

NOVEMBER 15-17, 2022

BUDAPEST

BI FORUM

BUSINESS INTELLIGENCE | DATA VISUALIZATION | DATA ANALYTICS

ELEVATING YOUR DASHBOARD DESIGN BY COMBINING TABLEAU AND FIGMA

TIMEA TOLTSZEKI

TIMEA TOLTSZEKI | [DATAUNICORN.NL](https://dataunicorn.nl)

TIMEA TOLTSZEKI

WWW.DATAUNICORN.NL

- Born in Budapest, partially raised in Brazil
- Economist turned data vizzer
- Studies : BGF (International Relations & Economic Diplomacy), Corvinus University of Budapest (MBA), Utrecht University
- In Business intelligence & Data Analytics over 10 years (mainly in pharma and biotech)
- Leaseplan – Sr Tableau & BI developer
- Boehringer Ingelheim – Regional Head of Data Analytics & Platforms
- Data + Women and TUG chapter co-lead in NL
- Design & Art buff



Starter

Free

Forever

- ✓ 3 Figma and 3 FigJam files
- ✓ Unlimited personal files
- ✓ Unlimited collaborators
- ✓ Plugins, widgets, and templates
- ✓ Mobile app

Choose Starter

FIGMA WHO?

- <https://www.figma.com/>
- Figma is a vector graphics editor and prototyping tool which is primarily web-based, with additional offline features enabled by desktop applications for macOS and Windows.
- cloud-based design tool that is similar to Sketch in functionality and features, but with big differences that make Figma better for team collaboration.
- Free account to discover

THE VALUE OF FIGMA LAYOUT DESIGN FOR TABLEAU DASHBOARDS

“Coming out of your comfort zone is tough in the beginning, chaotic in the middle, and awesome in the end...because in the end, it shows you a whole new world !!
Make an attempt..”



Above all things, it will save you time and effort and can make planning and strategizing a lot more efficient



A great layout design assures your dashboard is readable, enjoyable and actionable.



Wireframing helps to brainstorm design solutions, evaluate the user experience, communicate with clients to translate the product's needs and solutions



Documentation of client requests, project history and keep the end goal in mind for what the product should communicate to the user



It is fun to design something out of the box!

WAYS TO LEVERAGE FIGMA IN TABLEAU DASHBOARD DESIGN

I, PROTOTYPING / WIREFRAMING

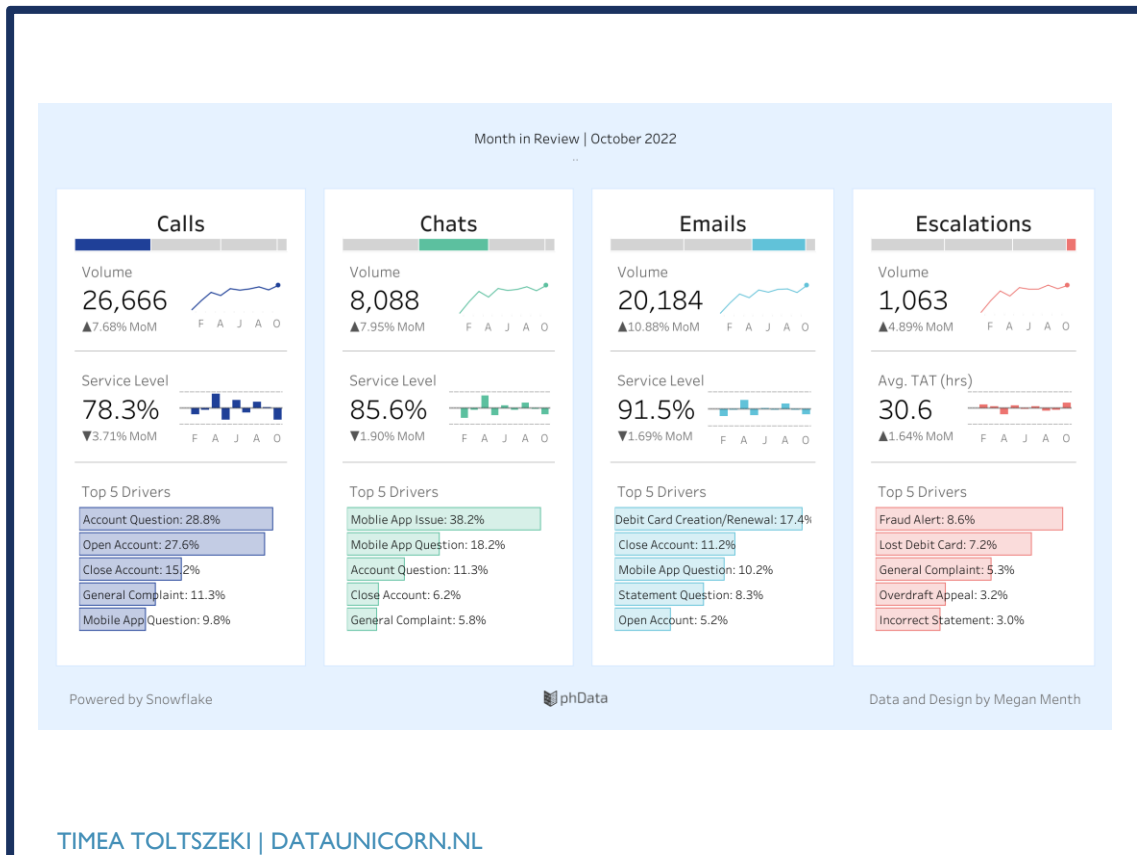
- **Dashboard layout design** involves the precise arrangement of various design elements together in a single space to communicate information.
- The successful layout will be both **visually appealing** *and* **easily readable**.
- What is our goal? > produce a satisfactory user experience
- Designers can use this knowledge to build more intuitive, human-centered products and experiences. Instead of forcing users to adapt to the design of a product or experience, we can use some key principles from psychology as a guide for designing in a way that is adapted to people.
- By understanding how different psychology principles influence human behaviour, alias our users, you can design your product more attractive, usable and elicit specific actions from the users.
- Applying these principles will help improve the usability, aesthetics and effectiveness of any designs or data products (data visualization).

LAWS OF UX – NOT ONLY FOR UX DESIGNERS

Gestalt Principles of Visual Perception

Gestalt psychology is a theory of visual perception that originated in the early 1900s.

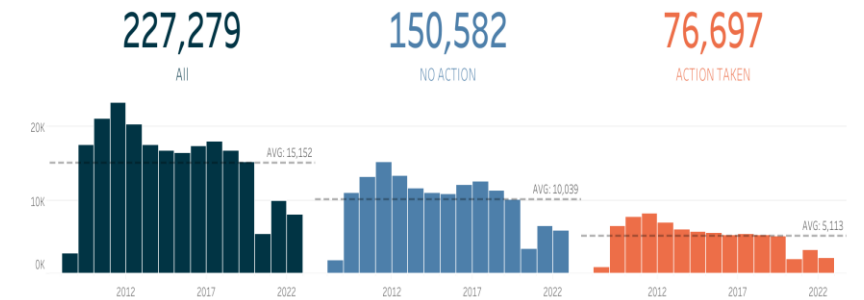
1. **Law of Symmetry** - Humans naturally find symmetry aesthetically pleasing
2. **Law of Proximity**
3. **Law of Similarity** - When placed in close proximity to each other, similar objects are often related to each other
4. **Figure and Ground**
5. **Law of Closure**
6. **Law on Continuity – Data storytelling** This psychological phenomenon occurs when the eye is compelled to move through one object and continue to another object.



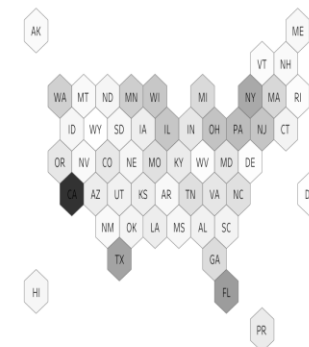
LAWS OF UX – NOT ONLY FOR UX DESIGNERS

- 1. Hick's Law** – dashboard decluttering
Essentially, too many choices lead to choice or analysis paralysis, i.e., information overload preventing users from taking any action at all.
- 2. Miller's Law** – cognitive overload
The theory, offered by George Miller back in the '50s, states that the average person can only keep 7 +/- 2 items in their working memory.
- 3. Fitt's law** - Clickable anywhere so it's easy to carry out the action and Within a users' reach so they have to do minimal work
- 4. Von Restorff Effect-** KPI TILES
People are more likely to remember an object that's even slightly different than other similar objects.
- 5. Doherty Threshold** – Human-computer interaction is ideal when the interaction pace is less than 4 seconds
- 6. Occam's Razor** – Apple *“Good design is as little design as possible.”*
- 7. Pareto Principle** – MVP (minimum viable product)

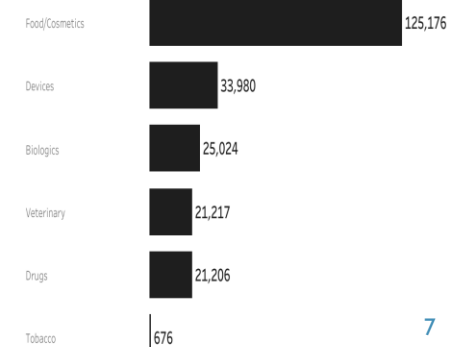
U.S. FOOD & DRUG ADMINISTRATION INSPECTIONS

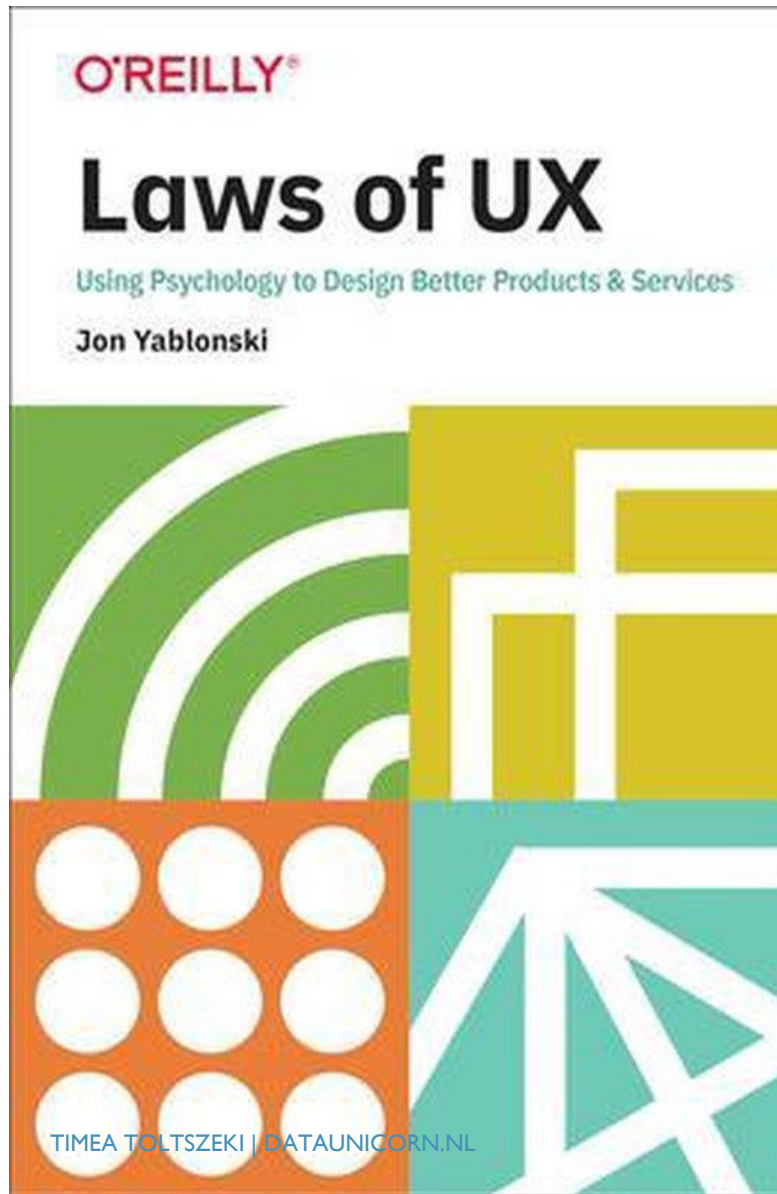


INSPECTIONS BY STATE
CLICK TO FILTER



INSPECTIONS BY PRODUCT TYPE
CLICK TO FILTER & DRILL DOWN

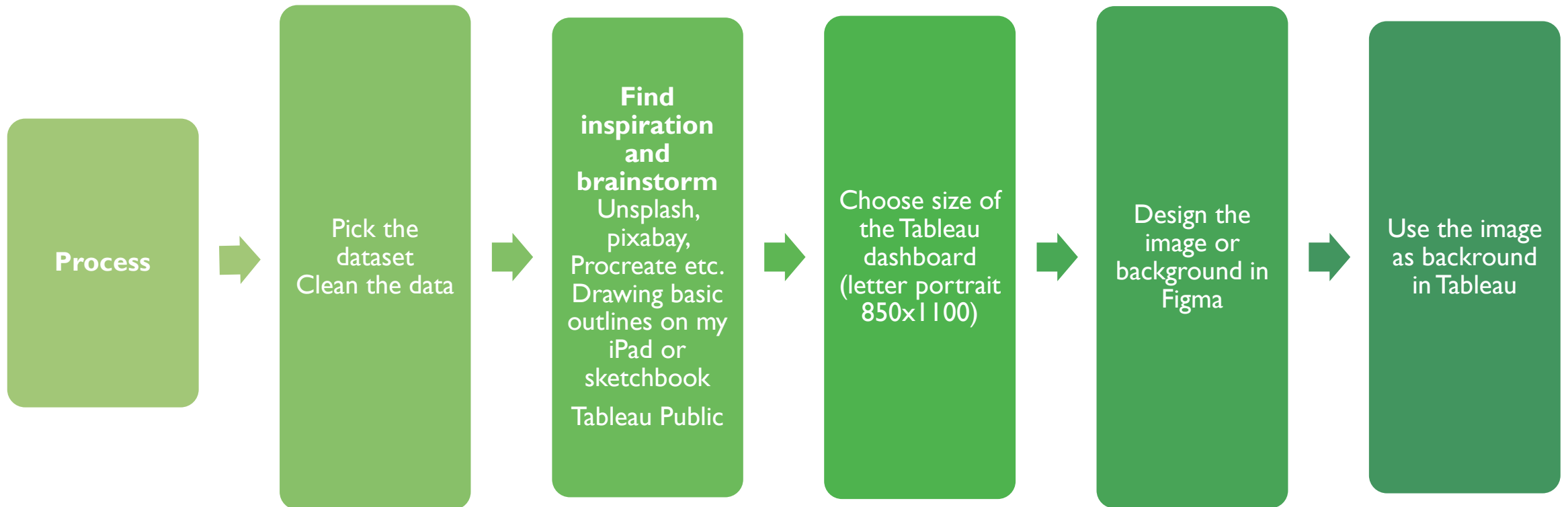




JON YABLONSKI : LAWS OF UX

WAYS TO LEVERAGE FIGMA IN TABLEAU DASHBOARD DESIGN

2, BACKGROUND IMAGE CREATION



CHEAT SHEET

ANDY KRIEBEL'S VISUAL VOCABULARY

- <https://public.tableau.com/app/profile/andy.kriebel/viz/VisualVocabulary/VisualVocabulary>

Visual Vocabulary

There are so many ways to visualise data - how do we know which one to pick? Click on a category below to decide which data relationship is most important in your story, then look at the different types of charts within the category to form some initial ideas about what might work best. This list is not meant to be exhaustive, nor a wizard, but is a useful starting point for making informative and meaningful data visualisations.

Click any section below to view the charts



Deviation

Emphasise variations (+/-) from a fixed reference point. Typically the reference point is zero but it can also be a target or a long-term average. Can also be used to show sentiment (positive/neutral/negative).

Correlation

Show the relationship between two or more variables. Be mindful that, unless you tell them otherwise, many readers will assume the relationships you show them to be causal (i.e., one causes the other).

Ranking

Use where an item's position in an ordered list is more important than its absolute or relative value. Don't be afraid to highlight the points of interest.

Distribution

Show values in a dataset and how often they occur. The shape (or 'skew') of a distribution can be a memorable way of highlighting the lack of uniformity or equality in the data.

Change over Time

Give emphasis to changing trends. These can be short (intra-day) movements or extended series traversing decades or centuries: Choosing the correct time period is important to provide suitable context for the reader.

Part-to-Whole

Show how a single entity can be broken down into its component elements. If the reader's interest is solely in the size of the components, consider a magnitude-type chart instead.

Magnitude

Show size comparisons. These can be relative (just being able to see larger/bigger) or absolute (need to see fine differences). Usually these show a 'counted' number (for example, barrels, dollars or people) rather than a calculated rate or per cent.

Spatial

Used only when precise locations or geographical patterns in data are more important to the reader than anything else.

Flow

Show the reader volumes or intensity of movement between two or more states or conditions. These might be logical sequences or geographical locations.

CREATED BY

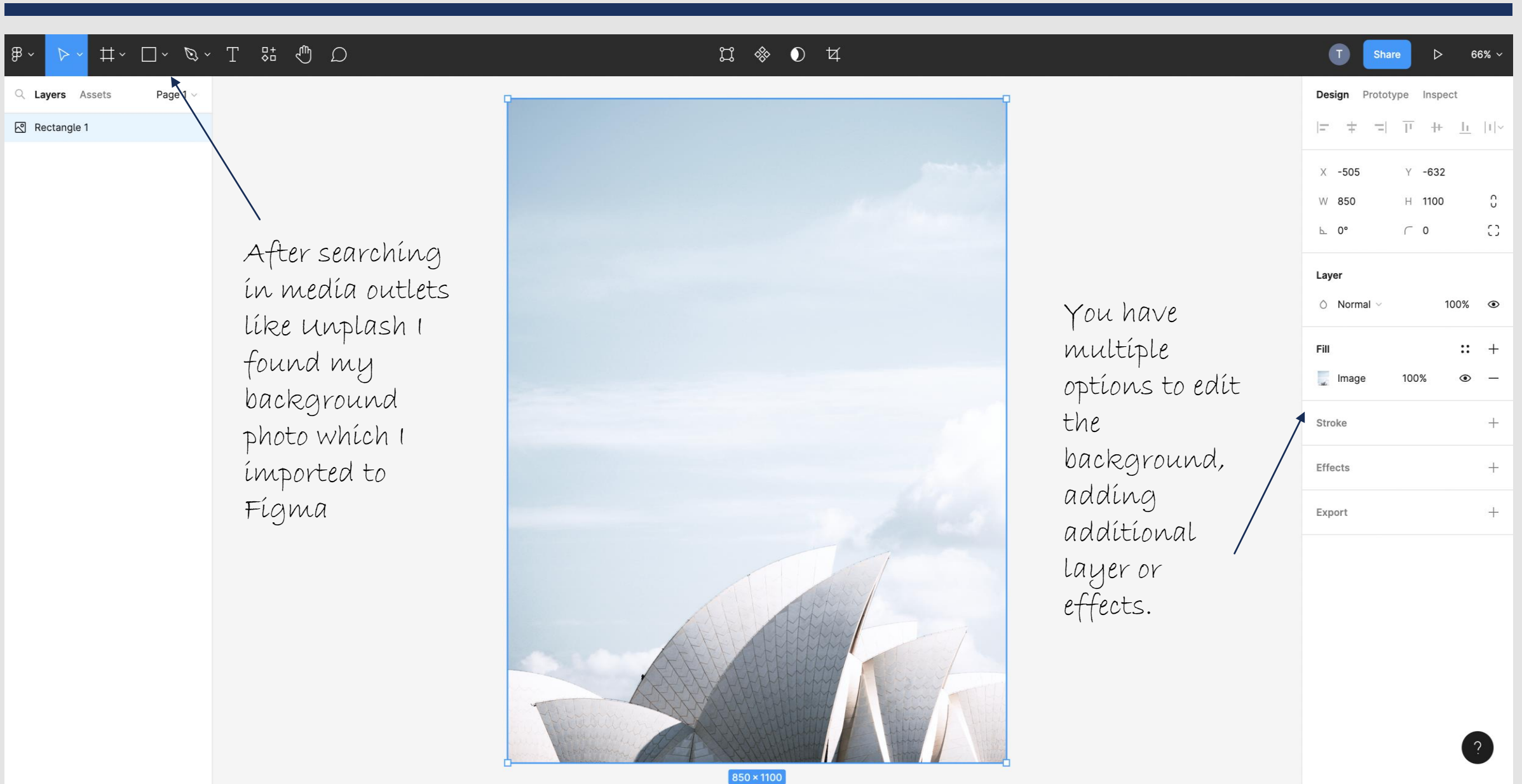
(c) Andy Kriebel | @VizWizBI | 2018 | All right reserved | Permission to republish with proper credit

INSPIRED BY

FT Graphics: Alan Smith; Chris Campbell; Ian Bott; Liz Faunce; Graham Parrish; Billy Ehrenberg; Paul McCallum; Martin Stabe
Visual Vocabulary Poster: tt.com/vocabulary

CREDITS & TUTORIALS

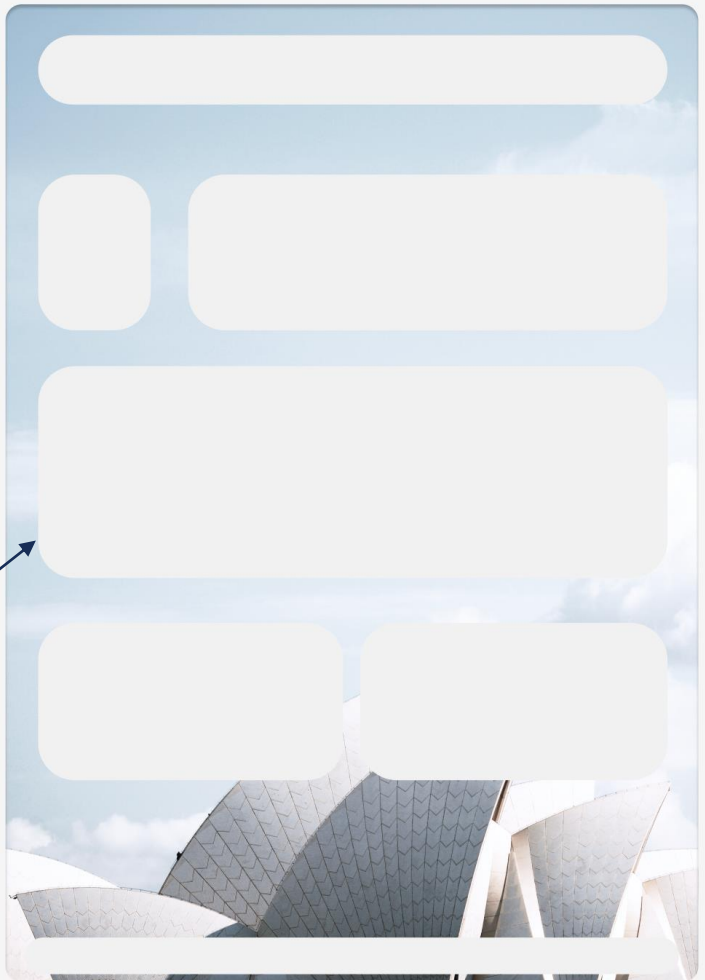
Diverging Stacked Bar	Steve Wexler	Data Revelations	Arc Chart	Ken Fl.	KenFlaerlage.com	Chord Diagram	Noah.	DataBlick
Sunburst Chart	Leonid Golub	Super Data Science	Radar Chart	Adam.	Dueling Data	Sankey Diagram	Leoni.	Super Data Science
Surplus/Deficit Filled Line	Jeffrey Shaffer	Data + Science	Scaled Cartogram	Ken Fl.	KenFlaerlage.com	.		
Violin Plot	Ben Moss	YouTube	Venn Diagram	Leoni.	Super Data Science	..		



After searching in media outlets like Unplash I found my background photo which I imported to Figma

You have multiple options to edit the background, adding additional layer or effects.

- Layers Assets Page 1
- Rectangle 8
- Rectangle 7
- Rectangle 6
- Rectangle 5
- Rectangle 4
- Rectangle 3
- Rectangle 2
- Rectangle 1



I have created the placeholders for the charts and texts by placing curved rectangles

Easy to change the color and later on to copy the color code if necessary

Design Prototype Inspect

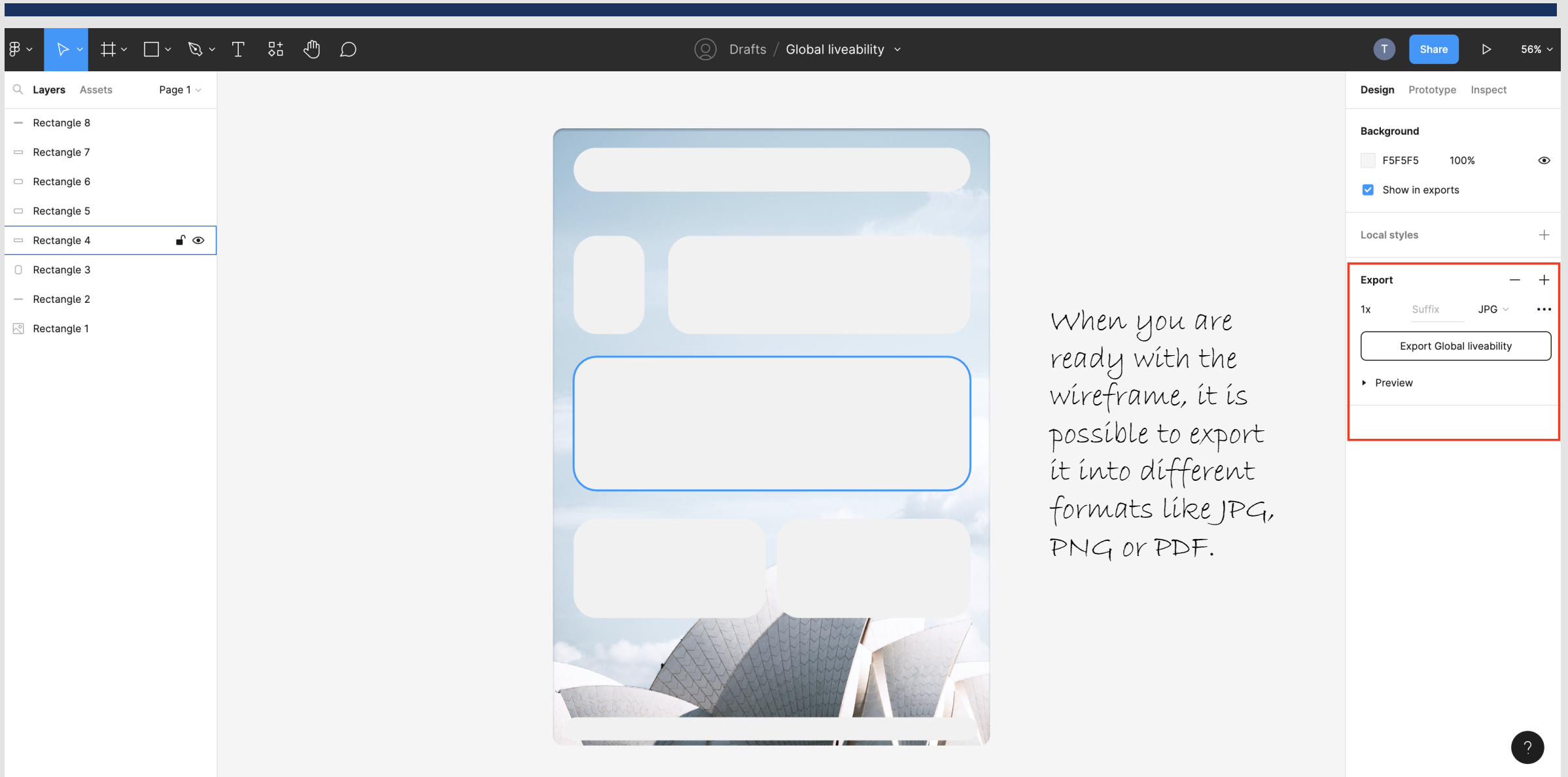
Background

Color: #F5F5F5 | Opacity: 100% | Visibility:

Local styles +

Export +





When you are ready with the wireframe, it is possible to export it into different formats like JPG, PNG or PDF.

The screenshot shows a dashboard editor interface. At the top, there is a toolbar with various icons for navigation and editing. On the left side, there are several panels: 'Dashboard' with 'Default' and 'Phone' options and a 'Device Preview' button; 'Size' with a dropdown menu set to 'Custom size (850 x 1200)'; 'Sheets' with a list of items: 'population vs rating', 'heatmap', 'Healthcare', 'Education', and 'treemap'; and 'Objects' with a grid of icons for 'Horizontal', 'Vertical', 'Text', 'Image', 'Web Page', 'Data Story', 'Blank', 'Navigation', 'Download', 'Extension', and 'Ask Data'. Below the 'Objects' panel are 'Tiled' and 'Floating' buttons, and a 'Show dashboard title' checkbox. A red box highlights the 'Size' panel. A modal dialog titled 'Edit Image Object' is open on the right, containing 'Insert Image File' and 'Link to Image' buttons, a 'Choose an image file...' label with a 'Choose' button, 'Options' for 'Fit Image' and 'Center Image', a 'URL Opened When Image Is Clicked' text input, and an 'Alt Text' text input. At the bottom of the dialog are 'Apply' and 'OK' buttons. A red arrow points from the 'Image' icon in the 'Objects' panel to the 'Edit Image Object' dialog. Another red arrow points from the 'Image' icon to the 'Image' icon in the 'Objects' panel. The text 'Choose an image using the' is partially visible next to the dialog.

Dashboard Layout <

- Default
 - Phone
- Device Preview

Size
Custom size (850 x 1200) ▾

- Sheets
- population vs rating
 - heatmap
 - Healthcare
 - Education
 - treemap

- Objects
- Horizontal
 - Vertical
 - Text
 - Image
 - Web Page
 - Data Story
 - Blank
 - Navigation
 - Download
 - Extension
 - Ask Data

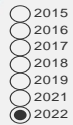
Tiled Floating

Show dashboard title



Global Liveability Index | Best Cities To Live In Around The World

Overall, 2022 has seen a sharp rise in the Liveability Index following two years dominated by Covid-19 restrictions that saw a drop in the quality of living globally.



Melbourne
Australia
4.917.750

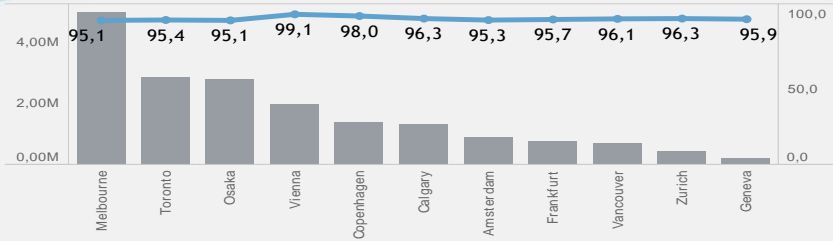
Osaka
Japan
2.753.862

Toronto
Canada
2.794.356

Calgary
Canada
1.306.784

Vienna
Austria
1.951.354

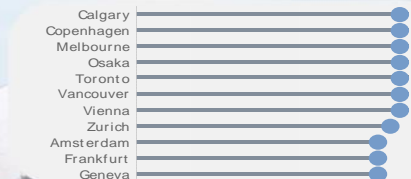
Highest scoring cities have less than 2M inhabitants.



Healthcare Ratings



Education Ratings



Data source: Forbes and Wikipedia | Timea Toltszeki | dataunicorn.nl

Check list

- Decluttering the worksheets
- Making sure colors are harmonized
- If necessary, change the worksheet color to match with the background
- Checking the font that I used the same everywhere
- Data storytelling > adding context and understand what I would like to communicate to the user



THANK YOU!