Dataviz exam simulation - Practice 11

Analysis

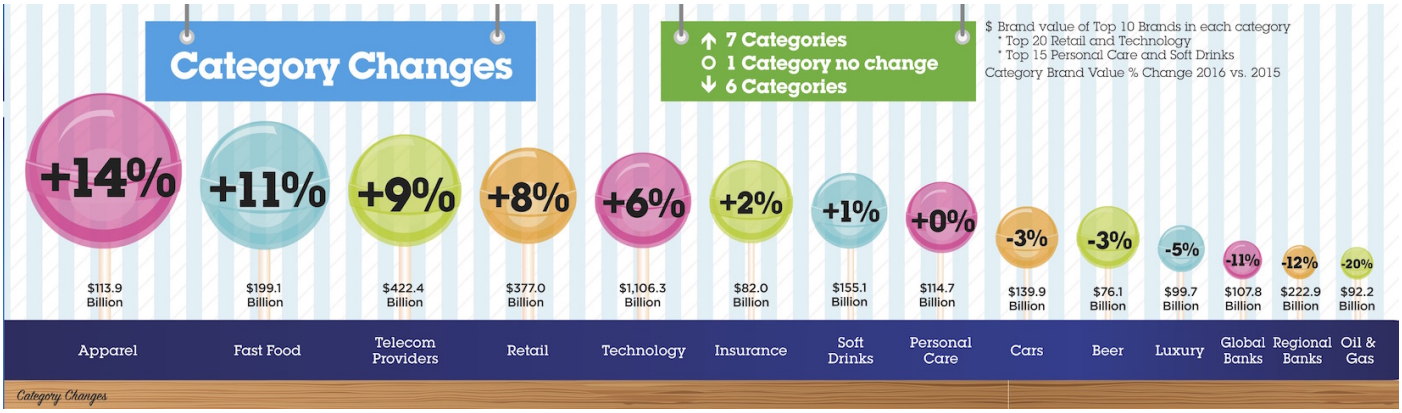

Figure 1: BrandZ

Analyze the above graph according to the following criteria.

Question

Which one of the following questions represents the purpose of this visualization?

- What is the change in the value of some categories of brands from 2015 to 2016?
- What is the absolute value of some categories of brands in 2015?
- What is the trend of the value of some categories of brands over several years?
- What is the category of business associated with the highest revenues?
- What is the most representative color associated with some categories of brands?

Data

Is the data quality appropriate? Select true answers only.

- The values associated with each category are too similar to be accurate.
- The data is accurate because percentages and absolute values are appropriate for this task.
- The data is not complete because the absolute value does not refer to the overall value of the category.
- The data is complete because all possible categories of brands have been reported.
- The data is consistent as similar categories of brands are considered.
- The data is not consistent because only the top 10/15/20 brands are considered.
- The data used in this visualization has been collected before 2015.
- The visualization clearly explains what are the sources of the data.
- Understandability is not appropriate because the text explaining the data is not very clear.
- Precision is not appropriate, percentages should have two decimal digits at least.

Visual

Proportionality

Are the values encoded in a uniformly proportional way?

no, we do not know wheter the axis starts from 0 or not, moreover tha lollipop size is overall not consistent, also it makes little sense to use area to show negative percentages

Utility

All the elements in the graph convey useful information?

the following elements are useless and do not convey any useful information and as such can be removed: background, the wood effect on the bottom, the green text, the absolute values (we can remove them as we only care about percentage changes), moreover we can also remove a lot of colors (i.e. the dark blye one) and the lollipop

Clarity

Are the data in the graph clearly identifiable and understandable (properly described)?

whilst the usage of direct labeling helps with the category, the chosen colors for each category and their repetition does not convey any useful information and as such it can be removed. moreover, the absence of a y-axis makes it difficult to effectively compare the data

Design

Design the visualization based on the following data structure.

Field	Dim./Measure
Category	dim
Percentage	measure
Value	measure

Design schema

Schema	Description
Rows	sum([Percentage]),
Columns	category
Type	bar
Color	default
Size	default
Label	sum([Value])

Sketch of the resulting graph

i would create an horizontal bar char having in the y-axis the name of the category and on the x axis the percentage of said category, finally on top of each bar there is the respective absolute value

Theory

If a variable represents heights of people and a data point is "0.002 km", we are observing an issue of:

- Precision
- Accuracy
- Understandability
- Consistency
- Completeness