

# **Positioning Analysis**

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# **Positioning options**

## **Options selected**

Option	Selection
Include preferences	Yes
Number of dimensions	3
Focal brand	Stanley
Show segments of preferences	Yes
Number of segments	3
Decision rule	First-Choice
Current market shares	No
Date and time	2025-02-23 05:46:09 UTC

Options selected.

## **Data description**

Data	Number of Row	s Number of columns	Column names
1 Perceptual data	6	6	C0, Stanley, Hydro Flask, Owala, Yeti,
2 Preference data	51	6	Respondent, Stanley, Hydro Flask, Owala, Yeti,

Data description.

# **Dimensions**

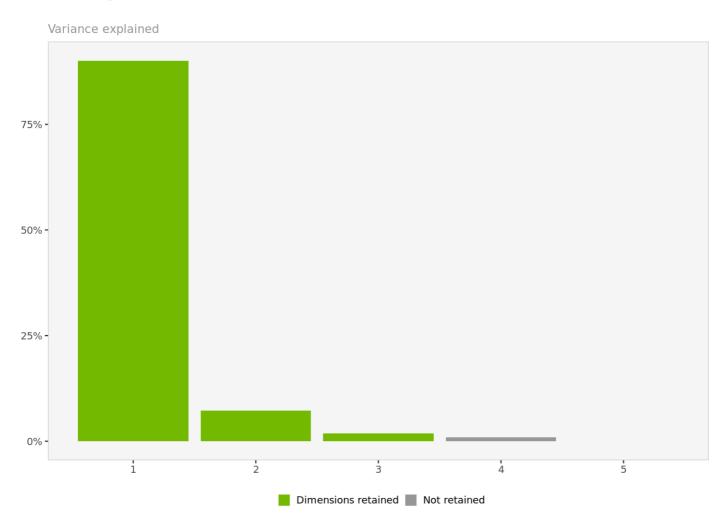
#### Number of dimensions retained

You have decided to display the first 3 dimensions, which account for a total of 99.1% of the variance in the data.

	Variance explained	d Cumulative variance
<b>Dimension 1</b>	90.1%	90.1%
<b>Dimension 2</b>	7.2%	97.3%
Dimension 3	1.8%	99.1%
<b>Dimension 4</b>	0.9%	100.0%
<b>Dimension 5</b>	0.0%	100.0%

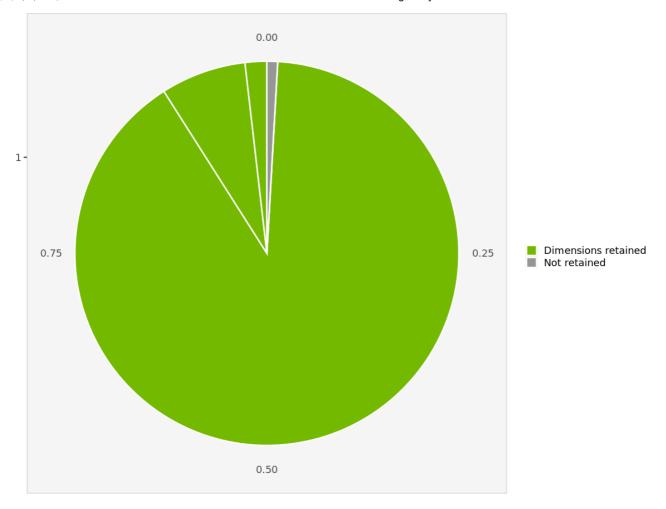
Variance explained. Variance and cumulated variance explained, by dimension.

## Variance explained



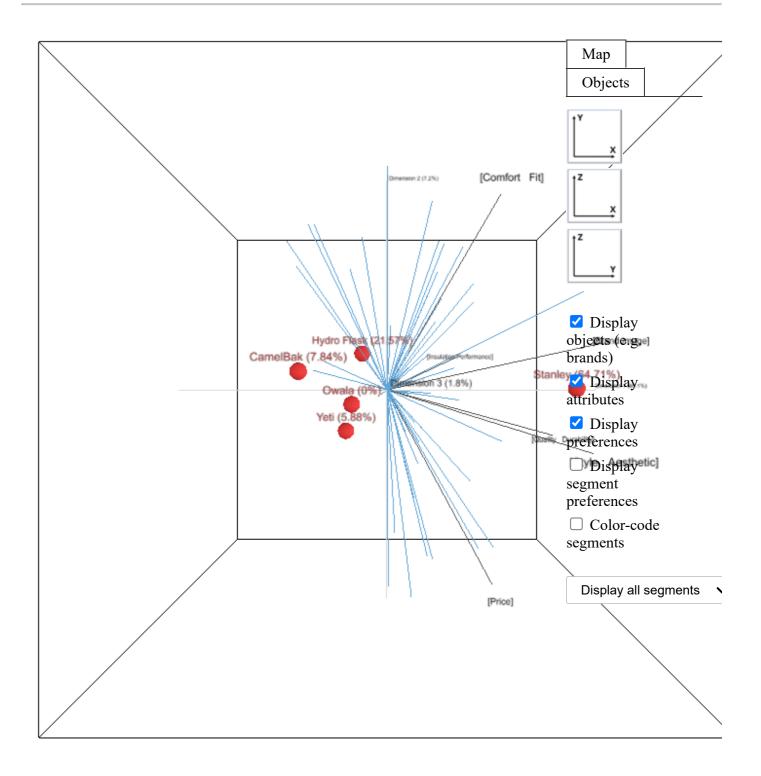
**Variance explained**. Each additional dimension captures a decreasing portion of the variance found in the original data.

## **Cumulative variance explained**



**Cumulative variance explained**. The first 3 dimensions account for 99.1 % of the variance in the data.

# 3D visualization



**Visualization in 3D of the perceptual map**. To rotate the map, holds the left mouse button down and move it around.

# **Objects**

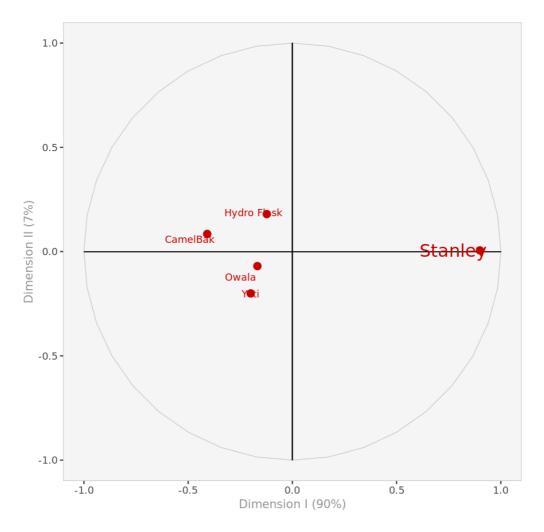
#### **Interpretation**

In this section, only the objects (e.g., brands) are displayed on the perceptual map.

In interpreting the map, remember that the closer two objects are, the more similar they are perceived to be, that is, the more similar they rate on the underlying attributes.

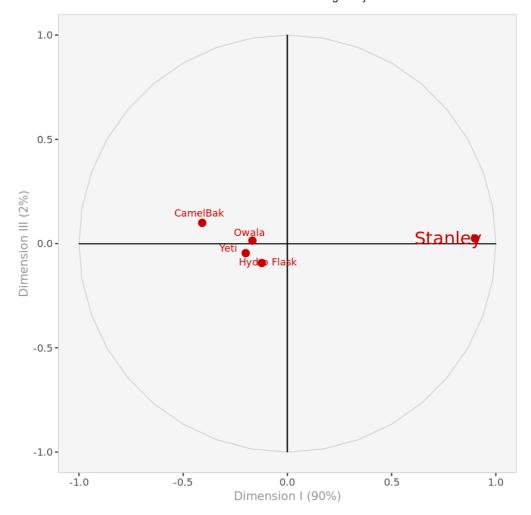
Since the first 3 dimensions of the perceptual map have been retained, the map can be seen as a cube in 3 dimensions. Each view displays the cube seen from a different angle.

#### **Dimensions I-II**



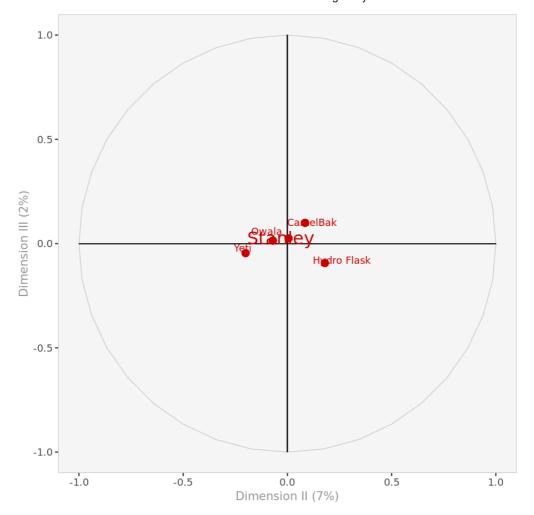
Objects I-II. Object position on the first and second dimensions of the perceptual map.

#### **Dimensions I-III**



Objects I-III. Object positions on the first and third dimensions of the perceptual map.

## **Dimensions II-III**



Objects II-III. Object positions on the second and third dimensions of the perceptual map.

## **Coordinates**

	Dimension I	Dimension II	Dimension III
Stanley	0.900	0.006	0.025
Hydro Flask	-0.123	0.180	-0.093
Owala	-0.168	-0.070	0.014
Yeti	-0.200	-0.200	-0.046
CamelBak	-0.409	0.085	0.099

Object coordinates. Displays the coordinates of all the objects in every dimension.

# **Attributes**

#### Interpretation

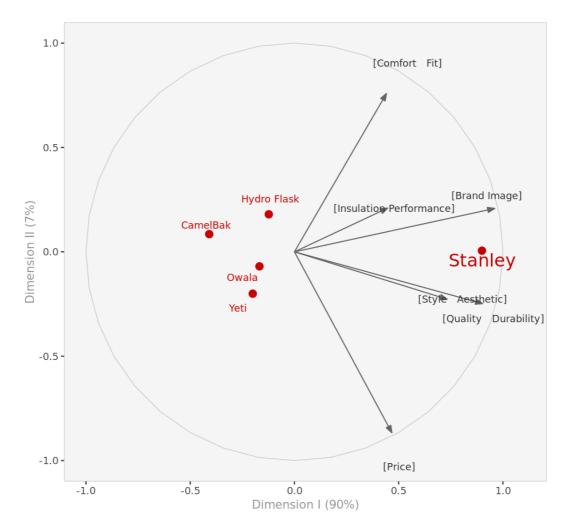
In interpreting the direction of the attributes, remember that:

- Two attributes that go in the same direction are positively correlated, that is, an object rated high on one attribute will usually be rated high on the other.
- Two attributes that are perpendicular to one another are uncorrelated.
- Two attributes that go in opposite directions are negatively correlated, that is, an object rated high on one attribute will often rate low on the other, and vice-versa.

In interpreting the length of the vector representing the attributes:

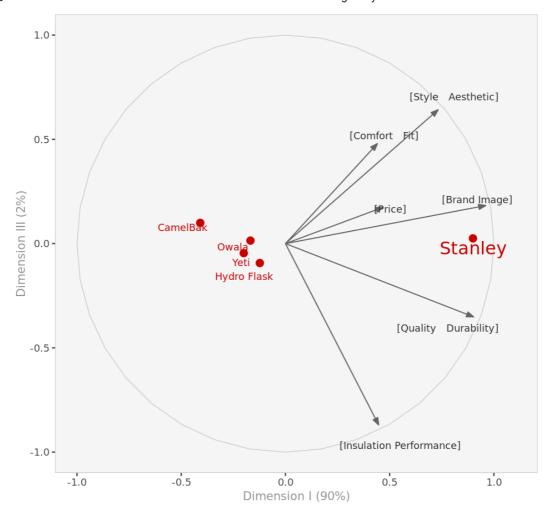
- The longer the attribute vector, the better that attribute is captured by the two dimensions displayed.
- If an attribute appears very close to the origin when looking at dimensions I and II, it could be longer and be better captured by dimension III.

#### **Dimensions I-II**



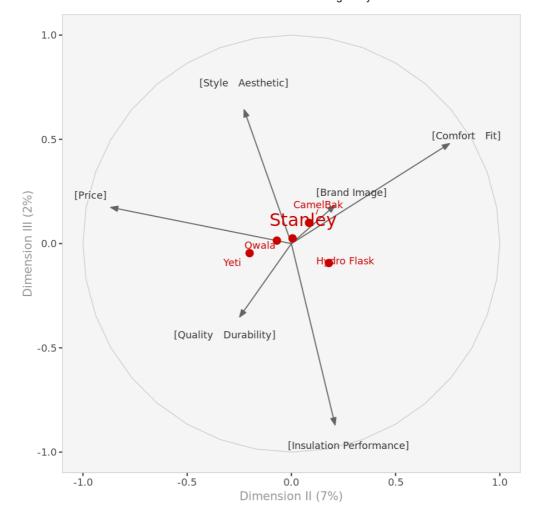
Attributes I-II. Objects and attributes on the first and second dimensions of the perceptual map.

#### **Dimensions I-III**



Attributes I-III. Objects and attributes on the first and third dimensions of the perceptual map.

## **Dimensions II-III**



Attributes II-III. Objects and attributes on the second and third dimensions of the perceptual map.

#### **Coordinates**

	Dimension I	Dimension II	<b>Dimension III</b>
[Price]	0.467	-0.867	0.174
[Quality Durability]	0.903	-0.248	-0.352
[Insulation Performance]	0.447	0.210	-0.870
[Comfort Fit]	0.441	0.758	0.480
[Style Aesthetic]	0.733	-0.227	0.642
[Brand Image]	0.961	0.208	0.183

Attributes coordinates. Displays the coordinates of all the attributes in every dimension.

## **Summary**

	Dimension I	Dimension II	Dimension III
1 Most positive	[Brand Image]	[Comfort Fit]	
2	[Quality Durability]		
3	[Style Aesthetic]		
4			
5 Most negative		[Price]	[Insulation Performance]

**Dimension interpretation**. Displays the names of the attributes most aligned with each dimension.

	Dimension I	Dimension II	Dimension III
[Price]	0.0838	-0.1553	0.0311
[Quality Durability]	0.0948	-0.0261	-0.0369
[Insulation Performance]	0.0910	0.0426	-0.1770
[Comfort Fit]	0.0846	0.1454	0.0920
[Style Aesthetic]	0.0926	-0.0287	0.0811
[Brand Image]	0.0949	0.0205	0.0180

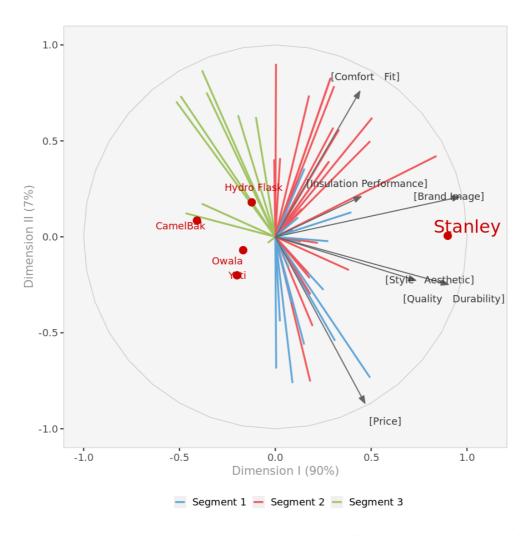
Factor loadings (excerpt). Displays the factor loadings of attributes.

	Mean Stdev
[Price]	3.240 0.1673
[Quality Durability]	3.380 0.3033
[Insulation Performance]	3.360 0.1517
[Comfort Fit]	3.360 0.2702
[Style Aesthetic]	3.280 0.3633
[Brand Image]	3.280 0.4087

**Mean and standard deviation (excerpt)**. Displays the means and standard deviations of the attributes.

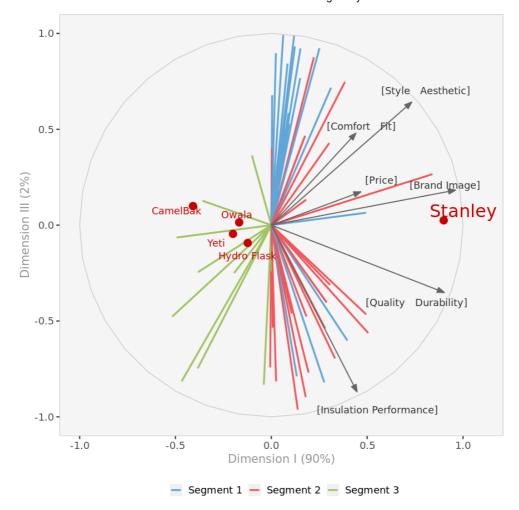
# **Preferences**

#### **Dimensions I-II**



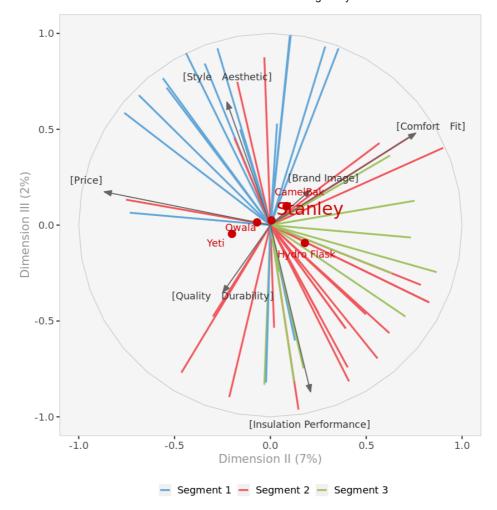
**Perceptual Map I-II.** Complete perceptual map with objects, attributes and preferences on the first and second dimensions.

#### **Dimensions I-III**



**Perceptual Map I-III**. Complete perceptual map with objects, attributes and preferences on the first and third dimensions.

#### **Dimensions II-III**

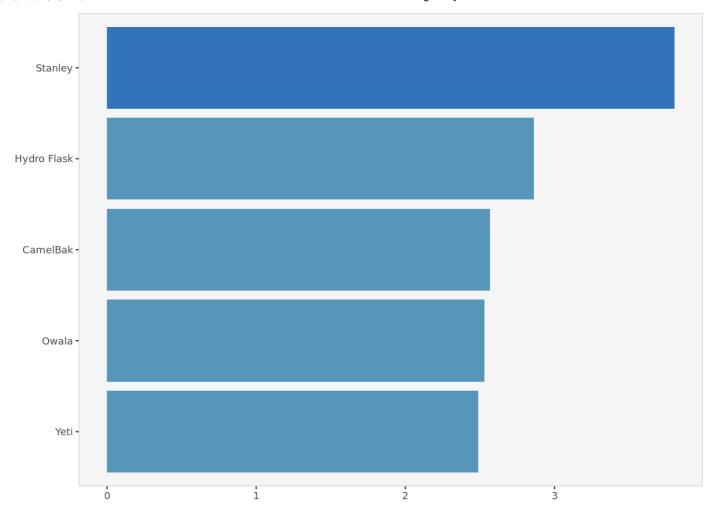


**Perceptual Map II-III.** Complete perceptual map with objects, attributes and preferences on the second and third dimensions.

#### Preference data

	Average preference
Stanley	3.80
Hydro Flask	2.86
CamelBak	2.57
Owala	2.53
Yeti	2.49

Average brand preference. For each brand, displays its average preference value in decreasing order.



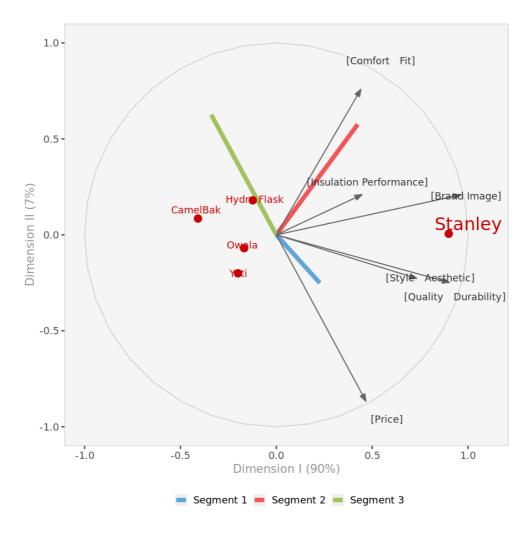
Average preferences histogram. For each brand, displays its average preference value.

	Dimension I	Dimension II	Dimension III
Respondent 1	0.397	0.128	-0.602
Respondent 2	0.280	0.393	-0.539
Respondent 3	0.004	-0.686	0.678
Respondent 4	0.333	0.559	-0.696
Respondent 5	0.280	0.393	-0.539
Respondent 6	0.841	0.421	0.266
Respondent 7	0.176	0.737	0.466
Respondent 8	-0.494	0.734	-0.065
Respondent 9	-0.006	0.404	-0.742
Respondent 10	0.384	-0.173	0.747

**Customer preferences (excerpt)**. Displays the coordinates of customer preferences in every dimension.

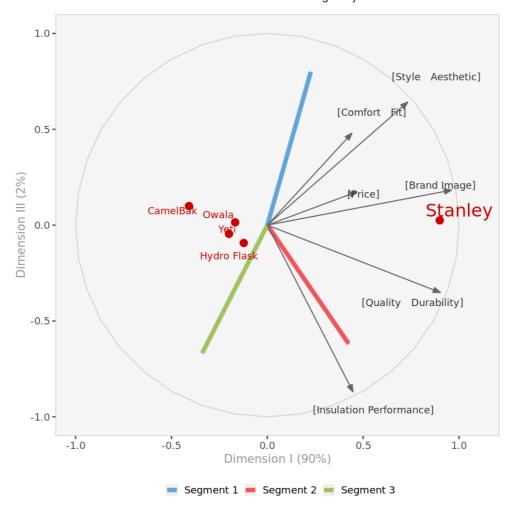
# **Segment preferences**

#### **Dimensions I-II**



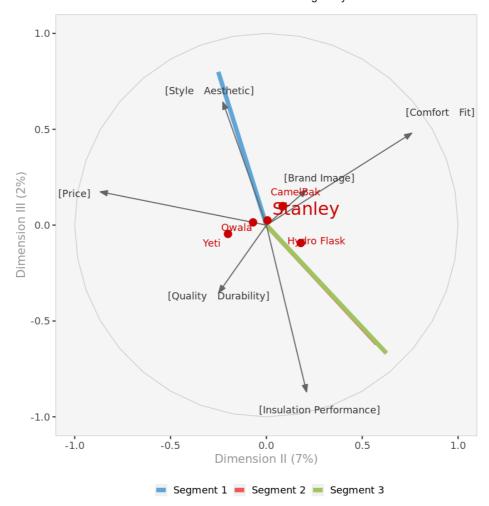
**Segment perceptual Map I-II**. Complete perceptual map with objects, attributes and average segment preferences on the first and second dimensions.

#### **Dimensions I-III**



**Segment perceptual Map I-III**. Complete perceptual map with objects, attributes and average segment preferences on the first and third dimensions.

#### **Dimensions II-III**

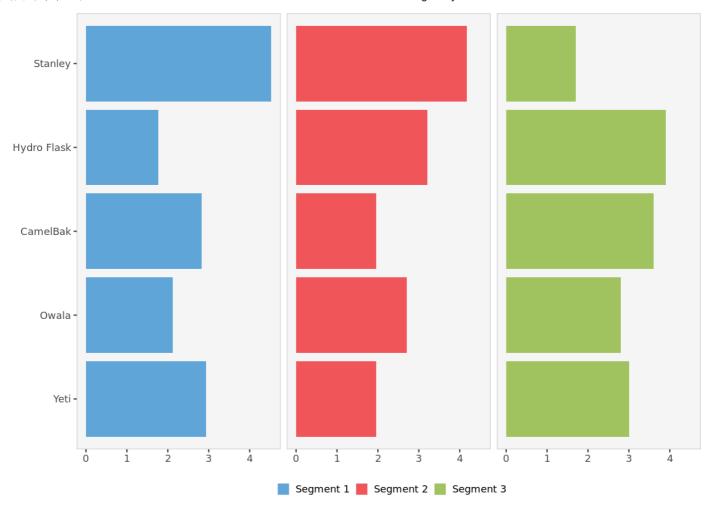


**Segment perceptual Map II-III**. Complete perceptual map with objects, attributes and average segment preferences on the second and third dimensions.

#### Preference data

	Average preference	Segment 1	Segment 2	Segment 3
Stanley	3.80	4.53	4.17	1.70
Hydro Flask	2.86	1.76	3.21	3.90
CamelBak	2.57	2.82	1.96	3.60
Owala	2.53	2.12	2.71	2.80
Yeti	2.49	2.94	1.96	3.00

**Average brand preference**. For each brand, displays its average overall preferences and average preferences by segments(if segmentation option is chosen).



Average segment preference. For each segment, displays its average preference value of each brand.

	Dimension I	<b>Dimension II</b>	<b>Dimension III</b>
Segment 1	0.227	-0.251	0.799
Segment 2	0.425	0.576	-0.619
Segment 3	-0.340	0.627	-0.668

**Segment preferences**. Displays the coordinates of the average preference vector for each segment.

Segment						
1	Segment 1					
2	Segment 2					
3	Segment 1					
4	Segment 2					
5	Segment 2					
6	Segment 2					
7	Segment 2					
8	Segment 3					
9	Segment 2					
10	Segment 2					

Segment membership (excerpt). Displays segment membership of each customer.

## **Market shares**

#### Introduction

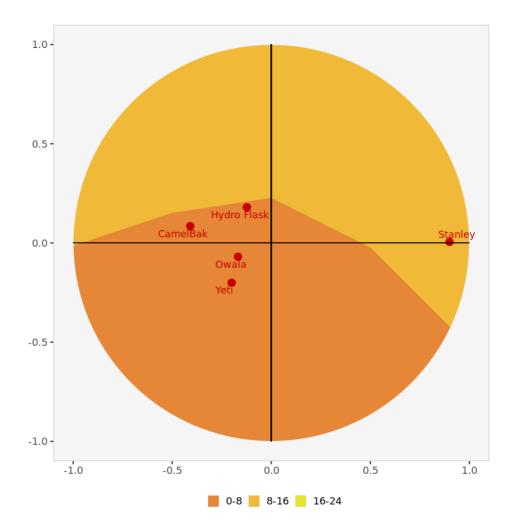
The following charts display simulations of the market shares a new product would achieve, depending on its position on the perceptual maps.

When two dimensions are displayed (e.g., Dimensions I and II), the new product is assumed to be at the center of the third dimension (e.g., Dimension III = 0).

These computations assume that all the other existing objects (i.e., products) will remain in the market, in their respective positions, and compete with the new entrant.

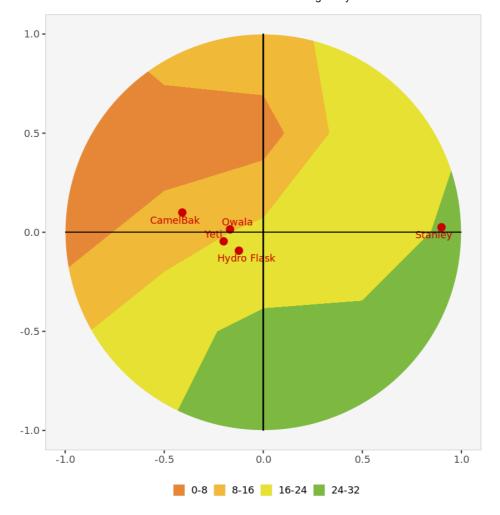
Market shares are estimated based on stated customers' preferences and the first-choice-rule.

#### **Dimension I-II**



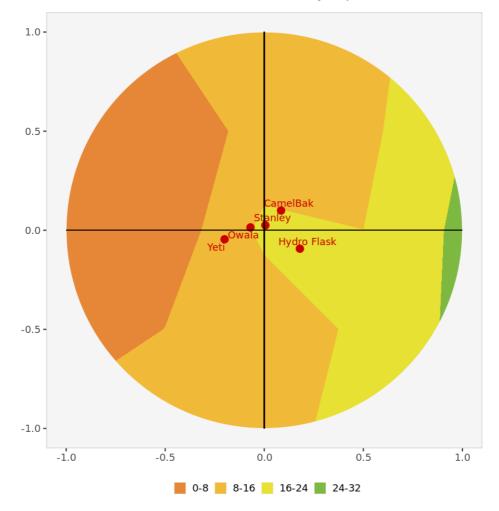
Market shares Dimension I-II. Objects positions along with market shares

#### **Dimension I-III**



Market shares Dimension I-III. Objects positions along with market shares

## **Dimension II-III**



Market shares Dimension II-III. Objects positions along with market shares

	Intercept	<b>Dimension I</b>	<b>Dimension II</b>	<b>Dimension III</b>
1	2.80	2.400	0.775	-3.642
2	3.40	1.998	2.802	-3.842
3	2.80	0.043	-6.622	6.539
4	3.20	2.156	3.625	-4.510
5	3.40	1.998	2.802	-3.842
6	2.20	3.121	1.564	0.987
7	3.40	1.543	6.452	4.084
8	2.40	-1.509	2.240	-0.197
9	2.20	-0.074	5.075	-9.336
10	2.60	1.540	-0.692	2.995

Preference beta values (excerpt).

	Parameter	Value
1	Rule	First-choice
2	alpha	none

Market share parameter table.

	Stanley	Hydro Flask	Owala	Yeti	CamelBak
Respondent 1	5	3	1	3	2

Respondent 2	5	4	4	2	2
Respondent 3	3	1	3	4	3
Respondent 4	5	4	3	2	2
Respondent 5	5	4	4	2	2
Respondent 6	5	2	2	1	1
Respondent 7	5	4	2	2	4
Respondent 8	1	3	3	2	3
Respondent 9	2	4	1	2	2
Respondent 10	4	2	3	2	2

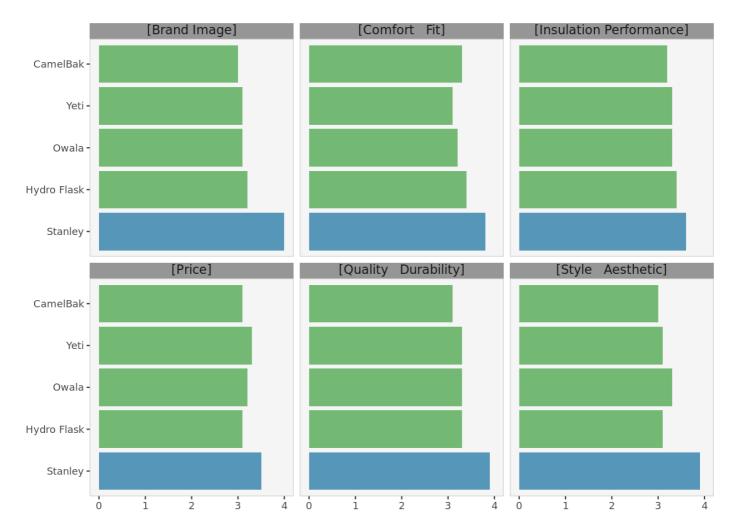
Actual preference data (excerpt).

# Perceptual data

#### Perceptual data

	Stanley	Hydro Flask	Owala	Yeti	CamelBak
[Price]	3.5	3.1	3.2	3.3	3.1
[Quality Durability]	3.9	3.3	3.3	3.3	3.1
[Insulation Performance]	3.6	3.4	3.3	3.3	3.2
[Comfort Fit]	3.8	3.4	3.2	3.1	3.3
[Style Aesthetic]	3.9	3.1	3.3	3.1	3.0
[Brand Image]	4.0	3.2	3.1	3.1	3.0

**Perceptual data overview**. Perception values for each attribute are shown in red if they are significantly (1 standard deviation) less than average perception of all brands. Perception values are shown in green if they are significantly more than average perception of all brands.



Attributes histograms. For each attribute, this chart displays a histogram of brand positions.

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