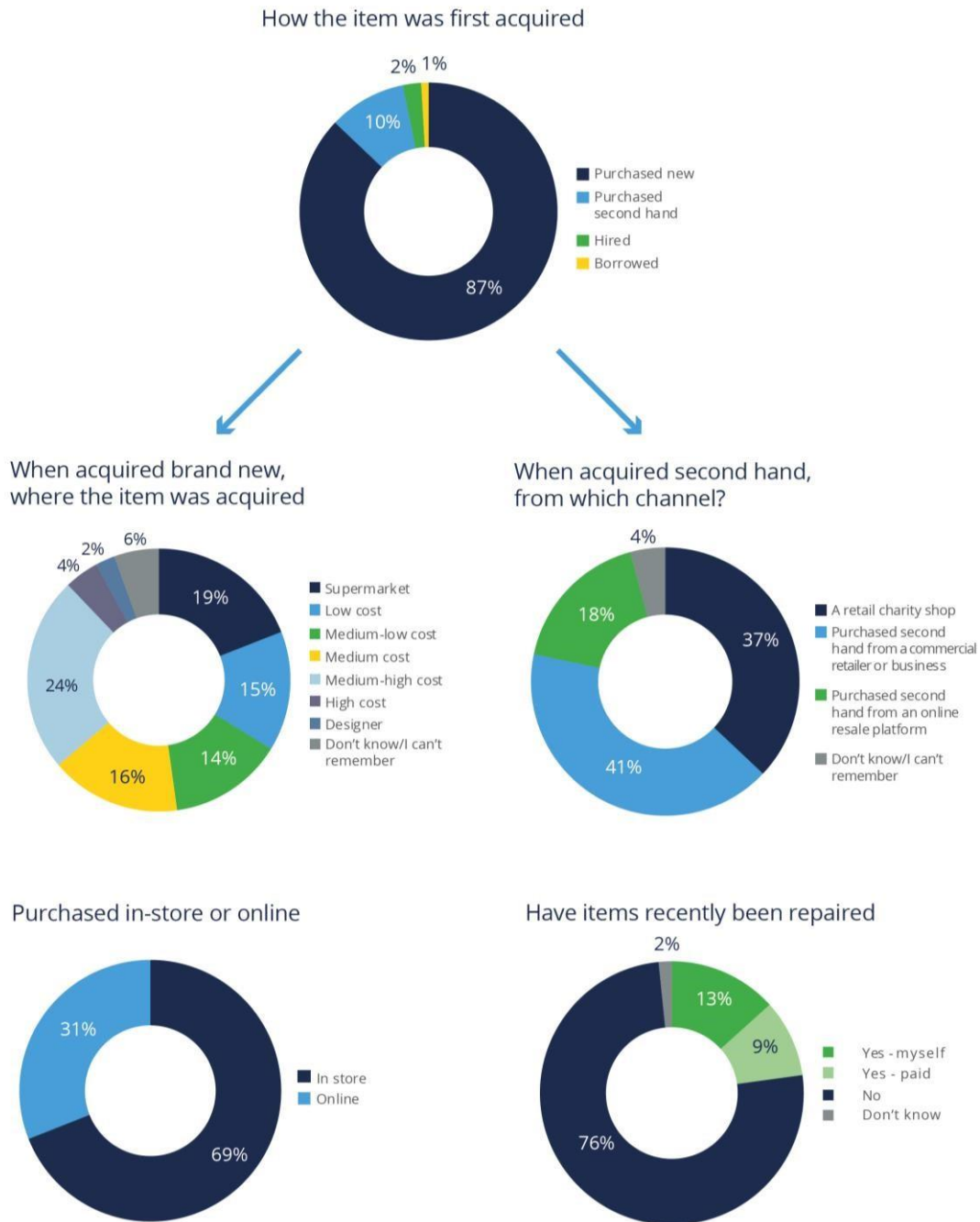
### Repair

Over one in five (22%) items has been repaired – either by the owner themselves (13%) or a paid service (9%). This is notably lower than the proportion of UK citizens who report that they look for, or are open to, repair services. This suggests there is potential to increase the practice of repair and bridge the value – action gap that exists.

### **Figure 4. How, when and where items of clothing were purchased, and incidence of any repair**

*This graph shows how, when and where items of clothing were purchases*

Base: 44,807 items of clothing, answered about by 6,000 UK adults who purchase clothing for themselves at least once a year. Oct-Nov 2021



## 2.0 Clothing longevity

### 2.1 Estimating active use

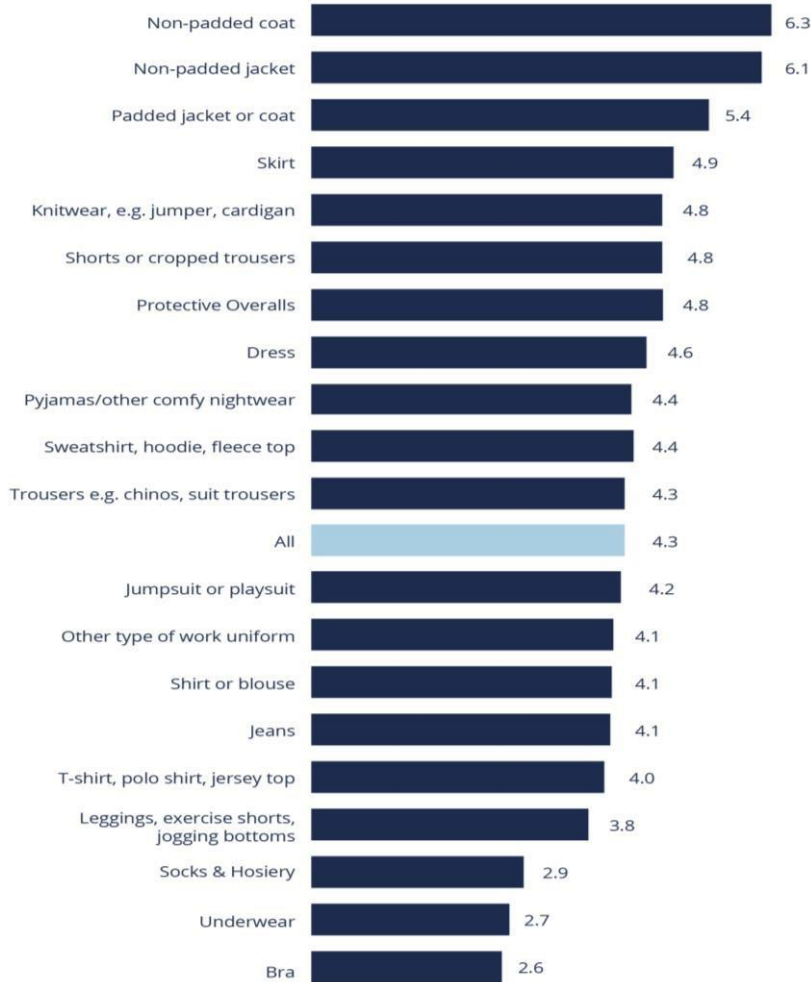
Estimated clothing longevity is calculated as the sum of the amount of time since respondents acquired a clothing item and the anticipated amount of time they think they will continue to wear it (Figure 5). The combined overall longevity estimate is 4.3 years, although this masks a wide variation across individual

clothing items that ranges from non-padded coats and jackets (6.3 and 6.1 years, respectively) through to underwear and bras (2.7 and 2.6 years, respectively).

**Figure 5. Estimated clothing longevity, in years**

*Q. How long ago did you acquire this [add item] that you wore most recently? Your best estimate is fine Q. And how much longer do you think you will continue to wear this [add item]? Your best estimate is fine.*

Base: 44,807 items of clothing, among 6,000 UK adults who purchase clothing at least once a year. Oct-Nov 2021



Comparisons in time back to the 2013 research need to be caveated because of changes in both the number and description of clothing categories. This prevents a direct comparison in the overall longevity estimate and hinders comparisons across several individual categories. However, where direct comparisons are possible, the results consistently indicate that predicted longevity of clothing items has increased. This is true, for example, of jeans (estimated to be 3.1 years in 2013 and 4.1 years in 2021), dresses (3.8 vs. 4.6 years), T-shirts, polo shirts or jersey tops (3.3 vs. 4.0 years), underwear (1.9 vs. 2.7 years) and bras (2.0 vs. 2.6 years).

Estimated longevity differs depending on the purpose for which clothes are worn, with clothing worn for casual wear estimated to have the highest longevity across many of the individual items of clothing. For example, casual T-shirts have an estimated longevity of 5.0 years, compared to a T-shirts worn in smart social or smart everyday contexts (3.4 and 3.7 years, respectively). The exceptions to this trend are items of clothing typically worn from the waist down (e.g. jeans, leggings, jogging bottoms, shorts) and also

underwear and socks. In these instances, predicted longevity is similar irrespective of the occasion the item is worn for.

There are also some notable differences in estimated longevity according to how the item was purchased and in-use behaviours. For example:

- **Acquisition type:** items purchased second hand/vintage have a higher estimated longevity than items purchased new: 5.4 years compared to 4.0 years. Furthermore, items purchased second hand from a commercial retailer have the highest estimated longevity of all (5.9 years).
- **Intensity of wearing:** there is a clear association with estimated longevity – from 4.0 years for items that are worn daily to 4.6 years among those worn once or twice a month and 5.5 years among those worn less often.
- **Repair:** there is a strong association with estimated longevity – from 3.9 years for items that have undergone no level of repair to 5.2 years among those who have undertaken a repair (either themselves or as part of a paid service). The results therefore suggest that a repair adds 1.3 years to the life of a garment, on average.
- **Demographics:** there is no association with gender (with men and women reporting similar estimated longevity across their items) and only a weak relationship with age, with those aged 55+ estimating higher overall longevity (4.6 years) compared to 18-34s (4.4 years) and 35-54s (3.9 years).
- **Brand/retailer mix:** there is some association with the type of brand/retailer where the item was purchased, with longevity estimates higher for items purchased from high cost and designer brands/retailers (4.5 and 4.3 years, respectively). This compares to items purchased from low cost (3.9 years) and medium cost brands/retailers (3.9 years). However, the association is relatively weak and estimated longevity is relatively consistent across brands/retailers.

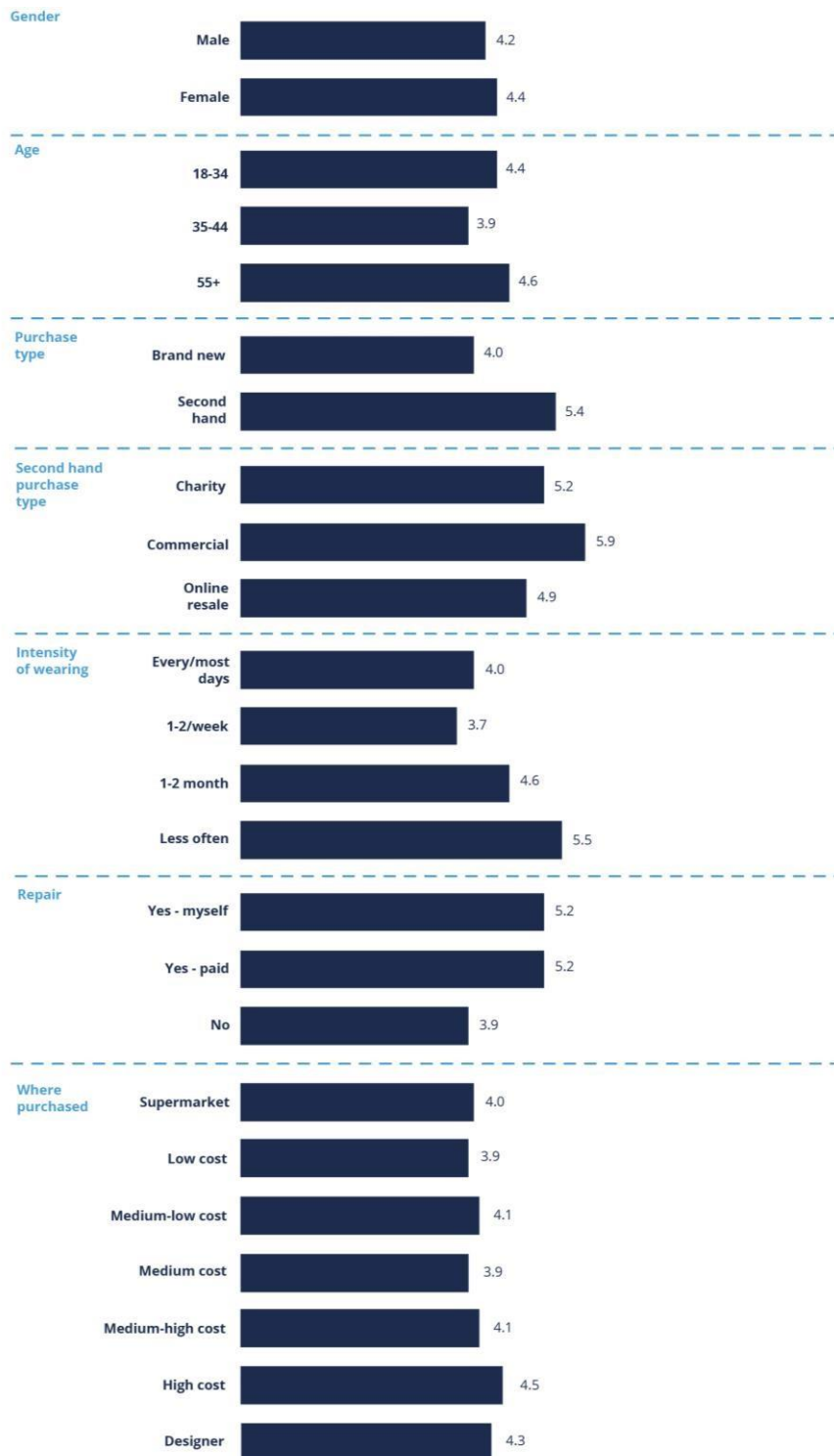
### Figure 6. Estimated clothing longevity in years – sub-group analyses

Q. How long ago did you acquire this [add item] that you wore most recently? Your best estimate is fine

Q. And how much longer do you think you will continue to wear this [add item]? Your best estimate is fine.

Base: 44,807 items of clothing, answered about by 6,000 UK adults who purchase clothing for themselves at least once a year.

Oct-Nov 2021



## 2.2 Items owned and in use

UK citizens report an average of 118 items of clothing in their wardrobe (according to the items in the study). This includes 15.1 pairs of socks and hosiery, 14.9 pieces of underwear, 12.2 T-shirts/polo shirts/jersey tops and 8.9 shirts/blouses (Figure 7).

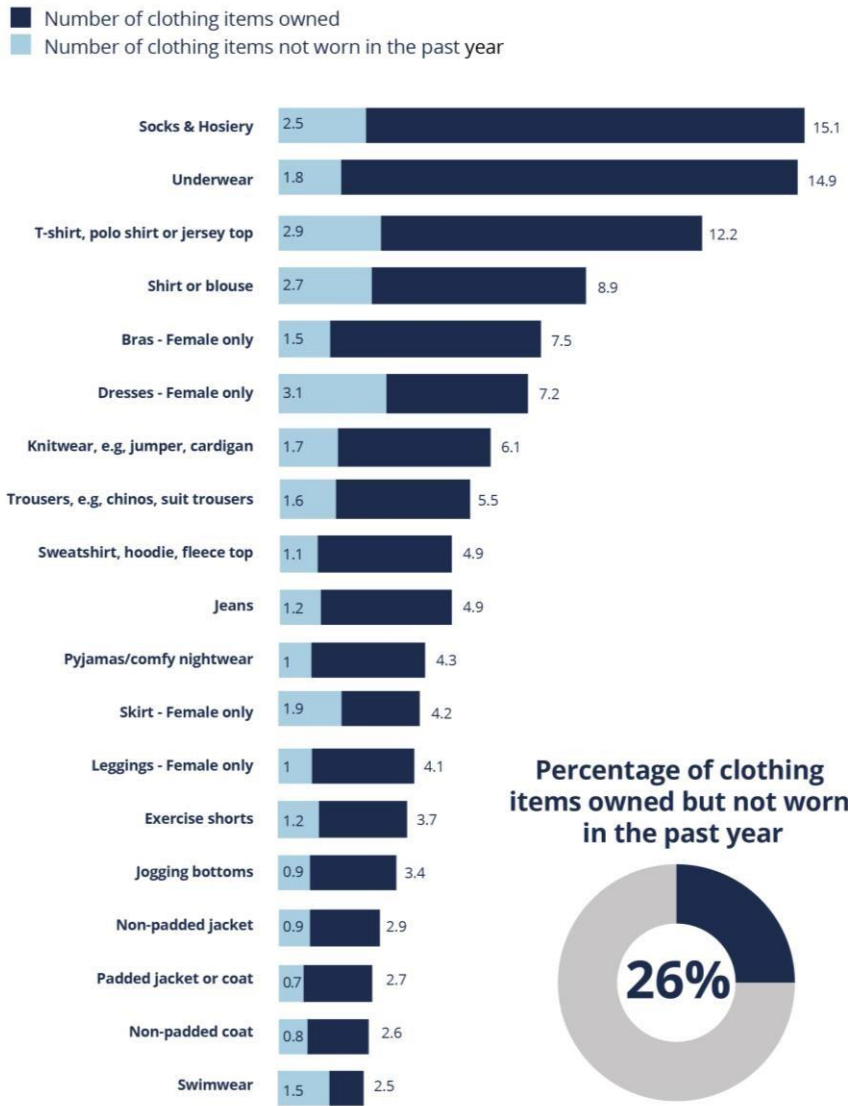
Of these items, UK citizens report that, on average, 31 items have not been worn in the past year. This represents just over a quarter (26%) of the clothing items in a typical UK wardrobe. There are notable

variations across individual items, with skirts and dresses the items most likely to be owned but not worn in the past year (44% and 43%, respectively). Utilisation is higher for items like underwear (12% were not worn in the past year), socks (17%), bras (20%), sweatshirts/hoodies/fleeces (22%) and jeans (24%).

**Figure 7. Items owned and in use**

Q. Thinking now about the clothing that you own (e.g. in your wardrobe). How many of the following items do you currently own? Please consider all your clothes, even if they no longer fit or you no longer store them at home. Q. How many of these items have you not worn in the past year?

Base: 6,000 UK adults who purchase clothing for themselves at least once a year. Oct-Nov 2021



Respondents were additionally asked why they had not worn these items in the past year. The reasons vary by clothing item, with three key groups emerging:

- ‘The item is for occasions only’ – this reason is the dominant reason why dresses have not been worn in the past year, and it is also a frequently cited reason for not wearing skirts, shirts/blouses, formal trousers and coats/jackets.
- ‘The item is no longer a good/comfortable fit’ – this explanation is cited frequently for jeans, formal trousers, skirts, shorts, jogging bottoms, T-shirts/polo shirt/jersey tops, bras and underwear.

- ‘I like the item but it is not a priority’ – this explanation (distinct from ‘I do not like the item anymore’ and more of a proxy for it falling somewhat out of favour) is cited frequently for knitwear, sweatshirts/hoodies, T-shirts/polo shirt/jersey tops, jeans, coats/jackets and underwear.

Other reasons, including ‘the item is worn out’ and ‘I do not like the item anymore’, are also cited but are less prominent by comparison. Only for jeans and leggings is ‘item is worn out’ more likely to be cited as a reason (and even for these items it still ranks third behind other explanations).

## 2.3 Wash frequency

Around 25% of clothing’s carbon impact happens once they are in use, from high washing temperatures and tumble drying<sup>5</sup>.

The research highlights that wash frequency varies considerably across different items of clothing (Figure 8). Coats and jackets are the items likely to be washed less frequently, for example padded jackets/coats are – on average – likely to be worn 17 times in between washes. This is followed by jeans (an average of 5.5 wears between washes). Wash frequency is notably higher for skirts/blouses (an average of 2.3 wears in between washes), T-shirts (2.6) and dresses (2.6).

In addition to the overall average, the range of responses is also notable – with a significant proportion of UK citizens in the survey washing all items after one wear. Excluding items like underwear and socks, this ranges from around one in five to two in five, depending on the item. 18-34s are consistently more likely to wash items after fewer wears, across most of the clothing items. For example, they wash jeans after 3.8 wears on average, compared to 5.6 wears among those aged 55+.

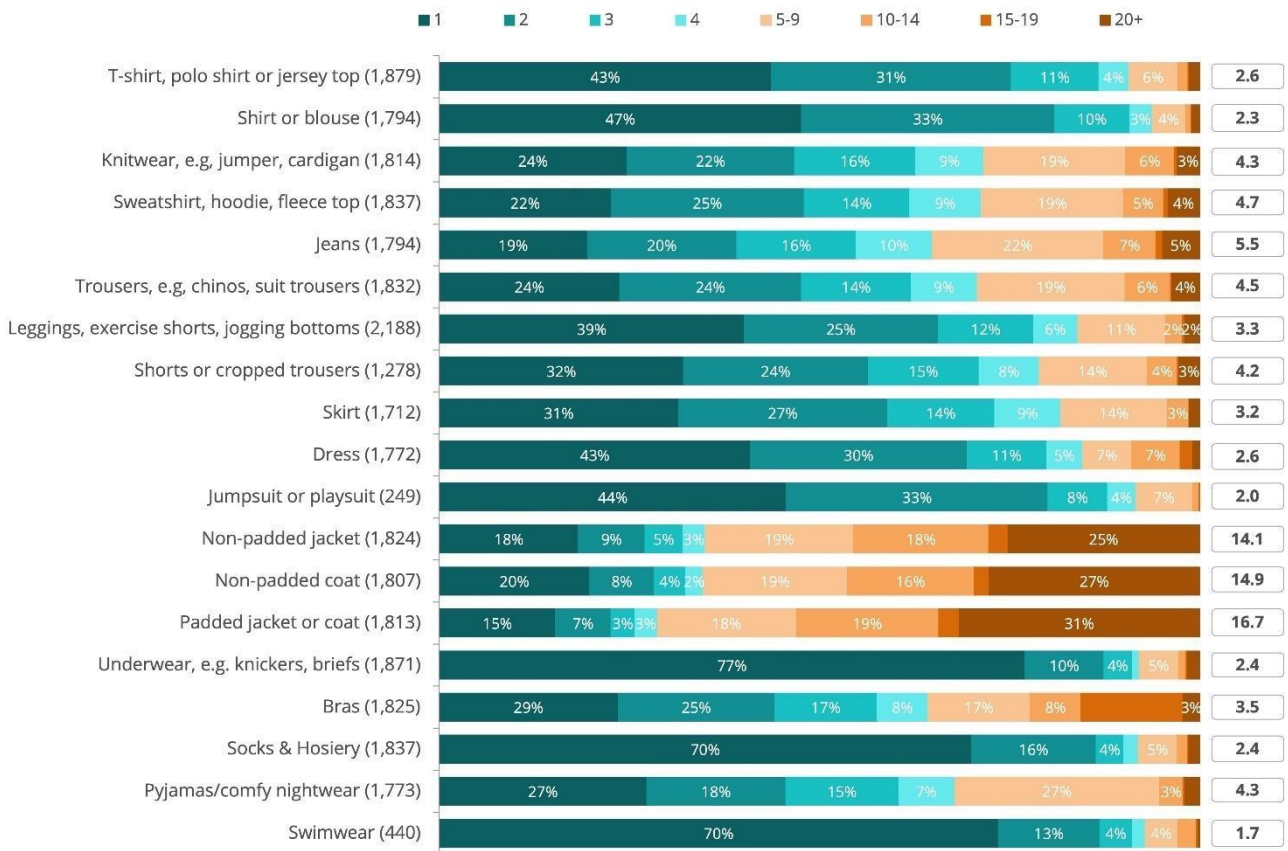
### Figure 8. Wash frequency

*Q. How many times do you tend to wear each of the following items before they get washed/cleaned?*

Base: 6,000 UK adults who purchase clothing for themselves at least once a year. Random allocation to six of the items in the list using a least fill method. Oct-Nov 2021

<sup>5</sup> <http://www2.globalfashionagenda.com/initiatives/fashion-on-climate/#/>





## 3.0 Assessing the potential for CBMs

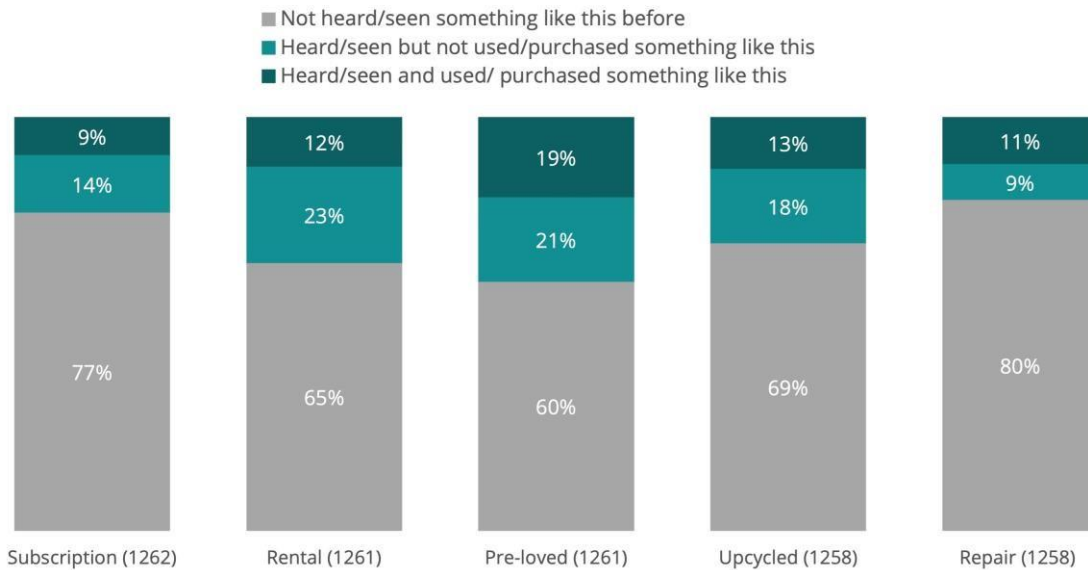
### 3.1 Current recognition and levels of use

The research demonstrates that recognition and levels of use/purchase for CBMs are currently low (Figure 9). It is highest for pre-loved clothing, which two in five (40%) are aware of and close to one in five (19%) have already purchased. It is lowest for the repair and subscription models (recognised by 20% and 23%, respectively, and already used by around one in ten).

**Figure 9. Recognition and use of CBMs**

*This graph shows the proportion of UK citizens who have seen and/or used a model like this before*

Base: UK adults who purchase clothing for themselves at least once a year. Base sizes who were allocated to each CBM indicated in brackets. Nov 2021



The survey indicates that those who have engaged with a CBM (or similar) will displace the purchase of new clothing items. This ranges from subscription services (where just over two in five - 42% - of those who have used this say it led to a reduction in the amount of new clothing purchases) to pre-loved and upcycled clothing items (54% and 57%, respectively).

### 3.2 Assessing the potential market

The research confirms a clear and mainstream potential market for all CBMs. This ranges from two in five (40%) UK citizens who say they are likely to use the subscription service, up to almost three in five (58%) for the repair service (Figure 10).

Furthermore, among those who have already engaged with the model (or similar), the majority say they would do so again. This ranges from the rental model (65% say they would use again) to the pre-loved model (73% would purchase again).

Younger, higher frequency shoppers and higher spend shoppers are the groups most likely to have already engaged with the CBMs and the groups most receptive in future. This applies consistently across all five CBMs. The repair model has notably more appeal among older and lower frequency shoppers (giving it broader appeal overall); whereas the subscription and rental models are least appealing to these groups.

### 3.3 Clothing types and occasions

There are some notable variations in the clothing types that UK citizens associate with each CBM (Figure 10). For the service-based models (i.e. subscription, rental and repair) smart and formal wear are more likely to be considered. By contrast, pre-loved and upcycled clothing ranges are more likely to be associated with casual and smart everyday wear.

In terms of specific items of clothing, jackets, coats and dresses are consistently cited across all models. Jeans are cited prominently in relation to the subscription and repair services, as well as upcycled ranges. Suits are cited prominently in relation to the subscription and rental services. Sweatshirts/hoodies and knitwear are more likely to be cited in relation to the upcycled model.

### 3.4 Motivations and barriers

The research highlights that each CBM has its own unique mix of motivations and barriers (Figure 10), although there are some commonalities – as follows:

- Cost is present throughout. For example, ‘more cost effective’ is the most frequently cited motivation for the pre-loved, rental, upcycled and repair models. It also manifests as a way of accessing brands that are too expensive to purchase, and this is particularly true for the subscription, rental and pre-loved models.
- Lower environmental impact is a frequently cited motivator, particularly in relation to the preloved, upcycled and repair models but less so in relation to the subscription and rental models.
- The suitability of the repair and subscription models for a range of occasions is a motivator, and likewise so is being able to try different items and styles without committing to buying them.

Turning to barriers, for those who say they are unlikely to consider the CBMs, the main barriers tend to be psychological rooted in self-identity, for example the idea that it is ‘not really me’. For those who are receptive to any degree, the barriers are focused on practical considerations. For example:

- Cost is not just a motivator but also a potential barrier, with ‘too expensive’ appearing in the top five barriers for all of the CBMs - particularly the repair, upcycled and subscription models.
- The key barriers for both the rental and subscription models is a concern about damaging (and being charged for) the items, as well as the size/fit of the items.
- For both the pre-loved and upcycled models, the size/fit and condition of the items are key concerns. Another potential barrier is a perception that it would be more difficult to return items.
- For the repair model, a key concern is the quality of the repair and – linked to this – if the item will still look as good/fit the same after the repair has been done. It also in turn links to cost, with citizens undertaking a form of cost-benefit analysis comparing the cost of the service relative to the chance of a successful repair.

**Figure 10. CBMs at a glance**

*This graph shows responses across questions on each CBM, including recognition of the concept, prior use of the CMB or something similar, receptivity to using in future and motivations and barriers*

Base: 2,100 UK adults who purchase clothing for themselves at least once a year. Oct-Nov 2021.

## Subscription



**Recognition and use:**  
9% say they have already used something similar; 77% have not heard of this before

**Potential market:** of those who have used something similar before, 70% would consider again.  
Among those who haven't used before 40% say they are likely to consider

**Impact on new purchases:** of those who used something similar before, 42% say they purchased fewer brand-new clothes as a result

**Type of clothes:** most likely to be used for smart social/ formal clothes.  
Particularly jackets, coats, dresses, jeans and suits

✓	Motivations and barriers	✗
1. Useful for many occasions (32%)	1. Worried about damaging a rental item (30%)	
2. Can try brands you can't afford (31%)	2. Size not fitting (29%)	
3. Can try a variety of styles without committing (31%)	3. Too expensive (23%)	
4. More cost effective (29%)	4. Hygiene (22%)	
5. Lower environmental impact (27%)	5. Condition of item (22%)	

## Rental



**Recognition and use:**  
12% say they have already used something similar; 65% have not heard of this before

**Potential market:** of those who have used something similar before, 65% would consider again.  
Among those who haven't used before 43% say they are likely to consider

**Impact on new purchases:** of those who used something similar before, 48% say they purchased fewer brand-new clothes as a result

**Type of clothes:** most likely to be used for smart social/ formal clothes.  
Particularly dresses, jackets, coats and suits

✓	Motivations and barriers	✗
1. More cost-effective (39%)	1. Worried about damaging a rental item (30%)	
2. Can try brands you can't afford (35%)	2. Size not fitting (25%)	
3. Can try a variety of styles without committing (33%)	3. Hygiene (24%)	
4. Useful for many occasions (29%)	4. Condition of item (24%)	
5. Avoids only wearing something once (27%)	5. Too expensive (22%)	

## Pre-Loved



**Recognition and use:**  
19% say they have already purchased this before; 60% have not heard of this before

**Potential market:** of those who have purchased before, 73% would consider again.  
Among those who haven't purchased before 54% say they are likely to consider

**Impact on new purchases:** of those who purchased these before, 54% say they purchased fewer brand-new clothes as a result

**Type of clothes:** most likely to be used for casual everyday wear outside of the home.  
Particularly jackets, coats, jeans, trousers and knitwear

✓	Motivations and barriers	✗
1. More cost-effective (43%)	1. Condition of item (27%)	
2. Lower environmental impact (39%)	2. Size not fitting (26%)	
3. Can try brands you can't afford (37%)	3. Might be more difficult to return item that doesn't suit (21%)	
4. Sounds like they will be good quality (31%)	4. Might not look new (21%)	
5. Useful for many occasions (26%)	5. Too expensive (20%)	

## Upcycled



**Recognition and use:**  
13% say they have already purchased this before; 69% have not heard of this before

**Potential market:** of those who have purchased before, 65% would consider again.  
Among those who haven't purchased before 53% say they are likely to consider

**Impact on new purchases:** of those who purchased these before, 57% say they purchased fewer brand-new clothes as a result

**Type of clothes:** most likely to be used for casual everyday wear outside of the home.  
Particularly jackets, coats, sweatshirts/hoodies, jeans and knitwear

✓	Motivations and barriers	✗
1. Lower environmental impact (36%)	1. Size not fitting (28%)	
2. More cost-effective (36%)	2. Too expensive (23%)	
3. Able to support responsible brands (29%)	3. Condition of item (22%)	
4. Unique items (28%)	4. Might be more difficult to return item that doesn't suit (20%)	
5. Want to reduce how many clothes I buy (26%)	5. Might not look new (20%)	

## Repair



**Recognition and use:**  
11% say they have already used something similar; 80% have not heard of this before

**Potential market:** of those who have used something similar before, 72% would consider again.  
Among those who haven't used before 58% say they are likely to consider

**Impact on new purchases:** of those who used something similar before, 51% say they purchased fewer brand-new clothes as a result

**Type of clothes:** most likely to be used for formal, smart social and smart everyday wear.  
Particularly jackets, coats, jeans, trousers and dresses

✓	Motivations and barriers	✗
1. More cost-effective (50%)	1. Low quality repair (32%)	
2. Something you loved could be worn again (49%)	2. Too expensive (30%)	
3. Lower environmental impact (41%)	3. Price not worth it compared to buying new (27%)	
4. Good for items that you don't want to throw away (40%)	4. Repair might impact how item looks / I might not like it (24%)	
5. Want to reduce how many clothes I buy (34%)	5. Too slow (15%)	

## 4.0 Conclusions and Opportunities

The longevity of a range of clothing items has increased since 2013, presenting a key opportunity to increase the sustainability of clothing.

The average longevity of jeans has increased from an estimated 3.1 years in 2013 to 4.1 years in 2021. Similar trends are evident for dresses (3.8 vs. 4.6 years), T-shirts/ polo shirts/ jersey tops (3.3 vs. 4.0 years) and underwear (1.9 vs. 2.7 years).

Estimated longevity differs depending on the purpose for which clothes are worn, with clothing worn for casual wear estimated to have the highest longevity. The exceptions to this are items worn from the waist down (e.g. jeans, leggings, etc.) as well as underwear and socks.

The research confirms that the behaviours and models that WRAP want to promote – whether repair, second hand/vintage or alternative methods of acquisition – can help towards environmental impact reductions.

- Clothing longevity is enhanced by purchasing second-hand/vintage, or when clothing is repaired. Indeed, the results therefore suggest that a repair adds 1.3 years to the life of a garment, on average.
- Similarly, those who have used a CBM, and specifically subscription and rental (pay-per-use) displace the least new purchases (42% and 48%, respectively) compared to the other three models, upcycled 57%, pre-loved 54% and repair 51%.

However, there is a significant scope to extend behaviours – the research suggests that a significant proportion of UK citizens are open to repair and to purchasing second hand, but not all of this cohort have yet translated this into consistent behaviours.

- Furthermore, there is still lots of room for improvement to extend the life of clothing and ensure it is utilised more. For example:
  - Clothing purchase frequency is high, with over two in five UK citizens purchasing clothing at least once a month. Men aged 18-34, women aged 35-54, those in London, and those with children are more likely to say they regularly buy clothing with the intention of using it for a short amount of time. They are also more likely to consciously avoid clothing from last season.
  - There are lots of unworn items in wardrobes (26%) and a significant number report wardrobes that are disorganised or overfull.
  - Almost a quarter (23%) of UK citizens say they regularly buy clothes with the intention of wearing them for a short time.
  - A significant proportion of UK citizens wash clothing items after a single wear.

There are opportunities for brands and retailers to reduce the impact clothing has on the environment by designing for circularity in key product categories.

- Findings support the need for changes in design, but considerations need to be made to understand how products can be designed for circularity.
- Product categories with higher user intensity, such as underwear, socks and T-shirts have lower predicted longevity than average and are also less suitable for CBMs. These types of products are less trend driven and are generally wardrobe staples. Their failure modes are also more likely to be a

technical failure with the item, such as 'no longer a good fit' or 'the item has worn out'. This presents a case to focus on increasing the durability of these products.

- Items worn from the waist down (e.g. jeans, leggings and trousers) also follow a similar pattern, and designing for durability should be prioritised.
- Some product categories which are worn less often, such as dresses, blouses, jumpsuits and skirts, have higher predicted longevity, but they are also categories where we use a much lower proportion of what we own than average. A main reason for this is 'this item is for occasions only' which presents an opportunity for CBMs where durable design must be prioritised if wearer intensity is to increase. However, 'I like the item but it is not a priority', is also a key failure mode, which could suggest that some of these items could also have shorter trend lifecycles, so retailers must also consider how they create products that are designed to be recycled at the end of use.

The research confirms a clear case and mainstream potential market for brands and retailers to implement CBMs and increase the utilisation of clothing. Although, the size of the potential varies for each CBM.

- The potential market ranges from two in five who say they are likely to use the subscription service to around three in five for the repair CBM.
- The groups most receptive to CBMs are exactly the ones that we need to focus on (i.e. higher consumption/spend/frequency purchasers).

There is the potential to build on existing behaviours but also create new habits - many people still do not know there is an alternative to buying new. Recognition of the CBMs is currently low, with levels of use/purchase even lower.

However, there is potential for CBMs to ease citizen 'pain points'.

- As noted earlier, there are lots of (just over a quarter) unworn items in citizens' wardrobes that have the potential to be supplied through CBMs.
- Some UK citizens have unorganised and full to bursting wardrobes – rental and subscription reduce the need for full-time storage, organisational skills and the time needed to do the organising, while resale and donation to pre-loved services helps to empty wardrobes, generate cash and help citizens feel good about doing something good.
- The main reasons UK citizens gave when asked why they had not worn clothing items in the past year vary by item, but there were three main groups across all: the 'item is for occasions only', 'the item is no longer a good/comfortable fit' and 'I like the item but it is not a priority'. CBMs could respond to all three of these.
- 41% of citizens do not want to make the effort to maintain their clothes after wearing them – rental and subscription reduce the need for this.
- CBMs could also be deployed for those who said they intent wearing their clothes for a short time or are consciously avoid clothing from last season. In particular favouring rental and subscription CBMs over traditional models of purchase and ownership.

There are key operational considerations when setting up CBMs.

- A good proportion of clothing is purchased once a month. CBMs need to look at monthly trends and focus the offer around this.
- Any offer must consider cost as a motivator but also a potential barrier, with 'too expensive' appearing in the top five barriers for all the CBMs - particularly the repair, upcycled and subscription models.
- Garments must be durable enough to withstand increased use.
- Citizens' pain points must be considered early enough in the planning stage of a CBM or within the marketing of the range or service. For example:
  - 'Size not fitting' is the first or second barrier for all CBMs, aside from repair.
  - For both pre-loved and upcycled models, the condition of the item is a key concern, followed by that 'it would be more difficult to return items'.
  - For the repair model, quality, cost of repair vs. buying new and 'how the item looks' are linked to form a cost-benefit analysis comparing the cost of the service relative to the chance of a successful repair.

Designing for circularity and CBMs need to work together to have the biggest impact reductions.

What next?

- By understanding the predicted longevity of different clothing categories, the factors that effect this, and the reasons for not wearing, Textiles 2030 can support businesses to make design decisions that will extend the life of clothing in the UK.
- While CBMs are growing in scale, breadth of services and market share, changes will not happen overnight. Any behaviour change takes time and businesses need to consider that they may be moving from selling a product to selling a concept change.
- Understanding what your customers' issues and pain points are will help develop the opportunities. Is it skill building, is it a nudge or awareness?
- Recognising that there is still significant scope to support and encourage citizens to care for the clothing (so they last longer) through improved care and repair will be one of the key behaviours to focus on for Textiles 2030.

## Annex 1 – descriptions of the CBMs

The following are the descriptions that were shown to survey respondents and set the context for their answers. Please note, no title was shown to respondents. They were shown the full description without any headline label or summary.

### 1. Subscription

A clothing brand you like has launched a new subscription service. Every two months, you will be sent four items of clothing you have chosen from a selection that has been curated for you, based on the preferences that you specify (e.g. the types of clothing items you want to receive, colour preferences, etc).



You are charged a fixed fee every two months for this service, the price of which is significantly cheaper than purchasing these items of clothing as new.

At the end of the two months, you have to return the items to store or via post, with the free postage and packaging provided. Upon return, the items will be cleaned, ready for the next subscription customer.

At the end of the two months, you also have the option to purchase the clothing you have been renting, for less than their standard retail price.

## 2. Rental (pay per use)

A clothing brand you like has launched a new rental service, which allows you to rent as many items of clothing as you like, at a fraction of the purchase price.

Items are charged individually, and once you have picked them out or they have been sent to you, you have a week in which to wear and return them to store or via post, with the free postage and packaging provided.

Upon return, the items will be cleaned, ready for the next rental customer.

## 3. Pre-Loved (resale)

A clothing brand you like has launched a 'preloved' (pre-owned) clothing range. Stylish items that had been previously purchased from them, but are no longer wanted by the original customer, are collected.

These clothes are cleaned and undergo a thorough quality check to ensure that they are in a good condition and that they are authentic.

They are then resold to new customers, for less than their standard retail price. This 'preloved' range is available both instore and online.

## 4. Upcycled (Re-manufactured)

A clothing brand you like has launched a new 'upcycled' range, which sells used clothing that has been transformed into something new by experienced designers.

For example, clothes may be revitalised with new decorative details or colour and print effects. One item of clothing could be transformed into something different, such as a shirt being refashioned into a dress, or two items could be combined into one, such as the creation of a new t-shirt from two with different designs.

## 5. Repair

A clothing brand you like has launched a service that allows clothing you have purchased from this brand to be easily repaired, for a fee that is paid at the point of repair.

This would involve replacing or repairing parts that are damaged, such as a split seam, a broken zip or a button that has fallen off.

The brand is working in collaboration with an external partner to offer this repair service, and it is available both instore and online. The items damaged at purchase would be covered by the brand's standard refund policy, whereas this service helps you keep clothes you love for longer, covering repairs needed due to use, regardless of how much time has passed since they were purchased.

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