



Design Principles for Effective Dashboard Design

★ Favorites	<input type="checkbox"/>
❑ Notebook	<input checked="" type="checkbox"/> Data Analysis
❖ Tags	Dashboard Design
🕒 Last edited time	@September 1, 2024 10:12 PM
✉ Archive	<input type="checkbox"/>
📎 Certificate	UC-bd353260-4210-4357-9a70-bc9d3d6946e1.pdf
🕒 Created time	@September 1, 2024 8:18 PM
≡ Instructor	Annabel Lyle
⚙ Status	Done

Template tip: Use this template to manage your notes.

Pomodoro Timer

<https://flocus.com/minimalist-pomodoro-timer/>

[Lofi](#)

[Jazz](#)

[Classical](#)

Objectives

Add your objectives here to track your next action when you return to the notes.

Objective

Specific Objective 1

Specific Objective 2

Specific Objective 3

Learning Materials

Add the learning material referenced in your notes

▼ Learning Materials

▼ Material 1

▼ Material 2

▼ Material 3

Use this section to take notes on learning materials. Choose a note-taking method to start taking notes.

Work Desk

Topic:

Date: @May 19, 2024

Notes

Design Principles for Effective Dashboard Design - Google Search

G https://www.google.com/search?q=Design+Principles+for+Effective+Dashboard+Design&rlz=1C1VDKB_en-GBIN1109IN1109&qq=Design+Principles+for+Effective+Dashboard+Design&gs_lcp=EgZjaHJvbWUyBggAEEUYOTIGCAEQRRg8MgYIAhBFGDzSAQgxNTUzajBqN6gCALACAA&sourceid=chrome&ie=UTF-8

▼ Dashboards as a communication Tools

1. Our role as Analyst

- a. interpret data - Data Interpretation
- b. communication
- c. Change behaviour within the business
- d. driven continual improvement

2. Communication tools

- a. slides
 - i. static
 - ii. easy to create
- b. reports
 - i. mostly static
 - ii. can be re-run (jupyter notebook)

3. Communication methods

- a. Email
 - i. wide reach
 - ii. less impact
- b. Face to face
 - i. large impact

- ii. opportunity for discussion

4. The Ultimate tool - Dashboard

- a. Google Data Studio
 - i. automatically update
 - ii. self service
 - iii. interactive
- b. Tableau
 - i. scale our work
 - ii. keep us sane

▼ Why you need to design for your users

- 1. New data source
- 2. definition
- 3. metrics that matters
- 4. integrate into BI tool
- 5. Create dashboard
- 6. share dashboard
- 7. engagement & improvement

▼ The Psychology of information retrieval

- 1. Pre-attentive processing
- 2. Conscious processing

▼ Design Principles

1. The 4 A's

▼ Affordance - Make it clear how it should be used

1. Define your Audience & Objective

- a. who are you building it for ?
- b. what are they trying to achieve or understand ?
- c. what questions will you answer in the dashboard ?

A AUDIENCE : SALES MANAGEMENT

OBJECTIVE : Understand how we are performing against our monthly targets and what the cause may be for any key changes

CONTENT :

1. have we hit target over the last 6 months?
2. how likely we are to hit target this month?
3. how different products are performing?
4. have there been any inventory issues?
5. how has each term performed vs target?

2. Summarise the objective and Audience in your title

- a. explaining this to your users makes it clear what your dashboard should be used for
 - i. Weekly sales dashboard - with description

3. Tell a story throughout your layout



a. Google Framework

- a. See
- b. Think
- c. Do

▼ Accessibility - used by people with a range of abilities & knowledge

1. Avoid Acronyms

- a. No Acronyms!
- b. use Full words and / or sentences

ultimate cheat sheet to deciphering the 123 most common business acronymns - Google Search
G https://www.google.com/search?q=ultimate+cheat+sheet+to+deciphering+the+123+most+common+business+acronymns&rlz=1C1VDKB_en-GBIN1109IN1109&oq=ultimate+cheat+sheet+to+deciphering+the+123+most+common+business+acronymns&gs_lcrp=EgZjaHJvbWUyBggAEUYOTIGCAEQIRgK0gEJMjc1OThqMWo3qAIAsAIA&sourceid=chrome&ie=UTF-8

2. Add Notes where needed

- a. in the footer
- b. above or below the chart

A They help explain detail that may be very important :

1. how the metric is defined
2. what the data source is
3. how the data was collected
4. question that a user was asked
5. who created the dashboard

3. Define your title of the charts

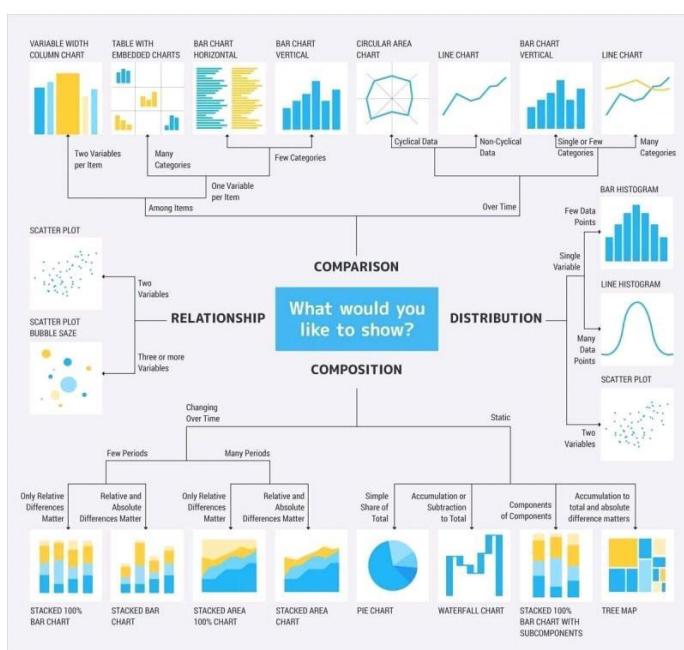
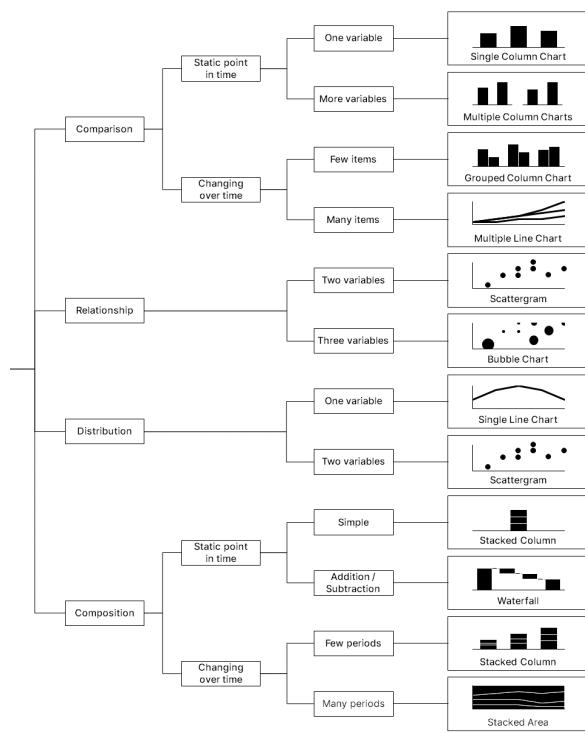
- a. total number of weekly registrations Vs "HOW MANY PEOPLE REGISTERED LAST WEEK ?"

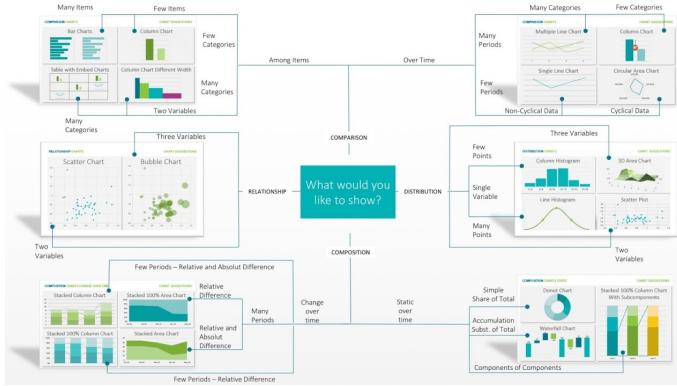
▼ Aesthetics - beautiful designs easier to use & more readily accepted

1. Choose your charts with intention
 - a. what do you need to communicate
 - b. what format is your data in?
 - i. Key performance indicators (KPI's)
 - 1. total's and % differences
 - 2. both
 - ii. Bar charts
 - 1. comparing categorical values
 - 2. data over time
 - iii. Attributes
 - 1. Rotation
 - 2. order of categories
 - 3. consider readability
 - 4. orientation
 - 5. orders of data
 - iv. Stacked charts

1. comparing categorical values and their composition
 2. totals or % composition
- v. Line charts
1. plotting data over time
 2. analysing trends
 3. comparing 2 data points over time
- vi. Area Chart
1. plotting data over time and its composition
 2. analysing trends
- vii. Area Chart 100 % stacked
1. plotting data over time and its composition
 2. analysing trends
- viii. Tables
1. lots of details
 2. careful not to overload users with information
 3. limit number of rows
- ix. Pie chart
1. segment categorical data
 2. hard for our brains to understand comparative sizes of slices
 3. you can always use a bar chart instead
- x. scatter plot
1. compare numerical values against each other
 2. explore how they are correlated ie. how one changes with respect to other
- xi. Bubble charts
1. compare numerical values against each other
 2. compare a third variable as the size of the points
- xii. Maps
1. plotting data geographically
 2. make comparisons by country / city / state

Slide Science Charting Decision Tree





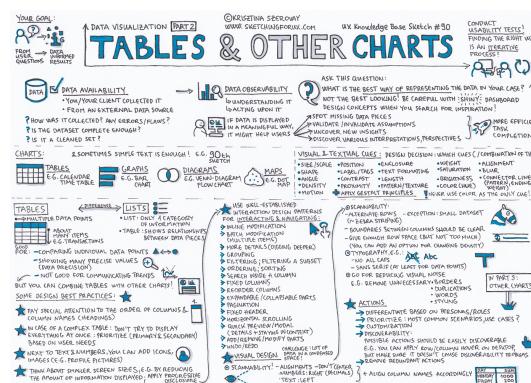
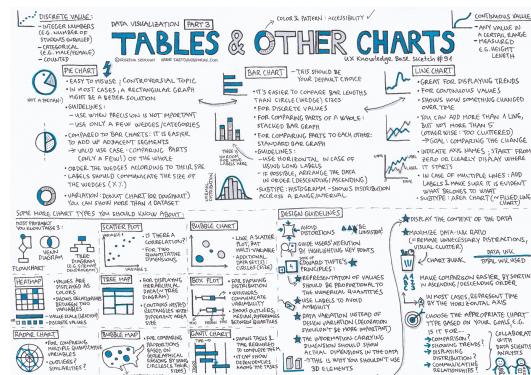
About the Data to Viz Project

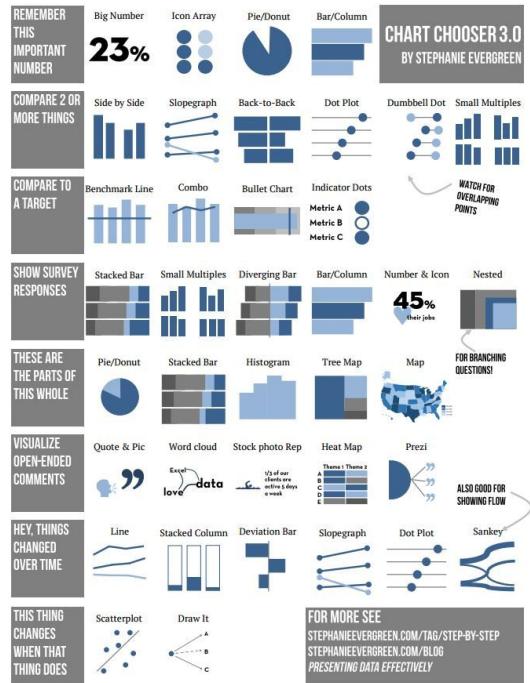
Presentation

Tools

History

[Viz](https://www.data-to-viz.com/about.html) <https://www.data-to-viz.com/about.html>





2. Have a colour palette

- keep colours professional
- expand brand colour schemes

Colors - The super fast color palettes generator!
Generate or browse beautiful color combinations for your designs.

[C https://coolors.co/](https://coolors.co/)



3. Leave White Space

- Don't add too much
- space can be helpful
- keep it simple

▼ Acceptance - must be accepted by the end user

1. The best way to introduce dashboard in person

- show old & new side by side
- walk through the changes
- check understanding
- ask for feedback!

2. Review over time

- set up a check in date
- review dashboard suite every 6 months
- monitor usage of reports (e.g. weekly active users)

3. Content Management

- a. email scheduling
- b. bookmarks
- c. table of content

SUMMARY - KEY TIPS

Affordance	make it clear how it should be used	Define purpose & audience. update the tile. Tell a story throughout the layout
Accessibility	used by people with a range of abilities & knowledge	Avoid acronyms. Questions as titles. Make use of notes.
Aesthetics	beautiful designs easier to use & more readily accepted	Choosing your charts. Colours & branding. Whitespace.
Acceptance	must be accepted by the end user	Introduction of the dashboard. Review & feedback over time. Content Management.

[universal-principles-of-design.pdf](#)

[storytelling-with-data-cole-nussbaumer-knaflc.pdf](#)