

Given the results of the [first segmentation analysis](#) were biased by responses from current Ref customers (e.g., the majority of Ref customers were found in one segment), a new segmentation analysis was conducted using only responses from the 1,711 panel respondents.

1. The 58 items from the [segmentation battery](#) were the primary inputs for the segmentation analysis.
2. Segment solutions ranging between 2 and 8 groups were evaluated.
3. Segment solutions containing 3, 4, and 6 segments were statistically optimal.

The 6-segment solution was ultimately chosen because the segments most likely to be Ref customers as determined by their mindset reveals similar shopping habits to Ref current customers, confirming their potential as prospective customers.

| Segment Size by Market | | | | | | |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Segment 1 | Segment 2 | Segment 3 | Segment 4 | Segment 5 | Segment 6 |
| Globally | 13% | 18% | 18% | 14% | 18% | 19% |
| US | 10% | 20% | 18% | 15% | 18% | 20% |
| Canada | 10% | 14% | 15% | 15% | 20% | 25% |
| UK | 14% | 17% | 16% | 18% | 20% | 16% |
| Germany | 24% | 17% | 25% | 6% | 14% | 13% |

Segment Summaries

For the following segmentation solution, we present index values to identify the dominant characteristics for each segment and summarize the variables that define each segment.

Temporary names have been applied to each segment to aid preliminary discussions. As our understanding of the segments deepens, the names will most likely evolve.

Kindly note the following when interpreting each index table:

- + Both over- and under-index variables are ranked in descending order.
- + The index value indicates the extent to which the variable varies from the rest of the population. A value of 100 indicates no variation; a high value above 100 signals a high positive deviation (i.e., agreement) and a value below 100 signals a negative deviation (i.e., disagreement).

SEGMENT 1 - Eco-Conscious Shopper (13%)

Mindset Introduction

Segment 1 is defined by their commitment to sustainability. They actively avoid buying from fast fashion brands and are willing to pay a premium for products made sustainably. Besides buying new clothes that are made sustainably, they are more likely to buy vintage apparel. Shoppers in Segment 1 are not likely to purchase new clothes every season or for specific occasions.

Demographics

- Plurality between 36 and 50 (42%)
- 43% urban / 39% suburban
- 30% HHI > \$100K
- 49% married / 33% living with a partner

Purchasing Behaviors

- Less likely to spend more than \$250 a month on clothing (35%)
- A plurality shop an equal amount online and in-person (42%)
- **Spend Allocation**
 - Special occasions: 13%
 - Everyday use: 52%
 - Professional use: 19%
 - Social events: 16%
- **Willingness to Pay**
 - Tops: 20% above \$100
 - Dresses: 50% above \$100
 - Jeans: 33% above \$100
 - Shoes: 64% above \$100
- 19% aware of Ref

Segment 1 Index Values

| LABEL | <i>Over index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|--|---------------------------|-----------------------------------|---------------------------------|
| I actively avoid buying from fast fashion brands | 155 | 67% | 43% |

| I am willing to pay more for apparel that is made using sustainable practices | 137 | 82% | 60% |
|---|----------------------------|--------------------------------|------------------------------|
| I actively seek out apparel brands that are environmentally conscious | 133 | 67% | 50% |
| I prefer to buy vintage apparel over new apparel whenever possible | 132 | 45% | 34% |
| I am willing to pay more for apparel that is made by workers who are treated fairly | 131 | 88% | 67% |
| LABEL | <i>Under index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| I often buy apparel with a specific occasion in mind | 60 | 38% | 63% |
| I don't really think about how much money I spend on apparel | 56 | 23% | 41% |
| I typically buy new apparel at the beginning of every season | 55 | 31% | 56% |
| I attend a lot of social events | 55 | 24% | 43% |
| I care more about how apparel looks than how it was made | 37 | 20% | 55% |

SEGMENT 2 - Fashionistas (18%)

Mindset Introduction

Segment 2 is filled with fashionistas who see themselves as trendsetters. These individuals are extremely social and don't mind breaking the bank when it comes to purchasing apparel, especially when the brands are easily recognizable. Although they care about the environment, being fashionable takes precedence over sustainability.

Demographics

- Plurality between 36 and 50 (50%)
- 58% urban / 36% suburban
- 47% HHI > \$100K
- 67% married / 23% living with a partner

Purchasing Behaviors

- More likely to spend more than \$250 a month on clothing (82%)
- More likely to shop an equal amount online and in-person (49%)
- **Spend Allocation**
 - Special occasions: 19%
 - Everyday use: 33%
 - Professional use: 24%
 - Social events: 24%
- **Willingness to Pay**
 - Tops: 55% above \$100
 - Dresses: 83% above \$100
 - Jeans: 69% above \$100

- Shoes: 87% above \$100
- More likely to be aware of Ref (28%)

Segment 2 Index Values

| LABEL | Over index (value) | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|--|---------------------|--------------------------------|------------------------------|
| I attend a lot of social events | 172 | 75% | 43% |
| I am a trendsetter | 166 | 70% | 42% |
| I don't really think about how much money I spend on apparel | 164 | 68% | 41% |
| I am willing to pay more for apparel that is made in the USA | 159 | 69% | 44% |
| I like to wear apparel brands that are easily recognizable to others | 157 | 72% | 46% |
| LABEL | Under index (value) | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| I'm most likely at home on a Saturday night | 68 | 41% | 60% |
| I often shop around or wait for a sale to get a lower price | 51 | 31% | 60% |
| I don't have a lot of occasions where I need to get dressed up | 51 | 25% | 50% |
| I frequently worry about money | 44 | 21% | 46% |
| I never pay full price for apparel if I can avoid it | 32 | 18% | 56% |

SEGMENT 3 - Lost Shopper (18%)

Mindset Introduction

Individuals in Segment 3 perceive shopping as a chore and seek guidance on what to wear from others. If given the choice, they prefer to buy vintage apparel over new. These shoppers like to wear a lot of prints and want the brands they wear to be easily recognizable by others. Although they wear the same apparel to work as they do in their daily life, it is not because money is a barrier.

Demographics

- More likely to be between the ages of 15 - 26 (14%) and 26 - 35 (38%)
 - Plurality between 36 and 50 (43%)
- 65% urban / 27% suburban,
- 41% HHI > \$100K
- 68% married / 37% living with a partner

Purchasing Behaviors

- More likely to spend more than \$250 a month on clothing (68%)
- A plurality shop an equal amount online and in-person (44%)
 - Less likely to shop mostly in-person (17%)
- **Spend Allocation**

- Special occasions: 19%
- Everyday use: 35%
- Professional use: 23%
- Social events: 23%
- **Willingness to Pay**
 - Tops: 51% above \$100
 - Dresses: 69% above \$100
 - Jeans: 56% above \$100
 - Shoes: 75% above \$100
- 24% aware of Ref

Segment 3 Index Values

| LABEL | <i>Over index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|---|----------------------------|--------------------------------|------------------------------|
| I seek out guidance for what to wear | 201 | 74% | 37% |
| I prefer to buy vintage apparel over new apparel whenever possible | 191 | 66% | 34% |
| Shopping for clothing is a chore | 185 | 63% | 34% |
| I wear a lot of apparel with prints | 171 | 68% | 40% |
| I like to wear apparel brands that are easily recognizable to others | 165 | 76% | 46% |
| LABEL | <i>Under index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| Once I find a brand I like, I am very loyal to them | 92 | 71% | 77% |
| I prefer to invest in apparel that I can wear for many years | 90 | 70% | 77% |
| Personal wellness is one of my top priorities | 90 | 69% | 77% |
| I stick with apparel brands and styles that work for me regardless of trends | 89 | 65% | 73% |
| I prefer to buy versatile pieces that go with many other items in my wardrobe | 87 | 72% | 83% |

SEGMENT 4 - Budget Fashionistas (14%)

Mindset Introduction

Individuals in Segment 4 utilize social media to discover the latest fashion styles. These shoppers are all about the end look, willing to mix and match high and low-end apparel. They put a lot of effort into their look and are not afraid to experiment. Shopping is a fun activity for these shoppers and an act of self-expression.

Demographics

- More likely to be between the ages of 15 and 25 (17%)
 - Plurality between 36 and 50 (44%)
- 35% urban / 52% suburban
- 27% HHI > \$100K
- 49% married / 28% living with a partner

Purchasing Behaviors

- Less likely to spend more than \$250 a month on clothing (41%)
- A plurality shop an equal amount online and in-person (44%)
 - Less likely to shop entirely in-person (6%)
- **Spend Allocation**
 - Special occasions: 15%
 - Everyday use: 41%
 - Professional use: 21%
 - Social events: 24%
- **Willingness to Pay**
 - Tops: 17% above \$100
 - Dresses: 49% above \$100
 - Jeans: 34% above \$100
 - Shoes: 62% above \$100
- 24% aware of Ref

Segment 4 Index Values

| LABEL | <i>Over index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|---|----------------------------|--------------------------------|------------------------------|
| I use social media to discover the latest fashion styles | 137 | 73% | 53% |
| I love to mix and match high-end and low-end apparel brands | 130 | 87% | 67% |
| I put a lot of effort into how I look | 129 | 85% | 66% |
| I like to experiment with new fashion styles and trends | 129 | 77% | 60% |
| Building relationships is one of my top priorities | 127 | 84% | 66% |
| LABEL | <i>Under index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| I'm most likely at home on a Saturday night | 61 | 37% | 60% |
| My fashion style has not changed much in the past several years | 53 | 28% | 53% |
| I don't have a lot of occasions where I need to get dressed up | 52 | 26% | 50% |
| I wear the same apparel to work as I do in my day-to-day life | 50 | 22% | 45% |
| Shopping for clothing is a chore | 30 | 10% | 34% |

SEGMENT 5 - Resigned Shopper (18%)

Mindset Introduction

Segment 5 is filled with homebodies who do not have many occasions to get dressed up for. Their fashion style has not changed much over the years, and they see themselves as creatures of habit. For these individuals, shopping is a chore, most likely linked to their money worries and issues finding flattering clothing.

Demographics

- More likely to be between the ages of 36 and 50 (53%)
- 32% urban / 50% suburban
- 37% HHI > \$100K
- 55% married / 26% living with a partner

Purchasing Behaviors

- Less likely to spend more than \$250 a month on clothing (26%)
- Less likely to shop an equal amount online and in-person (34%)
 - More likely to shop mostly online (29%)
- **Spend Allocation**
 - Special occasions: 12%
 - Everyday use: 54%
 - Professional use: 19%
 - Social events: 15%
- **Willingness to Pay**
 - Tops: 14% above \$100
 - Dresses: 39% above \$100
 - Jeans: 21% above \$100
 - Shoes: 49% above \$100
- 17% aware of Ref

Segment 5 Index Values

| LABEL | <i>Over index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|---|----------------------------|--------------------------------|------------------------------|
| I don't have a lot of occasions where I need to get dressed up | 137 | 68% | 50% |
| My fashion style has not changed much in the past several years | 130 | 68% | 53% |
| I'm most likely at home on a Saturday night | 129 | 78% | 60% |
| I frequently worry about money | 127 | 59% | 46% |
| I primarily wear outfits in neutral colors | 123 | 65% | 53% |
| LABEL | <i>Under index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| I like to experiment with new fashion styles and trends | 40 | 24% | 60% |
| It is easy for me to find apparel that flatters my body | 38 | 23% | 62% |
| I attend a lot of social events | 37 | 16% | 43% |

| | | | |
|---|----|-----|-----|
| I feel comfortable with my body exactly how it is today | 31 | 18% | 57% |
| I am a trendsetter | 27 | 11% | 42% |

SEGMENT 6 - Discount Shopper (19%)

Mindset Introduction

Individuals in Segment 6 care more about how apparel looks than how it is made. They can put together an outfit on a budget and take pride in never paying full price for apparel. Segment 6 is more strongly defined by who they are not than who they are. These shoppers do not seek out environmentally friendly brands and do not care about brand values. Moreover, they are not willing to pay a premium for sustainable clothing or brands they feel connected to.

Demographics

- More likely to be between the ages of 51 and 64 (15%)
 - Plurality between 36 and 50 (49%)
- 42% urban / 41% suburban
- 36% HHI > \$100K
- 46% married / 33% living with a partner

Purchasing Behaviors

- Less likely to spend more than \$250 a month on clothing (36%)
- Less likely to shop an equal amount online and in-person (37%)
 - More likely to shop mostly (25%) or entirely (11%) in-person
- **Spend Allocation**
 - Special occasions: 12%
 - Everyday use: 53%
 - Professional use: 18%
 - Social events: 18%
- **Willingness to Pay**
 - Tops: 15% above \$100
 - Dresses: 43% above \$100
 - Jeans: 26% above \$100
 - Shoes: 60% above \$100
- Less likely to be aware of Ref (12%)

Segment 6 Index Values

| LABEL | <i>Over index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
|--|---------------------------|--------------------------------|------------------------------|
| I care more about how apparel looks than how it was made | 130 | 71% | 55% |
| I can put together a fashionable outfit for less than \$100 | 116 | 84% | 73% |
| I don't have a lot of occasions where I need to get dressed up | 115 | 57% | 50% |
| I never pay full price for apparel if I can avoid it | 111 | 63% | 56% |

| | | | |
|---|----------------------------|--|--|
| I'm most likely at home on a Saturday night | 109 | 66% | 60% |
| LABEL | <i>Under index (value)</i> | SEGMENT % strongly agree/agree | TOTAL % strongly agree/agree |
| I'm more likely to buy from brands when I feel connected to their values | 36 | 22% | 60% |
| I seek out guidance for what to wear | 33 | 12% | 37% |
| I am willing to pay more for apparel that is made using sustainable practices | 29 | 17% | 60% |
| I like to know what a brand stands for before I purchase apparel from them | 18 | 9% | 50% |
| I actively seek out apparel brands that are environmentally conscious | 16 | 8% | 50% |

Appendix

Analysis Results

Our analysis identified the 6-segment solution to be the most optimal.

| clusters (k) | Methodology | Silhouette score ¹ | Dispersion ² | Largest segment % | Smallest segment % |
|--------------|------------------|-------------------------------|-------------------------|-------------------|--------------------|
| 6 | NMF ³ | .31 | .73 | 19% | 13% |

The stability of the solution was verified with the quality of the typing tool built for the created segments, based on the segmentation variables. This was the classification with 6 classes

| measure | top 10 drivers | top 15 drivers | top 20 drivers | top 25 drivers |
|--------------------------|----------------|----------------|----------------|----------------|
| accuracy | 0.46 | .52 | .54 | .63 |
| Brier score ⁴ | 0.34 | .32 | .31 | .27 |

Cluster Analysis Methodology

Non-negative matrix factorization is a method used to represent the model matrix (respondents' 58 variables) with 2 new matrices, where one segments respondents and the second groups variables into clusters of highly correlated features. This method is often applied to high-dimensional datasets where the number of features exceeds 20.

With this approach, we were able to cluster segment respondents according to their mindset variables and specify the variables that define each cluster.

The known challenge within this method is the proper specification of the number of segments used in the factorization, which is supported by statistical validation methods designed for clustering problems.

¹ This is a measure of the quality of the clustering. It is a measure of how similar an object is to its own cluster (cohesion) compared to other clusters (separation). Higher is better. Range from -1 to 1. Maximum is 1.

² This is a measure unique to NMF. It measures how consistently variables are assigned to the same segment. Higher is better. Range from 0 to 1. Maximum is 1.

³ Non-negative matrix factorization

⁴ This is a measure of the "calibration" of a set of probabilistic prediction. Smaller is better

