

Presenting statistical data using Infographics

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Data visualization techniques and the use of Infographics can offer a new potential: the conversion of statistical data into an "attractive narrative" or "data story", offering cognition, understanding and better interpretation of statistical data. The combination of a good set of statistical data, an interesting story or narrative and an effective design can lead to a successful Infographic with new potentials and opportunities. As digital-age users are becoming more accustomed to interact with graphics presented in visual format rather than numbers or data tables, Infographics will become more and more appealing. Using the power of visuals, Infographics can present complex statistical data and reveal hidden or abnormal patterns and trends or even elicit new information. This study presents the rules and standards for the construction of Infographics in the field of statistics to present large amount of statistical data and complex information.

A Statistical data

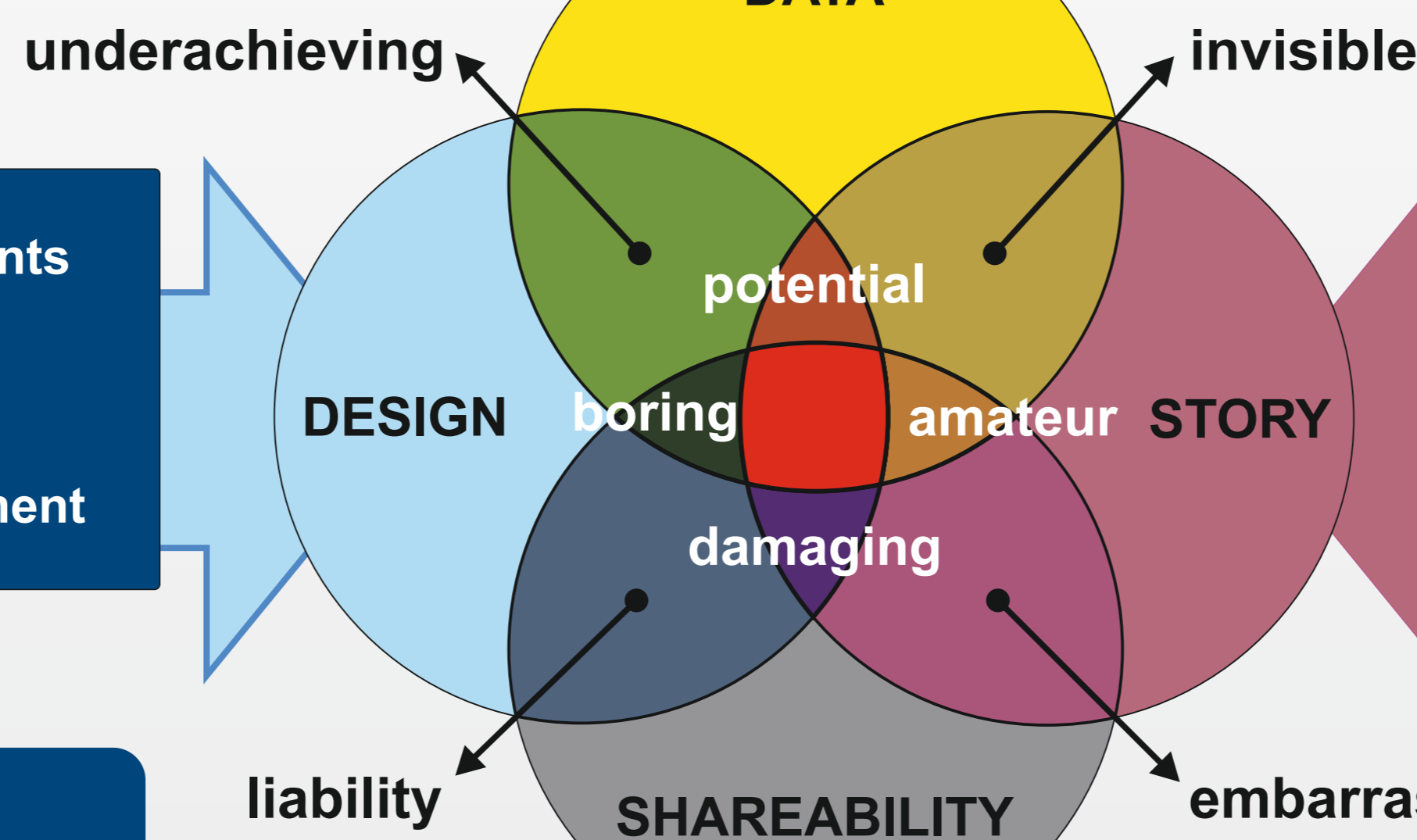
- 01 Principles of selecting data
- 02 Selection of eligible data
- 03 Preparation of selected data
- 04 Conversion into (info) graphs

Visual Analytics: Which graph type to choose ⁽¹⁾

Graph Types	Categorical Comparison	Values Over Time	Correlation	Measures Only/ KPI	Geographical
Horizontal Bars	✓			✓	✓
Vertical Bars	✓	✓		✓	✓
Tables Datasets	✓	✓	✓	✓	✓
Text Numbers				✓	
Line	✓	✓	✓		
Area	✓	✓			
Points and Bubbles	✓		✓		
Bar Markers	✓	✓			
Pie, Donuts, Gauge	✓			✓	
Tree map Heat map	✓				
Map Shapes and Points					✓
Word Cloud	✓				

C Design

- 01 Selection of graph elements
- 02 Definition of structure
- 03 Selection of color/fonts
- 04 Principles of item placement

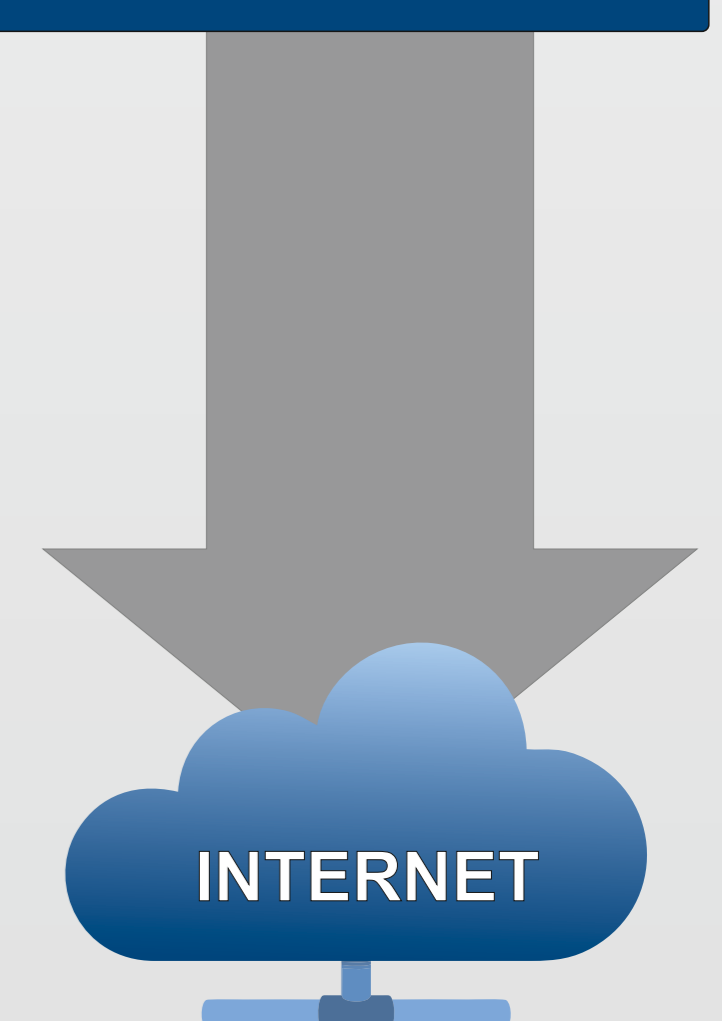
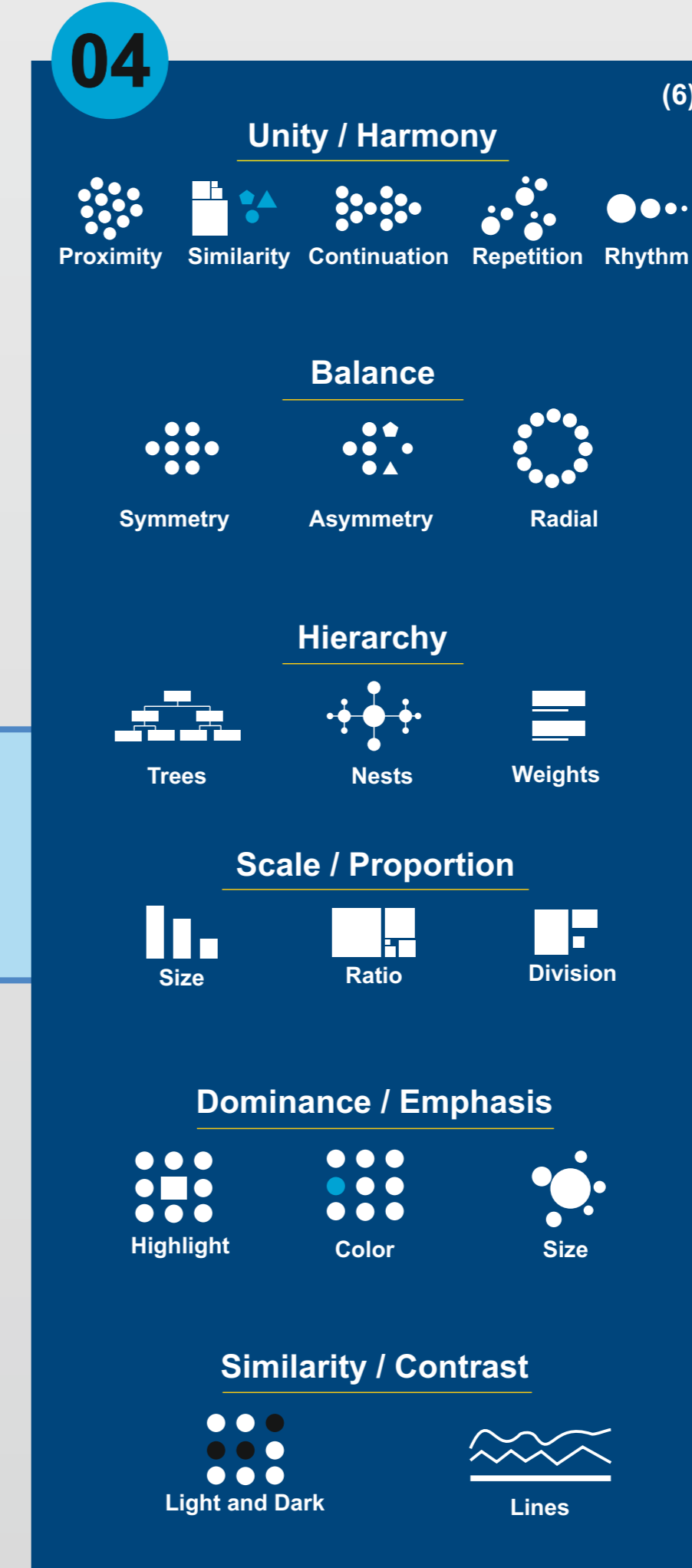
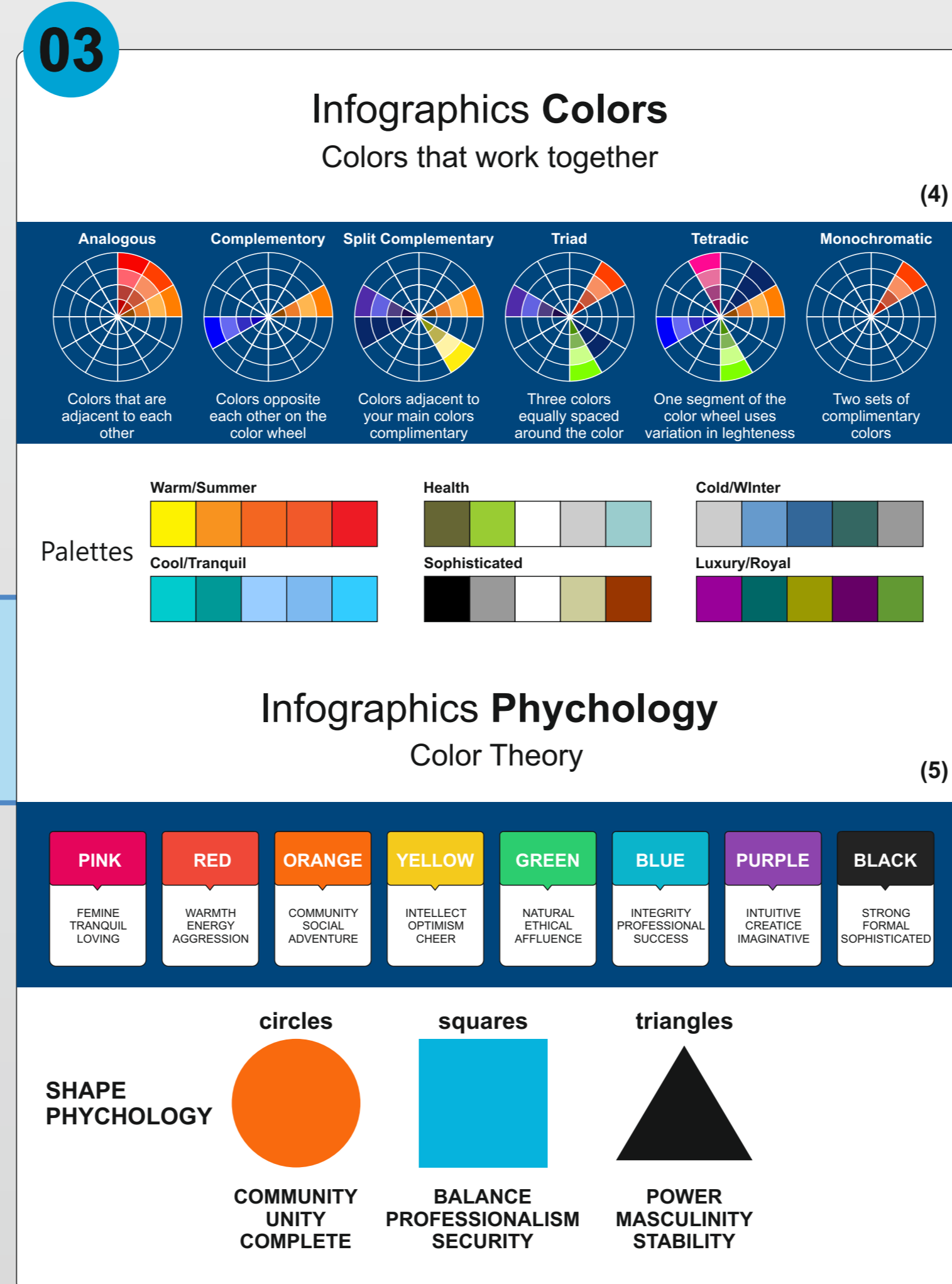
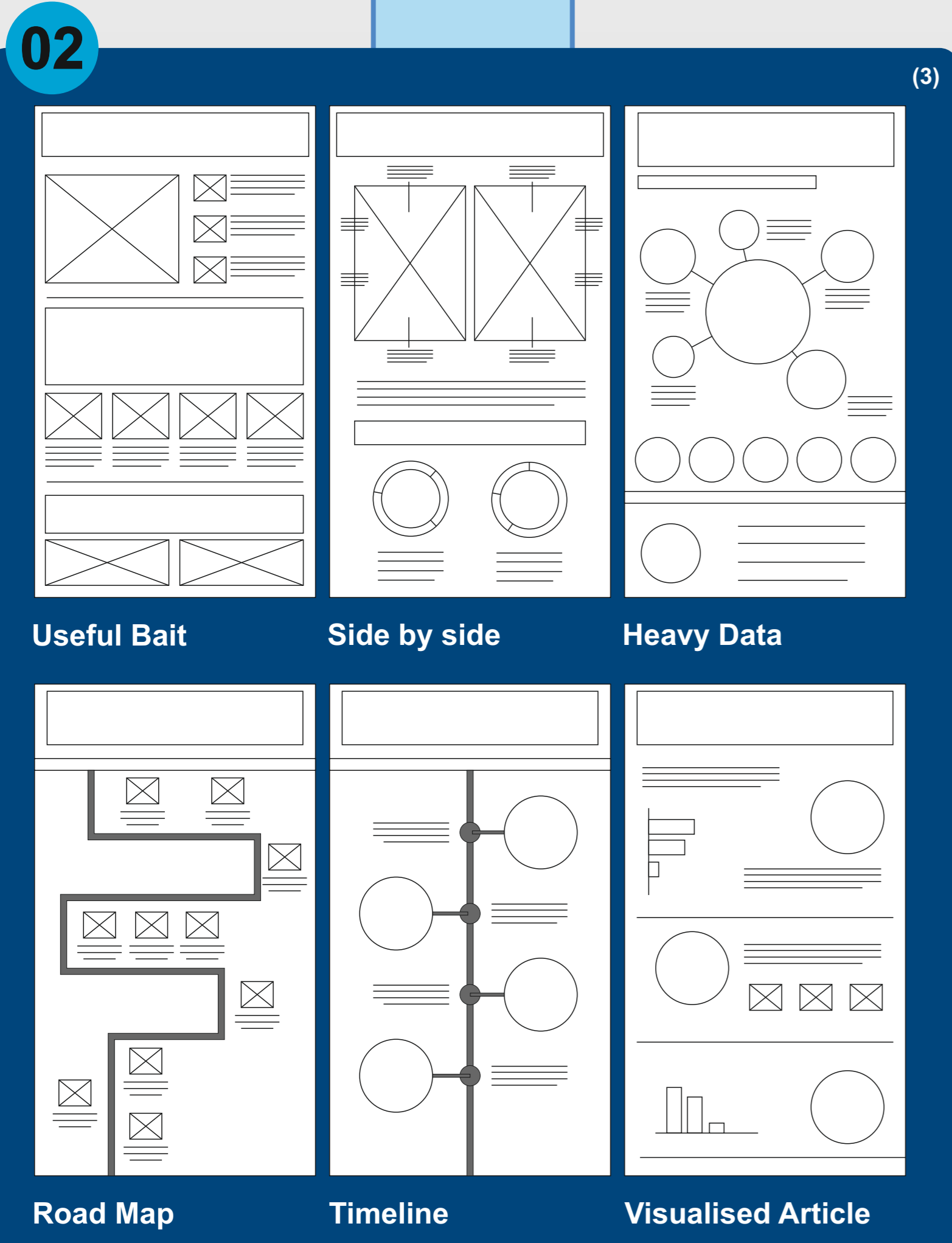


B "Story" of data

- 01 Research Question
- 02 Time frame
- 03 Message to be transmitted
- 04 Narrative of selected data

D Shareability

- 01 Published on the web
- 02 Easy to be accessible
- 03 Traceable via search engines
- 04 Published at a related website



REFERENCES

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 [3] Infographic Layout, modified from: <https://piktochart.com/wp-content/uploads/2015/02/Infographic-Cheat-Sheet.jpg>

[4] Infographics Colors, modified from: <http://123PRINT.co.uk>
 [5] Infographics Psychology, modified from: <http://SMTHM.co.uk>
 [6] Principles of design in Infographics, modified from: <https://visual.ly/community/infographic/education/6-principles-design>

