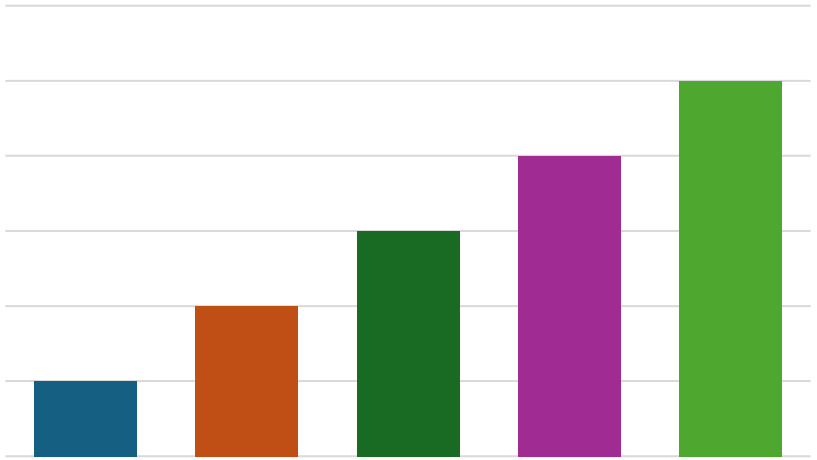
TECHNIQUES OF DATA VISUALIZATION



2024 Municipal Clerks Institute and Academy

School of Business
Eastern Illinois University™

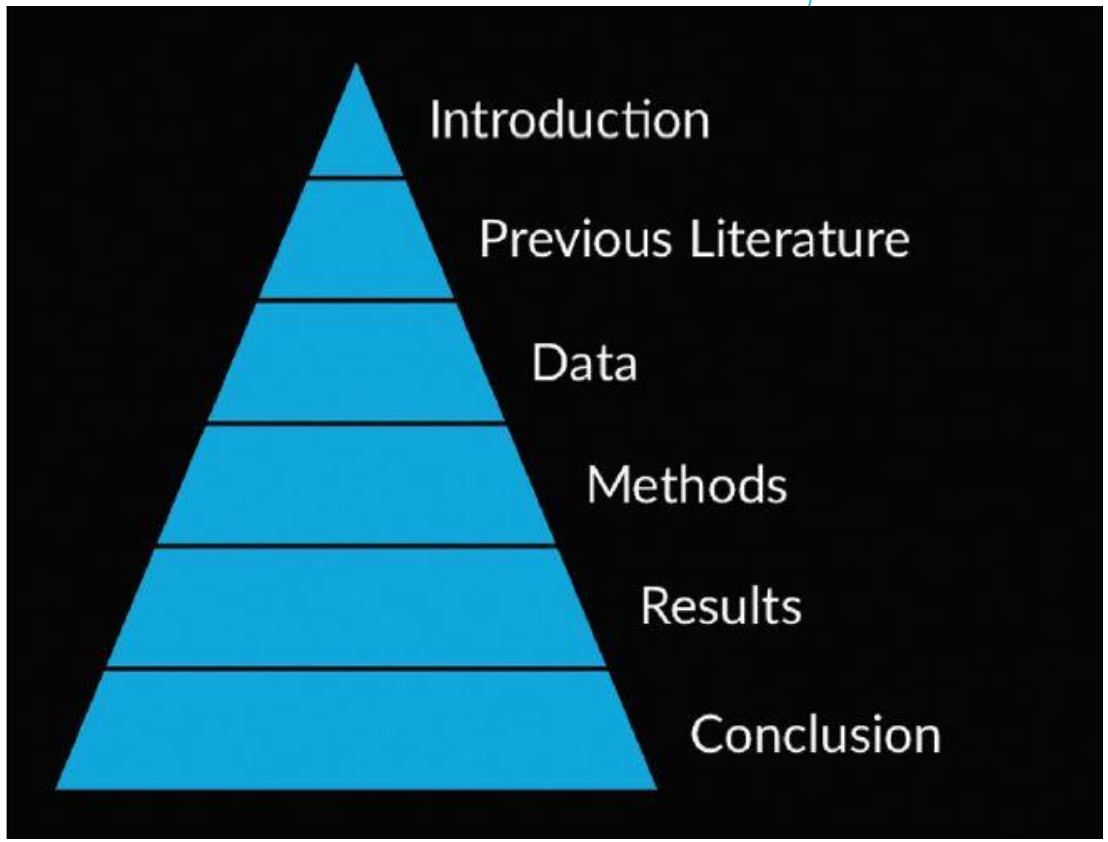
Nicholas Robinson, JD, LL.M., MBA
DoubleTree Hotel
Bloomington, Illinois
October 10, 2024

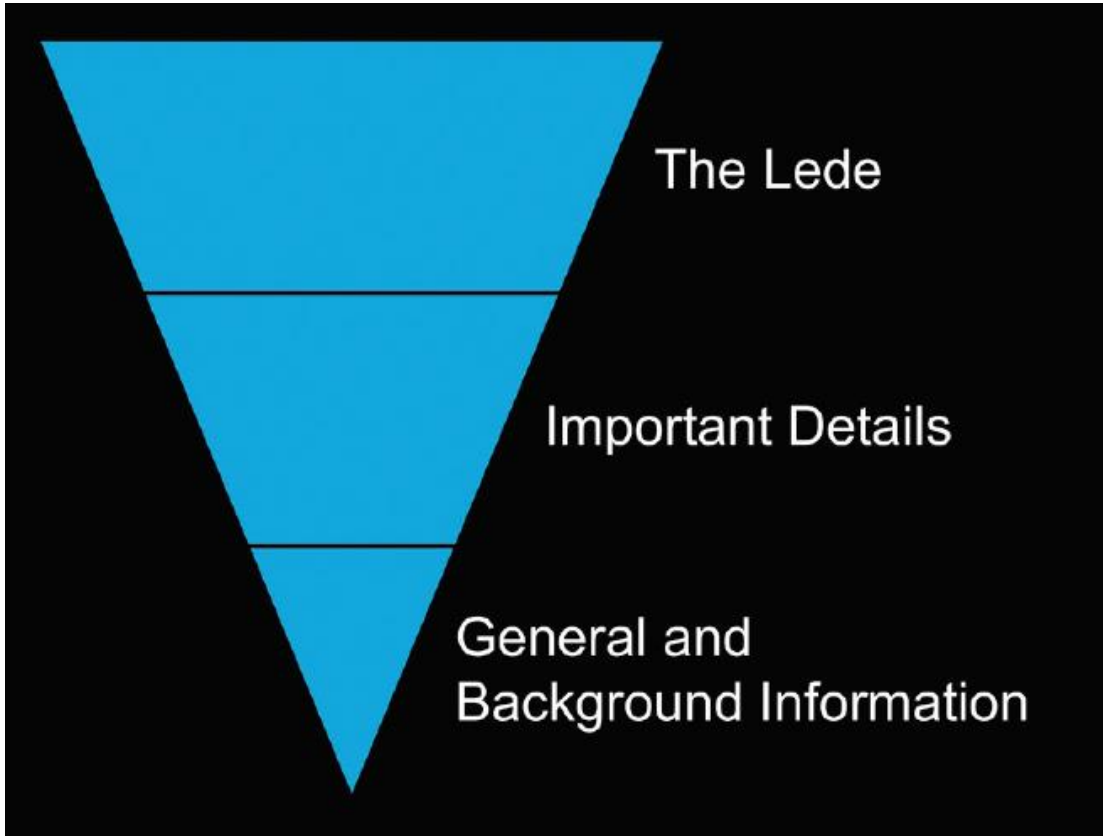
Techniques of Data Visualization

2024 Municipal Clerks Institute & Academy

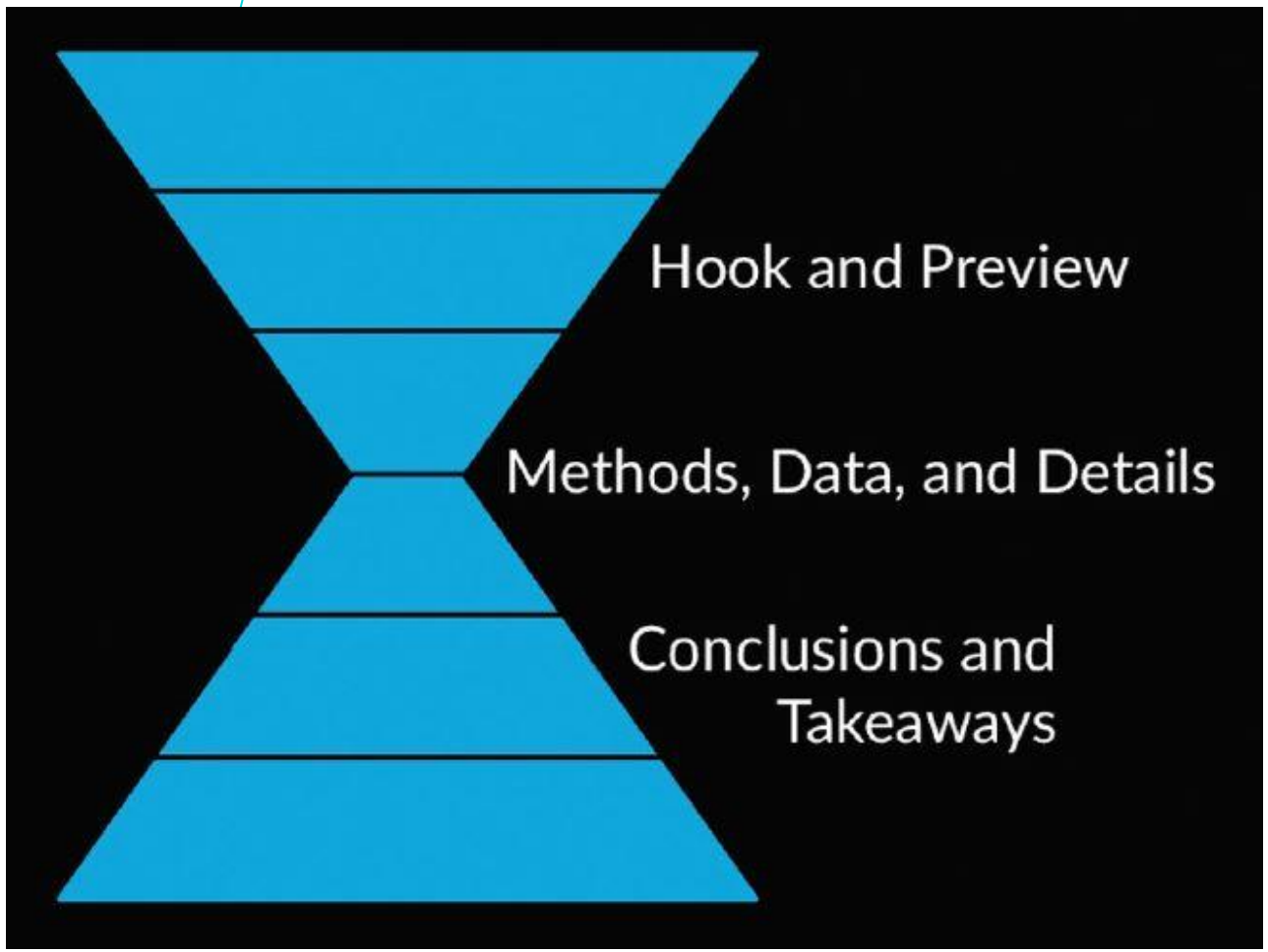
Nicholas Robinson, JD, LL.M., MBA
Bloomington, Illinois
October 10, 2024

STORYTELLING FOR IMPACT





STORYTELLING FOR IMPACT



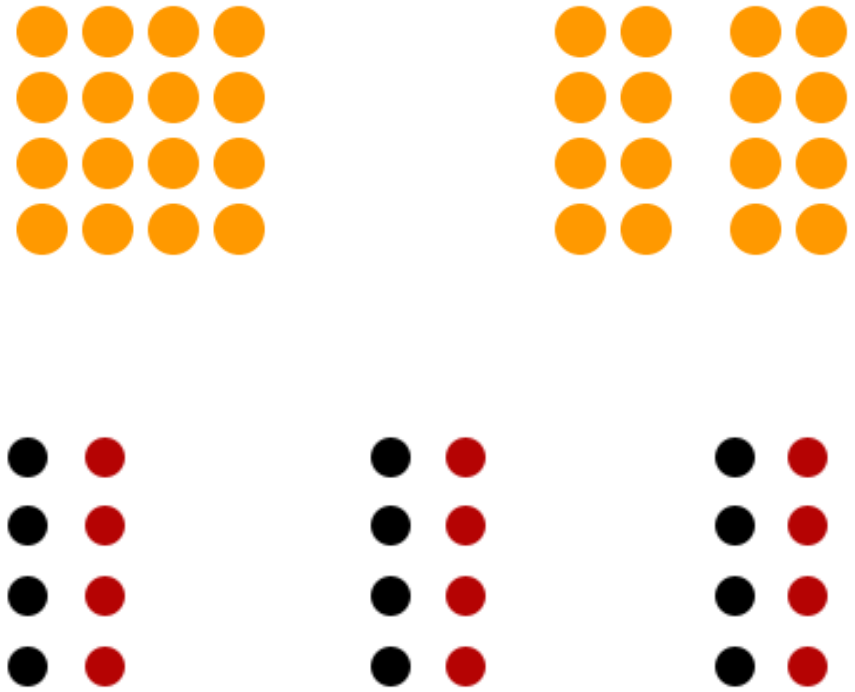
GESTALT PRINCIPLES

- Proximity
- Similarity
- Enclosure
- Closure
- Continuity
- Connection

GESTALT PRINCIPLES

- **Proximity:**

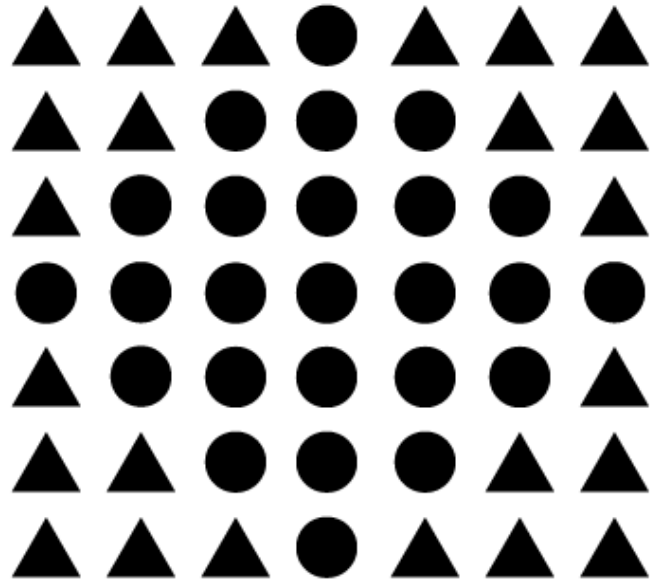
things that are close together appear to be more related than things that are spaced farther apart.



GESTALT PRINCIPLES

- **Similarity:**

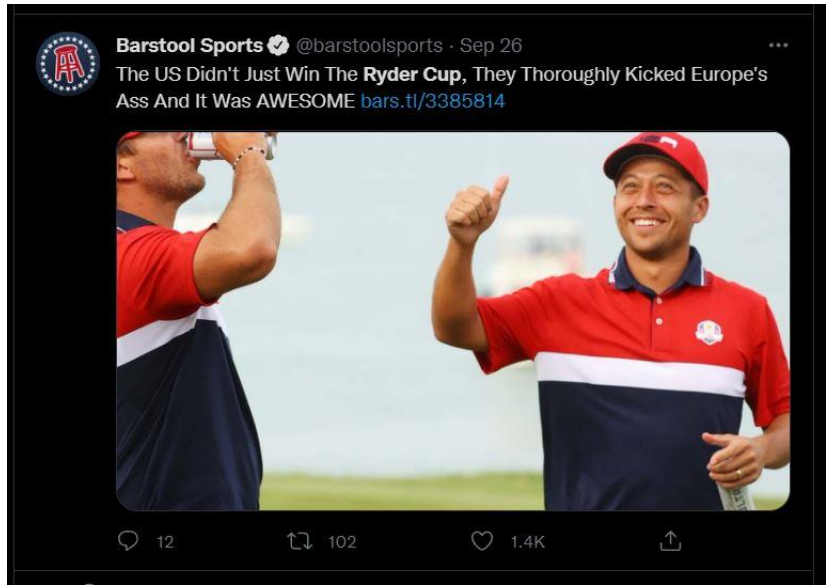
when things appear to be similar to each other, we group them together. And we also tend to think they have the same function.

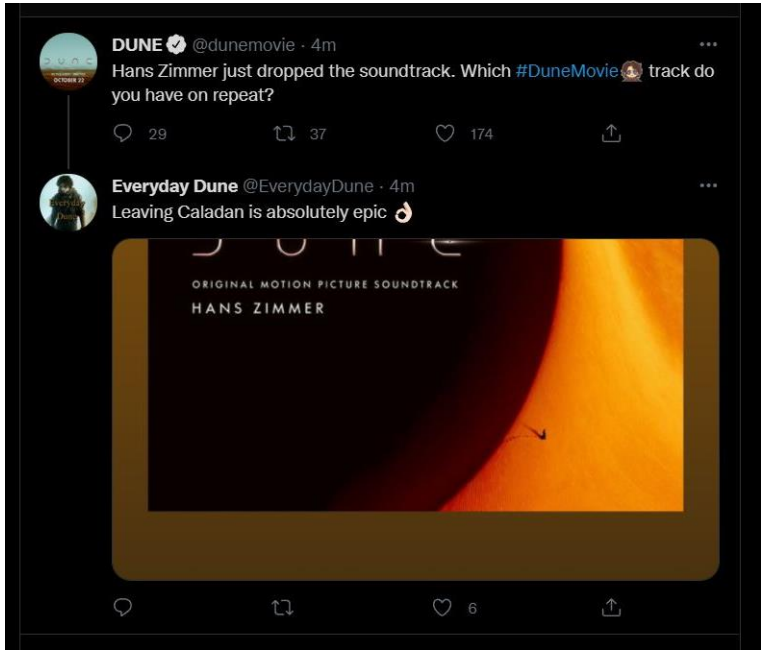


GESTALT PRINCIPLES

- **Enclosure (region):**

when objects are located within the same closed region, we perceive them as being grouped together.

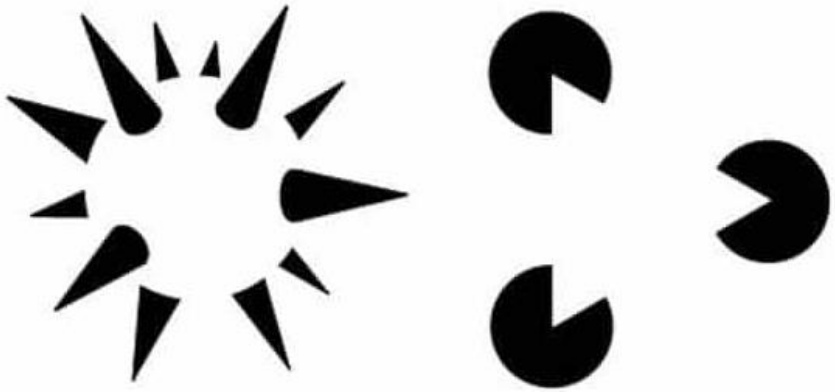




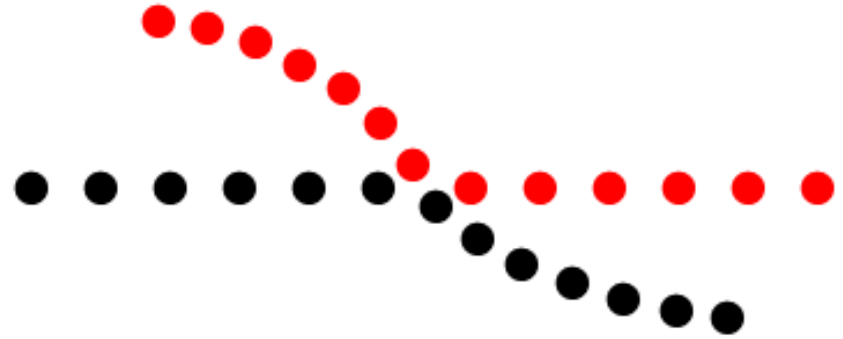
GESTALT PRINCIPLES

- **Closure:**

when we look at a complex arrangement of visual elements, we tend to look for a single, recognizable pattern.



GESTALT PRINCIPLES



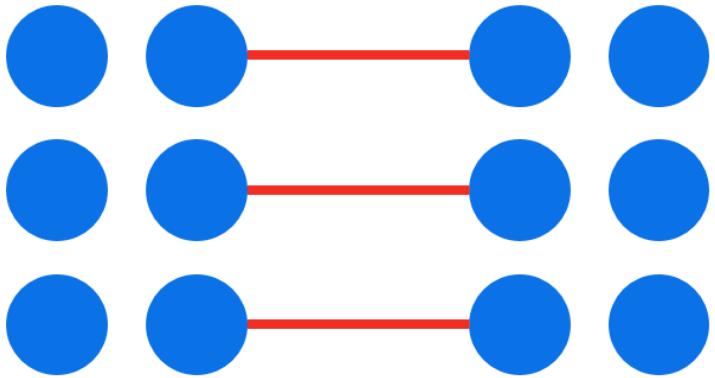
- **Continuity:**

elements that are arranged on a line or curve are perceived to be more related than elements not on the line or curve.

GESTALT PRINCIPLES

- **Connection:**

we perceive elements as connected to each other thanks to colors, lines, frames, or other shapes.



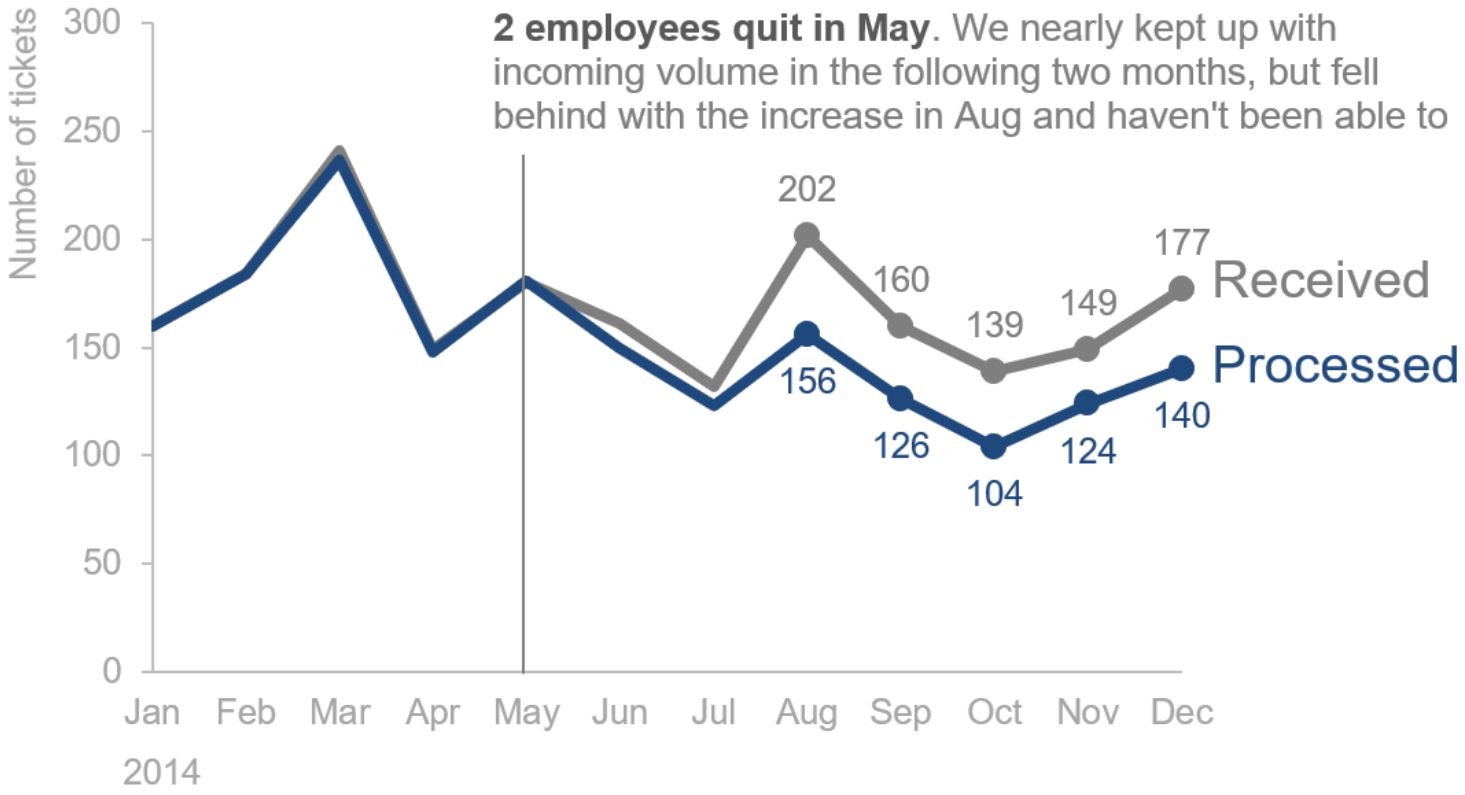
TEXT

FIG0510

Please approve the hire of 2 FTE

to backfill those who quit in the past year

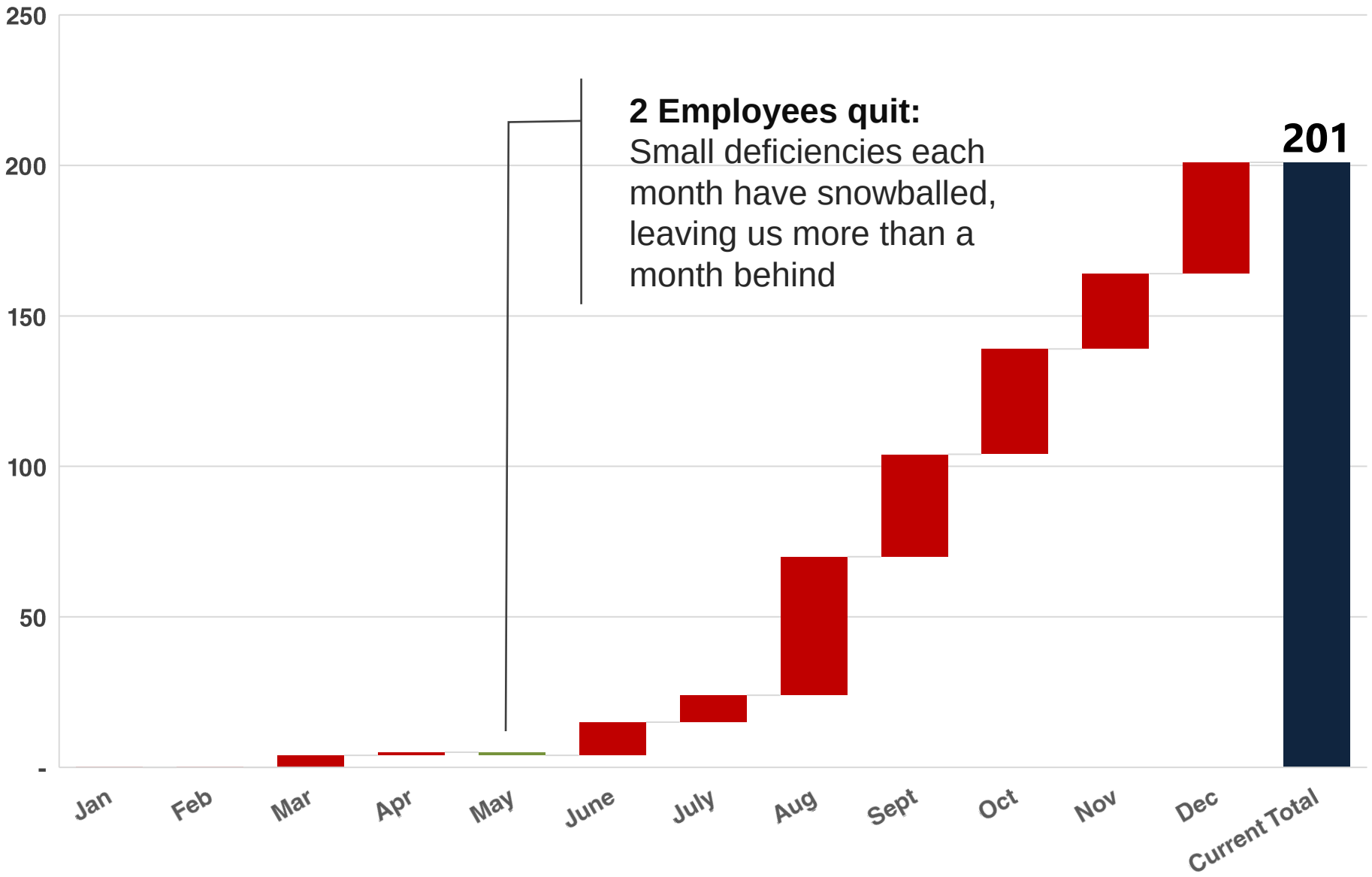
Ticket volume over time



Data source: XYZ Dashboard, as of 12/31/2014 | A detailed analysis on tickets processed per person and time to resolve issues was undertaken to inform this request and can be provided if needed.

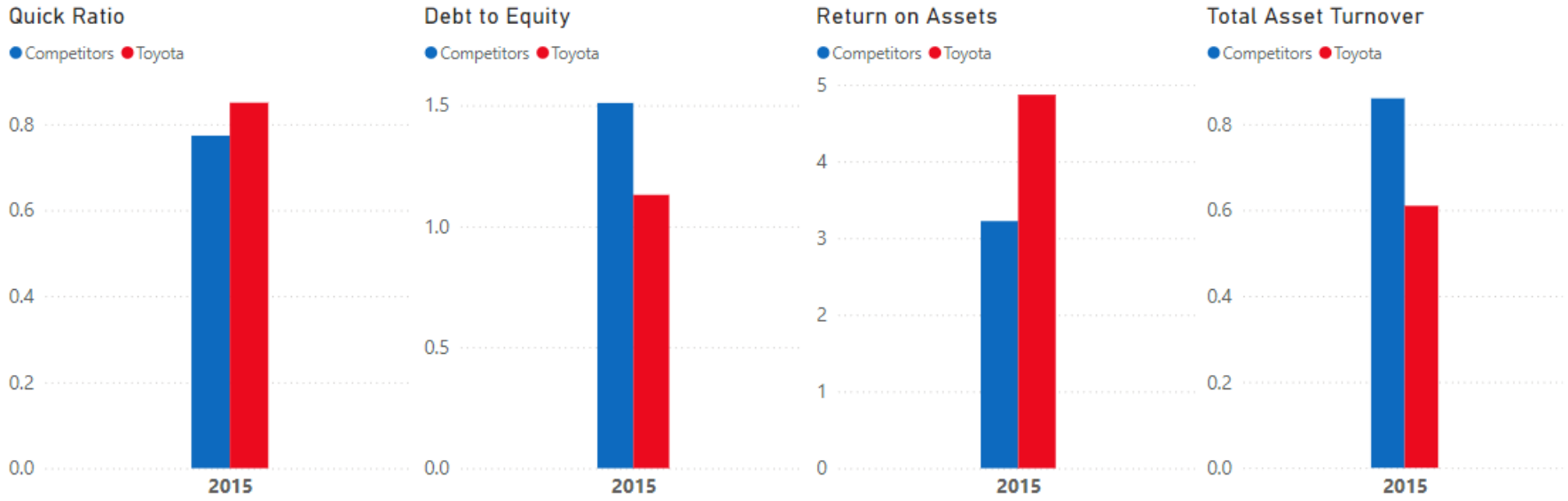
TEXT

Cummulative Processing Deficiencies From Staff Shortage



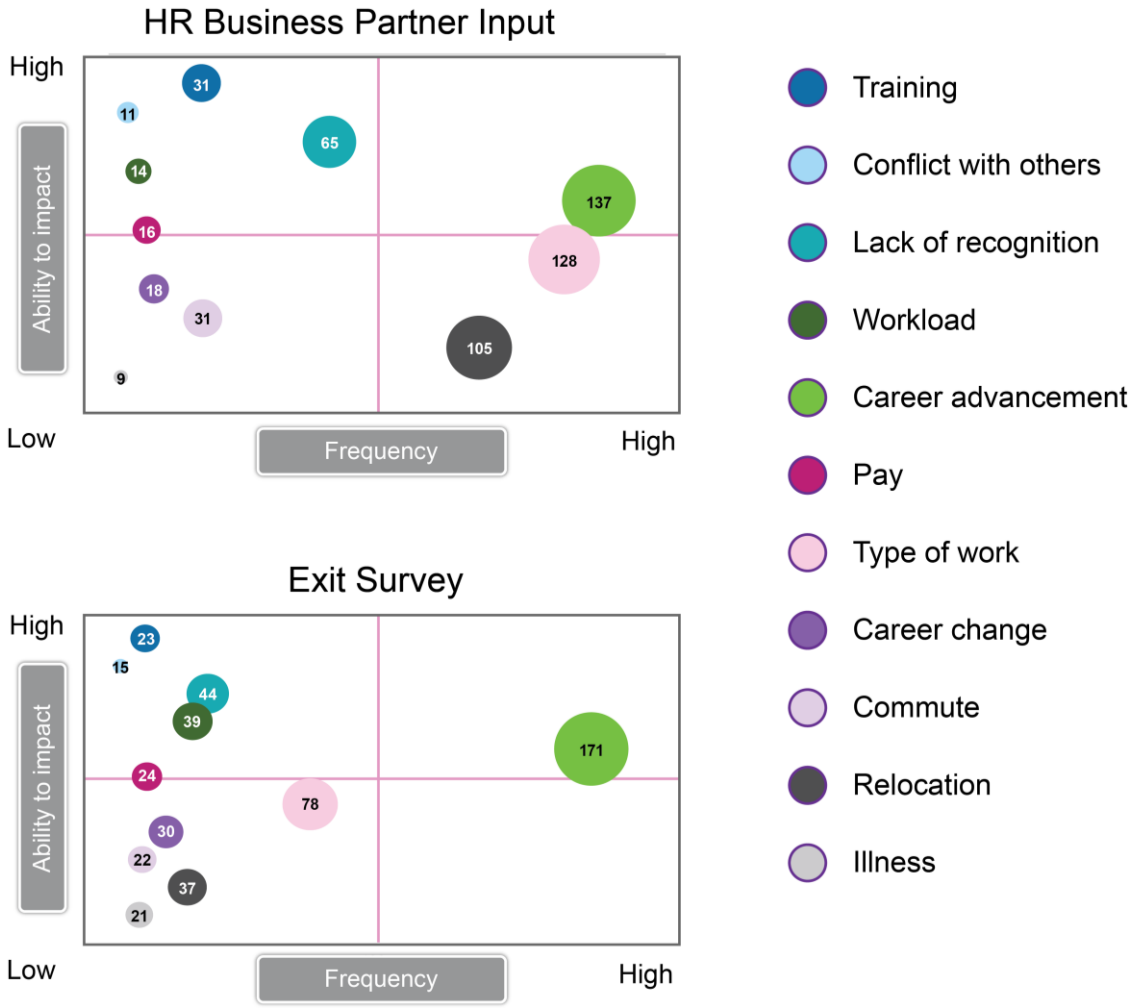
POWER BI

2015 | 2016 | 2017 | 2018 | 2019

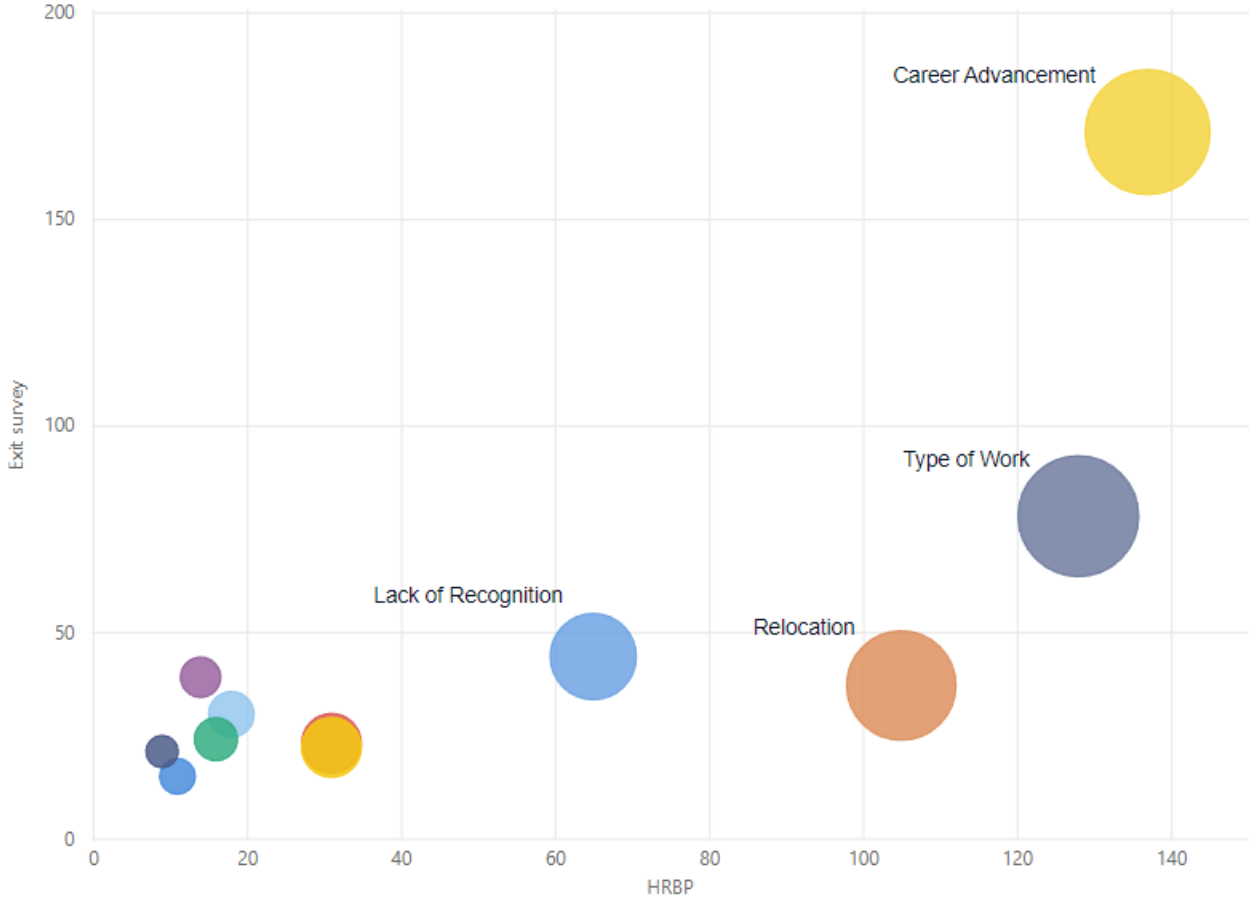


W/O POWER BI

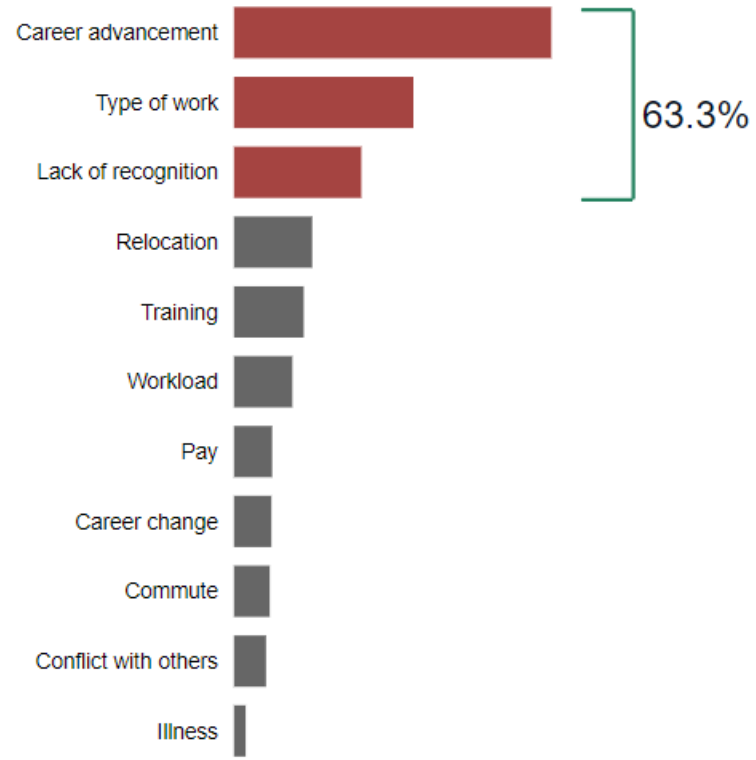
Reasons for Leaving



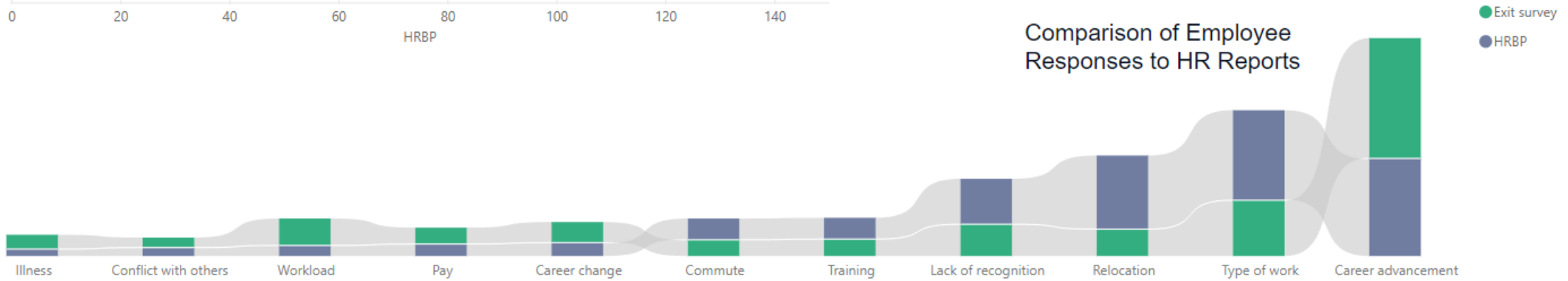
HRBP & Exit Survey Responses



Efficiency Factor Rankings and Proportions



Comparison of Employee Responses to HR Reports



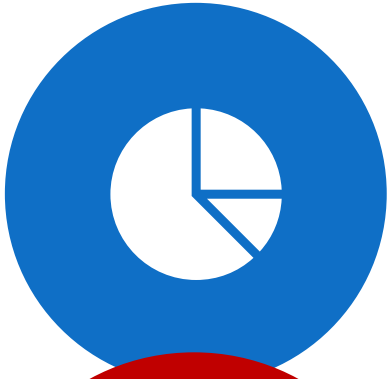
Filters

8.5 final example, Page 1

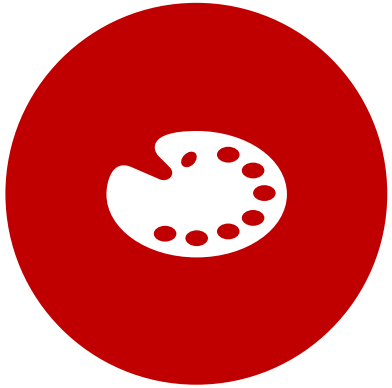
Live data

Data updated on 10/5/24, 9:51 PM

LOW HANGING FRUIT



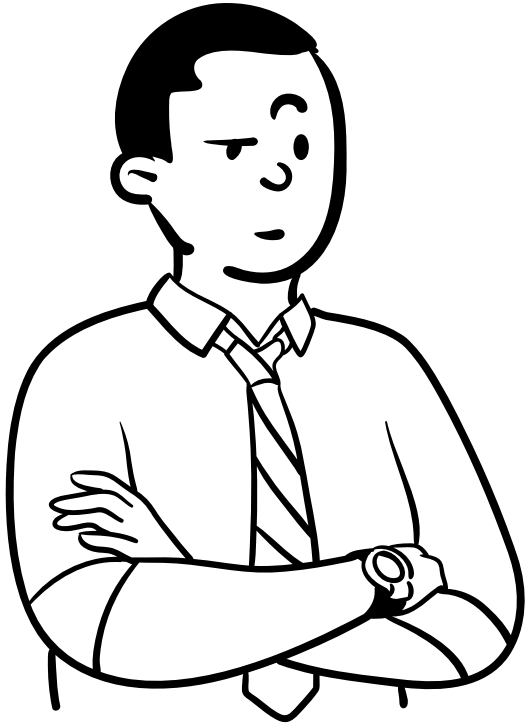
Pie Charts



Color

Words

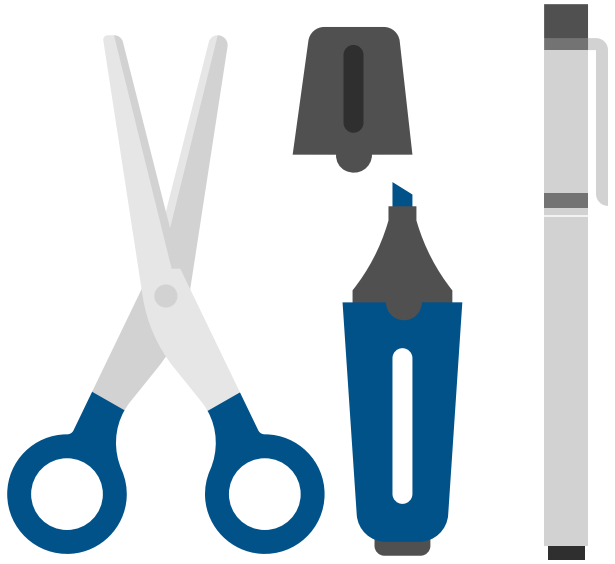
QUESTIONS?



RESOURCES

Charts: Storytelling With Data

Colors: Interactive Color Wheel
Color Theory

Google Design Guides:

- Fonts
- Accessibility
- Color