enginius
MARKETING ENGINEERING ONLINE

## Enginius

# Positioning Analysis

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# Dimensions

## Number of dimensions retained

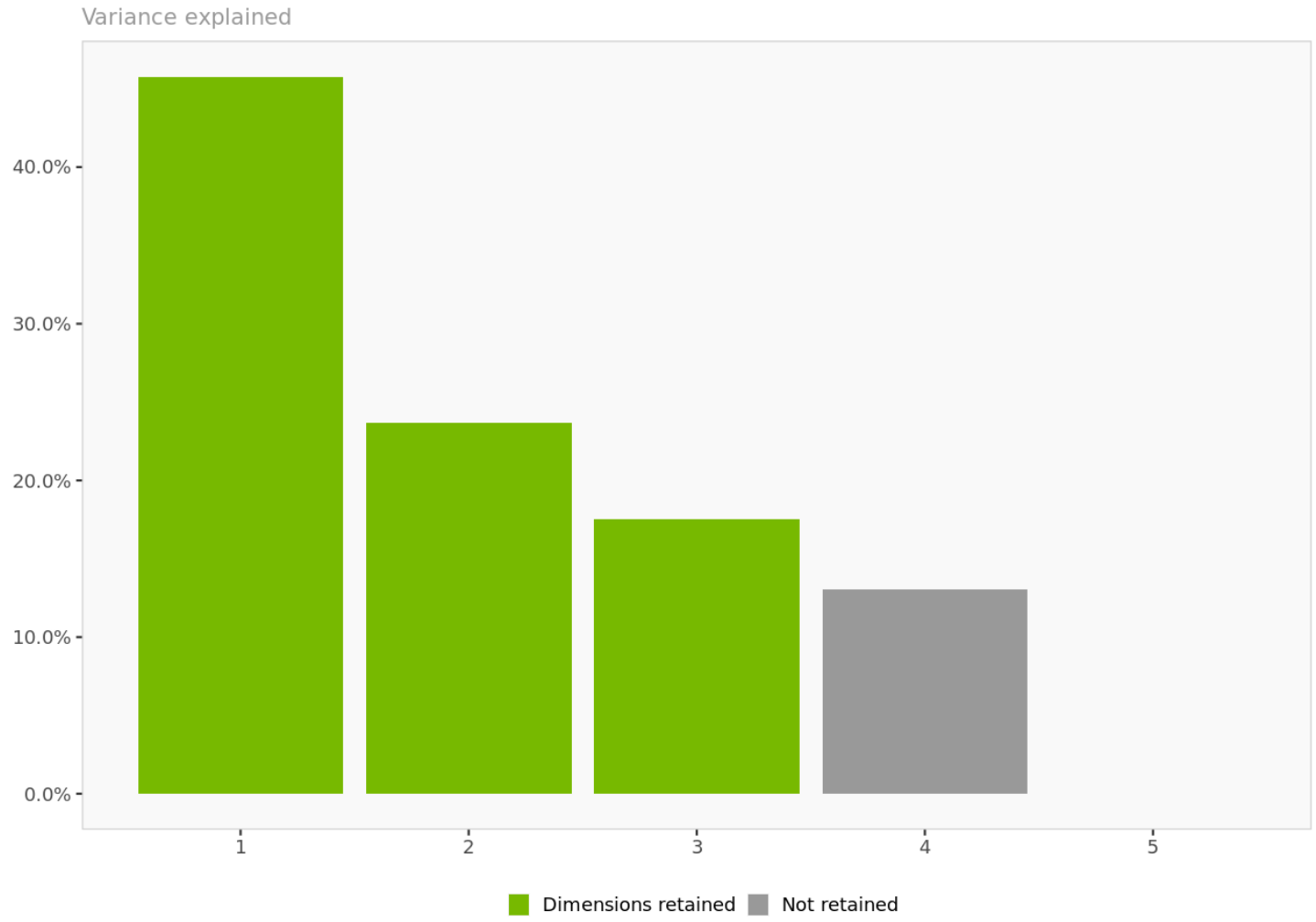
The first 2 dimensions of the positioning map explain 69.5% of the variance in the data.

Consequently, the first 3 dimensions will be displayed. The third dimension accounts for an additional 17.5% of the variance, for a total of 86.9%.

| | Variance explained | Cumulative variance |
|---|---|---|
| **Dimension 1** | 45.8% | 45.8% |
| **Dimension 2** | 23.7% | 69.5% |
| **Dimension 3** | 17.5% | 86.9% |
| **Dimension 4** | 13.1% | 100.0% |
| **Dimension 5** | 0.0% | 100.0% |

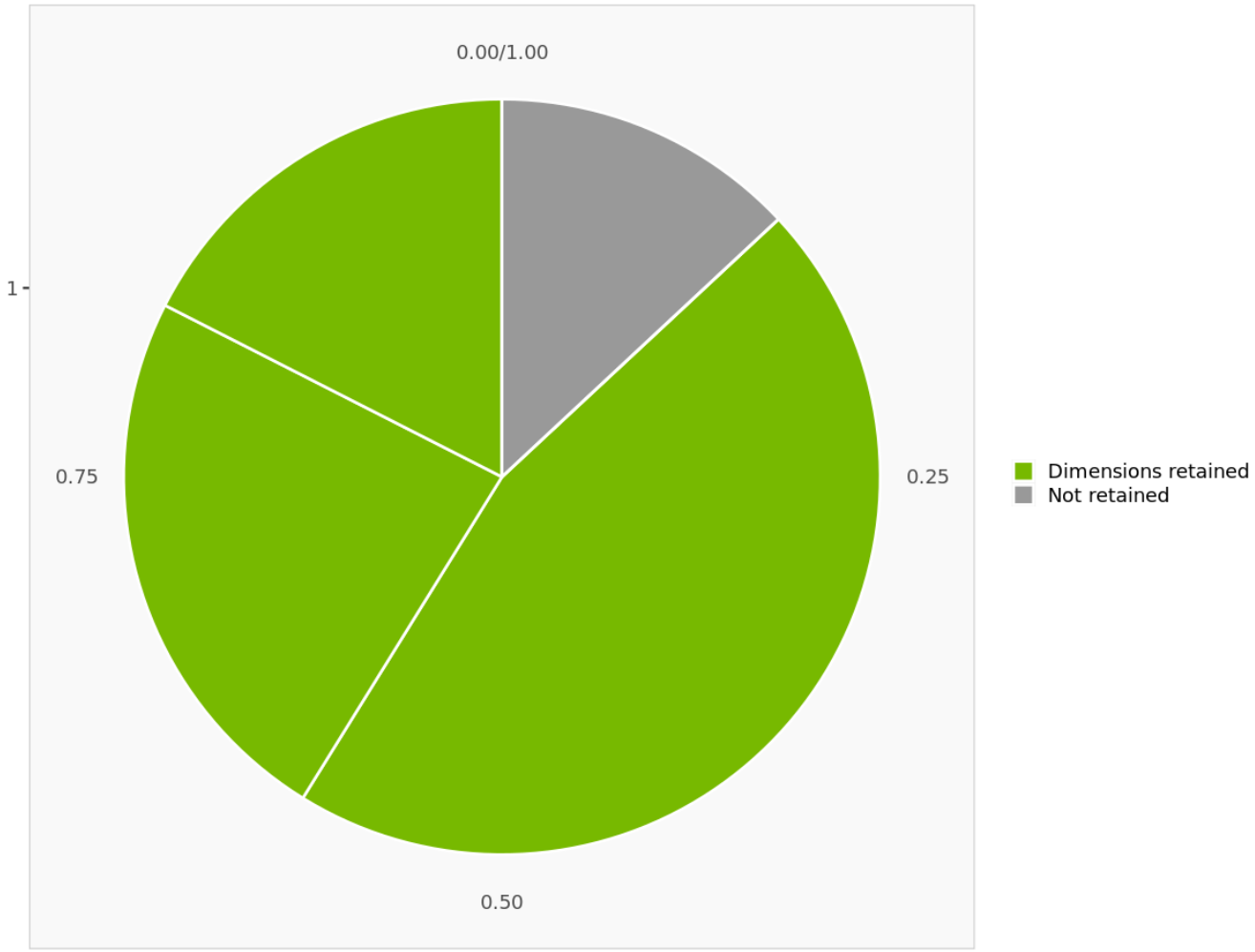
**Variance explained**. Variance and cumulated variance explained, by dimension.

## Variance explained



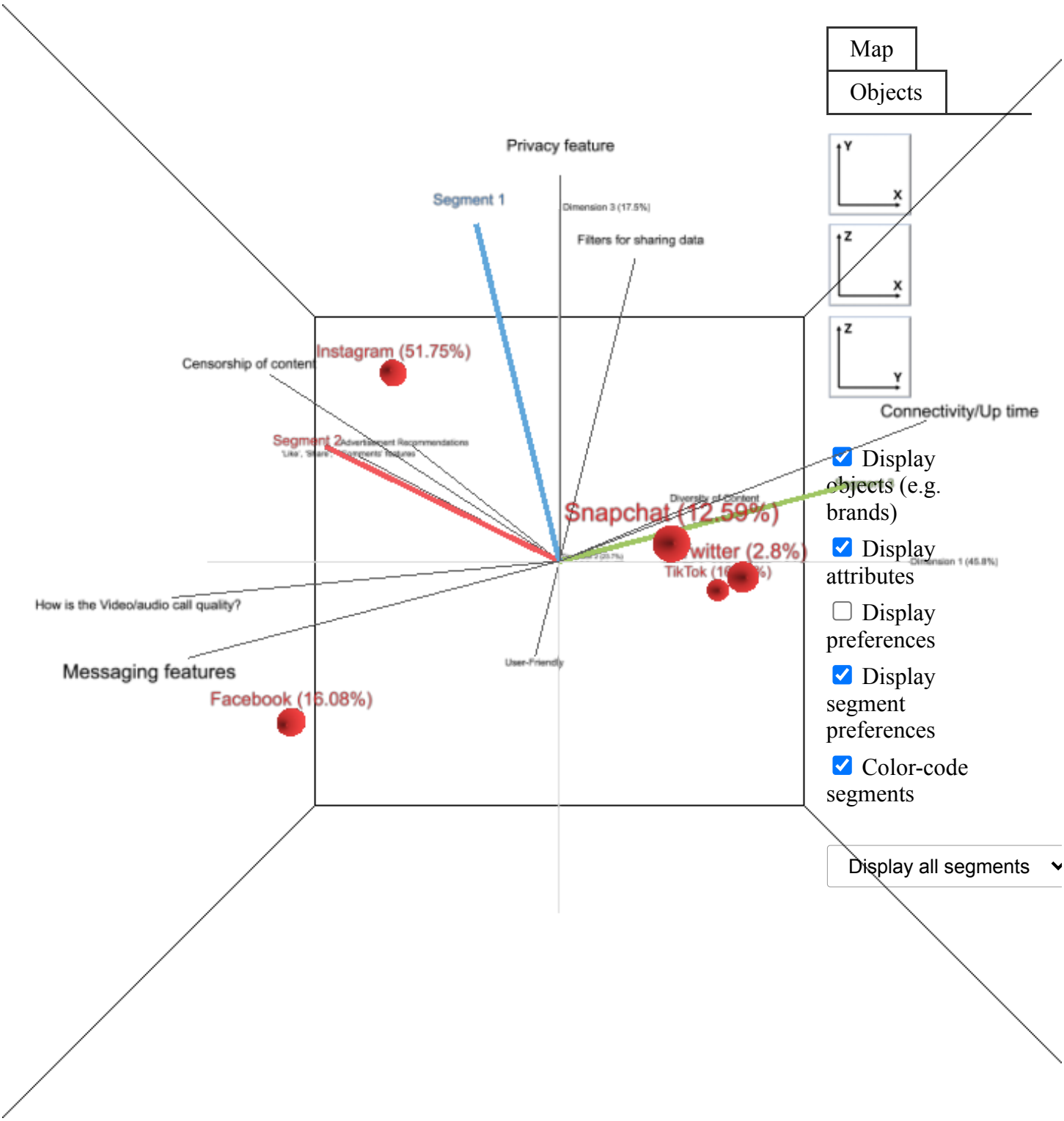

**Variance explained**. Each additional dimension captures a decreasing portion of the variance found in the original data.

## Cumulative variance explained




**Cummulative variance explained**. The first 3 dimensions account for 86.9 % 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

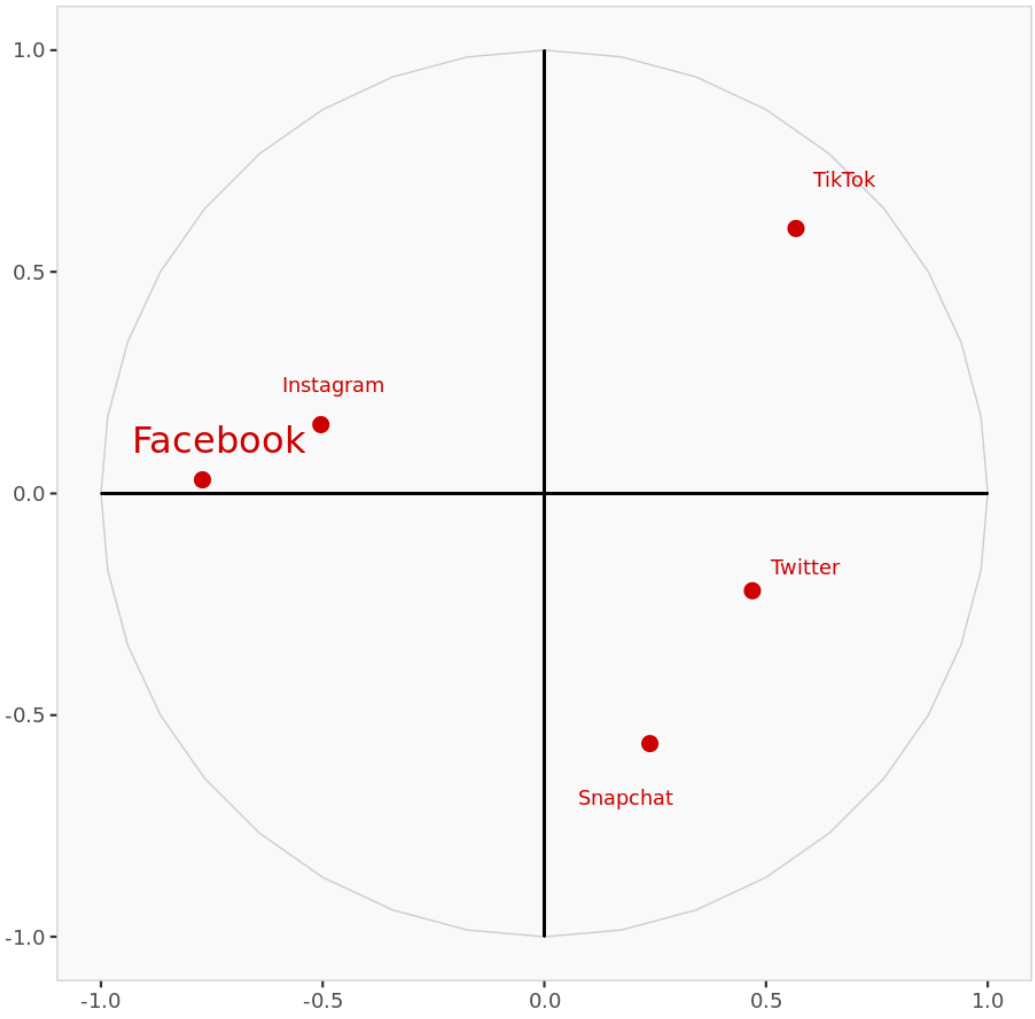
## Interpretation

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.

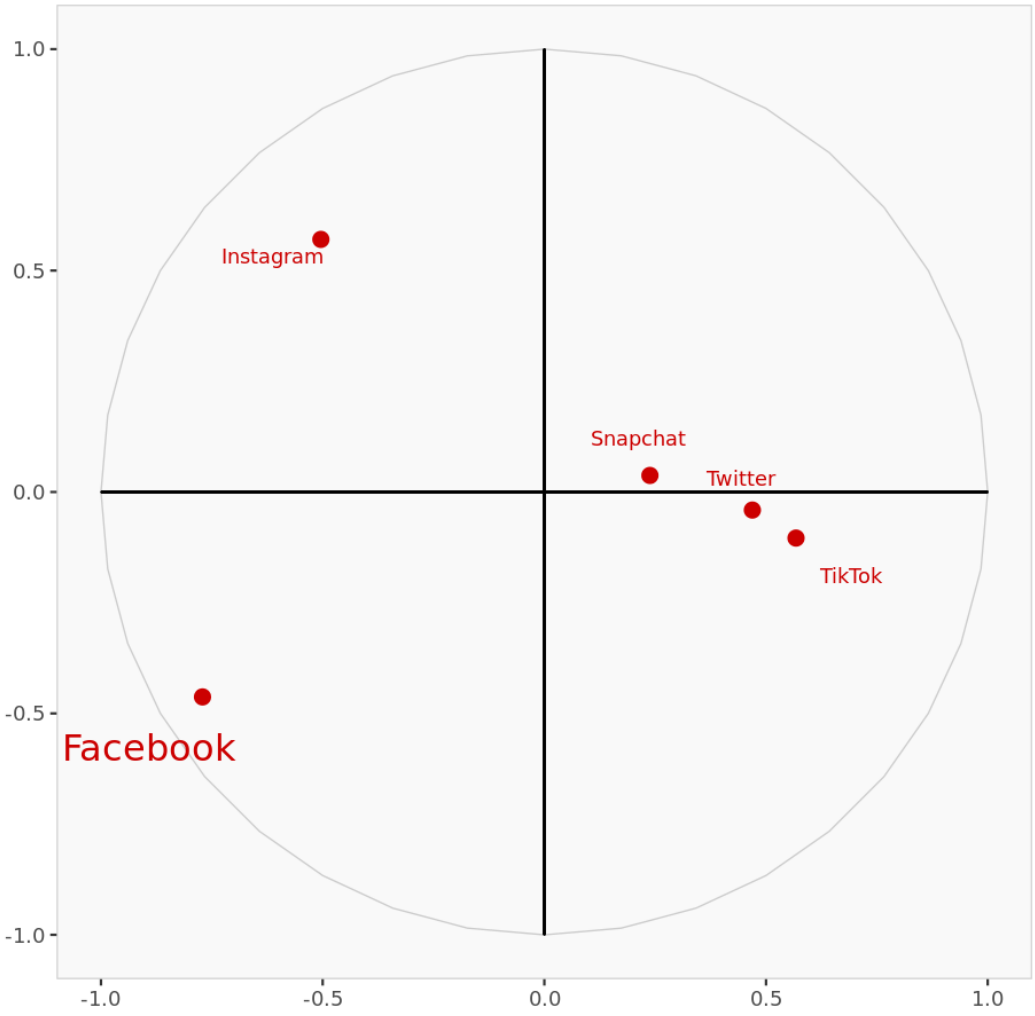
Since the first 3 dimensions of the perceptual map have been retained, the map can be seen as a cube in 3 dimensions. Each view displays the cube seen from a different angle.

## Dimensions I-II



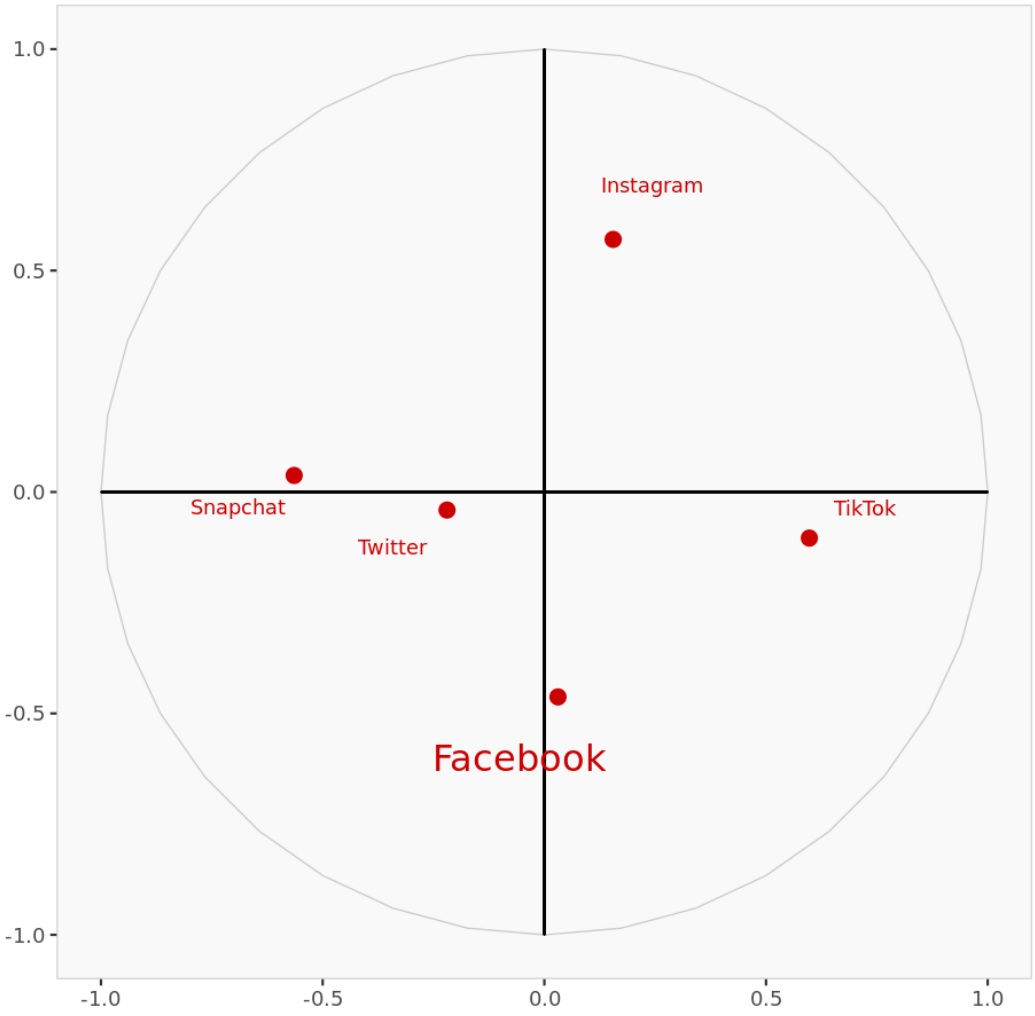

**Objects I-II**. Object position on the first and second dimensions of the perceptual map.

## 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 |
|---|---|---|---|
| **Facebook** | -0.771 | 0.031 | -0.463 |
| **Instagram** | -0.504 | 0.155 | 0.570 |
| **Snapchat** | 0.238 | -0.564 | 0.037 |
| **TikTok** | 0.568 | 0.598 | -0.104 |
| **Twitter** | 0.469 | -0.219 | -0.041 |

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

# Attributes

## Interpretation

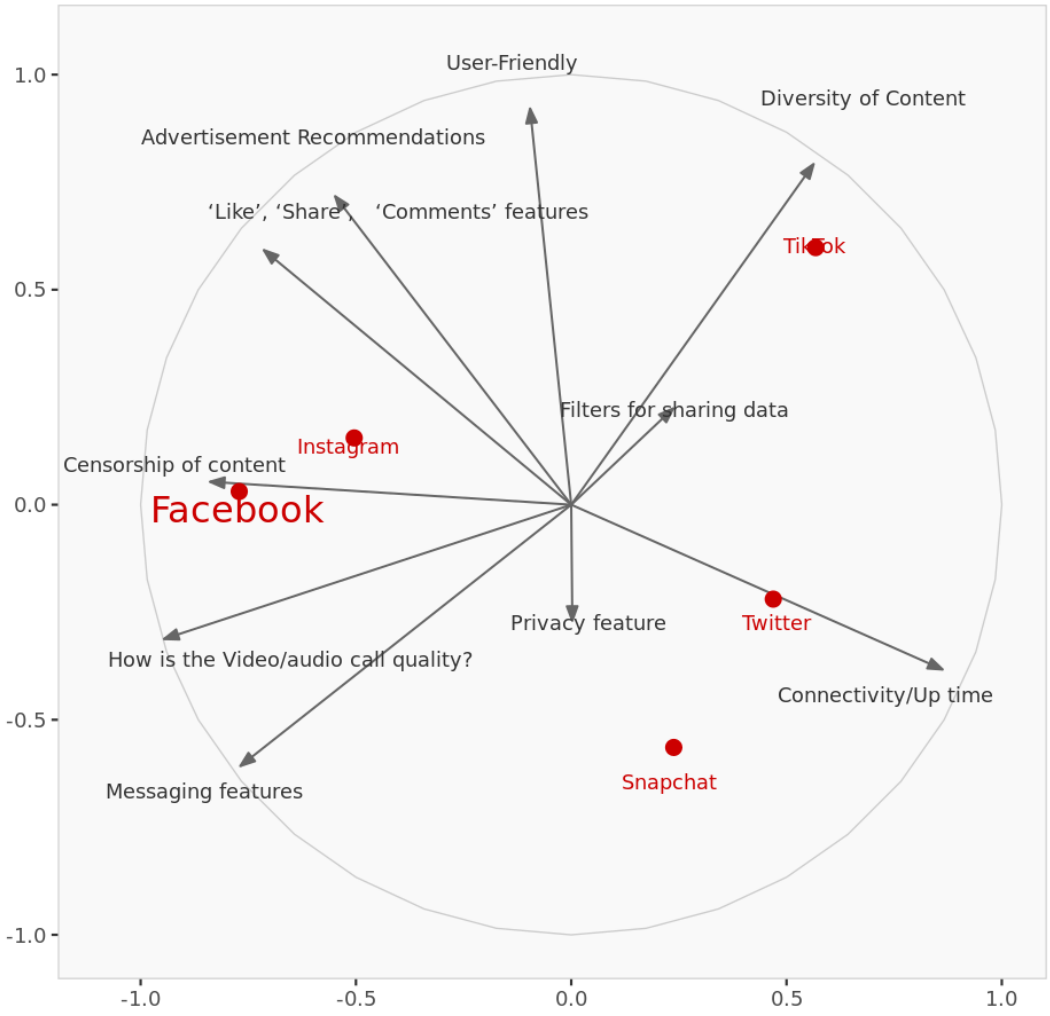
In interpreting the direction of the attributes, remember that:

- 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:

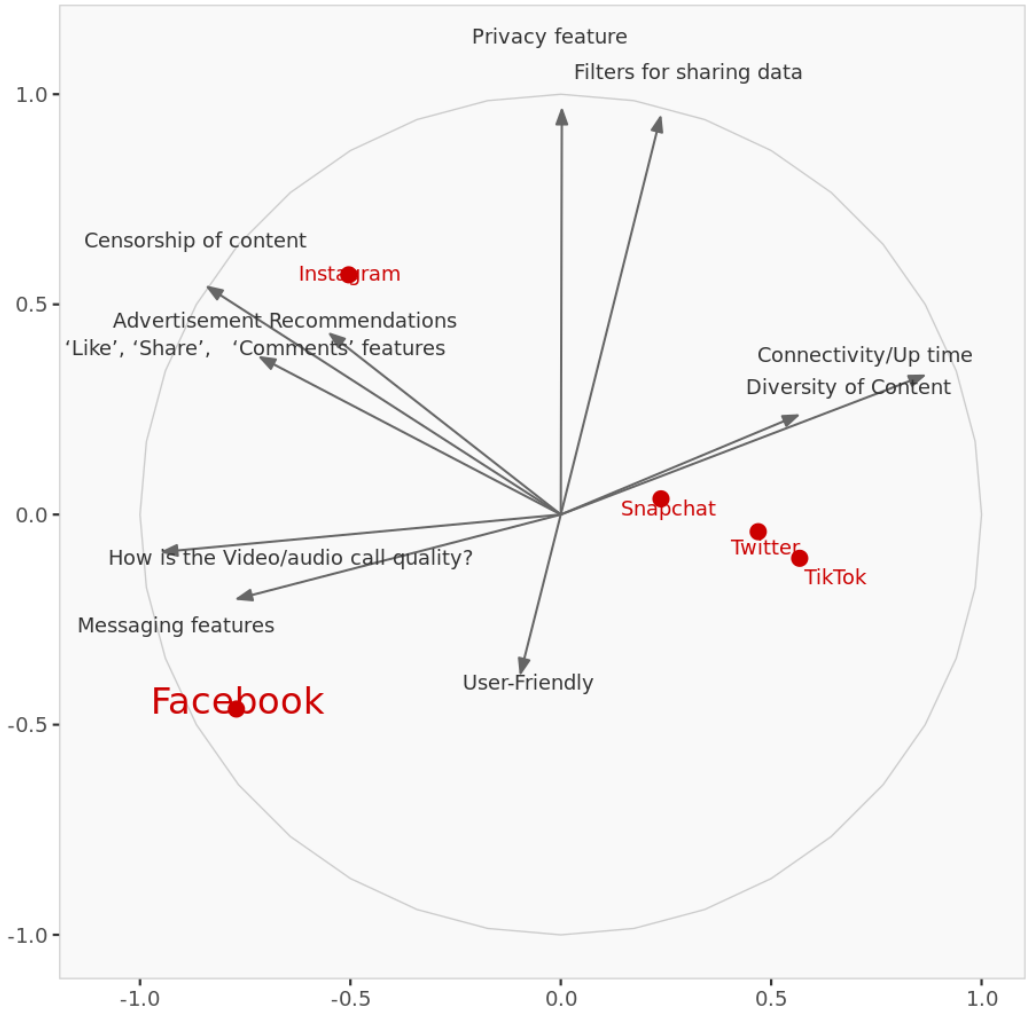
- The longer the attribute vector, the better that attribute is captured by the two dimensions displayed.
- If an attribute appears very close to the origin when looking at dimensions I and II, it could be longer and be better captured by dimension III.

## Dimensions I-II



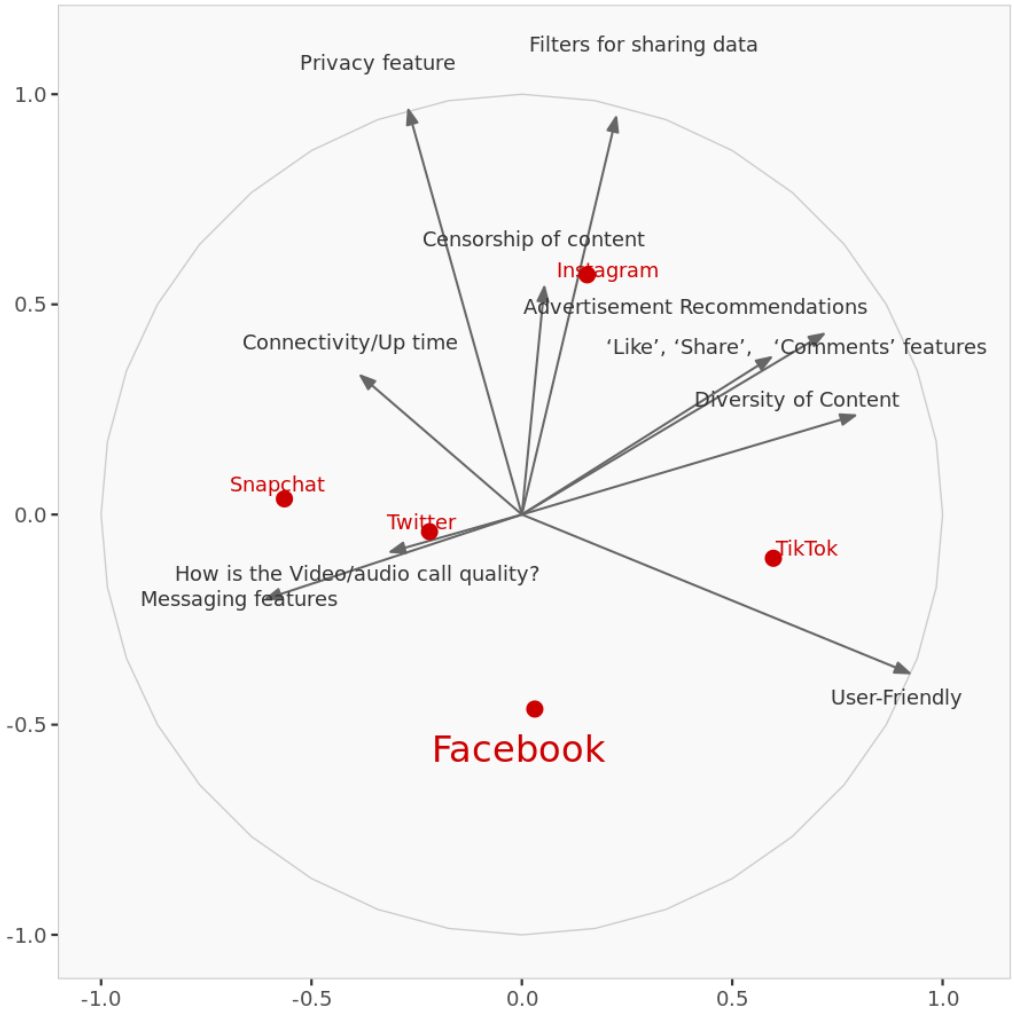

**Attributes I-II**. Objects and attributes on the first and second dimensions of the perceptual map.

## 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 | Dimension III |
|---|---|---|---|
| **Censorship of content** | -0.839 | 0.053 | 0.541 |
| **Diversity of Content** | 0.563 | 0.792 | 0.236 |
| **Filters for sharing data** | 0.237 | 0.224 | 0.945 |
| **Messaging features** | -0.769 | -0.608 | -0.200 |
| **'Like', 'Share', 'Comments' features** | -0.714 | 0.592 | 0.374 |
| **How is the Video/audio call quality?** | -0.946 | -0.312 | -0.089 |
| **Advertisement Recommendations** | -0.548 | 0.717 | 0.430 |
| **Connectivity/Up time** | 0.863 | -0.383 | 0.330 |
| **User-Friendly** | -0.096 | 0.921 | -0.377 |
| **Privacy feature** | 0.003 | -0.270 | 0.963 |

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

## Summary

| | Dimension I | Dimension II | Dimension III |
|---|---|---|---|
| **1 Most positive** | Connectivity/Up time | User-Friendly | Privacy feature |
| **2** | | Diversity of Content | Filters for sharing data |
| **3** | | Advertisement Recommendations | |
| **4 ...** | | | |
| **5** | ‘Like’, ‘Share’, ‘Comments’ features | | |
| **6** | Messaging features | | |
| **7** | Censorship of content | | |
| **8 Most negative** | How is the Video/audio call quality? | | |

**Attributes' coordinates positions**. Displays the names of the attributes depending of their position along each dimension.

| | Dimension I | Dimension II | Dimension III |
|---|---|---|---|
| **Censorship of content** | -0.1154 | 0.0073 | 0.0745 |
| **Diversity of Content** | 0.0875 | 0.1231 | 0.0367 |
| **Filters for sharing data** | 0.0357 | 0.0338 | 0.1425 |
| **Messaging features** | -0.1083 | -0.0856 | -0.0282 |
| **‘Like’, ‘Share’, ‘Comments’ features** | -0.0895 | 0.0742 | 0.0469 |
| **How is the Video/audio call quality?** | -0.1271 | -0.0420 | -0.0119 |
| **Advertisement Recommendations** | -0.0894 | 0.1169 | 0.0700 |
| **Connectivity/Up time** | 0.1124 | -0.0499 | 0.0431 |
| **User-Friendly** | -0.0177 | 0.1704 | -0.0698 |
| **Privacy feature** | 0.0005 | -0.0540 | 0.1926 |

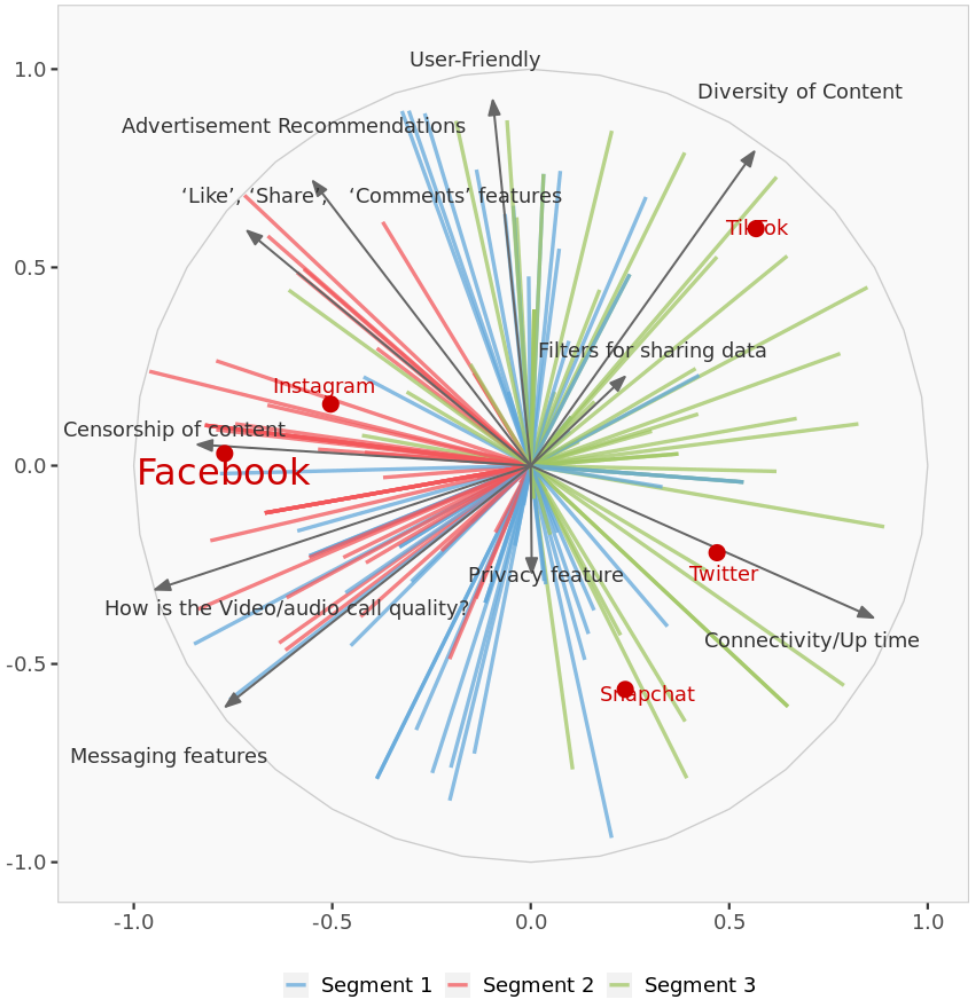
**Factor loadings (excerpt)**. Displays the factor loadings of attributes.

| | Mean | Stdev |
|---|---|---|
| **Censorship of content** | 3.071 | 0.6230 |
| **Diversity of Content** | 3.035 | 0.4535 |
| **Filters for sharing data** | 3.133 | 0.8365 |
| **Messaging features** | 3.070 | 0.5677 |
| **‘Like’, ‘Share’, ‘Comments’ features** | 2.965 | 0.6002 |
| **How is the Video/audio call quality?** | 2.901 | 0.6806 |
| **Advertisement Recommendations** | 2.982 | 0.5634 |
| **Connectivity/Up time** | 2.930 | 0.5576 |
| **User-Friendly** | 2.973 | 0.6717 |
| **Privacy feature** | 2.860 | 0.5983 |

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

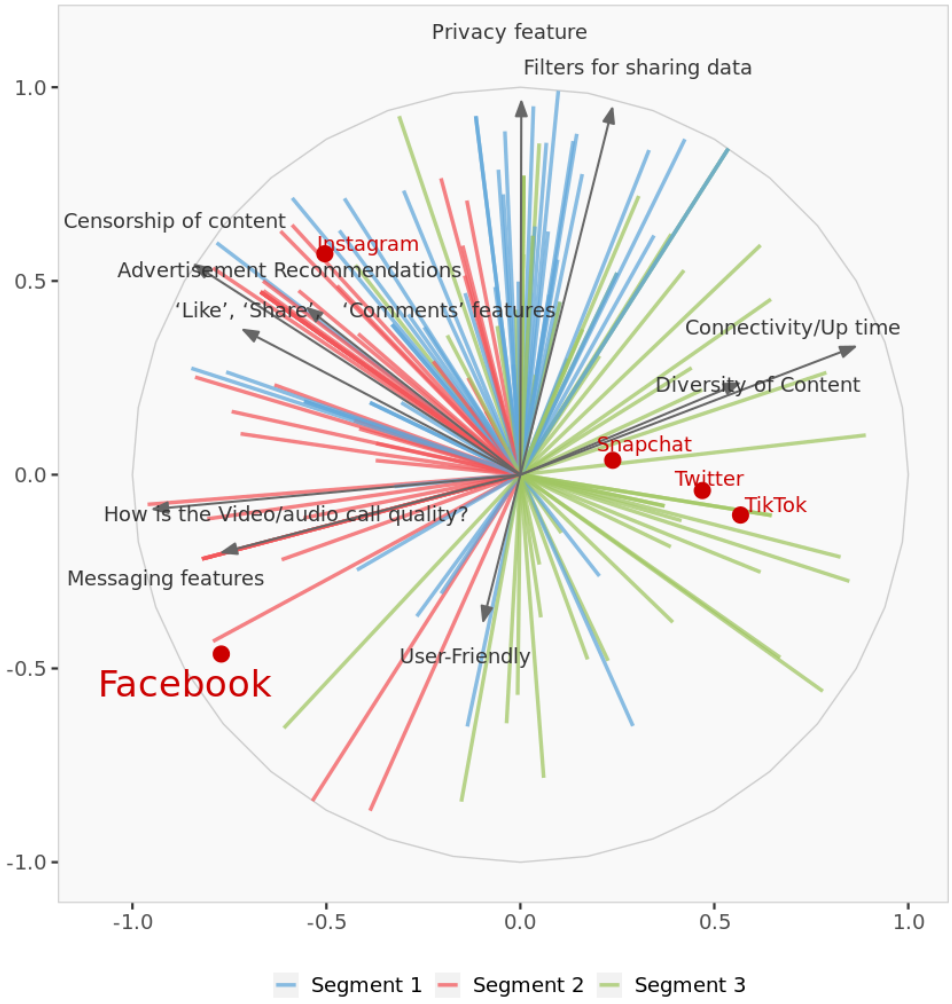
# Preferences

## Dimensions I-II



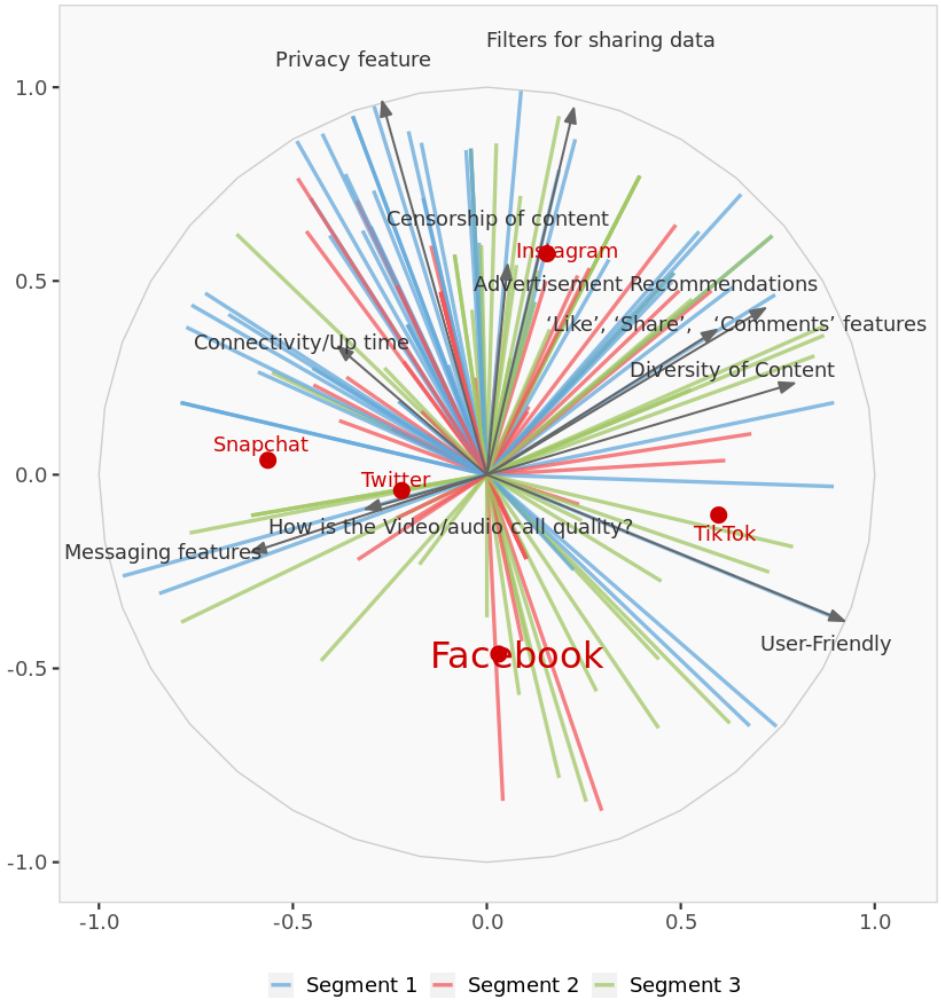

**Perceptual Map I-II**. Complete perceptual map with objects, attributes and preferences on the first and second dimensions.

## Dimensions I-III




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

## Dimensions II-III

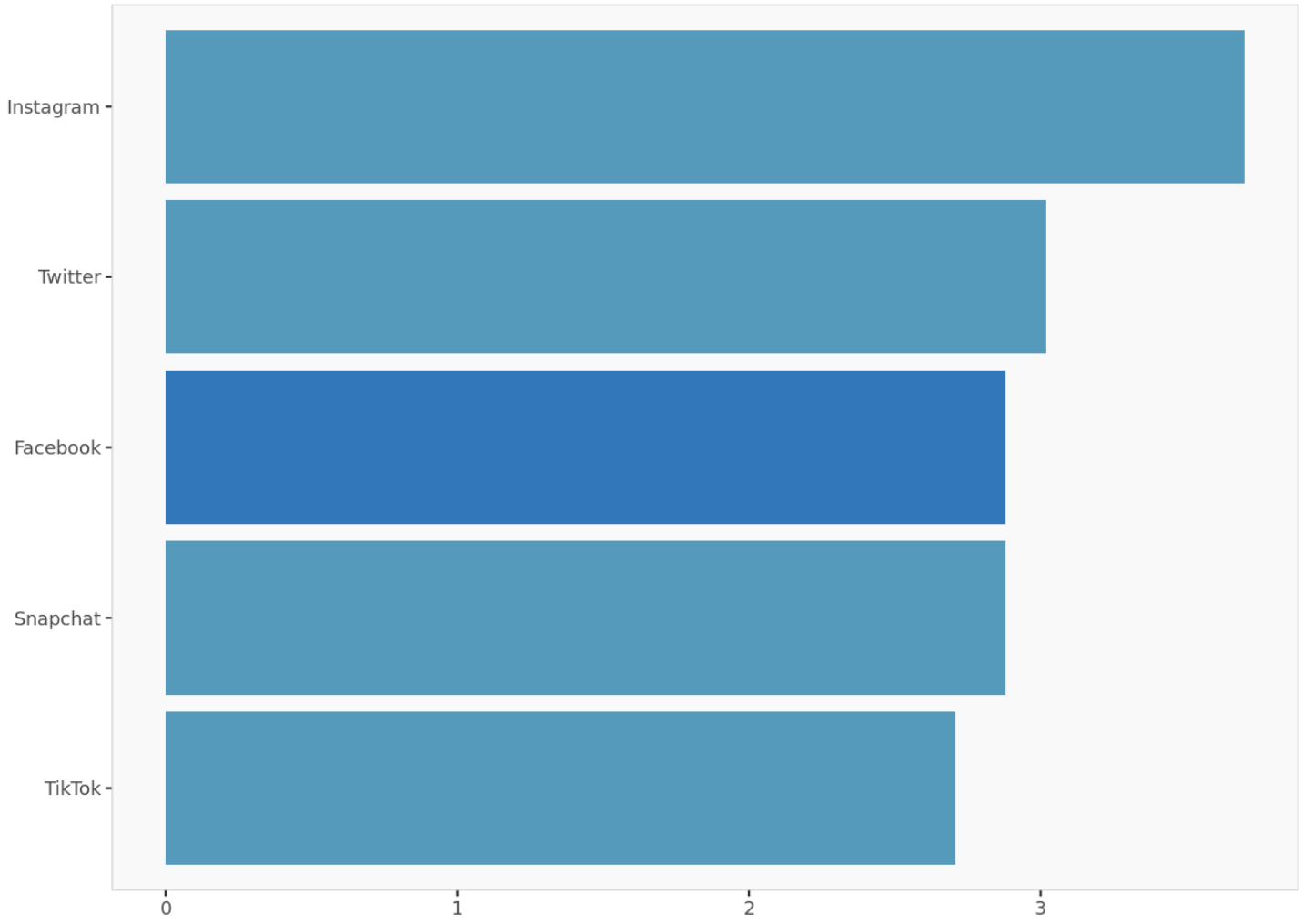



**Perceptual Map II-III**. Complete perceptual map with objects, attributes and preferences on the second and third dimensions.

## Preference data

| | Average preference |
|---|---|
| **Instagram** | 3.70 |
| **Twitter** | 3.02 |
| **Facebook** | 2.88 |
| **Snapchat** | 2.88 |
| **TikTok** | 2.71 |

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



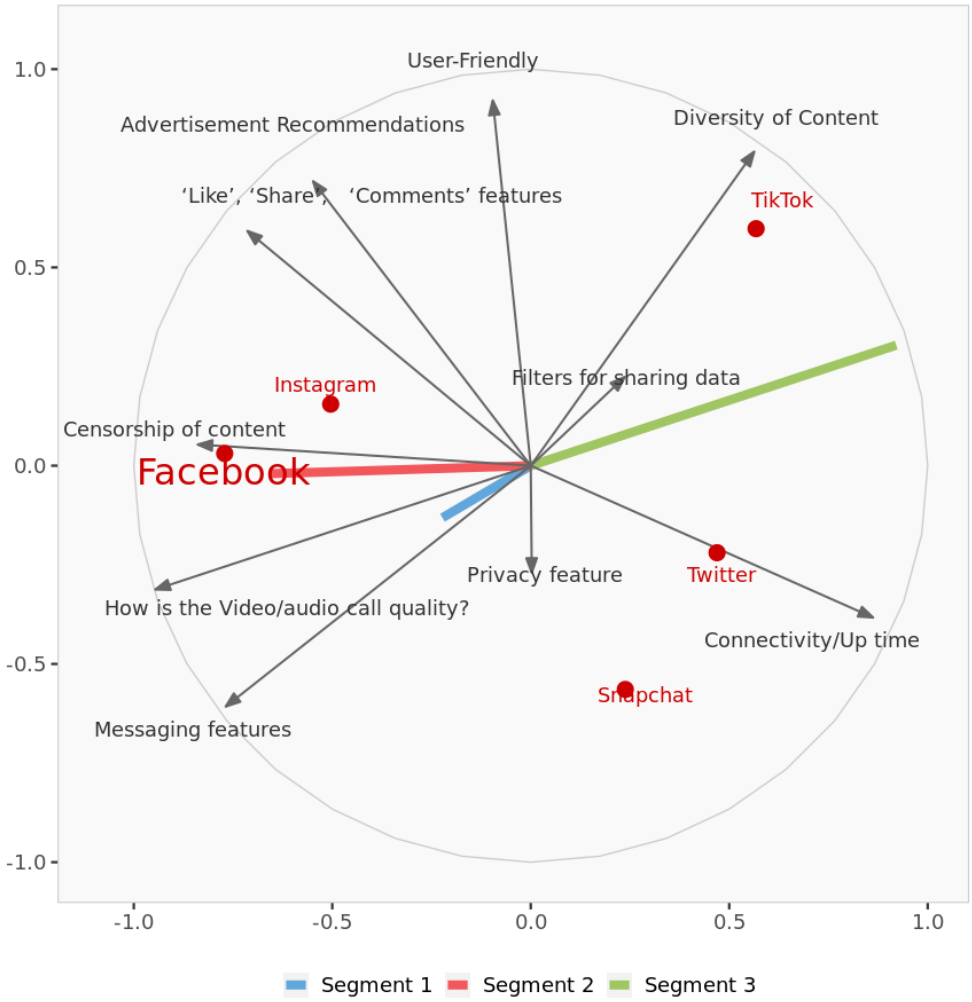

**Average preferences histogram**. For each brand, displays its average preference value.

| | Dimension I | Dimension II | Dimension III |
|---|---|---|---|
| **732svb@gmail.com** | -0.040 | -0.202 | 0.886 |
| **Arvidsh4444@gmail.com** | -0.961 | 0.238 | -0.077 |
| **BINEETHABYRI@GMAIL.COM** | -0.557 | -0.228 | 0.190 |
| **Bhosaleprithithvi96@gmail.com** | 0.789 | -0.554 | 0.264 |
| **Gvelusha@gmail.com** | -0.065 | 0.635 | 0.485 |
| **Kallurumounika23@gmail.com** | 0.389 | -0.645 | 0.621 |
| **Lokesh.g7755@gmail.com** | 0.648 | -0.608 | -0.105 |
| **Supreethagowda14@gmail.com** | -0.331 | -0.205 | 0.388 |
| **abhinavsrivastava032@gmail.com** | -0.135 | -0.030 | 0.250 |
| **abhinavsrivastava1930@gmail.com** | -0.372 | -0.030 | 0.081 |

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

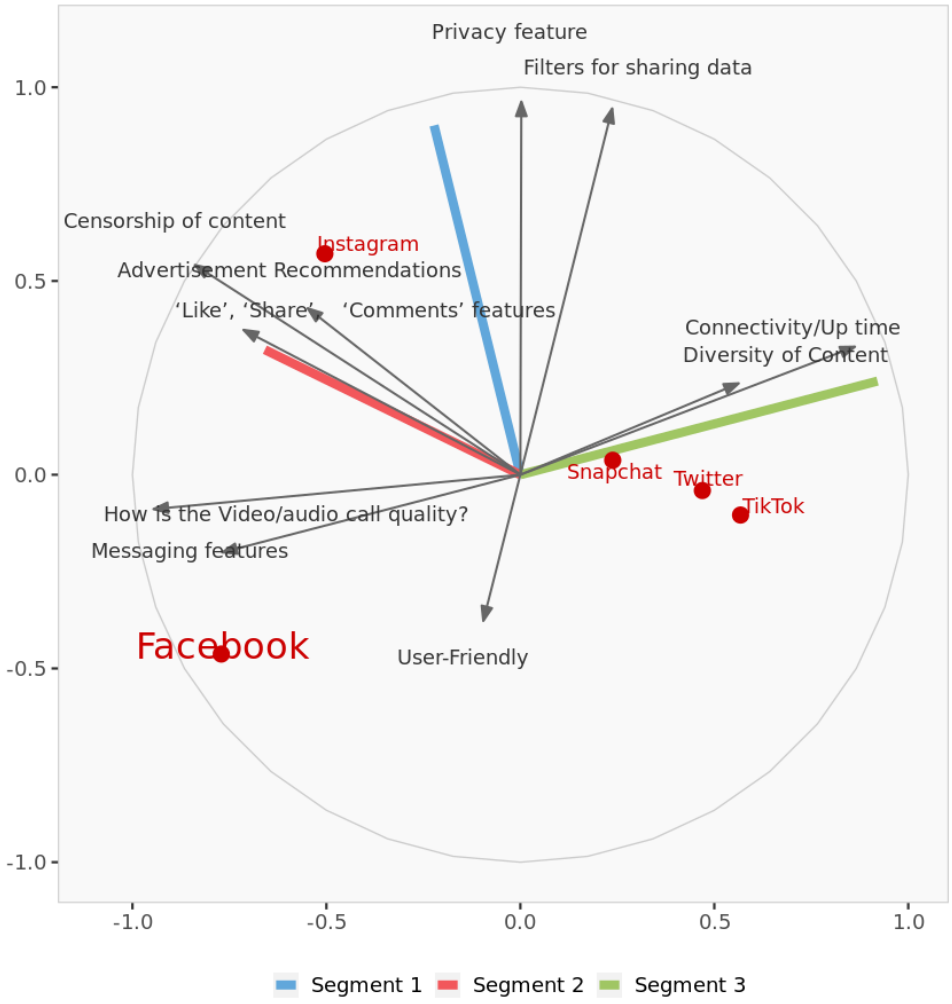
# Segment preferences

## Dimensions I-II



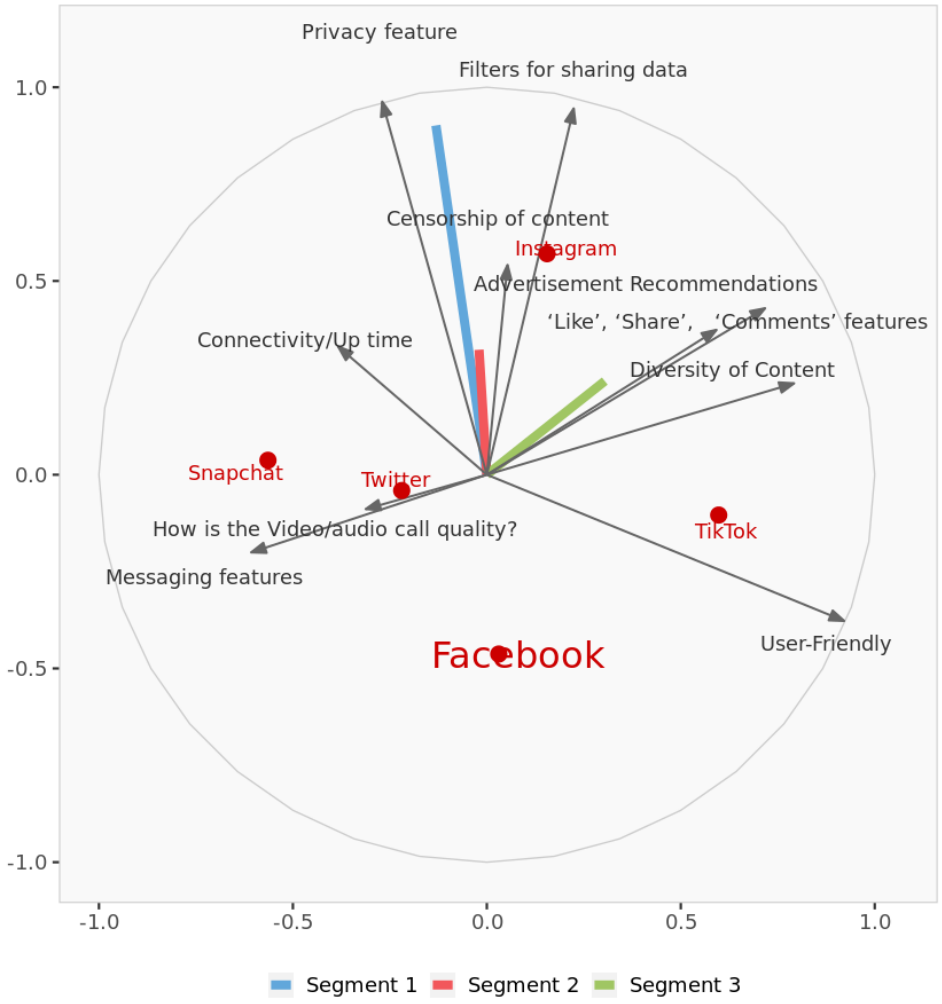

**Segment perceptual Map I-II**. Complete perceptual map with objects, attributes and average segment preferences on the first and second dimensions.

## 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

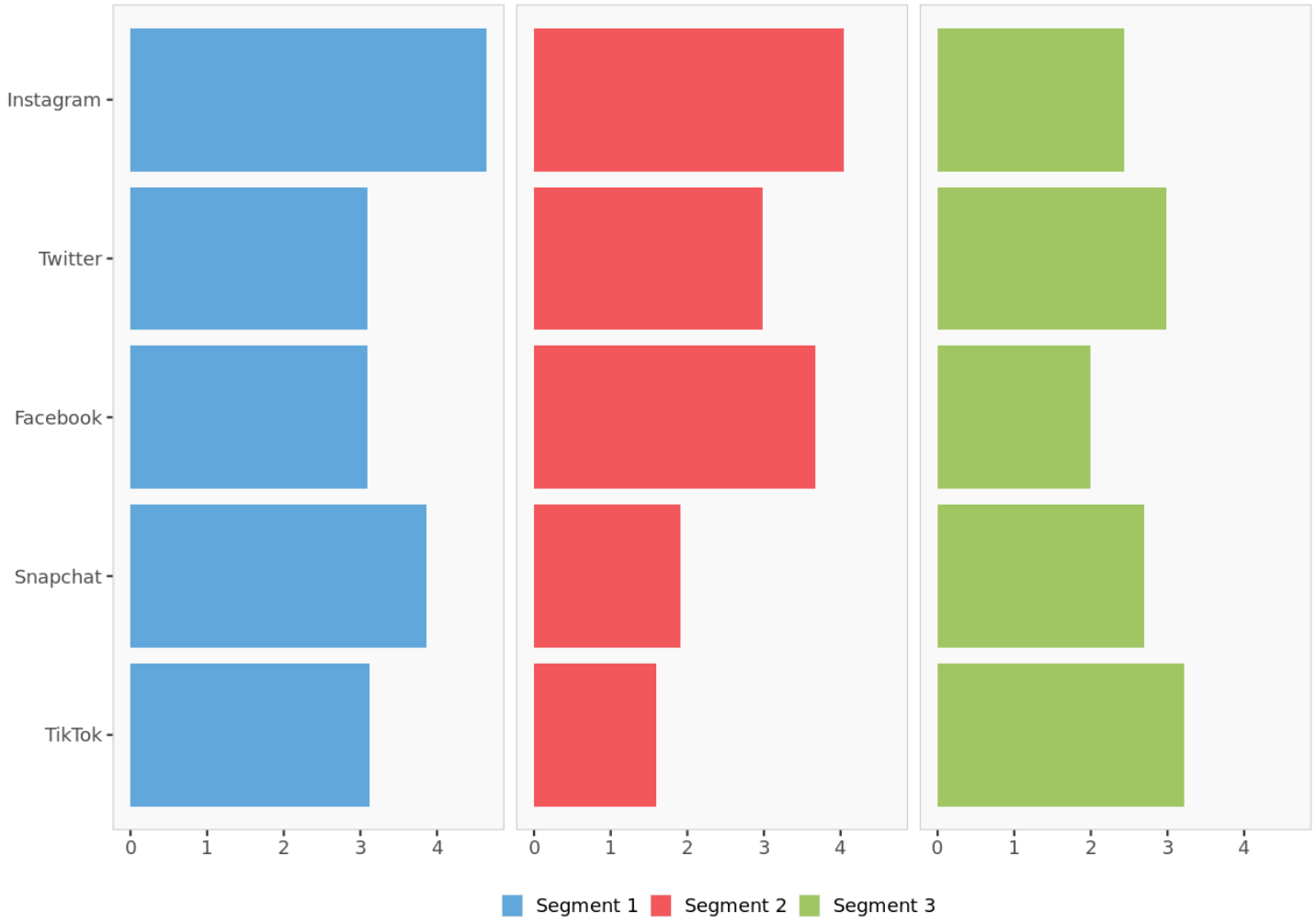



**Segment perceptual Map II-III**. Complete perceptual map with objects, attributes and average segment preferences on the second and third dimensions.

## Preference data

| | Average preference | Segment 1 | Segment 2 | Segment 3 |
|---|---|---|---|---|
| **Instagram** | 3.70 | 4.65 | 4.05 | 2.44 |
| **Twitter** | 3.02 | 3.10 | 2.98 | 2.98 |
| **Facebook** | 2.88 | 3.10 | 3.67 | 2.00 |
| **Snapchat** | 2.88 | 3.86 | 1.90 | 2.70 |
| **TikTok** | 2.71 | 3.12 | 1.60 | 3.22 |

**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 | Dimension II | Dimension III |
|---|---|---|---|
| **Segment 1** | -0.222 | -0.131 | 0.902 |
| **Segment 2** | -0.659 | -0.020 | 0.323 |
| **Segment 3** | 0.921 | 0.304 | 0.242 |

**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 3 |
| **5** | Segment 1 |
| **6** | Segment 3 |
| **7** | Segment 3 |
| **8** | Segment 1 |
| **9** | Segment 2 |
| **10** | Segment 2 |

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

# Market shares

## Introduction

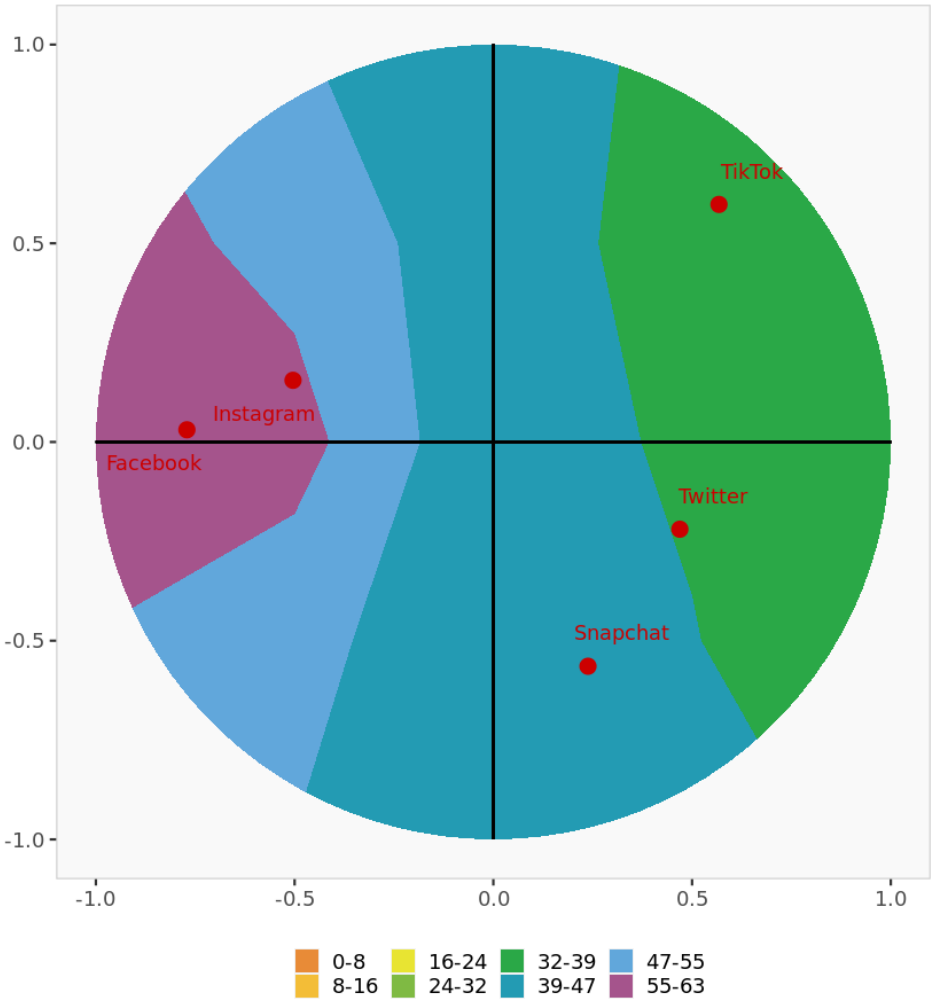
The following charts display simulations of the market shares a new product would achieve, depending on its position on the perceptual maps.

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.

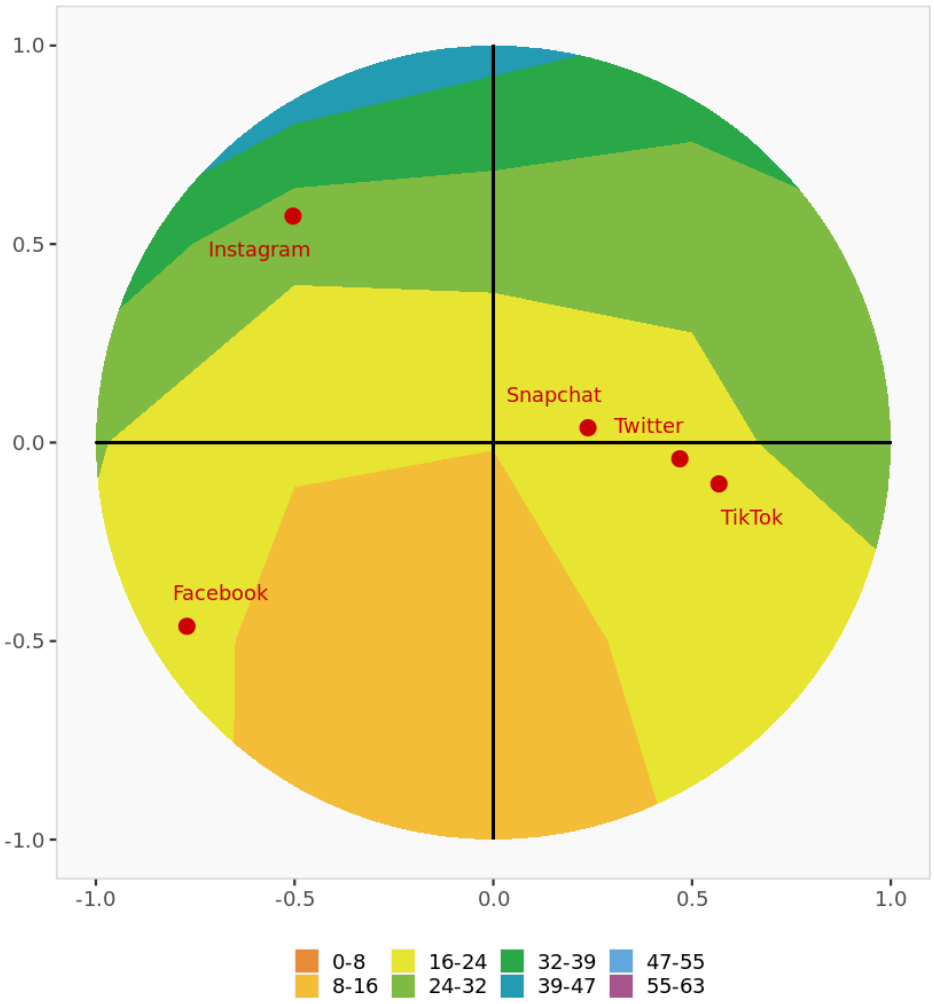
Market shares are estimated based on stated customers' preferences and the first-choice-rule.

## Dimension I-II



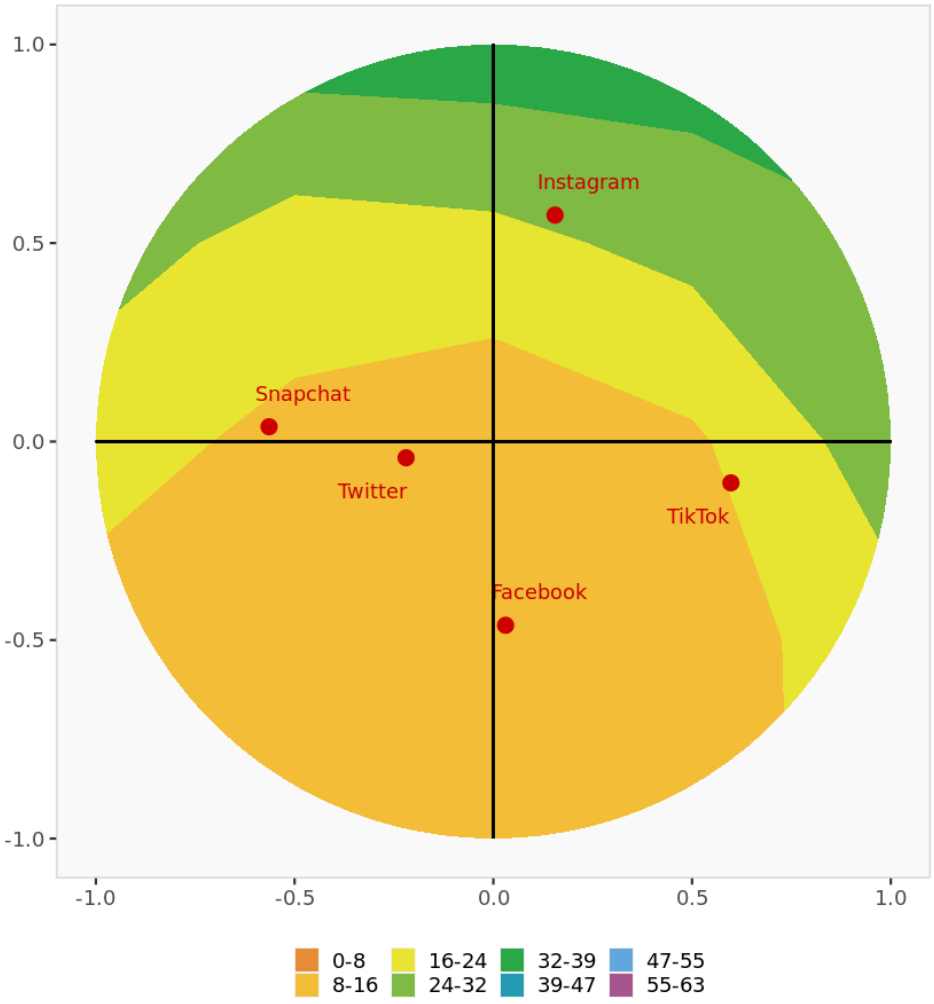

**Market shares Dimension I-II**. Objects positions along with market shares

## 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 | Dimension I | Dimention II | Dimention III |
|---|---|---|---|---|
| **1** | 2.80 | -0.183 | -0.926 | 4.063 |
| **2** | 2.40 | -3.175 | 0.786 | -0.253 |
| **3** | 4.00 | -1.757 | -0.717 | 0.598 |
| **4** | 2.80 | 1.902 | -1.336 | 0.636 |
| **5** | 3.60 | -0.236 | 2.304 | 1.759 |
| **6** | 2.80 | 1.162 | -1.927 | 1.854 |
| **7** | 2.20 | 1.694 | -1.588 | -0.275 |
| **8** | 3.80 | -1.224 | -0.758 | 1.434 |
| **9** | 3.00 | -0.581 | -0.130 | 1.078 |
| **10** | 2.80 | -1.670 | -0.134 | 0.362 |

**Preference beta values (excerpt)**.

| | Parameter | Value |
|---|---|---|
| **1** | Rule | First-choice |
| **2** | alpha | none |

**Market share parameter table**.

| | Facebook | Instagram | Snapchat | TikTok | Twitter |
|---|---|---|---|---|---|
| **732svb@gmail.com** | 1 | 5 | 4 | 2 | 2 |
| **Arvidsh4444@gmail.com** | 5 | 4 | 1 | 1 | 1 |
| **BINEETHABYRI@GMAIL.COM** | 5 | 5 | 5 | 3 | 2 |
| **Bhosaleprithithvi96@gmail.com** | 1 | 2 | 4 | 3 | 4 |
| **Gvelusha@gmail.com** | 3 | 5 | 3 | 5 | 2 |
| **Kallurumounika23@gmail.com** | 1 | 3 | 4 | 2 | 4 |
| **Lokesh.g7755@gmail.com** | 1 | 1 | 3 | 2 | 4 |
| **Supreethagowda14@gmail.com** | 4 | 5 | 5 | 3 | 2 |
| **abhinavsrivastava032@gmail.com** | 3 | 4 | 2 | 2 | 4 |
| **abhinavsrivastava1930@gmail.com** | 4 | 4 | 1 | 1 | 4 |

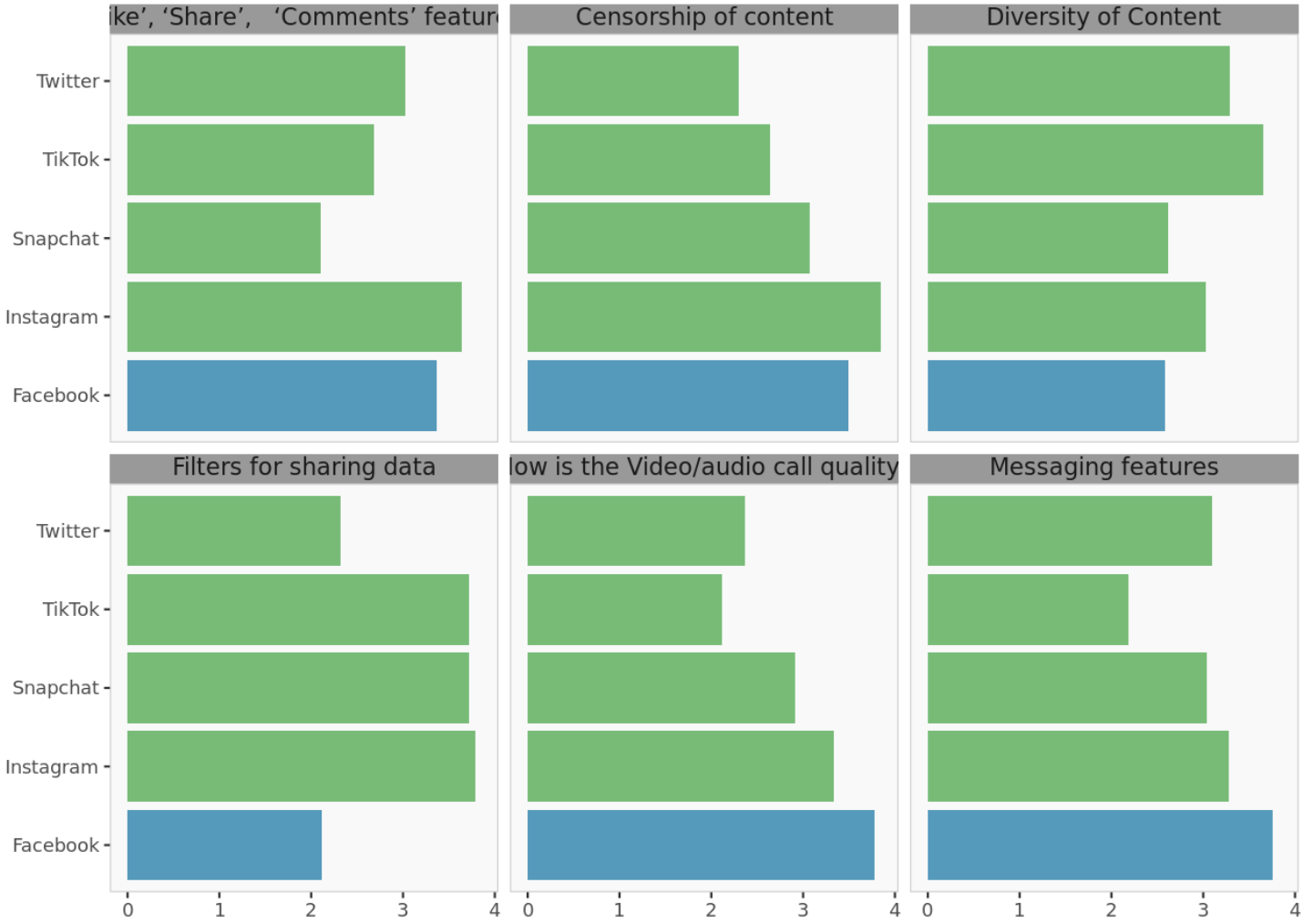
**Actual preference data (excerpt)**.

# Perceptual data

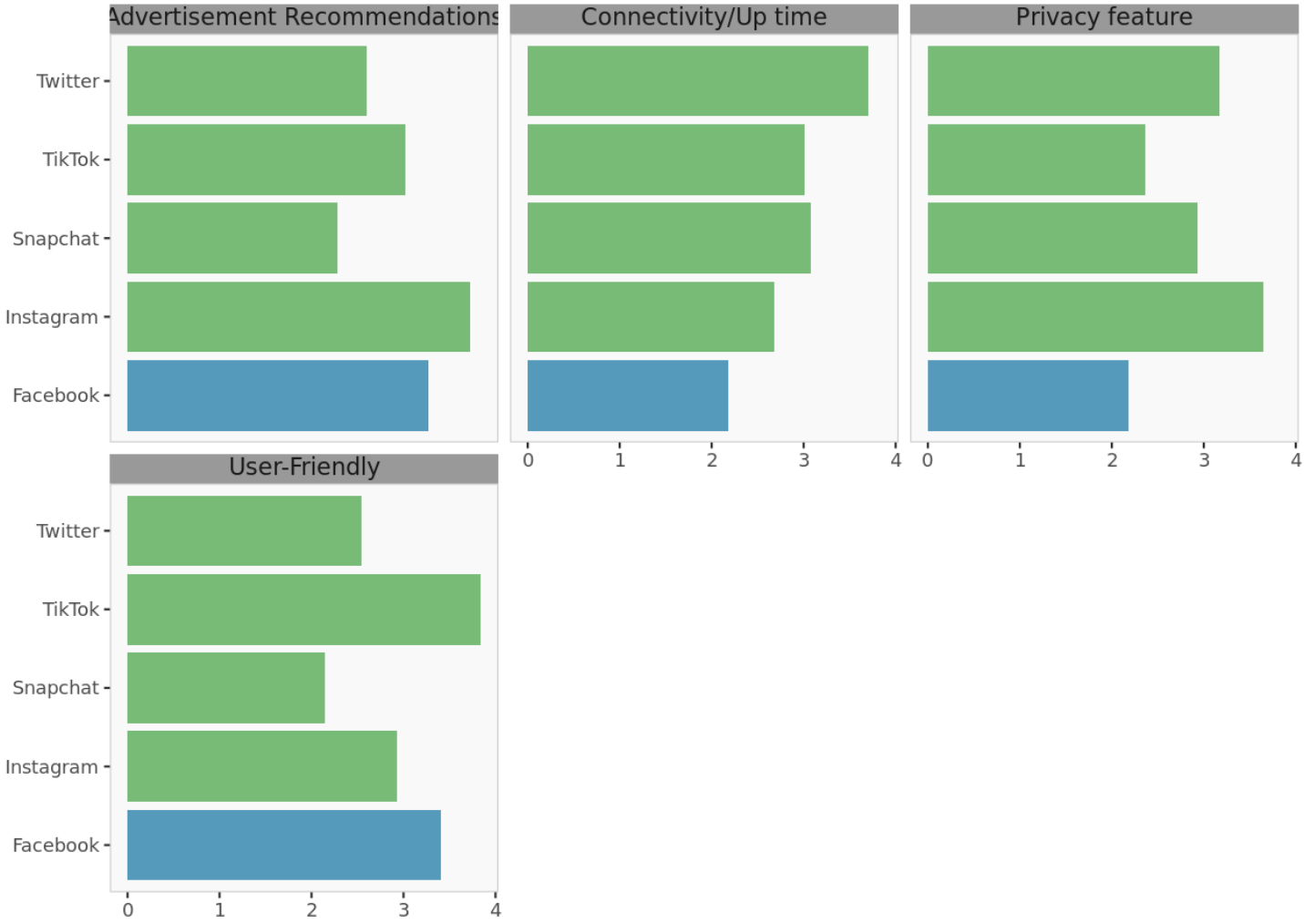
## Perceptual data

| | Facebook | Instagram | Snapchat | TikTok | Twitter |
|---|---|---|---|---|---|
| **Censorship of content** | 3.5 | 3.8 | 3.1 | 2.6 | 2.3 |
| **Diversity of Content** | 2.6 | 3.0 | 2.6 | 3.7 | 3.3 |
| **Filters for sharing data** | 2.1 | 3.8 | 3.7 | 3.7 | 2.3 |
| **Messaging features** | 3.8 | 3.3 | 3.0 | 2.2 | 3.1 |
| **'Like', 'Share', 'Comments' features** | 3.4 | 3.6 | 2.1 | 2.7 | 3.0 |
| **How is the Video/audio call quality?** | 3.8 | 3.3 | 2.9 | 2.1 | 2.4 |
| **Advertisement Recommendations** | 3.3 | 3.7 | 2.3 | 3.0 | 2.6 |
| **Connectivity/Up time** | 2.2 | 2.7 | 3.1 | 3.0 | 3.7 |
| **User-Friendly** | 3.4 | 2.9 | 2.1 | 3.8 | 2.5 |
| **Privacy feature** | 2.2 | 3.7 | 2.9 | 2.4 | 3.2 |

**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 number 1/2**. For each attribute, this chart displays a histogram of brand positions.




**Attributes histograms number 2/2**. For each attribute, this chart displays a histogram of brand positions.