Charts that every BI analyst should use!

Why We Need Data Visualization?

Humans have a data processing limit.
Data visualization helps understand the data and provides the right insight.

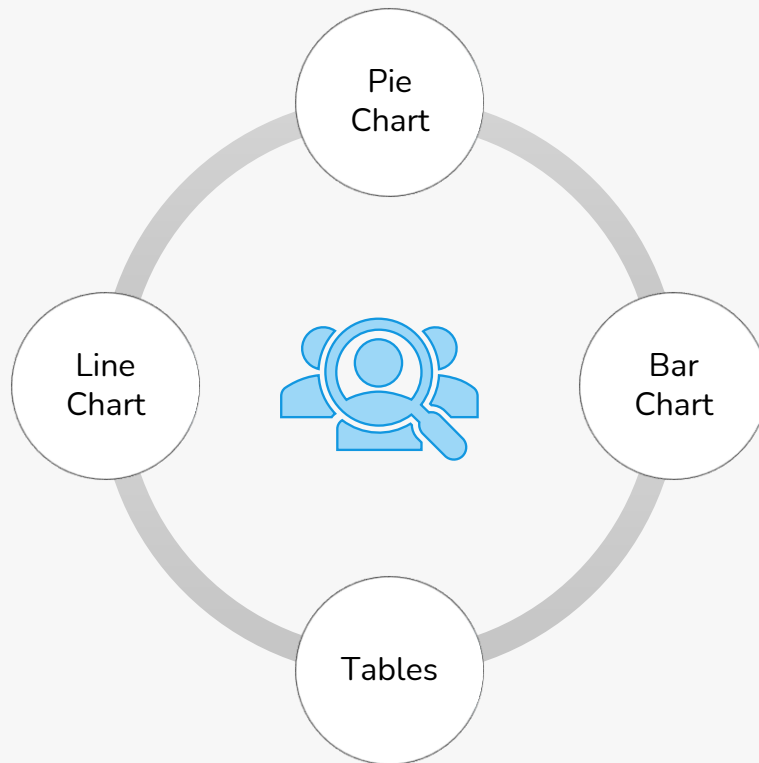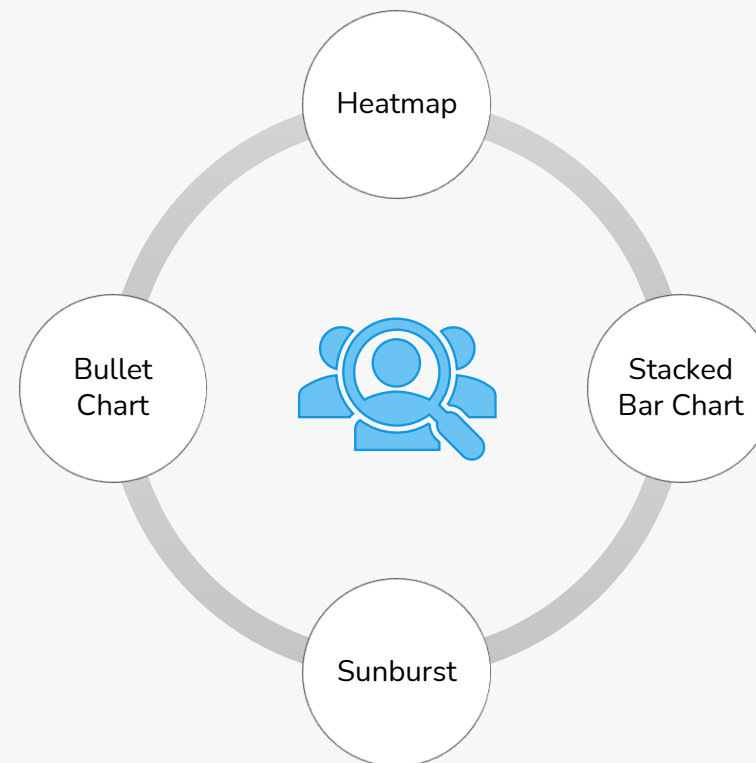# Why We Need Data Visualization?

| Written | Verbal | Visual | Listening |

Visual communication is the most faster source
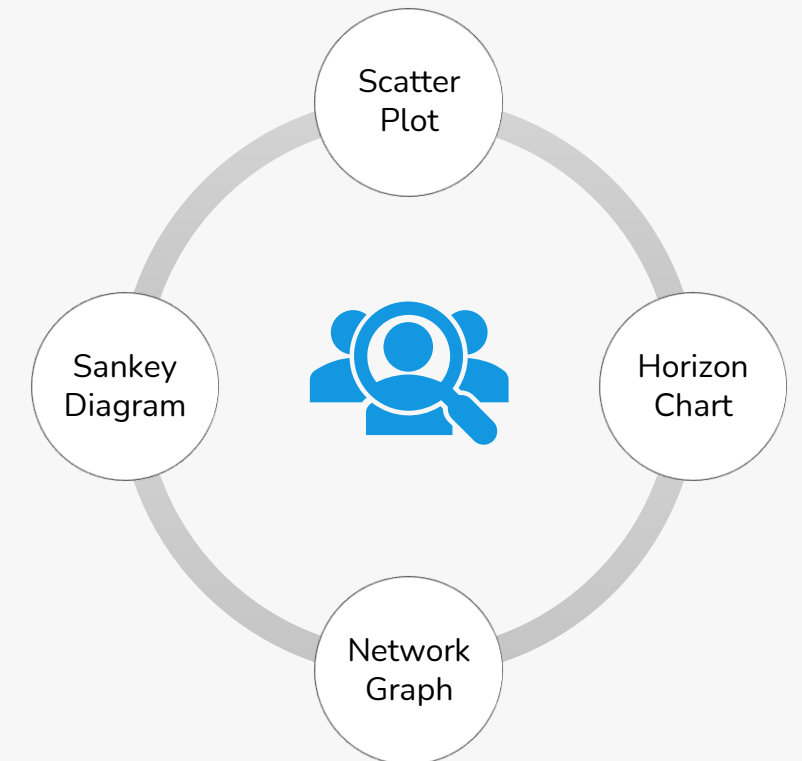
How to pick the right visual?

Beginner

Pie Chart

Line Chart

Bar Chart

Tables

Intermediate

Heatmap

Bullet Chart

Stacked Bar Chart

Sunburst

Advanced

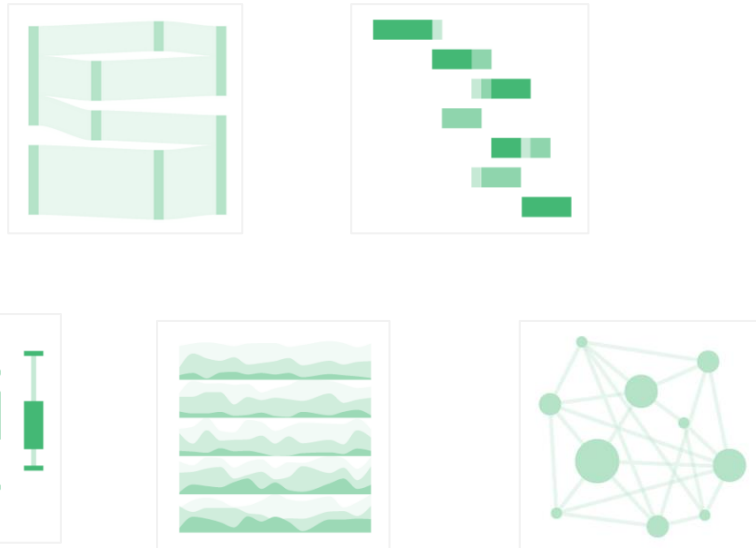Scatter Plot

Sankey Diagram

Horizon Chart

Network Graph

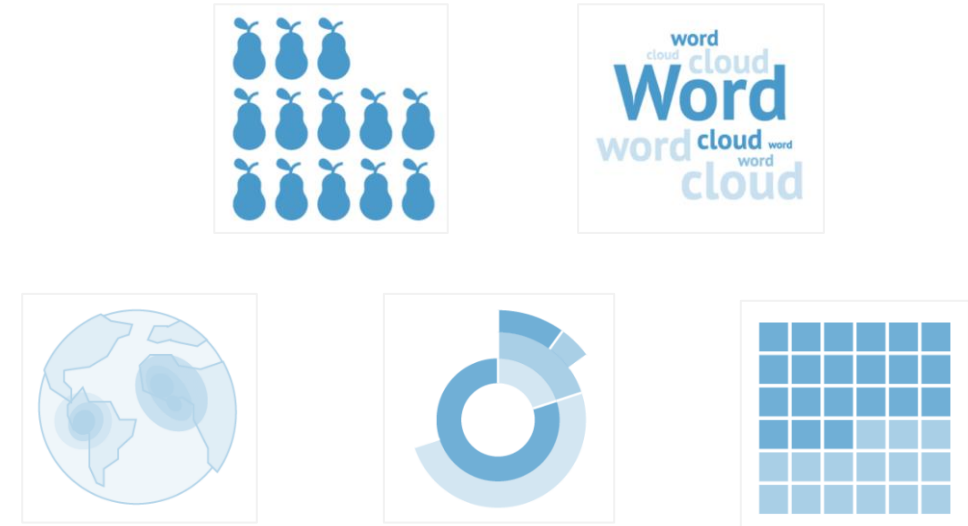Pick a chart after considering the reader's data literacy

How to pick the right visual?

Technical

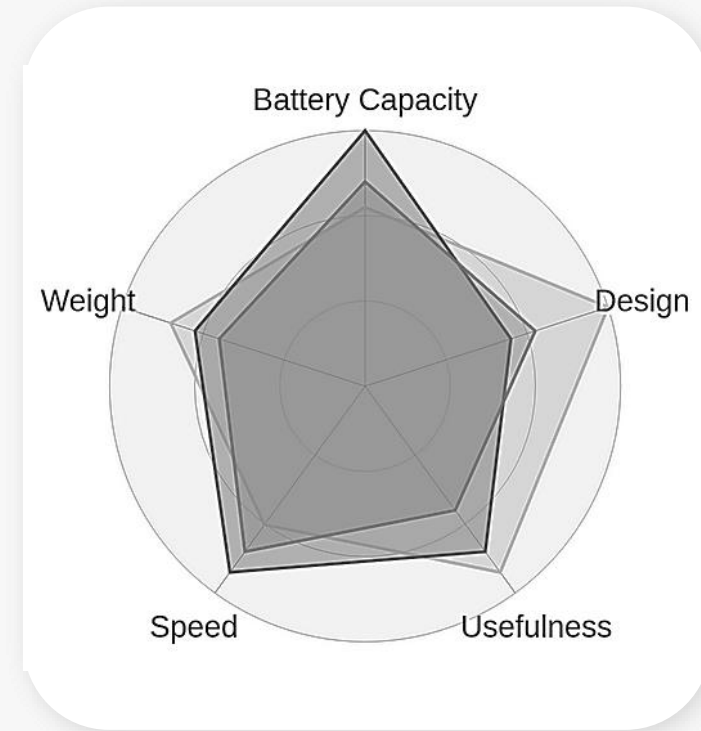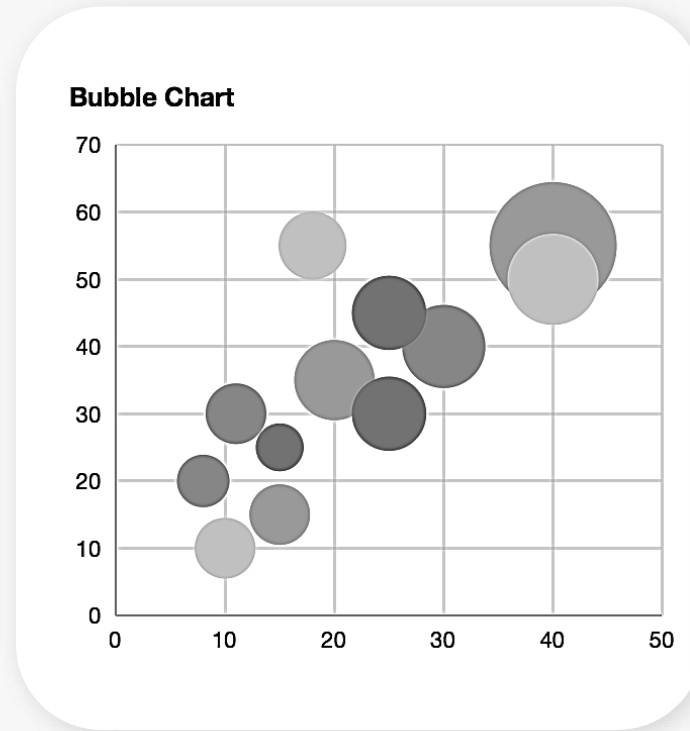Like Financial analysis or prediction model

Creative

Like news channels, publications or blogs

Purpose of communication matters

How to pick the right visual?

Use creative visuals with caution

Charts that every BI analyst should use

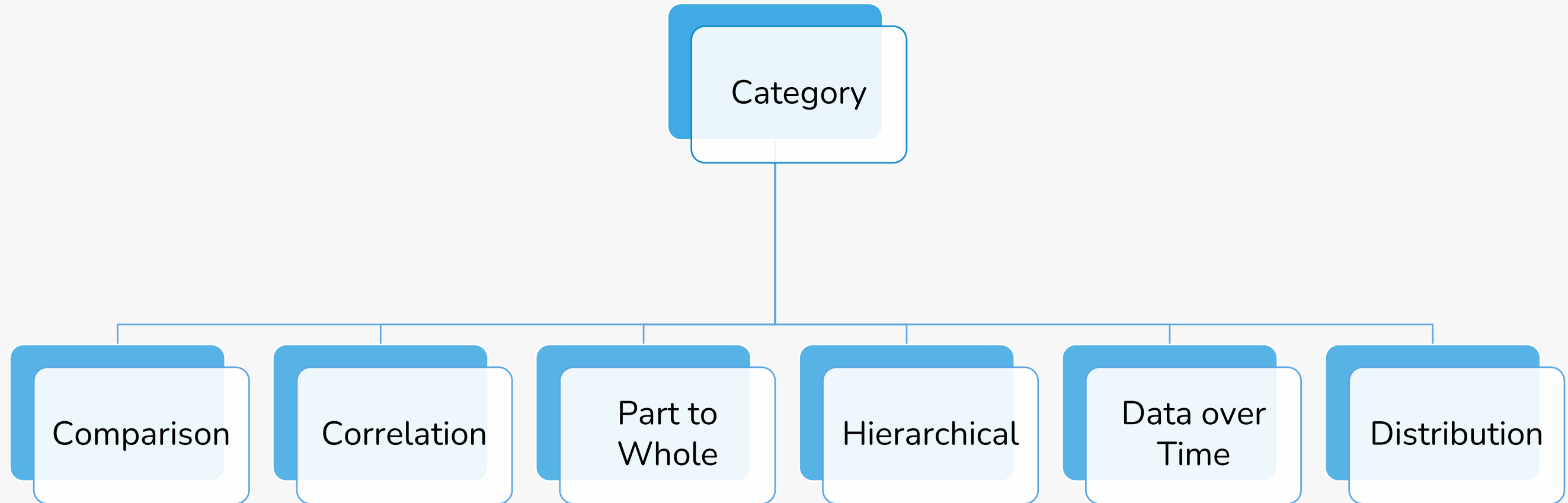| Exploratory Visual	Explanatory Visual
Exploratory visuals are those visuals that help an analyst to investigate the data to discover patterns, spot anomalies and test assumptions.	Explanatory visual are easy to understand and used to present key takeaway and information to the end user.

Chart Categories

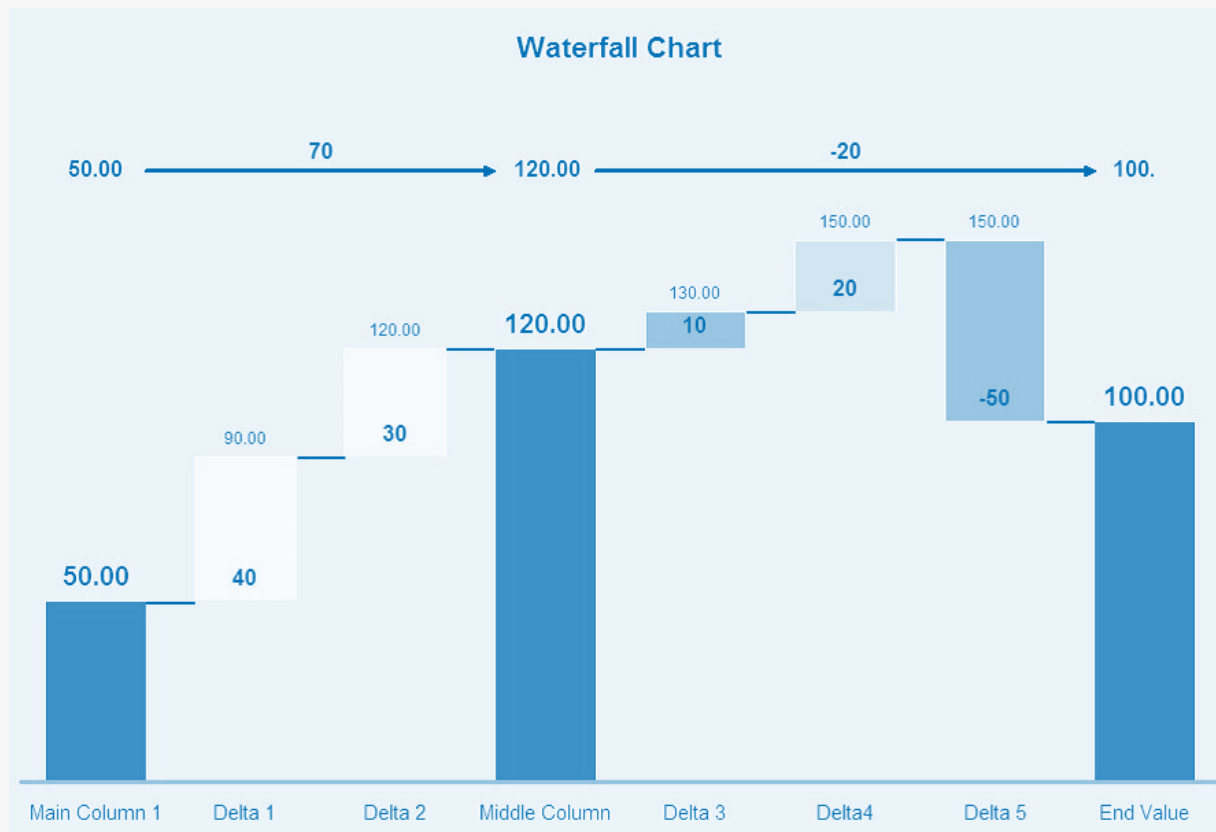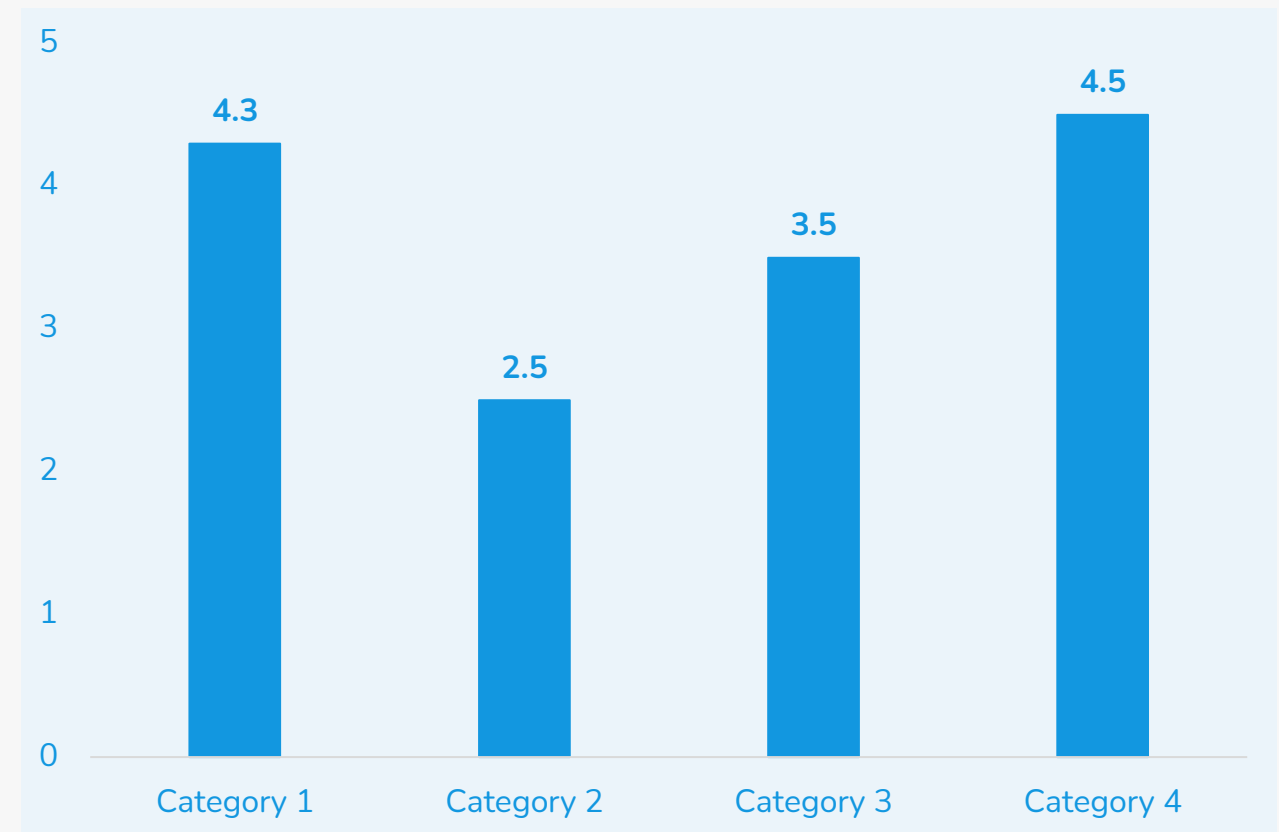There are six types of categories based on data use cases

Comparison

Waterfall chart
Intermediate Sum | Start-End | -/+ data | Proportion

Bar chart
Easy | Reference line | Variations | Error Bars

Correlation

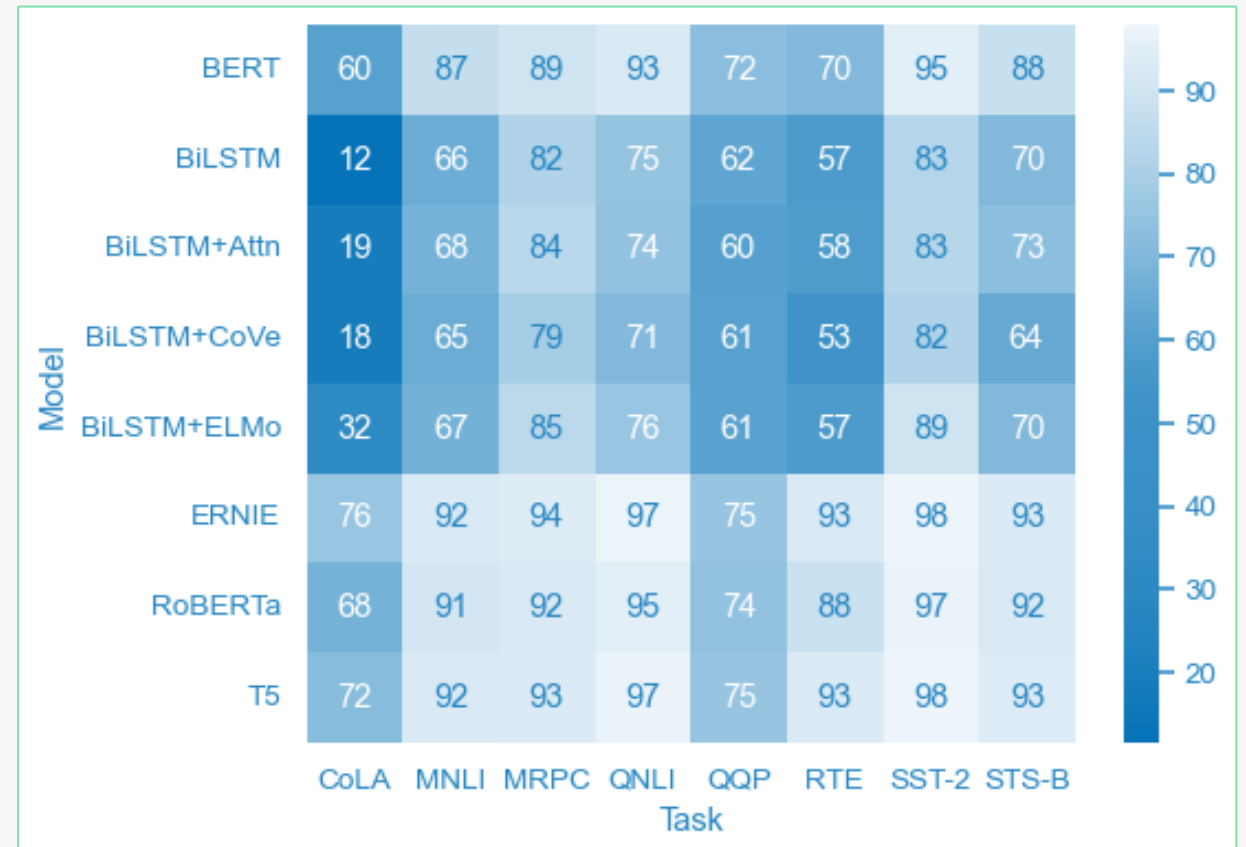| Exploratory Visual	Explanatory Visual

Scatter Plot
Metric relation | Quadrant | Pattern

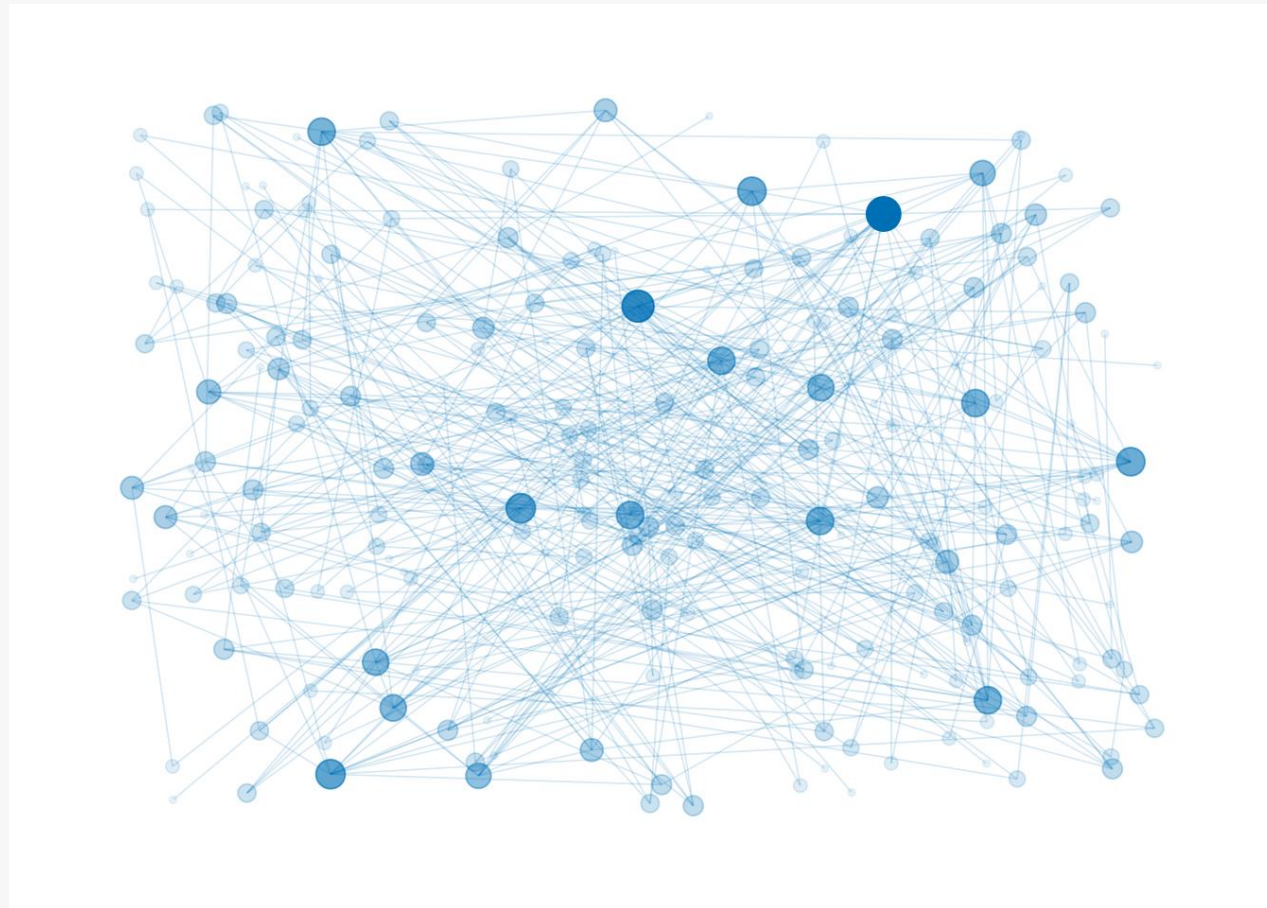## Heatmap
Entity relation | Color & shape | Mixed with Maps

Part to Whole

100% Stacked Column Chart
3 dimensions | cross comparison | group categories

Waffle Chart
2 dimension | Attractive | With icons

Waffle Chart : South West Sales = 47.4%

Category 1   Category 2   Category 3   Category 4

Hierarchical

Network Graph
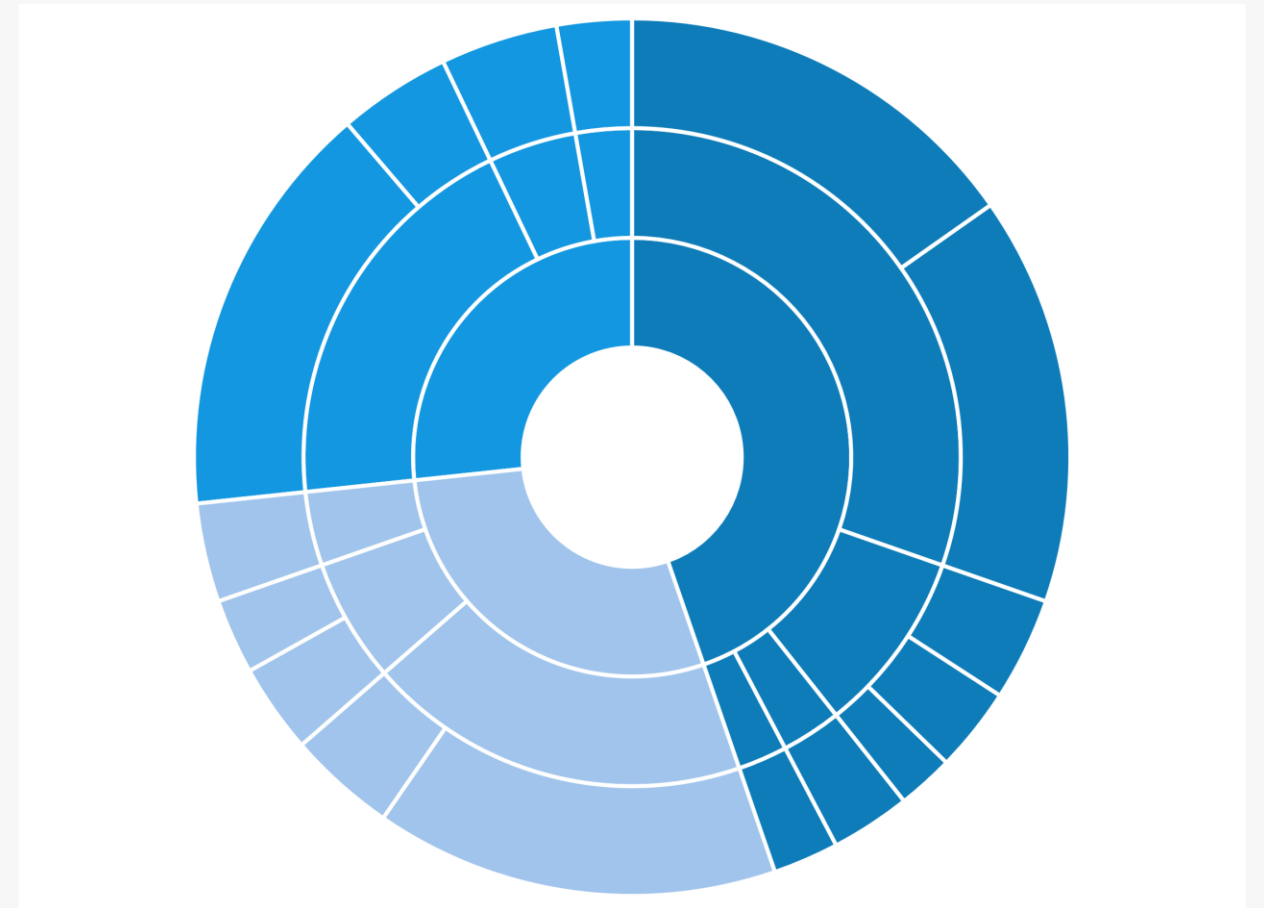Intra connection | Large data | Links

Sunburst Chart
Multiple levels | Zoom | Colors as cue

Data Over Time

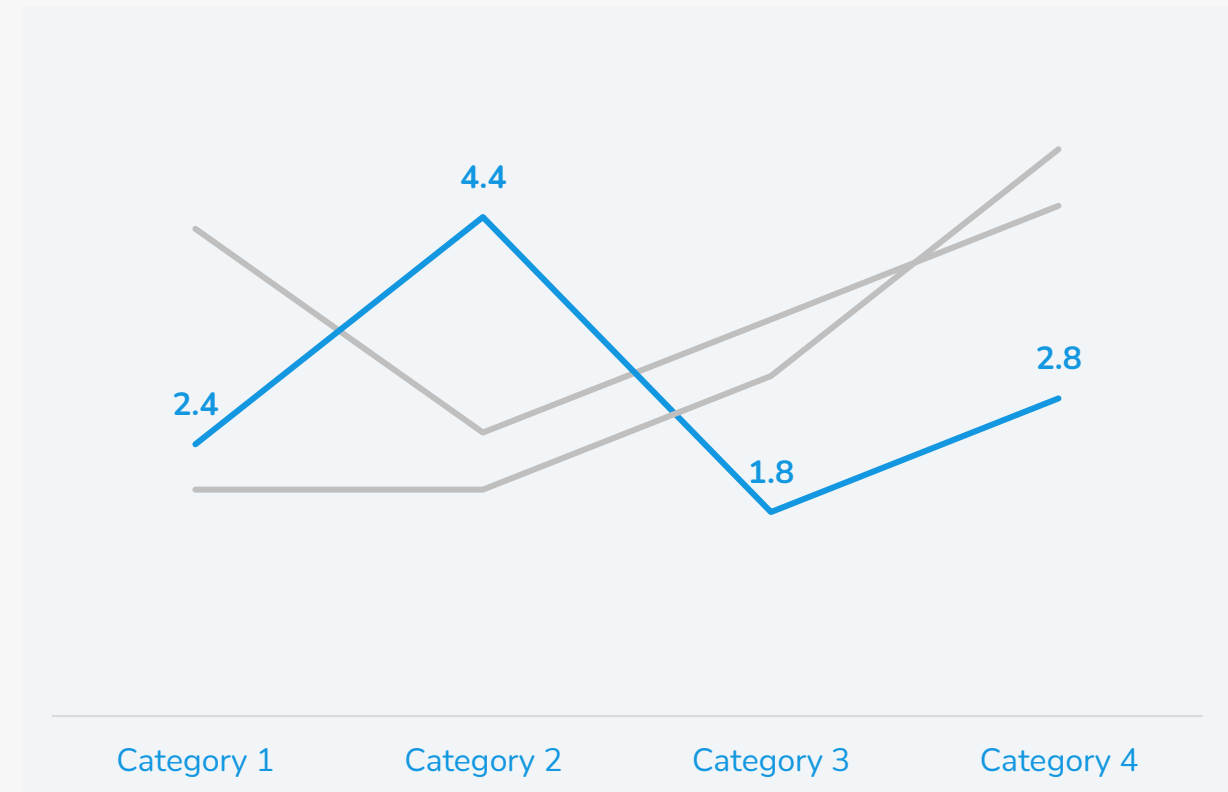| Exploratory Visual	Explanatory Visual

Horizon Chart
Time-series outlier | Space efficient | Color bands
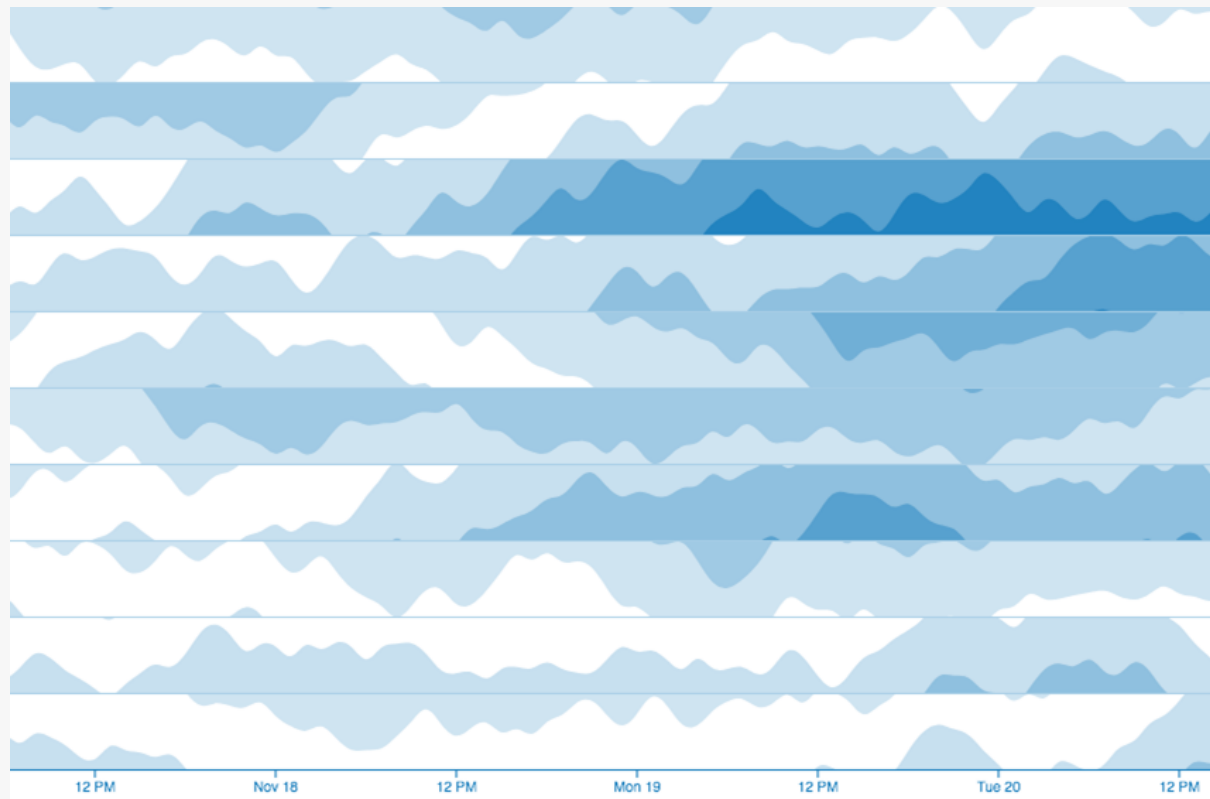
Line Chart
Simple | Effective | Continuous | Absolute data

Distribution

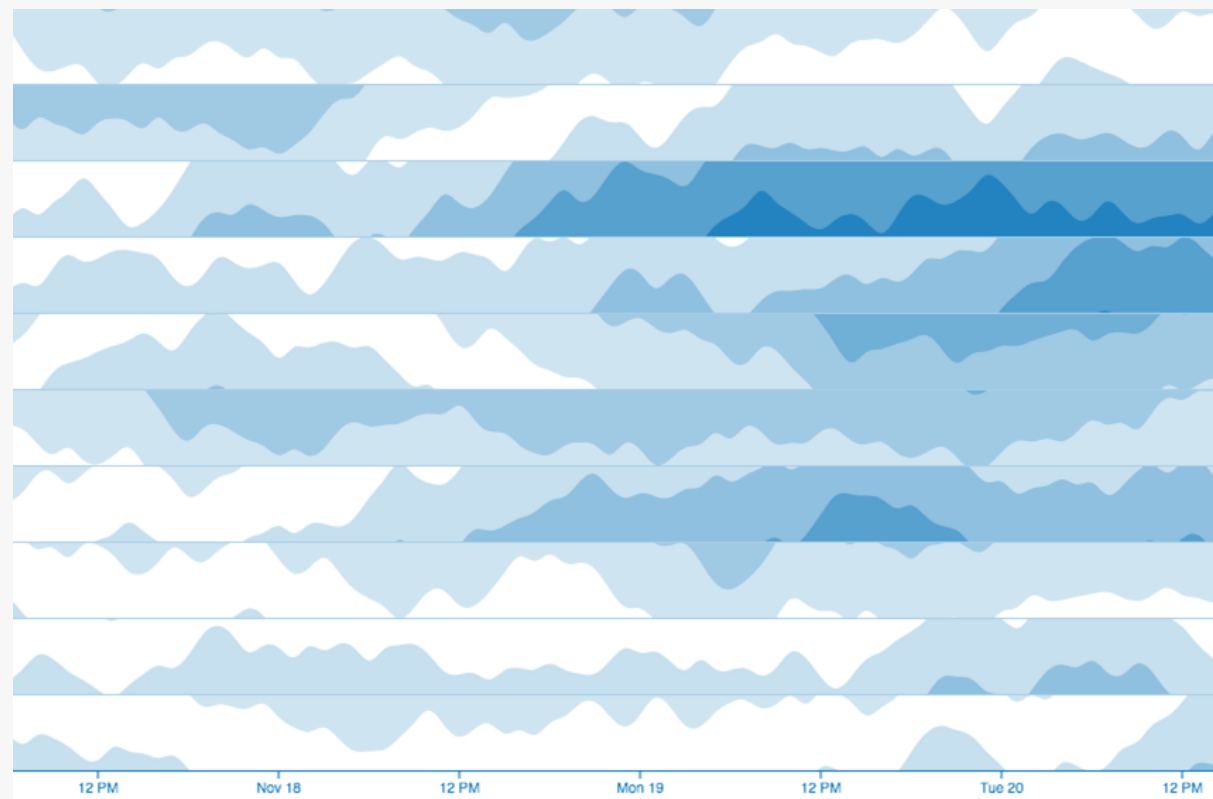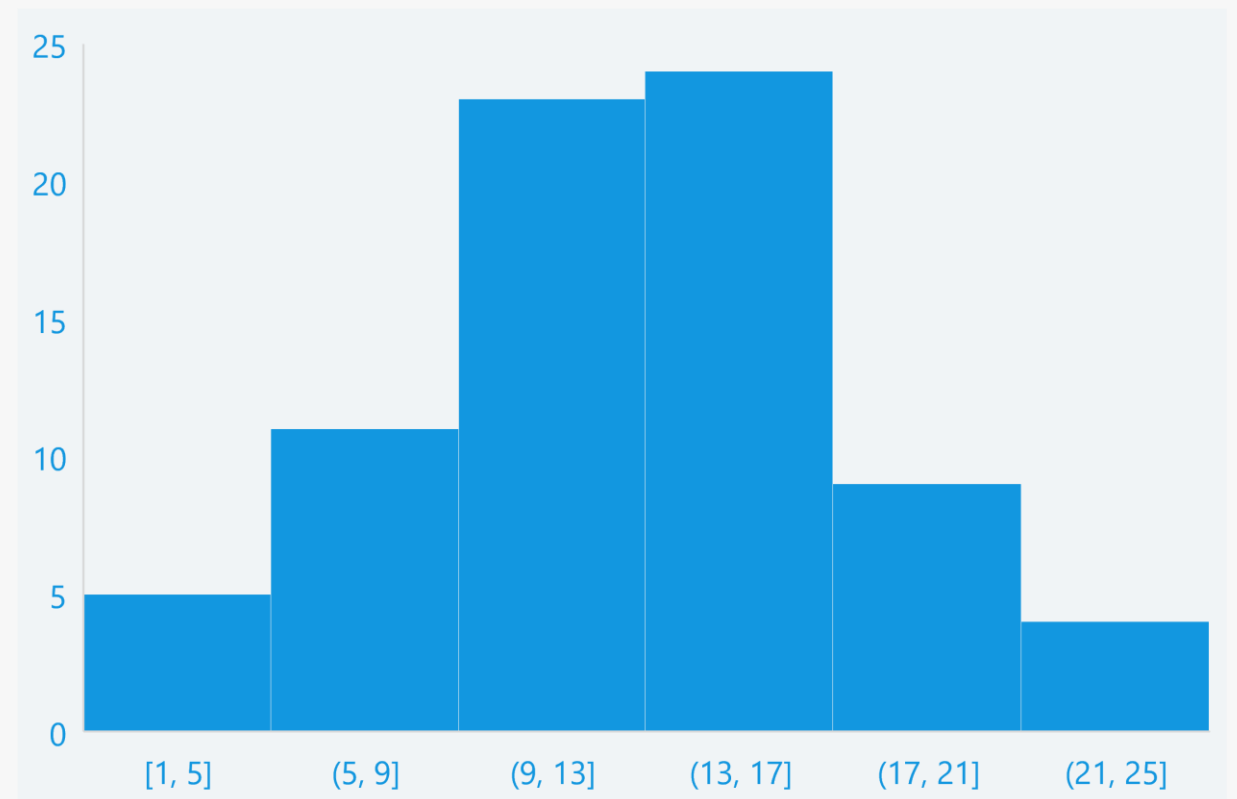| Exploratory Visual	Explanatory Visual
Horizon Chart	**Histogram**
Color band | 3 dimension | Space efficient	1 dimension | Frequency | Grouping

Thank You