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learning

Learning Data Analytics Made Easy

USER GUIDE

PERCEPTUAL MAP

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PERCEPTUAL MAP

Perceptual map, A perceptual map is a chart used by market researchers and businesses to depict and understand how target customers view and feel about a given brand or product. Perceptual maps can also be referred to as product positioning maps

LEFT PANEL (INPUT AREA)

OPERATIONAL ANALYSIS TAB (MAIN PANEL)

Perceptual Map

Input Data

Upload Perceptual data

| Browse... | No file selected |

Optional - Preference Data Input

Upload Preference Data

| Browse... | No file selected |

Overview   Data   PCA Variance Plot   Perceptual Map   Spider Chart

Perceptual Map

Perceptual Mapping is the use of graphs to identify the positioning of products/brands that consumers have, and find their preference. The graphs layout an X and Y axis with variables and ranges from the most desirable to least desirable. For instance, the far right may be listed as 'Upper class' while the left side will be 'Lower Class'. This allows for the placement of business names to help find the position that consumers place these businesses in relation to the variables listed.

- Wikipedia
In the panel on the left, click on 'Browse' and upload the perceptual data. Note that this application can read only csv file(comma delimited file), so if you don't have csv input data file, first convert your data in csv format and then proceed. Make sure you have top row as variable names and first column as respondent id/name in csv file. As soon as upload is complete, this app will read the data and all the variables in perceptual file will reflect in the panel on the left. Now you can navigate across different tab viz. 'PCA Variance Plot' tab, 'Perceptual Map' tab and 'Data' tab.

Perceptual Sample File

⬇ download perceptual sample data

Optional - Add Preferences

To make Joint Space map, click on second 'Browse' link and upload the preference data in csv format. As soon as upload is complete, respondents in preference data file will reflect in the panel on the left. Sample perceptual file and preference file is shown below

Preference Sample File

⬇ download preference sample data

LEFT PANEL (INP)

Upload your dataset here

Select your favorable variables required to base the analysis

Insert data as for optional preference as input

Perceptual Map

Input Data

Upload Perceptual data

| Browse... | JSM Cities Percept |

Upload complete

Choose Attributes
- ☑ Affordability
- ☑ Professional.Opp.
- ☑ no.social.life
- ☑ growth.potential
- ☑ poor.infrastruc

Optional - Preference Data Input

Upload Preference Data

| Browse... | No file selected |

DATA INPUT
(UPLOADING DATASET)

- Click on browse
- Select the data file that is in the form of csv format.(Ex program.csv)
- Browse the file and select the data to train your model for prediction.
- Top rows of the dataset should be of 'variable names'.

Data Exploration and Descriptive Statistics
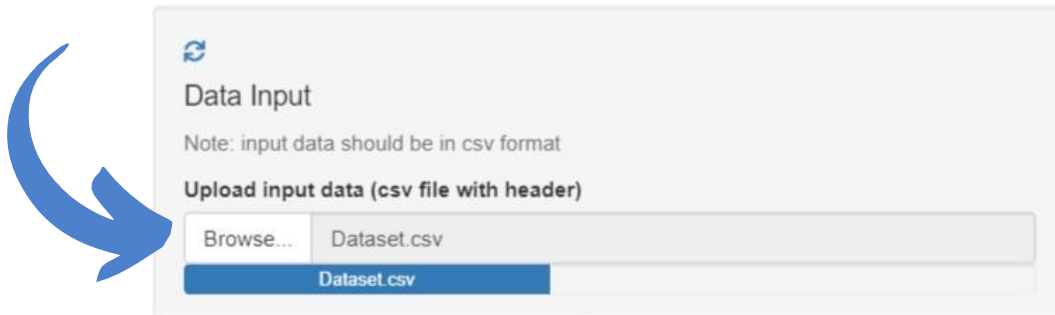
OVERVIEW TAB

This tab provides you with relevant study resources, tutorials, sample datasets and a short overview to start with, which helps you understand and comprehend your data correctly. This tab also provides you the basic idea about perceptual map and gives sample data and provides the description of analysis.

DATA TAB

It is very important to understand our data completely to infer meaningful insights and to get an overview of all the data points as a whole, but it is quite impossible to analyze thousand data points manually.

The **'Data'** option enables you to get a comprehensive evaluation through input data that help us form the basis of our analysis.

It will display all the 'descriptive analytics' for all the data variables present in the dataset.

Overview   Data   PCA Variance Plot   Perceptual Map   Spider Chart

Perceptual Data

Attributes	Mumbai.and.its.suburbs	Delhi.and.NCR	Kolkata	Chennai	Bengaluru	Hyderabad	Ahmedabad	Pune
Affordability	1.88	2.75	5.11	4.66	2.88	4.78	5.12	4.44
Professional.Opp.	6.19	5.95	3.73	4.91	6.19	6.10	4.56	5.62
no.social.life	1.46	1.77	3.57	3.69	1.59	2.04	4.04	2.16
growth.potential	5.17	5.20	3.95	4.95	5.33	6.05	5.44	5.80
poor.infrastruc	2.69	2.49	3.86	2.85	3.09	2.00	2.28	2.39

**Data is reviewed and it provides description of uploaded data**

PCA VARIANCE PLOT TAB

PCA is used to get the ration of variance (eigenvalue / total eigenvalues) Bar chart is used to represent individual explained variances. Step plot is used to represent the variance explained by different principal components. Data needs to be scaled before applying PCA technique.
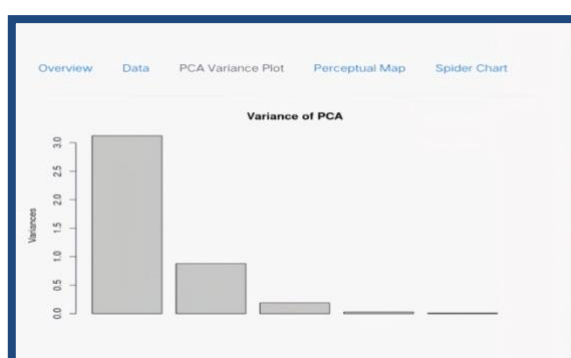
RPERCEPTUAL MAP TAB

The Perceptual mapping / Market mapping is a diagrammatic technique used by asset marketers that attempts to visually display the perceptions of customers or potential customers. The positioning of a brand is influenced by customer perceptions rather than by those of businesses.

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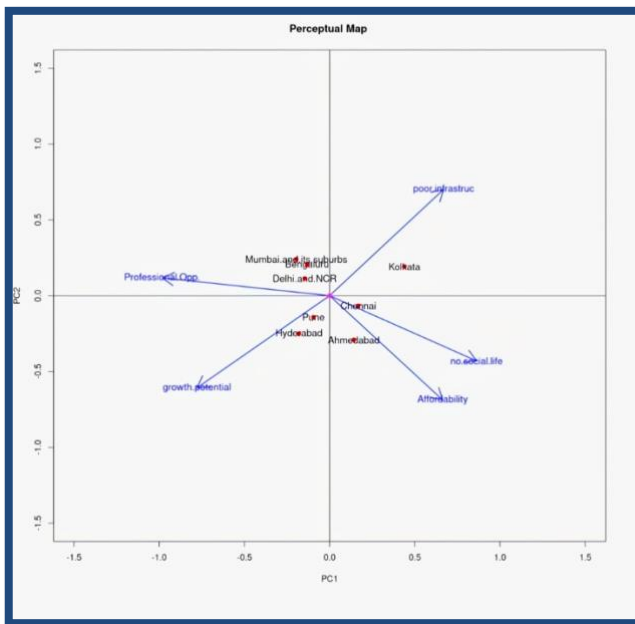
This is an example graph of perceptual mapping where all the attributes are considered and marked in 2D

⚠ *Use the left panel to modify/deal with the outliers identified here.*

SPIDER CHART TAB

A spider chart, also sometimes called a radar chart, is often used when you want to display data across several unique dimensions. Although there are exceptions, these dimensions are usually quantitative, and typically range from zero to a maximum value.

The radar chart is also known as web chart, spider chart, spider graph, spider web chart, star chart,star plot, cobweb chart, irregular polygon, polar chart, or Kiviat diagram.It is equivalent to a parallel coordinates plot, with the axes arranged radially.

An example of spider chart
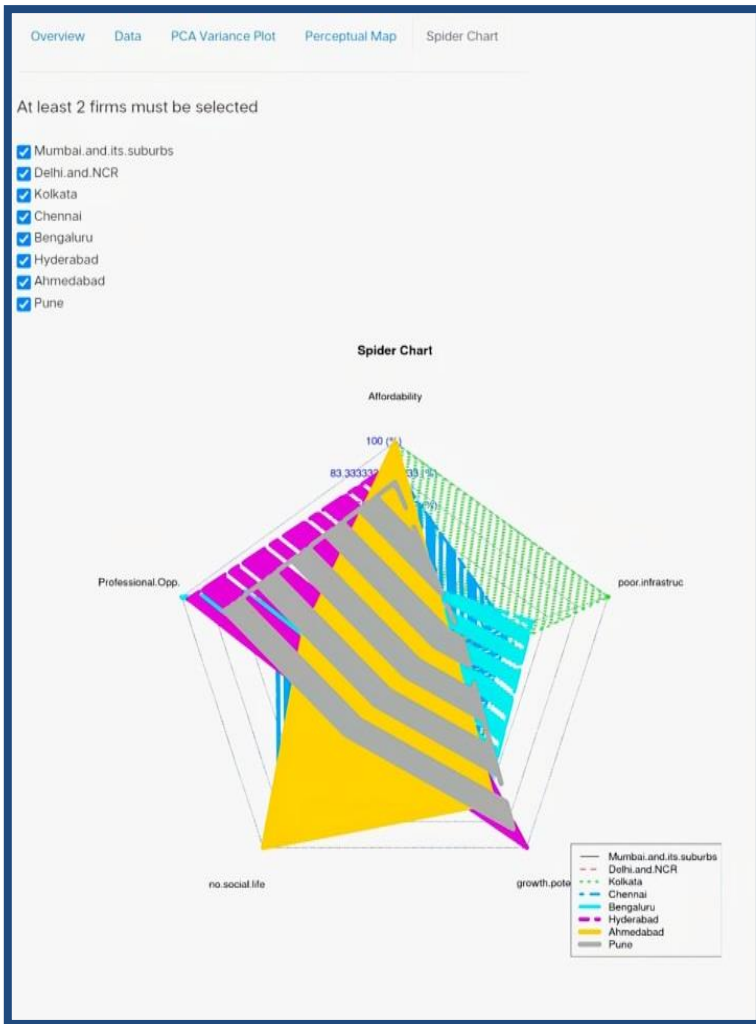
The spider chart has the attributes and ahs represented the data in multi-dimensions and each attribute is represented individually with respective colours and pattern