Lecture 8

DD 324: Data Visualisation

Dashboards

24 March 2025 · Gyan Lakhwani · gyanlakhwani@gmail.com · Department of Design, DTU

What's a dashboard?

Dashboard

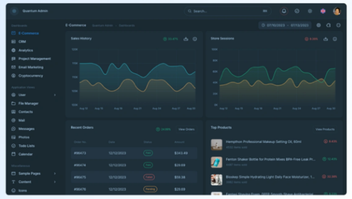
A central location for operators to monitor major functions at a glance via an instrument panel.

Quantum Admin

Multi-purpose Admin Template

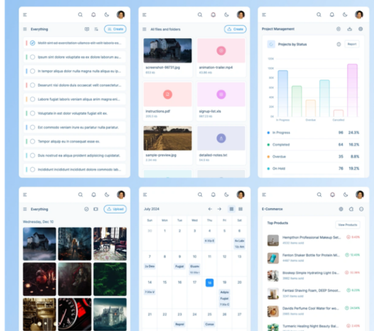
Dark Mode

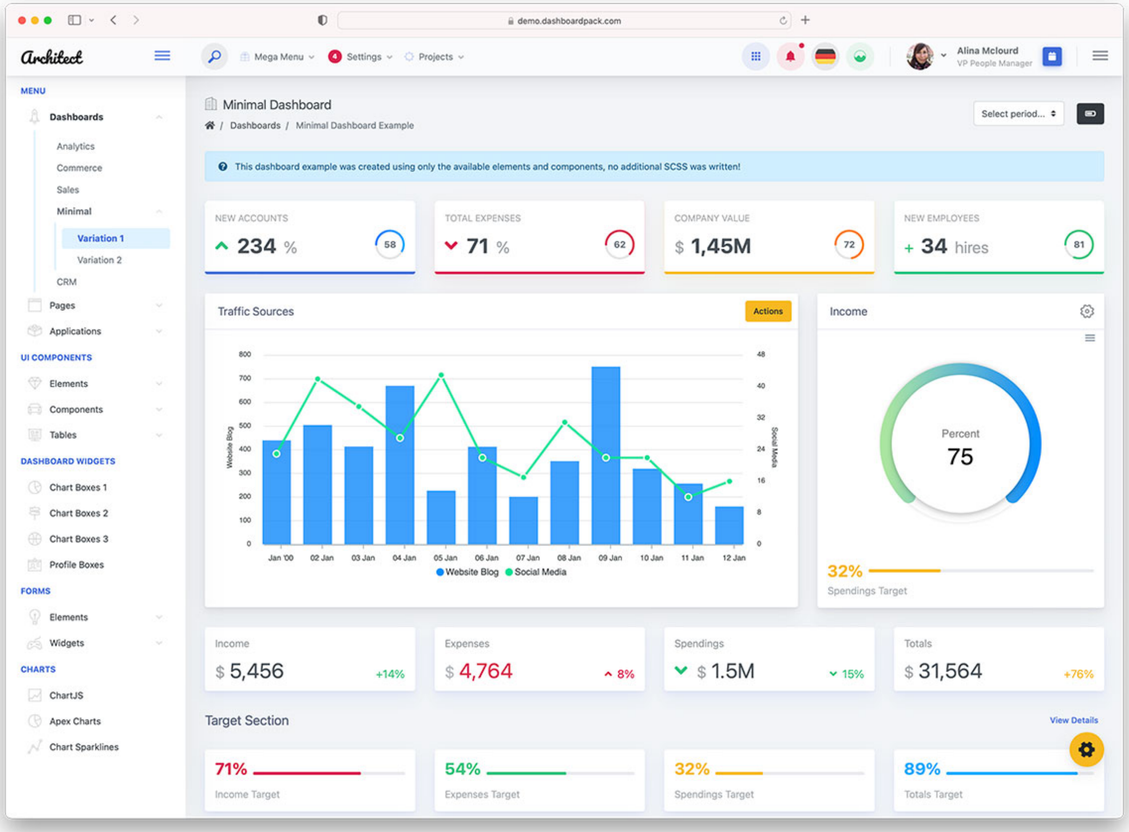
A meticulously refined dark mode for a seamless experience.

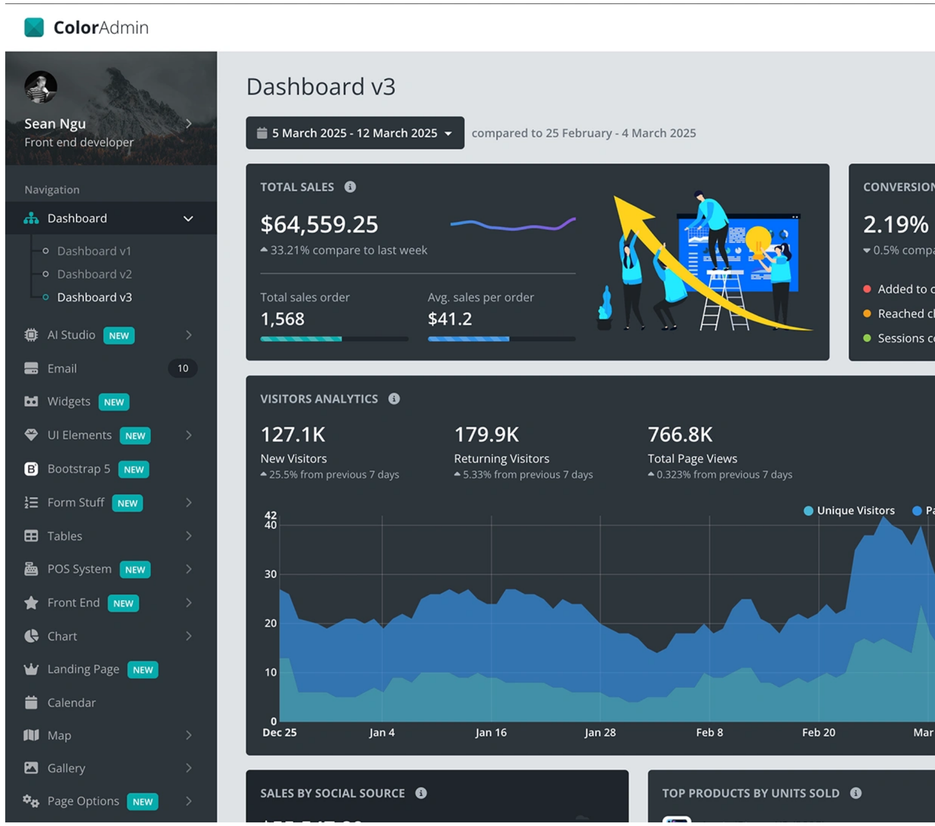


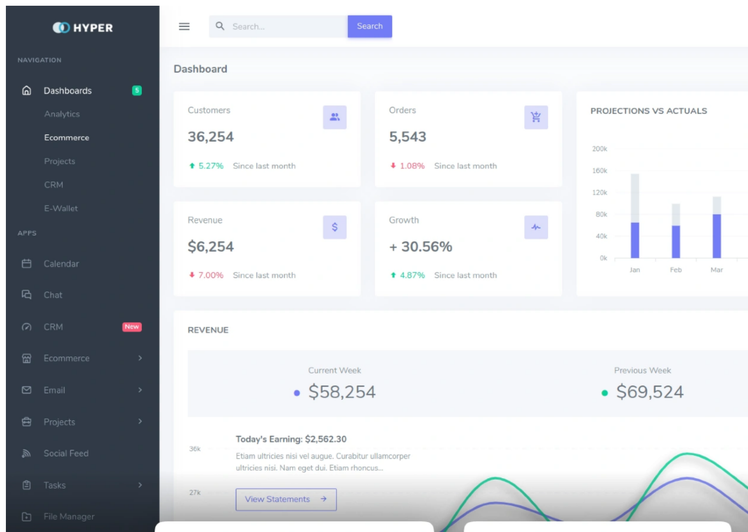
App-like Responsiveness

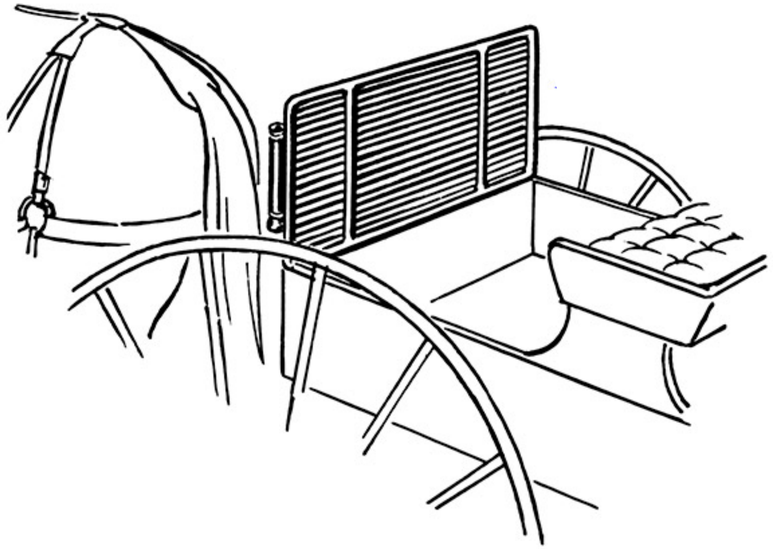
Unmatched responsiveness that adapts to all devices

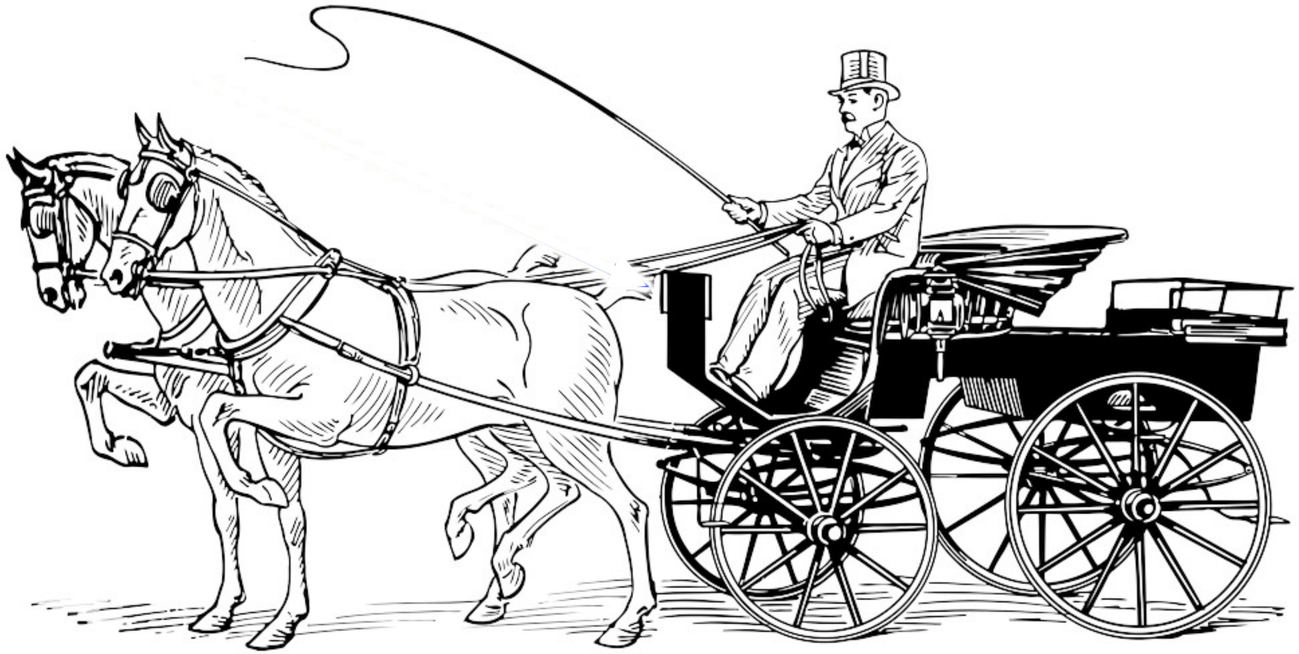




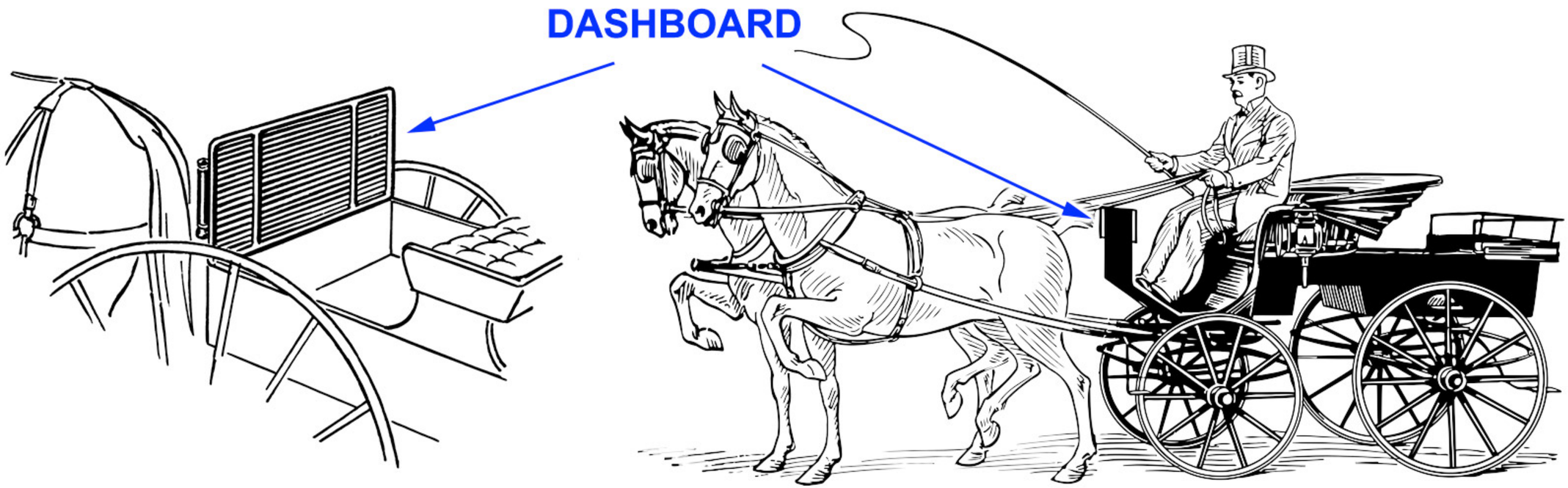








SOURCE: ded.company



SOURCE: ded.company

SOURCE: ded.company

140
H
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3
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x 1000
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120
100
140
80
160
60
180
km/h
40
200
20
220
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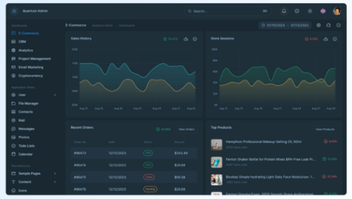
80 km/h
SERVICE INSPECTION

Quantum Admin

Multi-purpose Admin Template

Dark Mode

A meticulously refined dark mode for a seamless experience.



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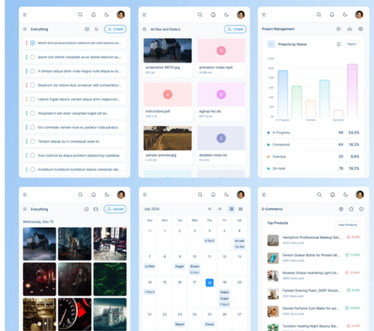
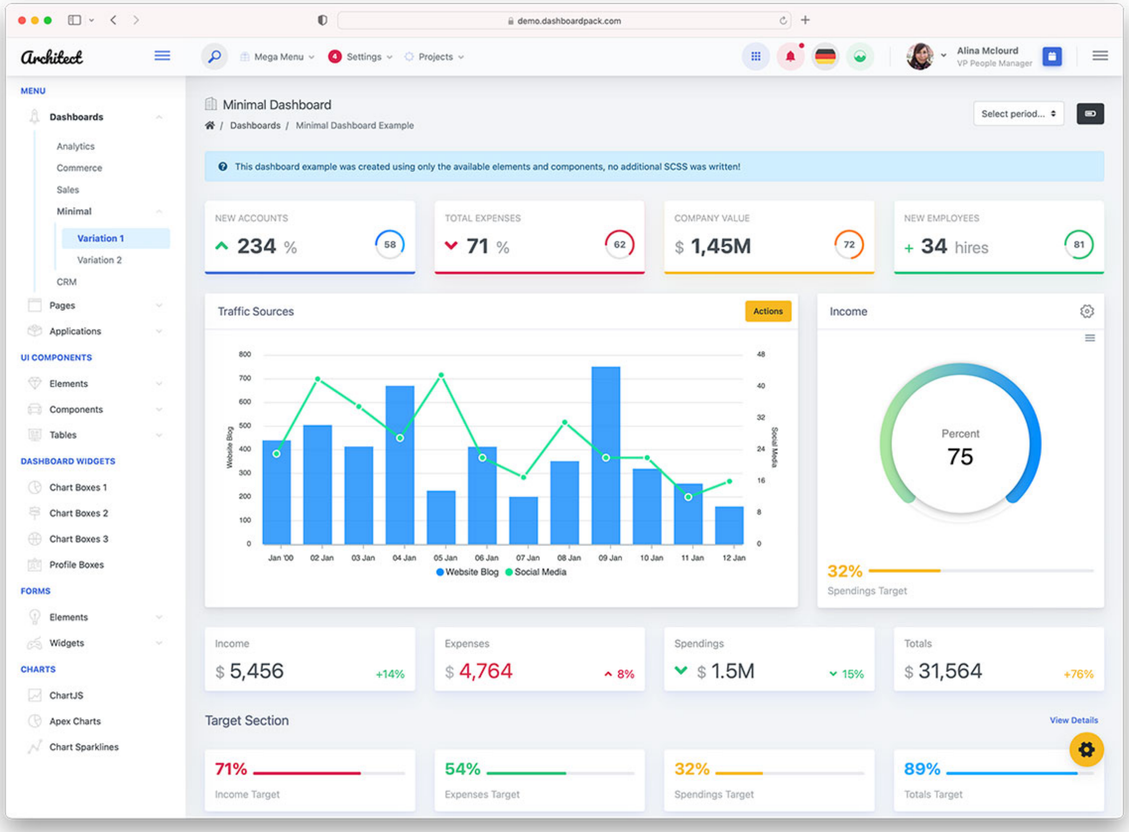
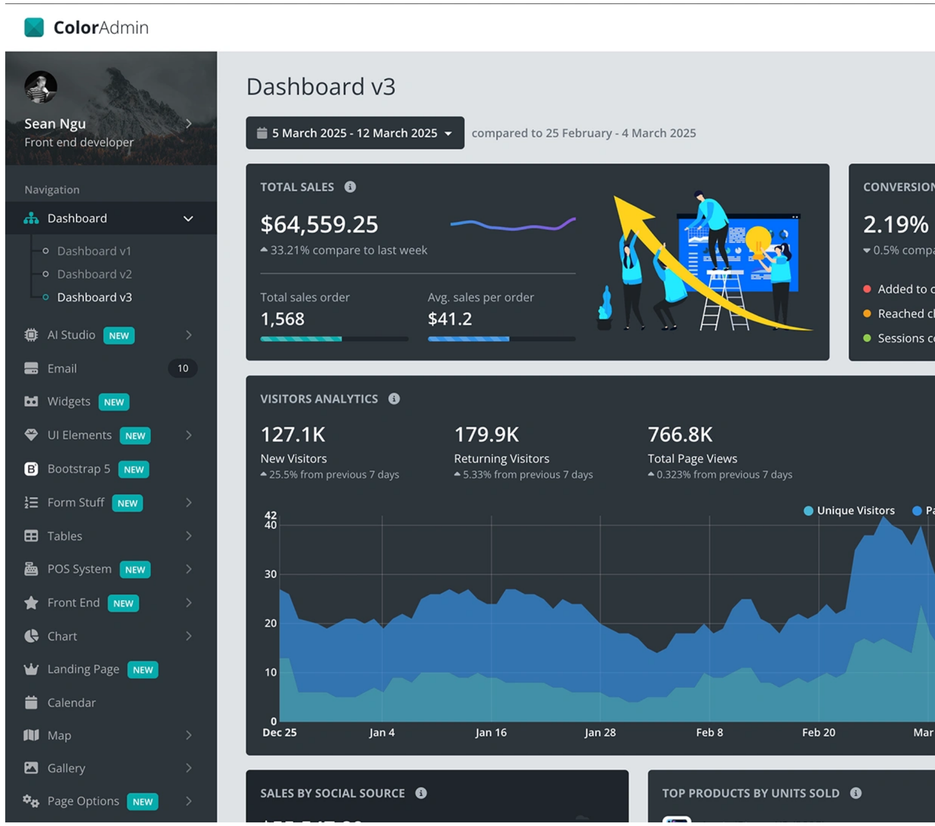
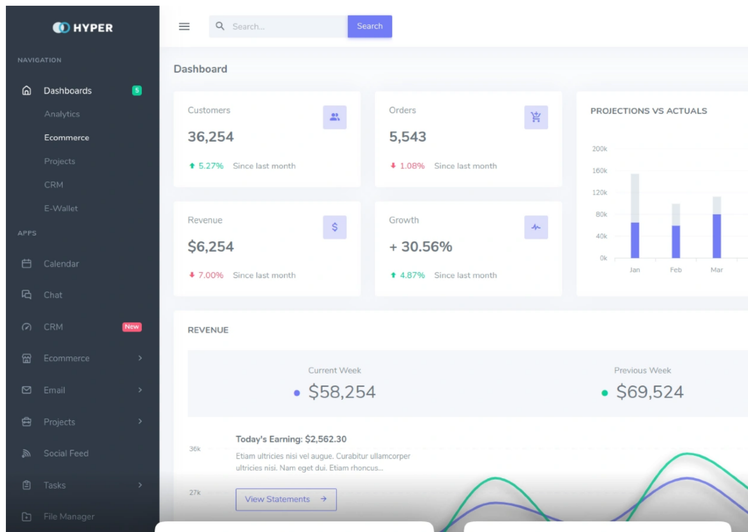
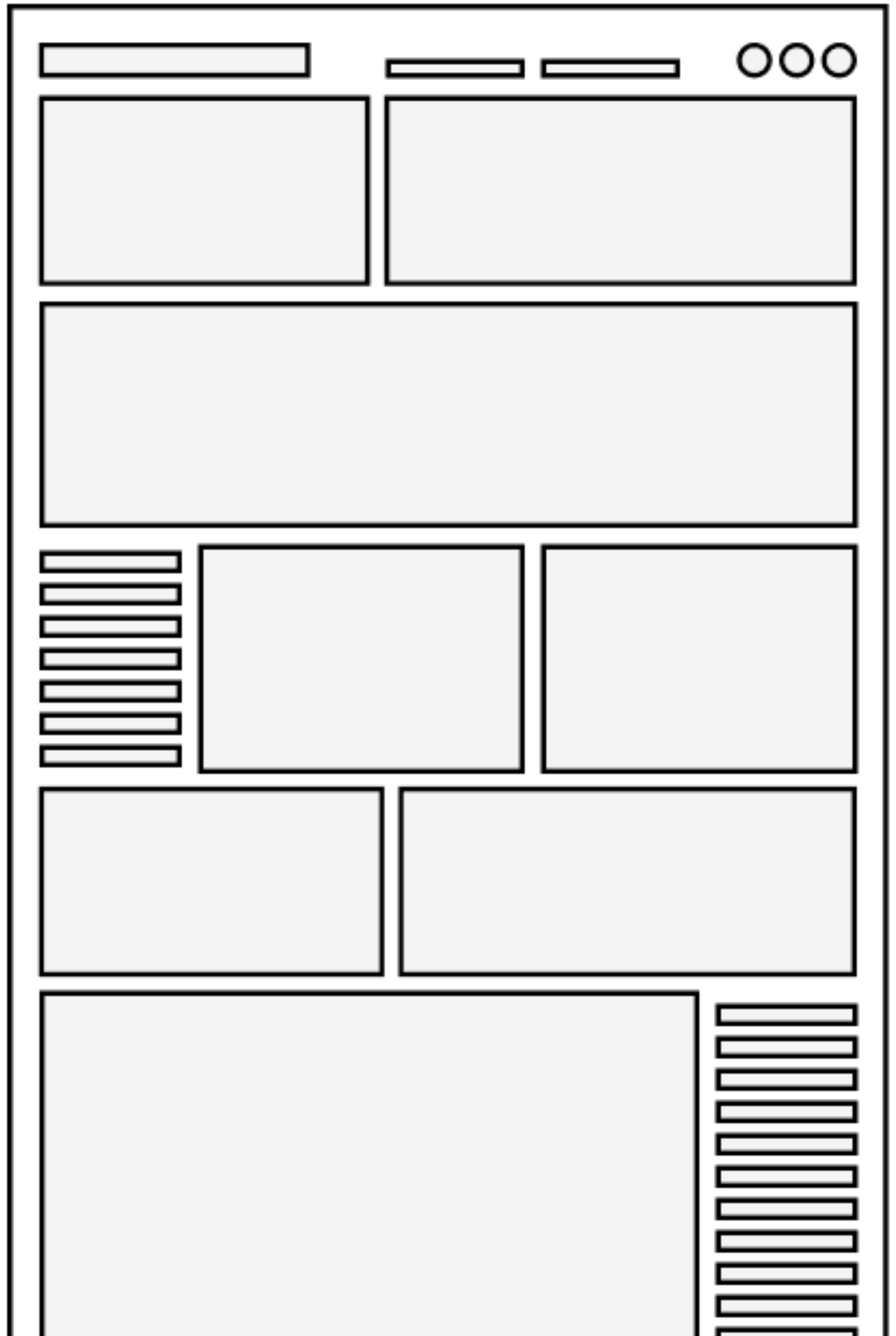








A common problem with dashboards is that they look very impressive and but nobody uses them.



If I ask you to make a dashboard...

Gyan Lakhwani

Design resources | Plugins | Whiteboarding | Presentations | Search | Publish

Discover community-made libraries, plugins, icon sets, and more

dashboard

Files

Power Bi - Dashboards - Atuali... Free
Daniel Rodrigues

Dashboards Layout Ideas Free
Reazul Karim

DashStack - Free Admin Dashb... Free
Seju

Free Dark Admin Dashboards Free
Ali

Creators

Figma Slides, now with plugins

Add

See plugins

Build beautiful presentations

Find decks to help you quickly design out your ideas. Easy to use,

Browse all presentations

Gyan Lakhwani

Design resources | Plugins | Whiteboarding | Presentations

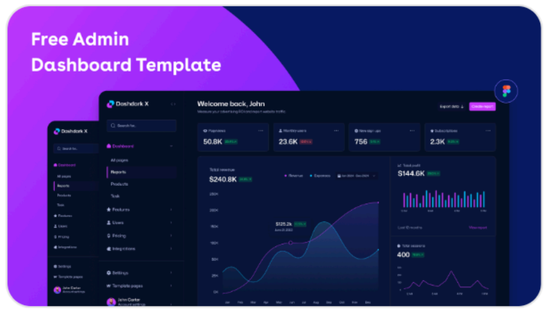
dashboard

Publish

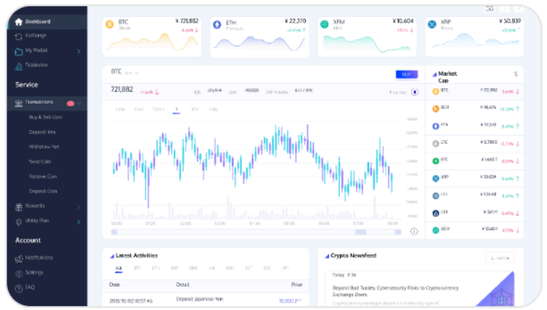
Results for **dashboard**

- All 162+
- Files + templates 100+
- Plugins 47
- Widgets 1
- Creators 41

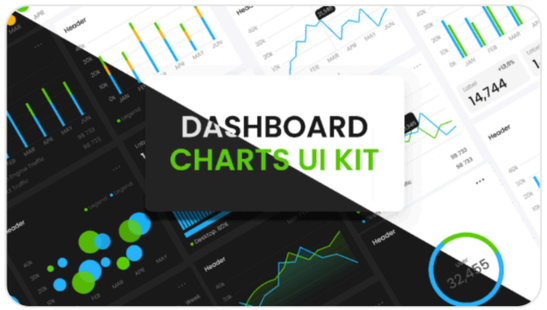
All products | Paid + free | All creators | Relevancy



Free Dark Admin Dashboards
by Ali • Free
♡ 441 👤 19.6k

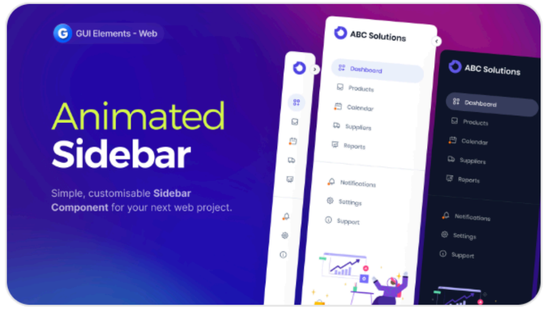


Dashboard练习
by An • Free
♡ 134 👤 16.6k

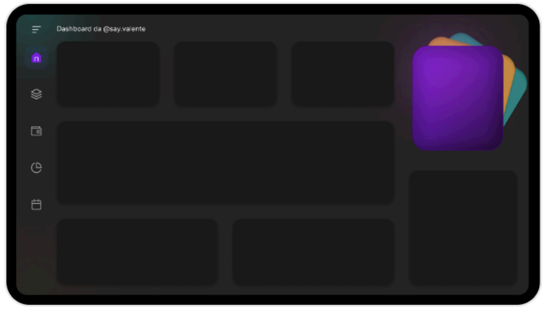


Dashboards Charts...
by MUHAMMAD KHALID • Free
♡ 175 👤 13.5k

BankDash - Dashboard UI Kit ...
by Seju • Free
♡ 2k 👤 85.9k



Animated Sidebar for Web...
by Gagan • Free
♡ 146 👤 7.8k



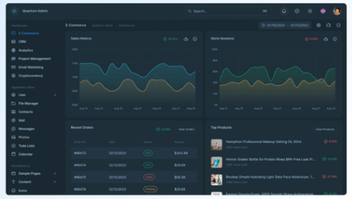
Layout Dark para Dashboards...
by Sayuri Arimori - Say • Free
♡ 285 👤 7.6k

Quantum Admin

Multi-purpose Admin Template

Dark Mode

A meticulously refined dark mode for a seamless experience.



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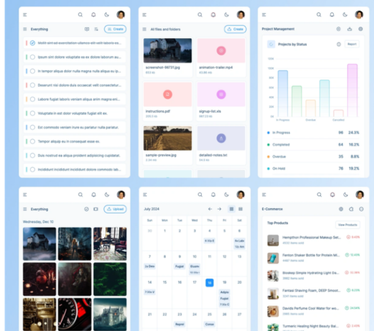
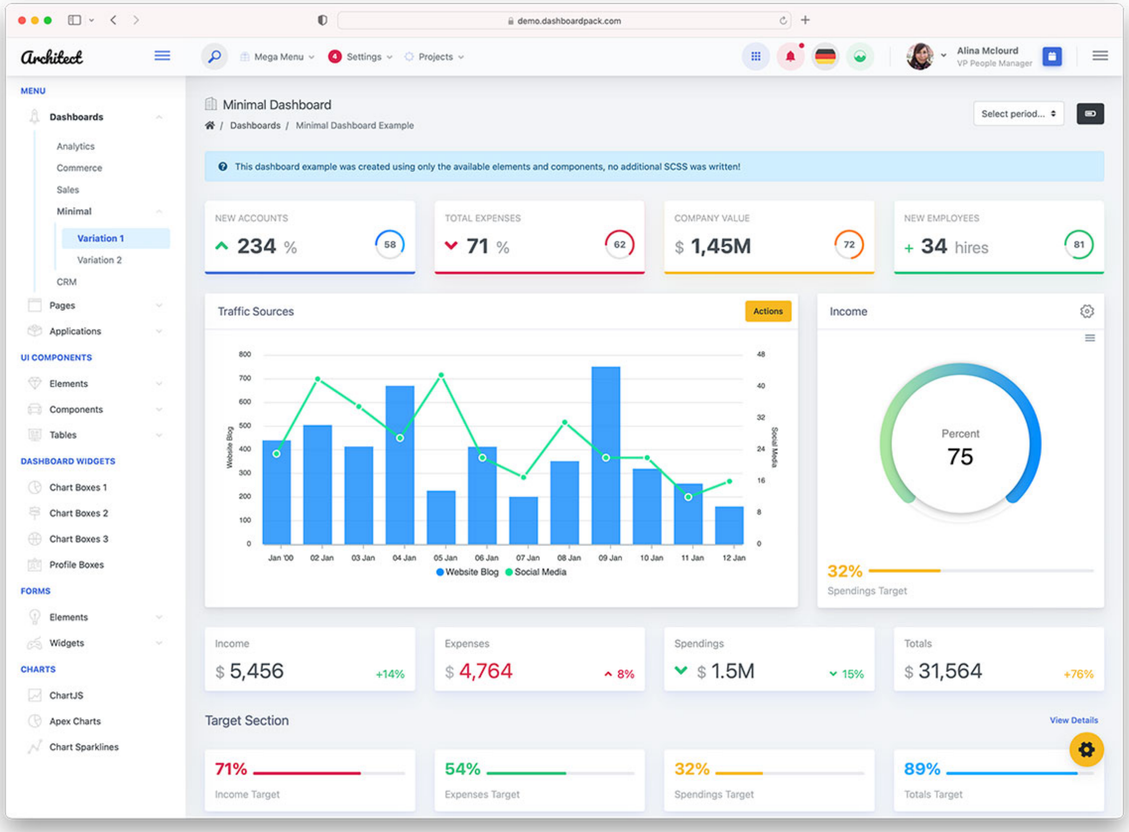
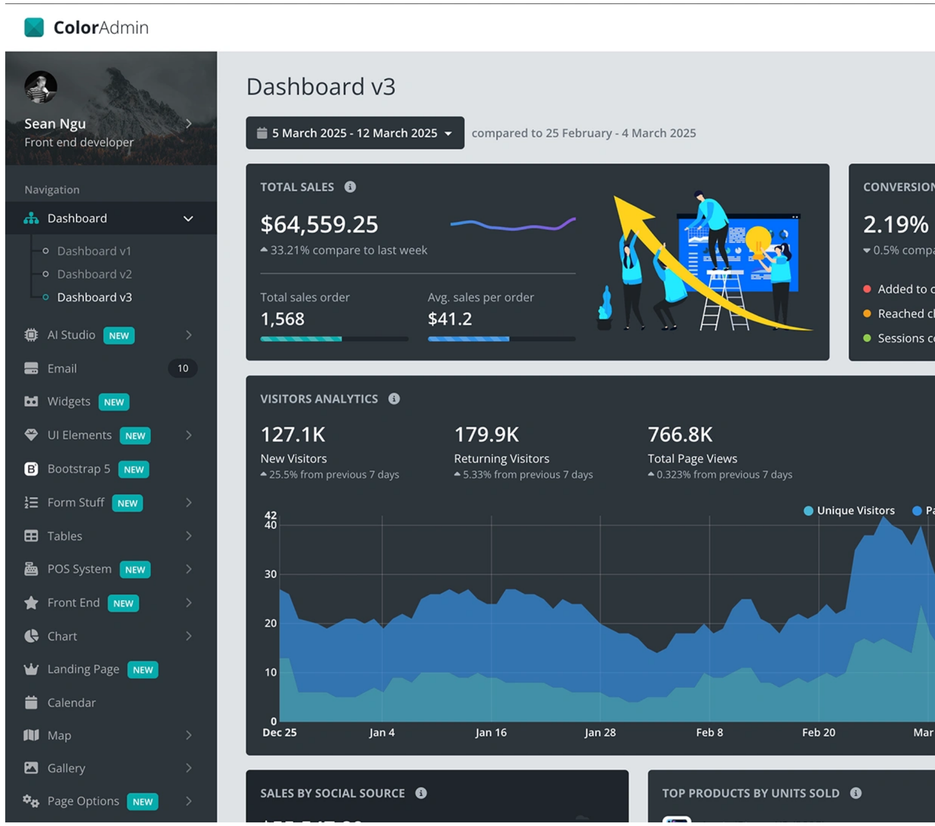
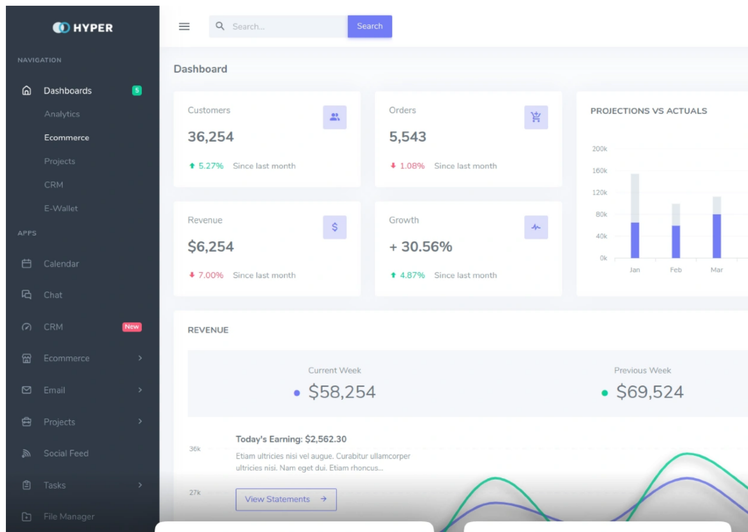








Why make dashboards?

What can we do with data?

Exhibit

Show raw data

List, Table, Infographic

Explain

Answer Questions

Data journalism, report

Explore

Finding what to ask

Dashboards, simulations

Experience

Finding meaning in data

Data art piece, New media installation

Enable

Building tools to visualise specific use cases

Software for data viz

What makes a dashboard *effective?*

It depends...

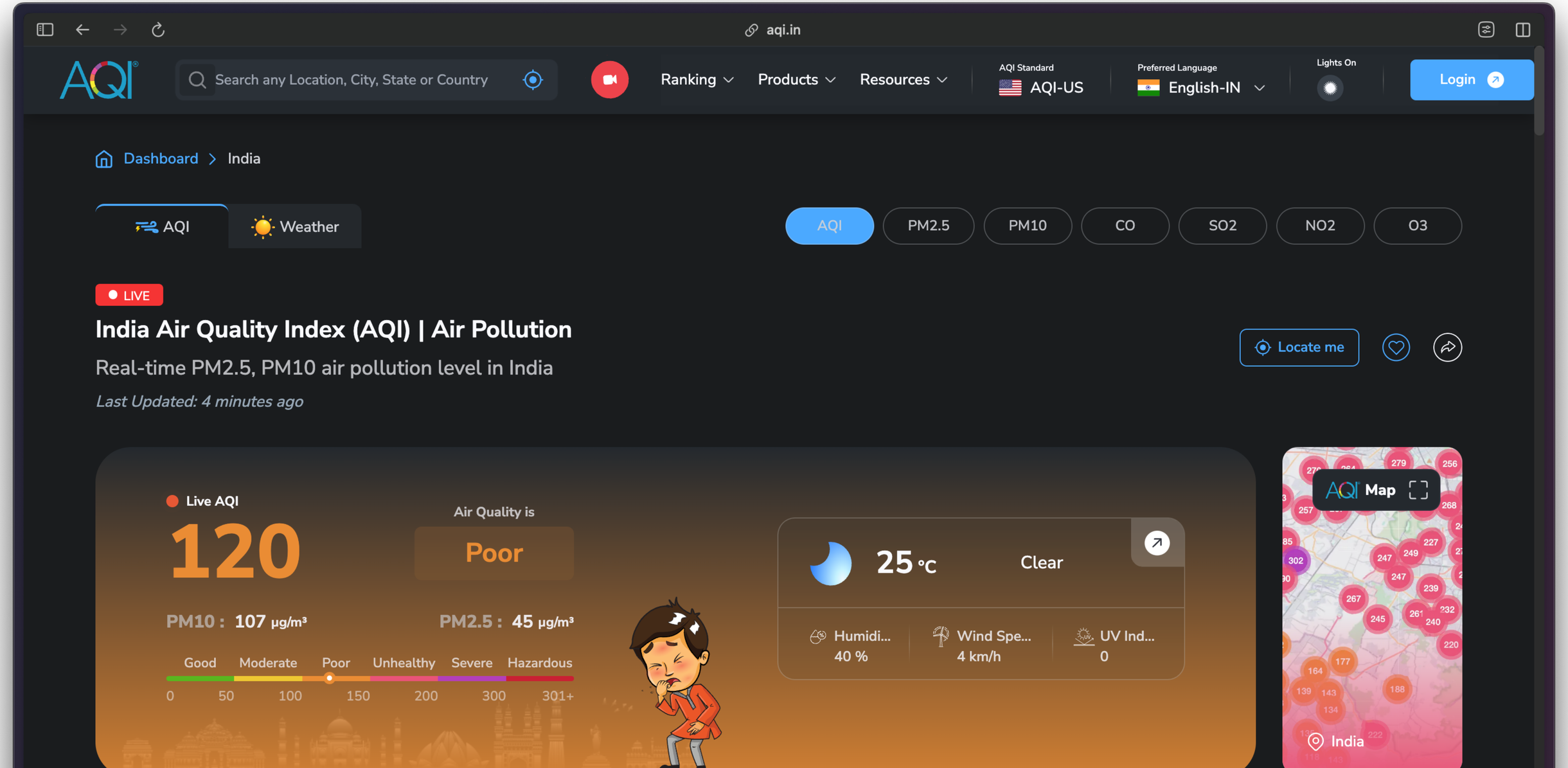
Who is the viewer?

What should they be looking for?

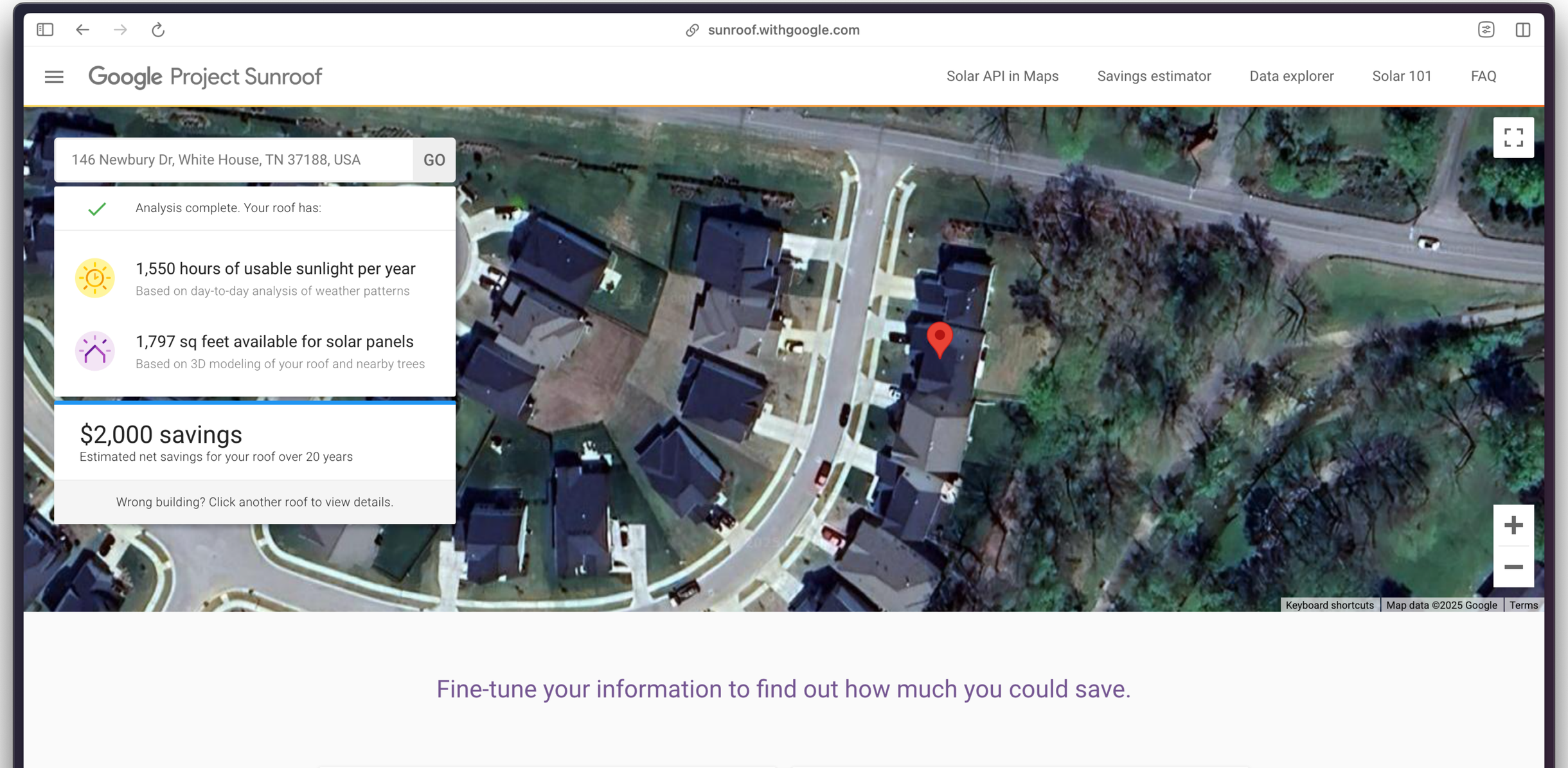
Why should they be looking for it

When will they look at it?

AQI.in Dashboard



Google Sunroof



Open Weather Map

openweathermap.org

OpenWeather | Weather in your city | Guide | API | Dashboard | Marketplace | Pricing | Maps | Our Initiatives | Partners | Blog | For Business | Sign in | Support centre

Search city | Search | Different Weather? | Metric: °C, m/s | Imperial: °F, mph

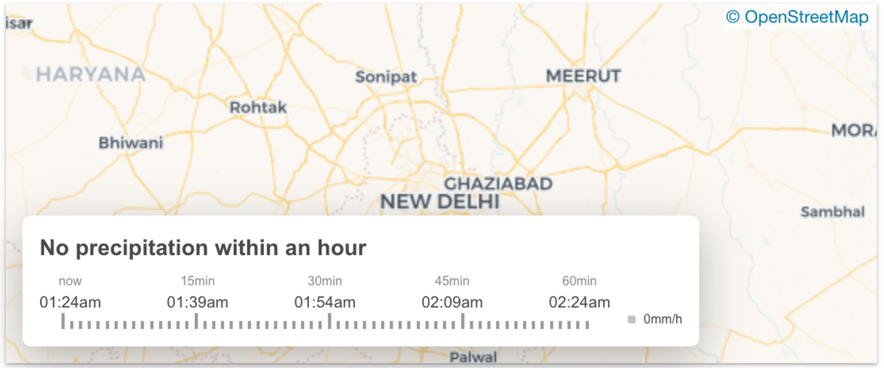
Mar 25, 01:24am

Delhi, IN

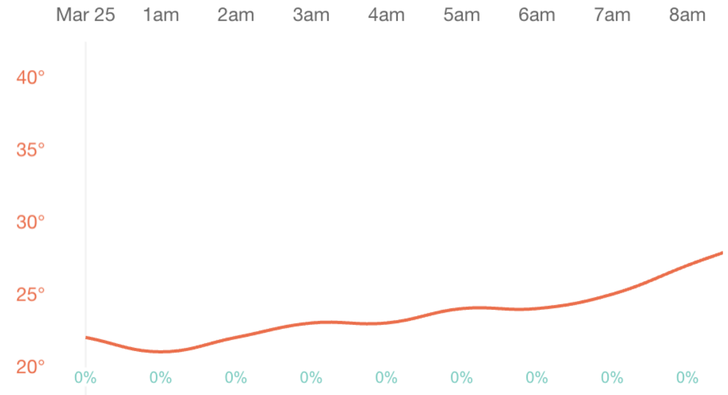
21°C

Feels like 21°C. Haze. Light air

1.5m/s ENE | 1011hPa
Humidity: 52% | Dew point: 11°C
Visibility: 4.0km



Hourly forecast



8-day forecast

Tue, Mar 25	37 / 21°C	clear sky
Wed, Mar 26	39 / 26°C	clear sky
Thu, Mar 27	38 / 26°C	clear sky
Fri, Mar 28	34 / 23°C	clear sky
Sat, Mar 29	35 / 21°C	overcast clouds
Sun, Mar 30	35 / 22°C	clear sky

ISN - Global Kidney Health Atlas

gkha.theisn.org

ISN HOME • WCN • ISN ACADEMY • JOURNALS

ISN INTERNATIONAL SOCIETY OF NEPHROLOGY | ISN-Global Kidney Health Atlas

Browse by: Indicator | Country | ISN Region | World Bank Income Group

Search indicators

Demographic and burden of kidney failure

Population & health expenditures

Burden of kidney failure

Prevalence of chronic kidney disease (CKD)

Incidence of kidney failure

Prevalence of kidney failure

Dialysis services

Availability of dialysis facilities

Prevalence of chronic kidney disease (CKD), 2023

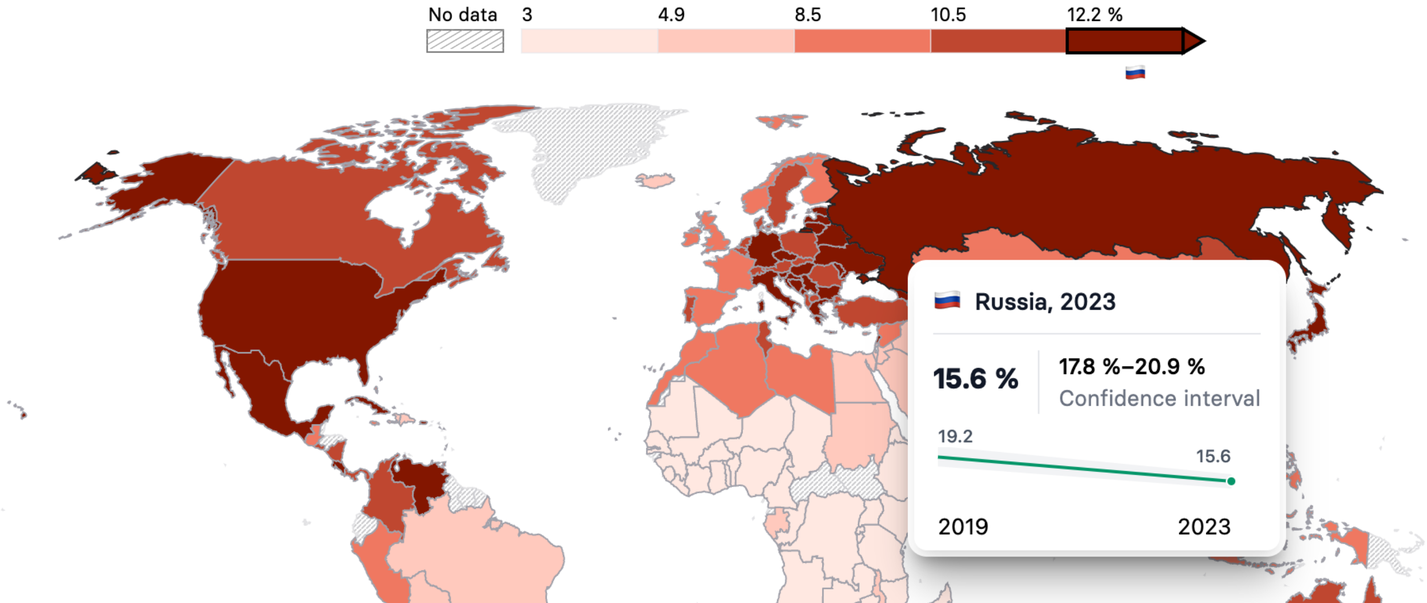
Percentage of individuals with chronic kidney disease (CKD), showing its widespread impact on public health (Data from desk research).

Map | Table

1/10 adults in the world (>850 million people) were estimated to have kidney disease in 2023.

2019 — 2023

Select a country...



COVID19INDIA

covid19india.org

COVID19 INDIA

Home / Karnataka

Karnataka

Last Updated on 24 Apr, 17:57 IST

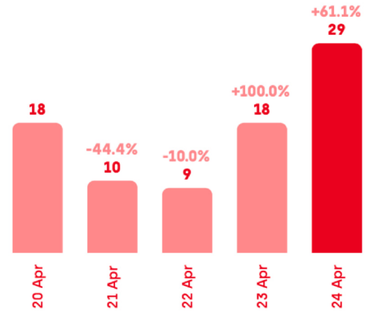
Tested
35,958

As of 24 Apr per source

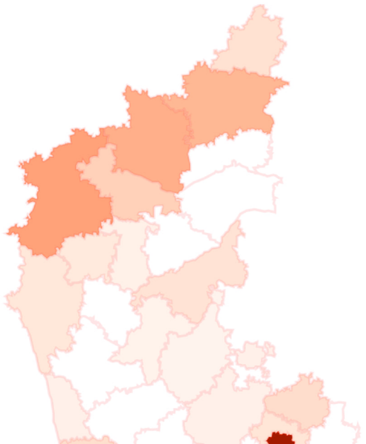
Confirmed	Active	Recovered	Deceased
[+29]		[+7]	[+1]
474	304	152	18

Top districts

120	Bengaluru	↑9
88	Mysuru	↑0
45	Belagavi	↑2
39	Vijayapura	↑2
36	Kalaburagi	↑1
24	Bagalkote	↑3

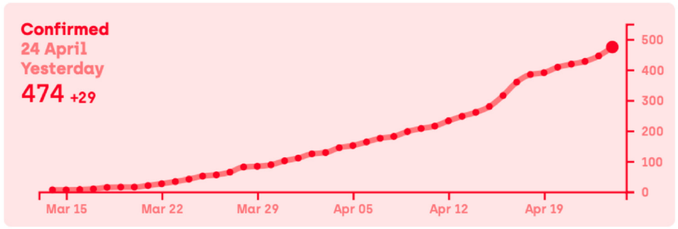


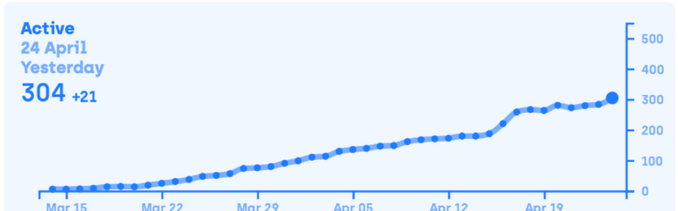
Karnataka

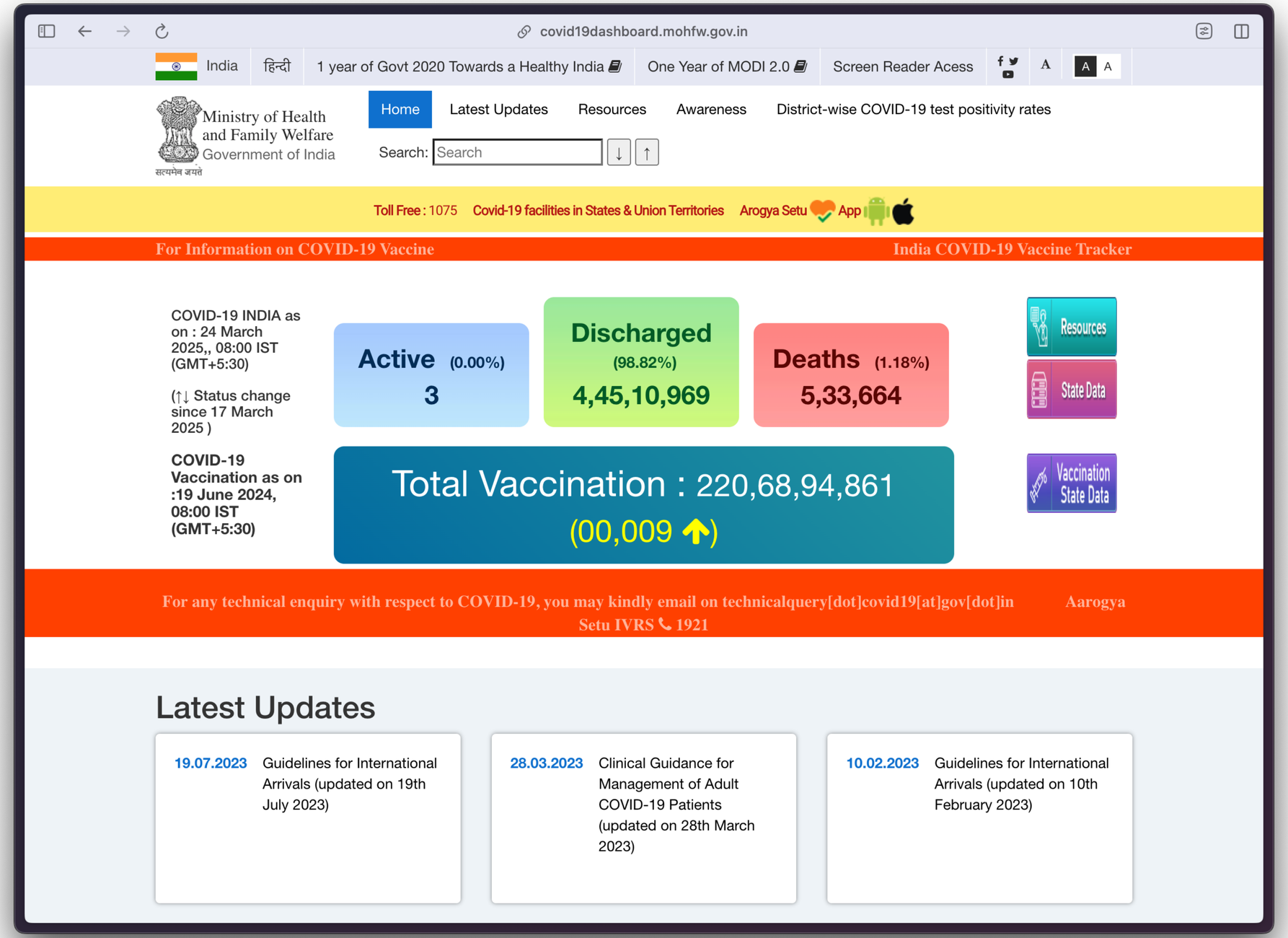


Cumulative | Daily

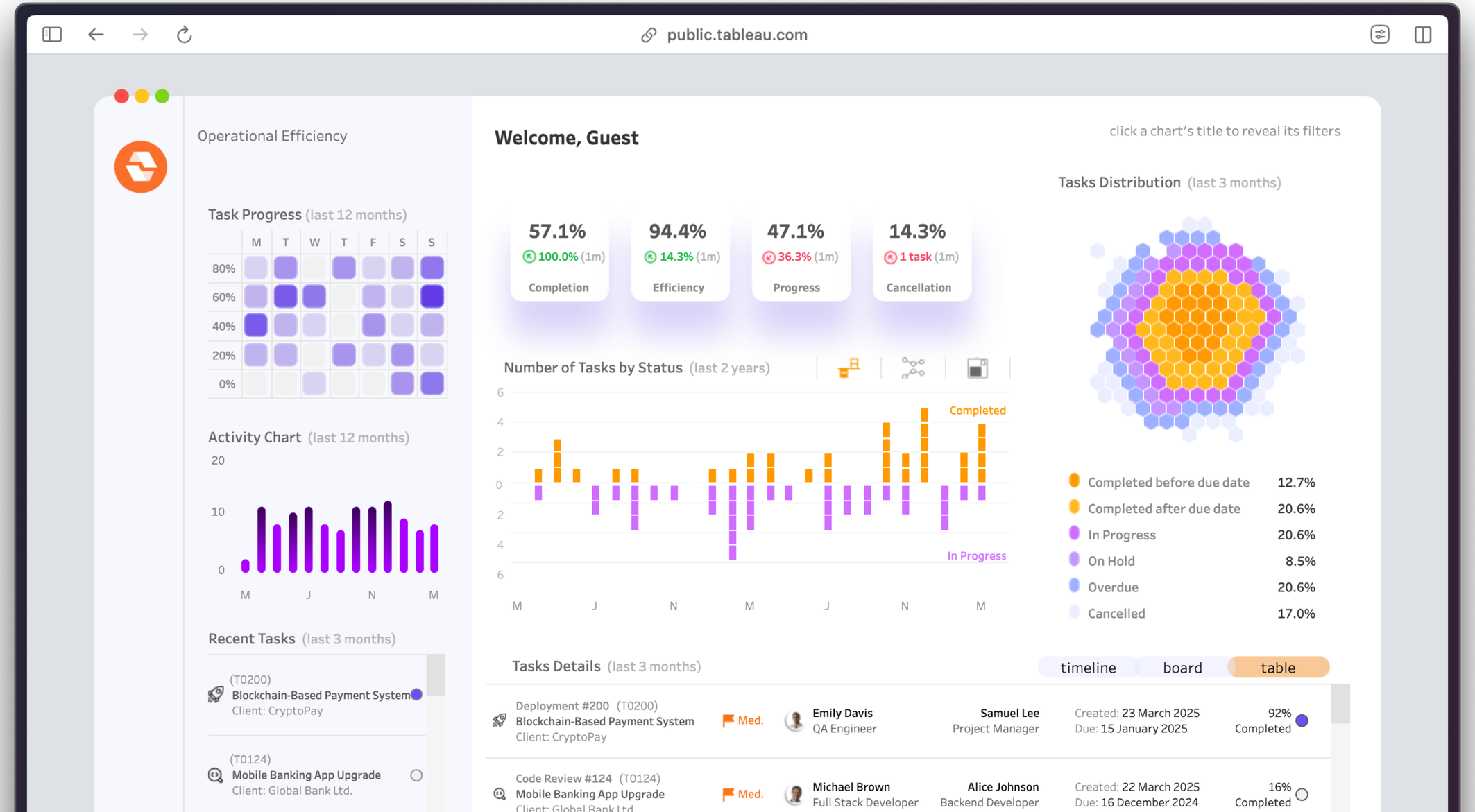
Scale Modes Uniform Logarithmic

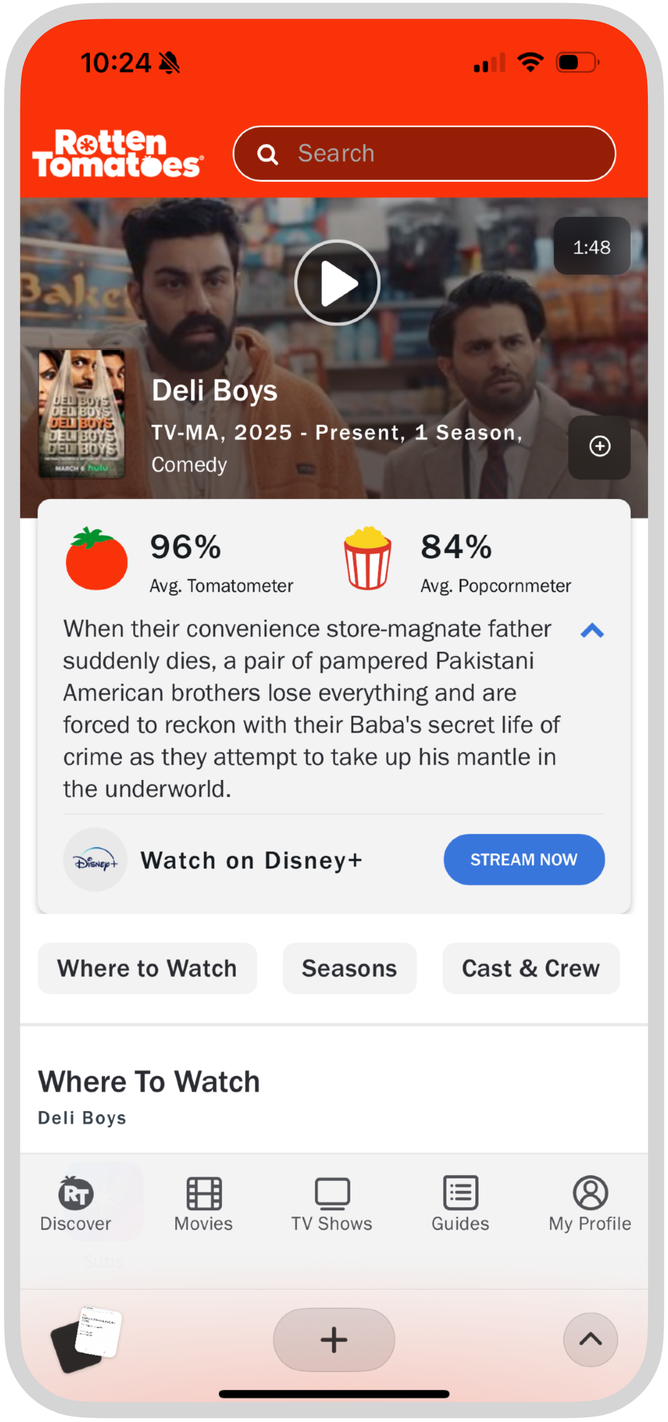





covid19dashboard.mohfw.gov.in
India
हिन्दी
1 year of Govt 2020 Towards a Healthy India
One Year of MODI 2.0
Screen Reader Acess
Ministry of Health and Family Welfare Government of India
सत्यमेव जयते
Home
Latest Updates
Resources
Awareness
District-wise COVID-19 test positivity rates
Search:
Search
Toll Free : 1075
Covid-19 facilities in States & Union Territories
Arogya Setu App
For Information on COVID-19 Vaccine
India COVID-19 Vaccine Tracker
COVID-19 INDIA as on : 24 March 2025,, 08:00 IST (GMT+5:30)
(↑↓ Status change since 17 March 2025)
Active (0.00%)
3
Discharged
(98.82%)
4,45,10,969
Deaths (1.18%)
5,33,664
Resources
State Data
COVID-19 Vaccination as on :19 June 2024, 08:00 IST (GMT+5:30)
Total Vaccination : 220,68,94,861
(00,009 ↑)
Vaccination State Data
For any technical enquiry with respect to COVID-19, you may kindly email on technicalquery[dot]covid19[at]gov[dot]in
Aarogya Setu IVRS 1921
Latest Updates
19.07.2023 Guidelines for International Arrivals (updated on 19th July 2023)
28.03.2023 Clinical Guidance for Management of Adult COVID-19 Patients (updated on 28th March 2023)
10.02.2023 Guidelines for International Arrivals (updated on 10th February 2023)

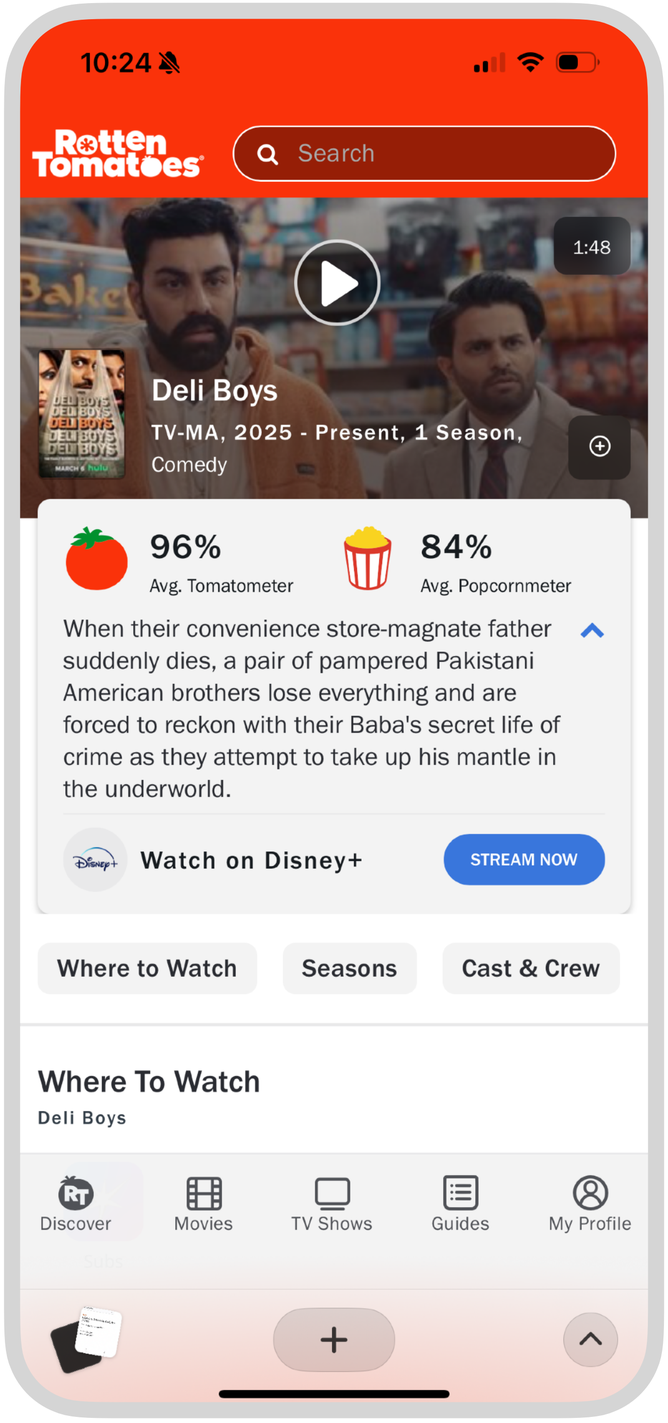
Operational Efficiency - Seun Adeyemo

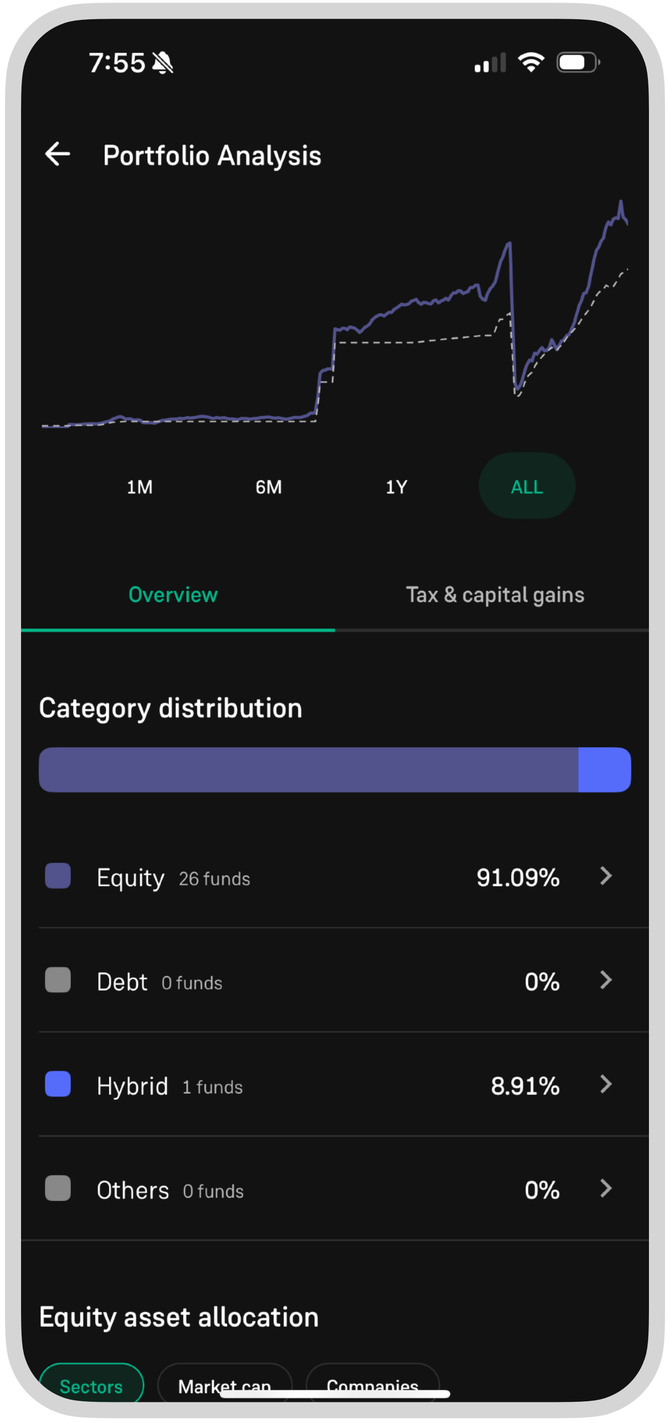


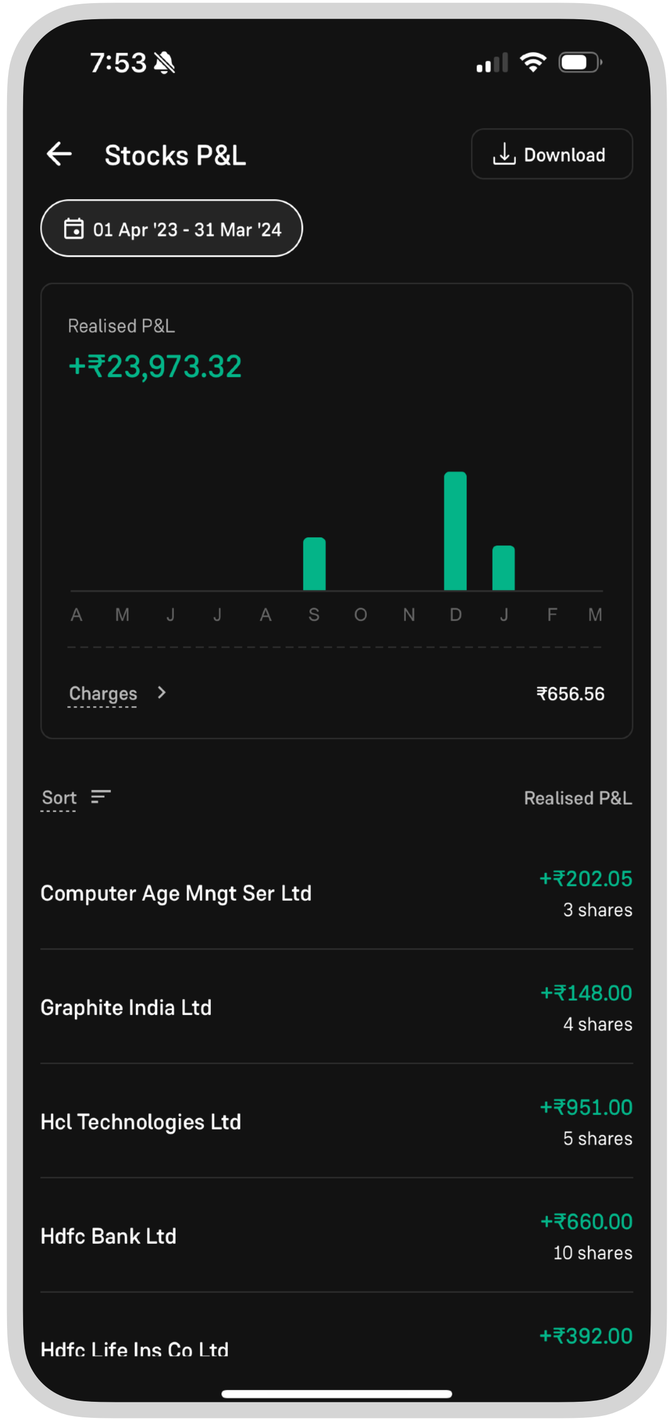


UI with some Information Visualisation

Data dense Dashboards


10:24
Rotten Tomatoes
Search
1:48
Deli Boys
TV-MA, 2025 - Present, 1 Season,
Comedy
96%
Avg. Tomatometer
84%
Avg. Popcornmeter
When their convenience store-magnate father suddenly dies, a pair of pampered Pakistani American brothers lose everything and are forced to reckon with their Baba's secret life of crime as they attempt to take up his mantle in the underworld.
Watch on Disney+
STREAM NOW
Where to Watch
Seasons
Cast & Crew
Where To Watch
Deli Boys
Discover
Movies
TV Shows
Guides
My Profile


7:55
Portfolio Analysis
1M
6M
1Y
ALL
Overview
Tax & capital gains
Category distribution
Equity 26 funds 91.09%
Debt 0 funds 0%
Hybrid 1 funds 8.91%
Others 0 funds 0%
Equity asset allocation
Sectors
Market cap
Companies


7:53
Stocks P&L
Download
01 Apr '23 - 31 Mar '24
Realised P&L
+₹23,973.32
A M J J A S O N D J F M
Charges
₹656.56
Sort
Realised P&L
Computer Age Mngt Ser Ltd
+₹202.05
3 shares
Graphite India Ltd
+₹148.00
4 shares
Hcl Technologies Ltd
+₹951.00
5 shares
Hdfc Bank Ltd
+₹660.00
10 shares
Hdfc Life Ins Co Ltd
+₹392.00

Start 28:30

MITID INNOVATION PROGRAMME

INNOVATION GRADSHOW 2020

Episode 33
What stories can you narrate with data?

Rasagy Sharma
Principal Information Designer, Gramener

18th Aug 2020
4.30 pm to 6.30 pm

Gramener Vendor Consolidation Dashboard

gramener.com

Vendor Consolidation | Category | Plant | Company

Materials purchased across multiple vendors — within the **same week & plant**, where there is potential to consolidate vendors *and* orders.

Total spend	Total orders
105,312,704	56,792

Intelligent Concrete Gloves O was ordered weekly across 3.3 vendors. with 11.6 orders/week (13,134 orders).
Category: Concrete Gloves

Spend	Vendors	Orders / wk
6,953,594	3.3	11.6

Fantastic Rubber Shirt J was ordered weekly across 3.0 vendors. with 8.3 orders/week (439 orders).
Category: Rubber Shirt

Spend	Vendors	Orders / wk
3,152,165	3.0	8.3

Sleek Wooden Ball J was ordered weekly across 2.3 vendors. with 6.9 orders/week (276 orders).
Category: Wooden Ball

Spend	Vendors	Orders / wk
412,740	2.3	6.9

Sleek Wooden Ball M was ordered weekly across 2.4 vendors. with 6.7 orders/week (310 orders).

Intelligent Concrete Gloves O: Purchase Distribution

Category: Concrete Gloves

On average, every week, Intelligent Concrete Gloves O was:

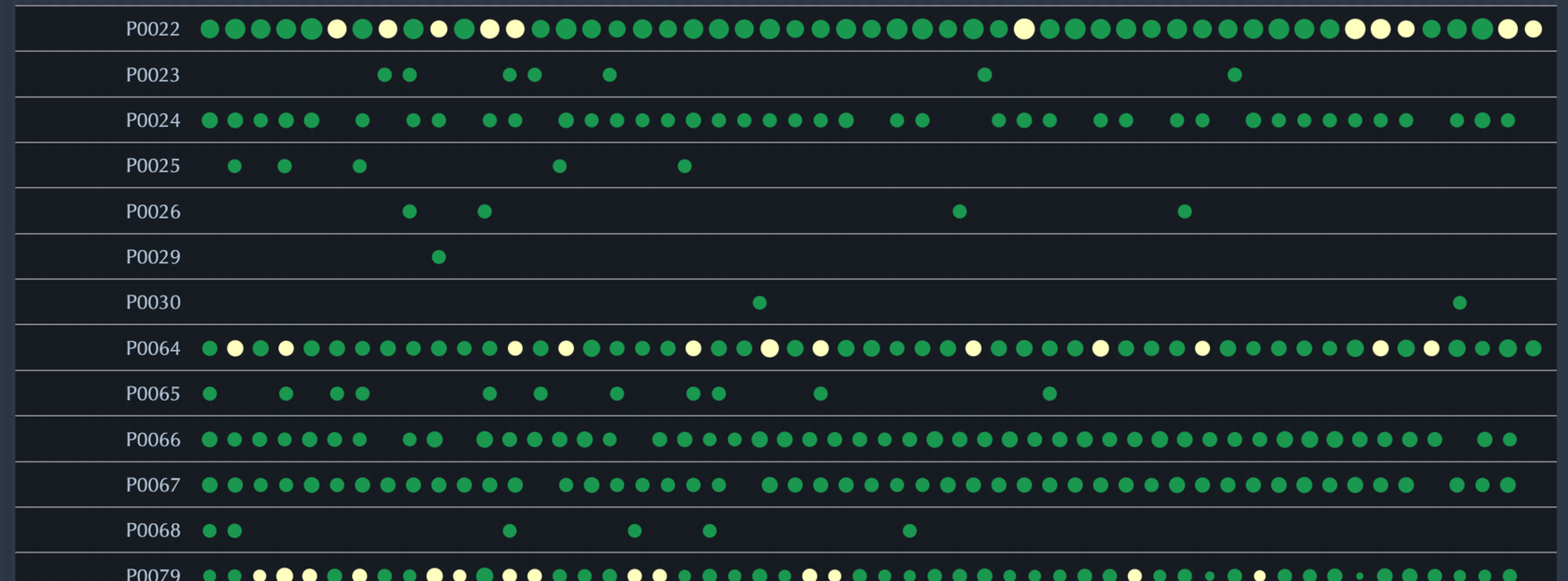
- Ordered 11.6 times per week
- Across 3.3 vendors on average, each week
- For a weekly spend of 131,200 (Total: 6,953,594)

Here is the weekly distribution of vendor orders by plant:

Legend

Spend: -100,000 Spend: 20,000 Spend: 140,000

0.0 vendors 10.0 vendors 20.0 vendors



Do good dashboards have to look boring?

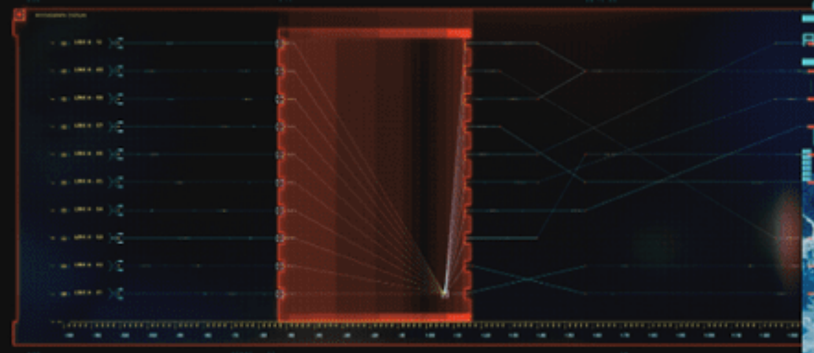
Do good dashboards have to look boring?

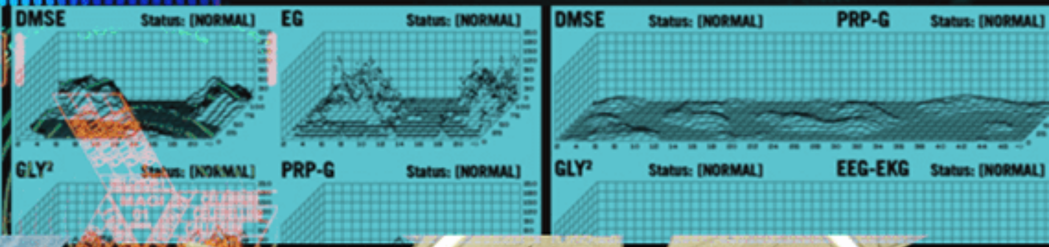
“Don't make something unless it is both necessary and useful; but if it is both necessary and useful, don't hesitate to make it beautiful.”

http://bokardo.com/archives/the-shaker-design-philosophy/

MOODBOARD

A Sci-fi visual aesthetic that enthusiasts and patrons would appreciate

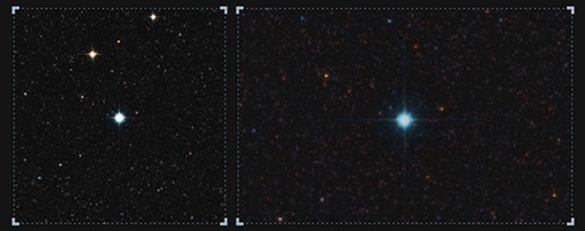




GROWTH-India Telescope Dashboard

OBSERVING TARGET:

TCP_J18224935-2408280



RA-DEC: 26.42, 9.60

ALTITUDE: 45°

AZIMUTH: 82.6°

NON-SIDEREAL SIDEREAL

RA Rate: 15.035 DEC Rate: 0.000

PERS IN: Ashwani Pandey

PROG ID: GIT-2022-C1-P07

PROP NO: EEFT2400567357432137...

FILTERS: 12

Gx300 Rx200 Ix200 Zx400 Ux600 Gx300 Rx200 Ix

EXPOSING: Ix200.0s *(4 of 12)*

TIME ELAPSED: 05:02

67%

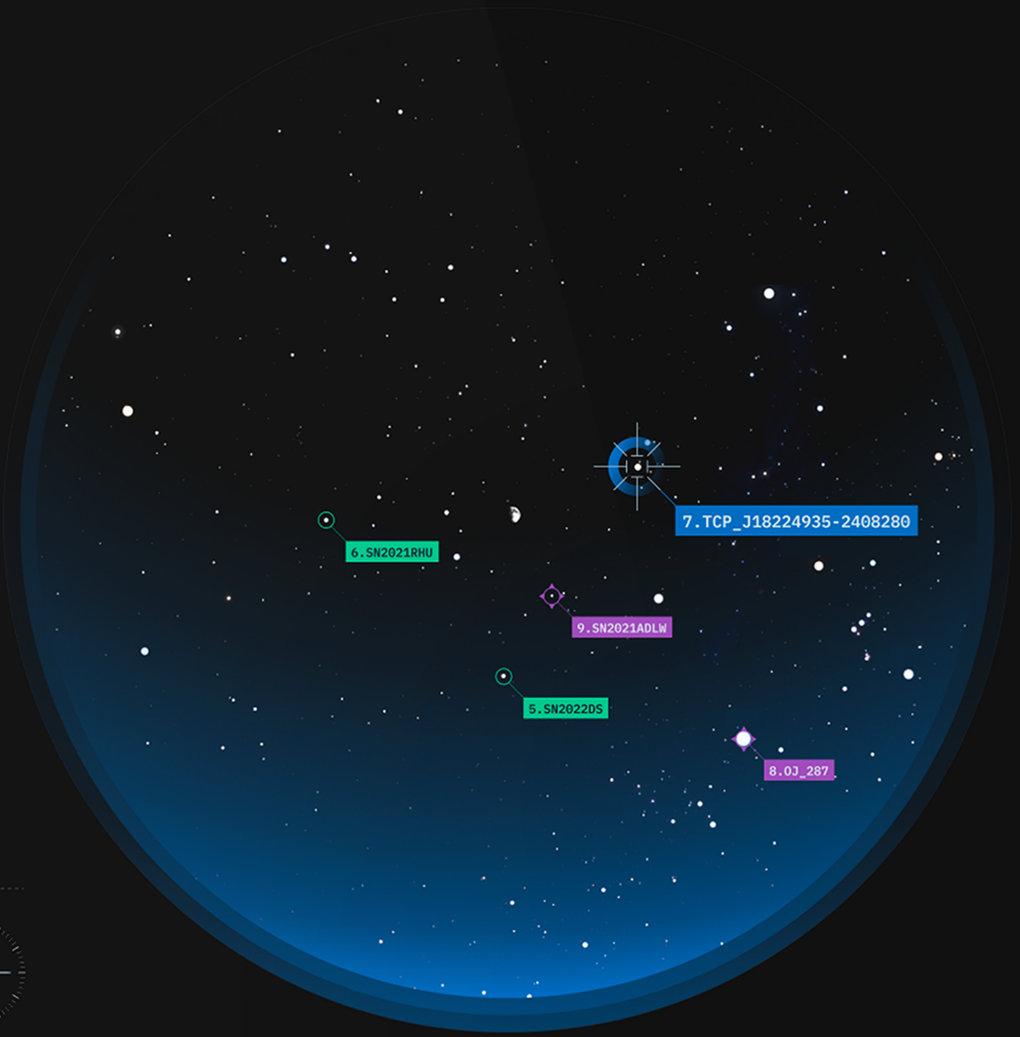
TIME LEFT: 02:02

TIME OBSERVED: 00:30:34

TOTAL LEFT: 00:45:30 00:45:30 00:45:30

GROWTH INDIA TELESCOPE
IAO HANLE, LADAKH

LIVE
02-04-2022



TARGET LIST:

5 SN2022DS

6 SN2021RHU

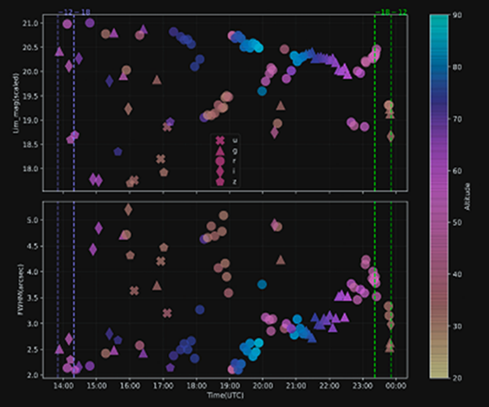
7 TCP_J18224935-2408280

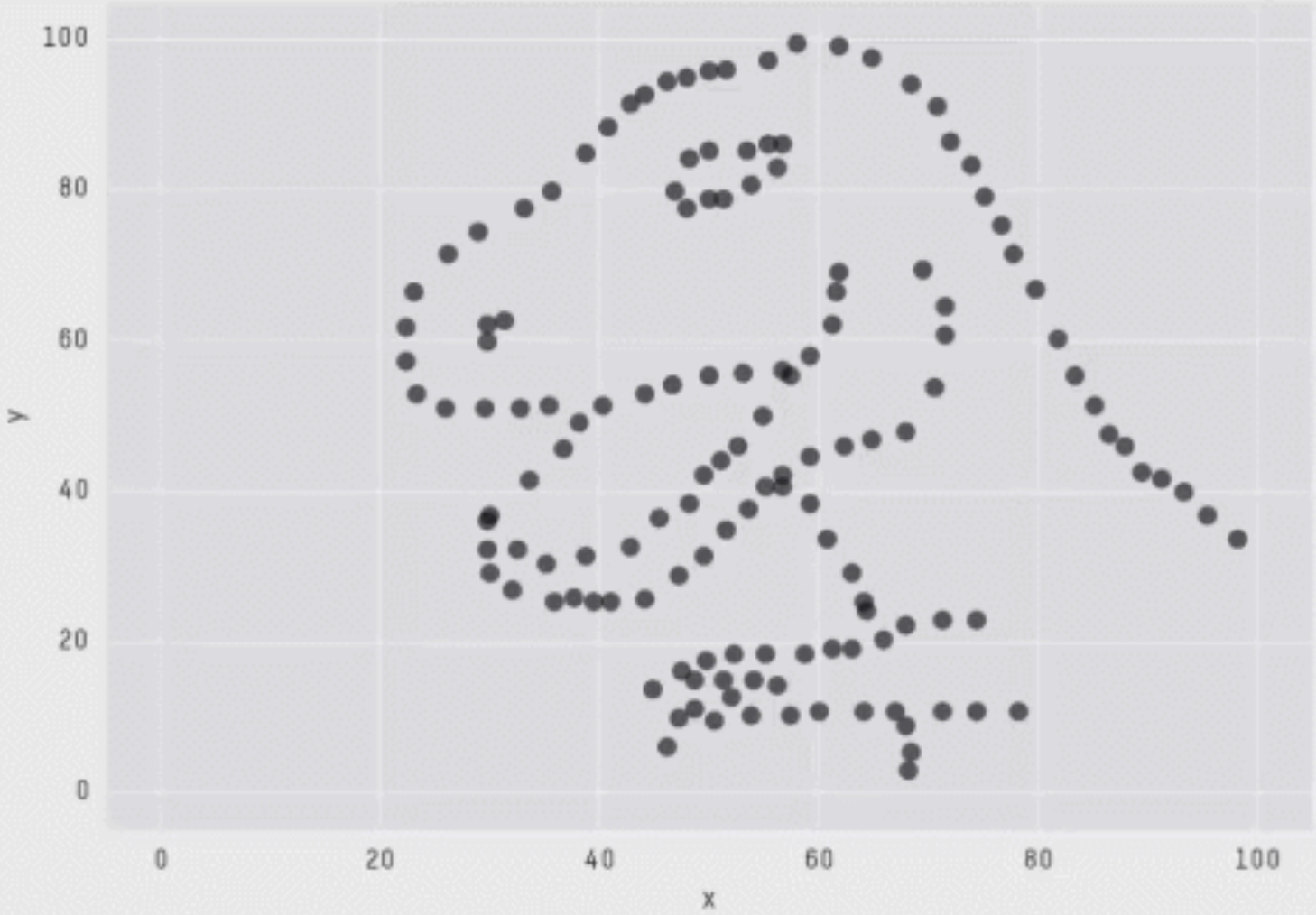
8 OJ_287

9 SN2021ADLW

OBSERVABILITY PLOT:

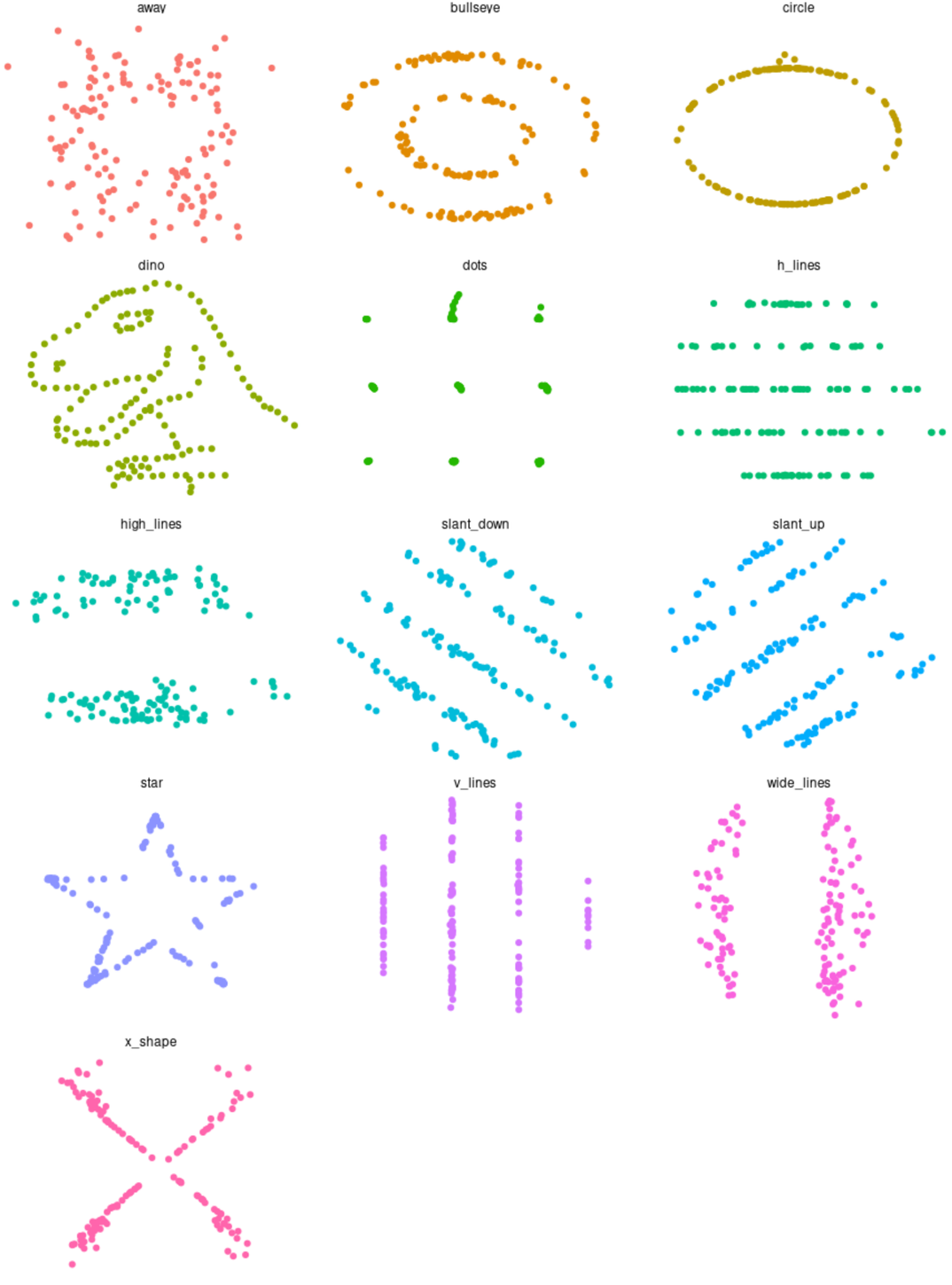
BEAST GRAPH:





X Mean: 54.2659224
Y Mean: 47.8313999
X SD : 16.7649829
Y SD : 26.9342120
Corr. : -0.0642526

Datasaurus Dataset [SOURCE]


away
bullseye
circle
dino
dots
h_lines
high_lines
slant_down
slant_up
star
v_lines
wide_lines
x_shape

CREDIT CARD PIN DATASET

5337, 8369, 1602, 1834, 1976, 1197, 0425, 6233,
8504, 9305, 1497, 1222, 2118, 8650, 4001, 6555,
1760, 8266, 1888, 9703, 1120, 6942, 0622, 0704,
8976, 9229, 9191, 9055, 2606, 5263, 1236, 0103,
0287, 5768, 2421, 7942, 7412, 0829, 9232, 9790,
8440, 0027, 0102, 0909, 0208, 0054, 7543, 7601,
3949, 3315, 2215, 3455, 1988, 0016, 3207, 2107,
4308, 0502, 3333, 9406, 4646, 7774, 3838, 2441,
8073, 6169, 4202, 2751, 1123, 1963, 0563, 4242,

DD 324: Data Visualisation · 14 Jan 2025 · Gyan Lakhwani · gyanlakhwani@gmail.com · Department of Design, DTU

Data —— Information

Not all stats are useful

Unique PINs
Which all PINs are people using?

0000, 0001, 0002, 0003…

Average (mean)
Find the arithmetic mean of the numbers

3954

Data ——— Dashboards

The ‘WHO’

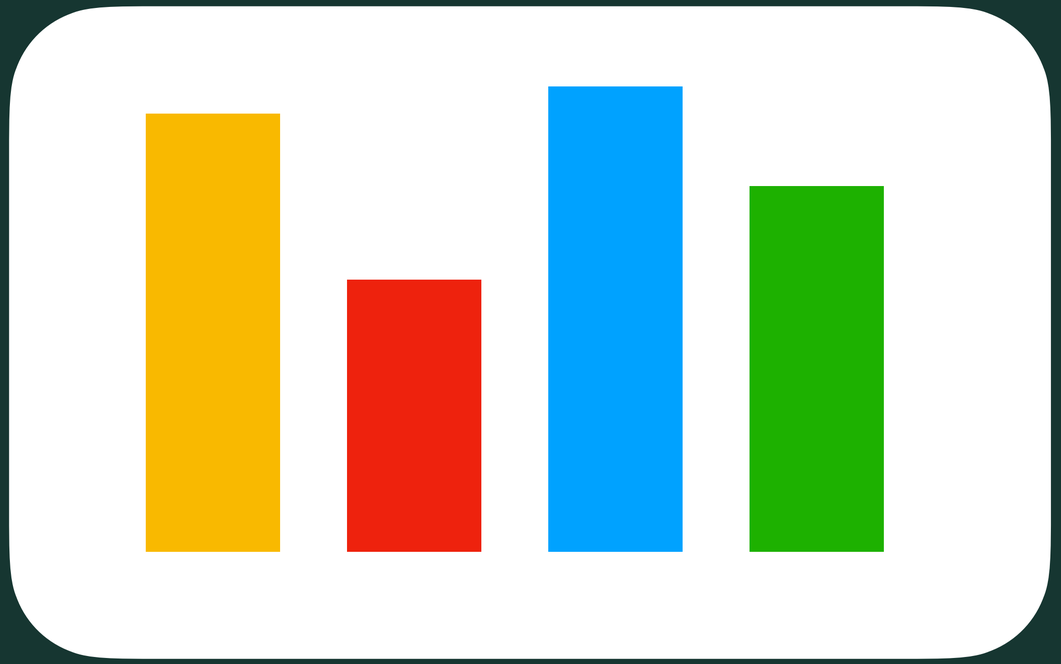
Who is the viewer?

What do they care about?

How can you put the data into terms that they can understand?

Data —— Dashboards

The ‘WHAT’

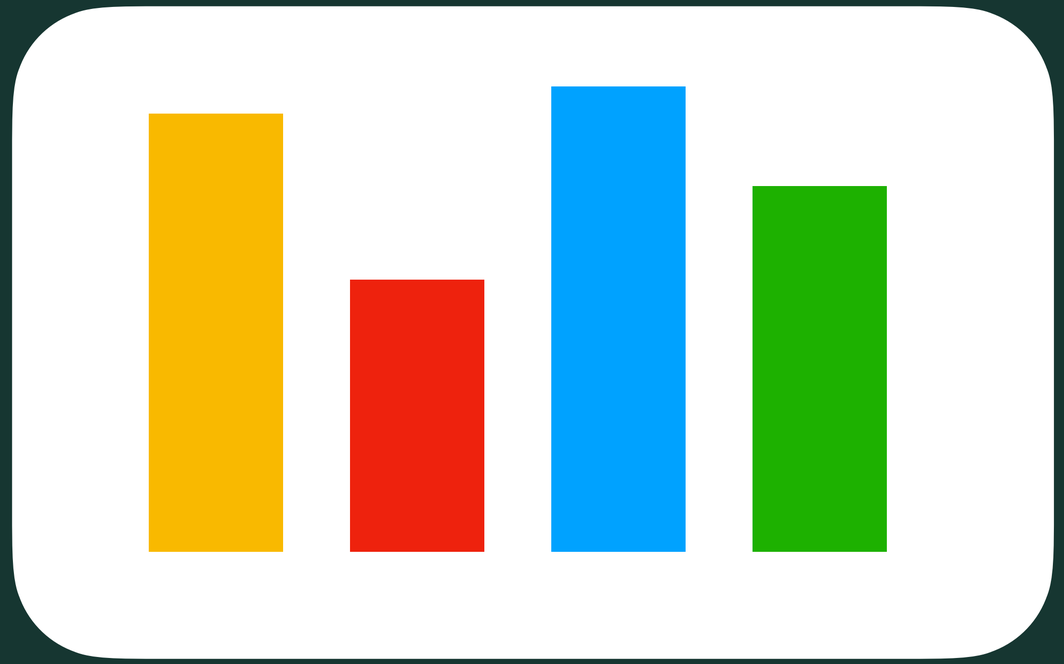


Each graphic in a dashboard must make sense on it’s own.

Everything we have covered about effective visualisations and storytelling with data applies.

Data —— Dashboards

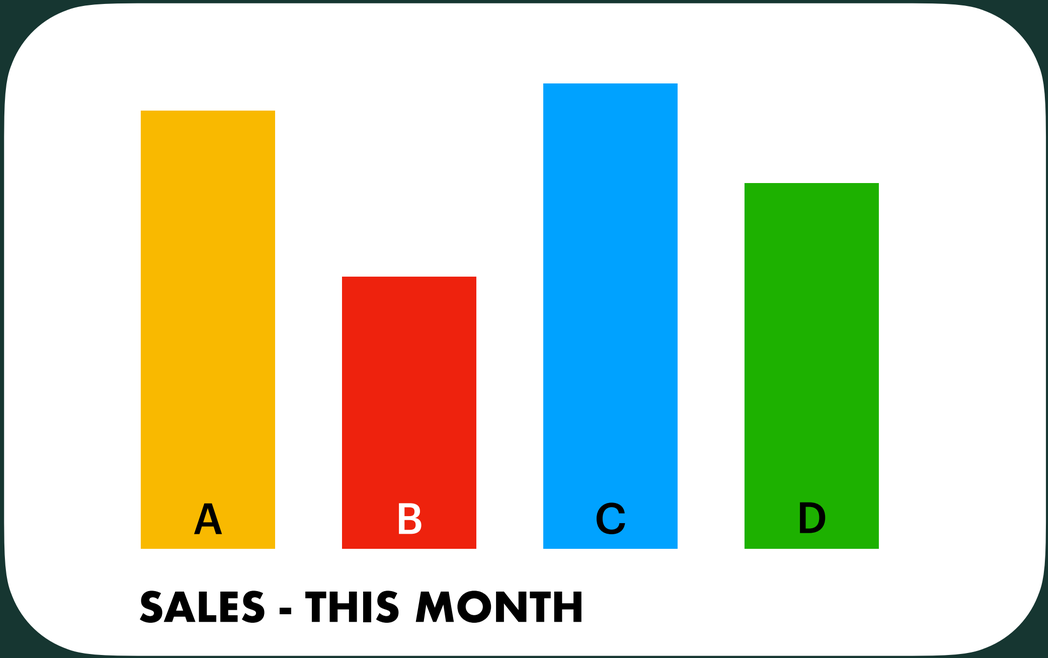
The ‘WHAT’

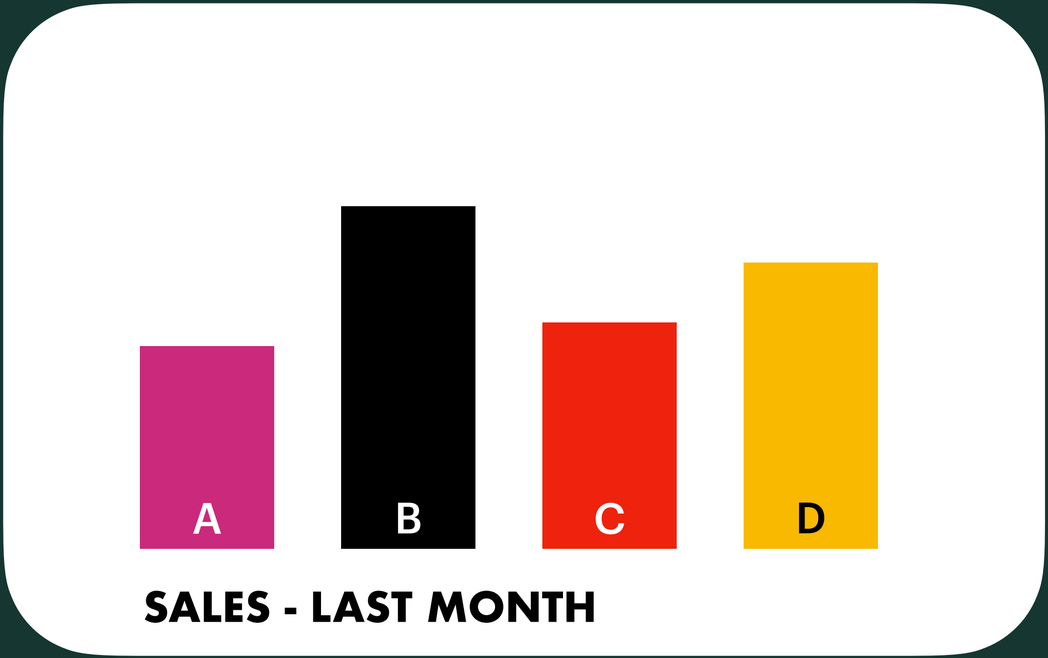


Data —— Dashboards

The ‘WHAT’

It also must make sense in the context of all the other visualisations. Use similiar colour schemes and representations for similiar things.





Data —— Dashboards

The ‘WHAT’

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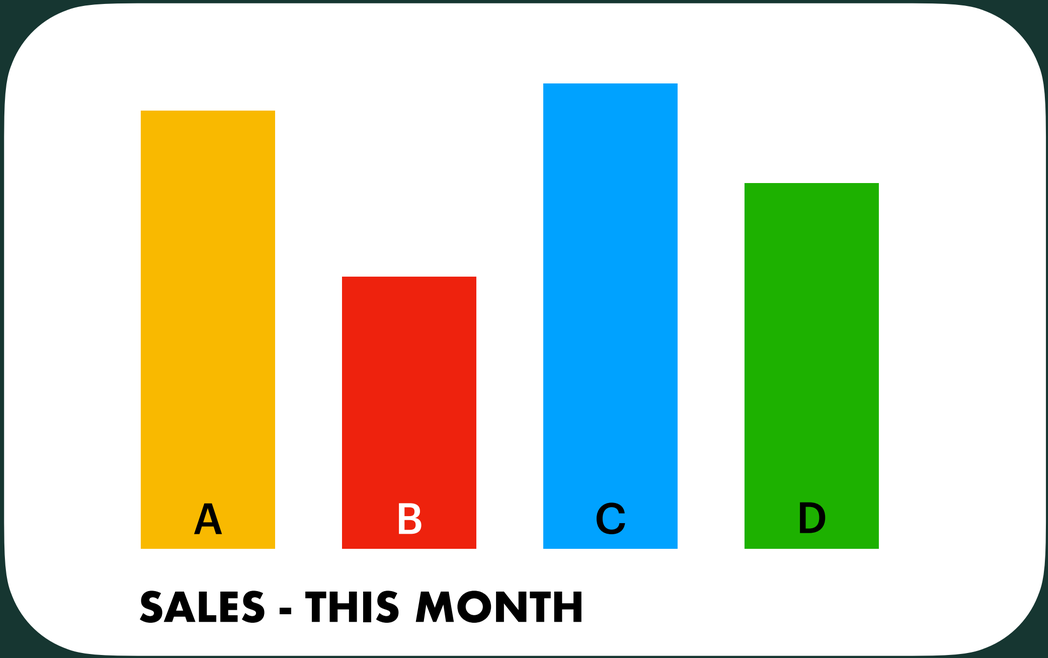
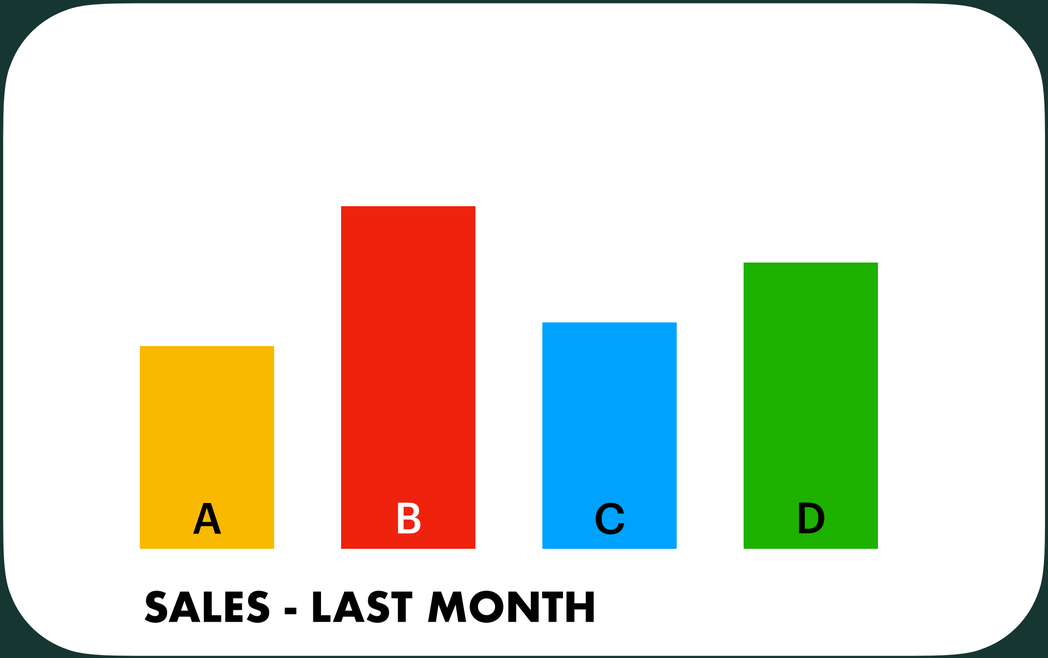
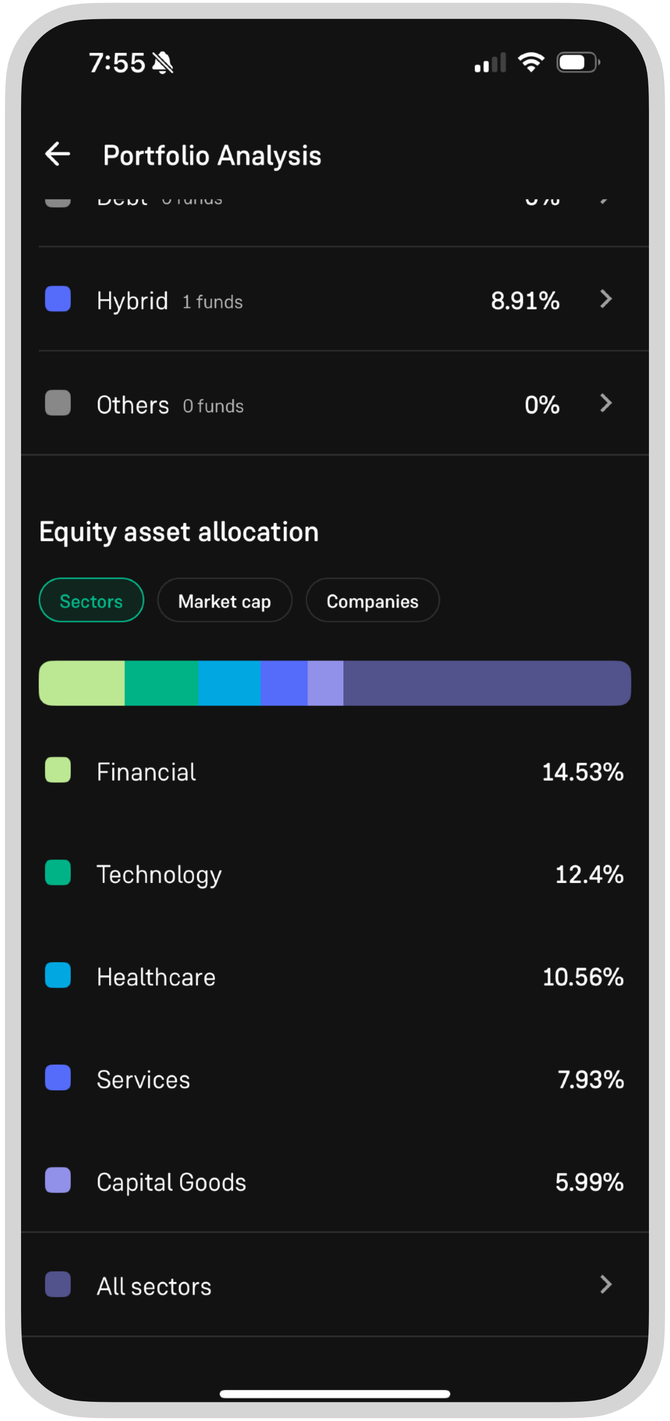
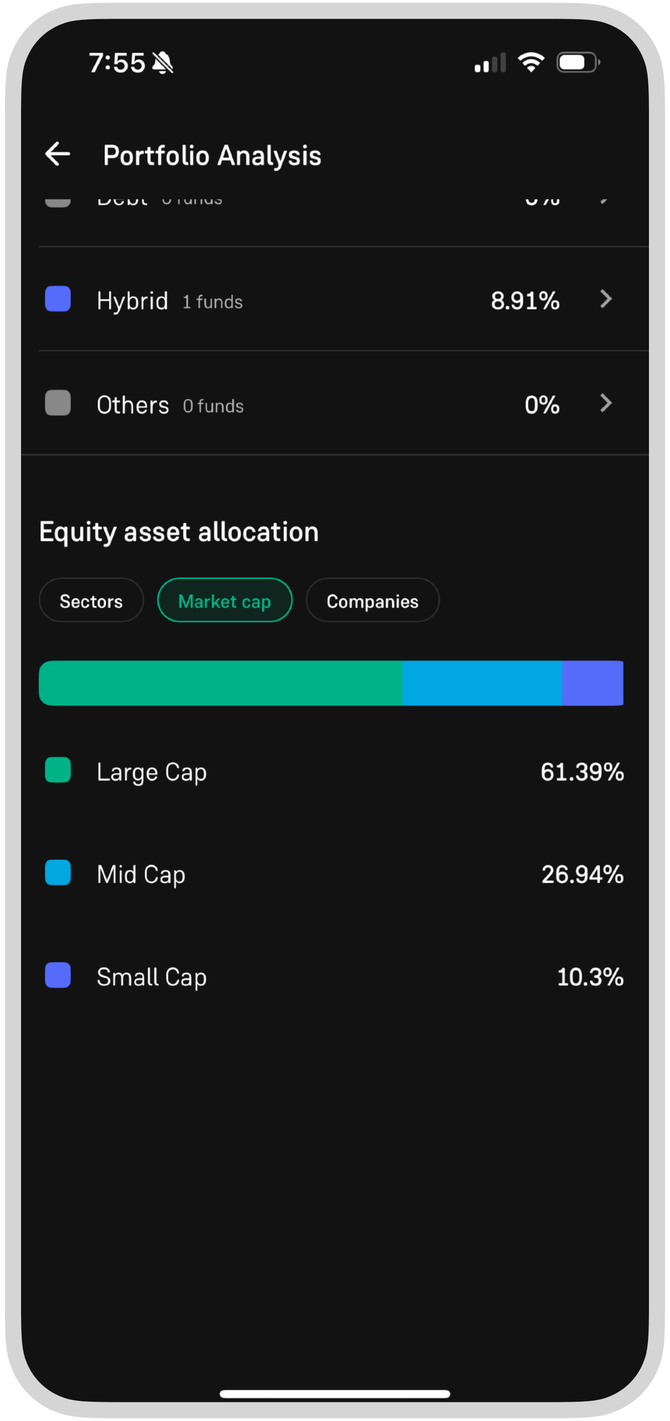
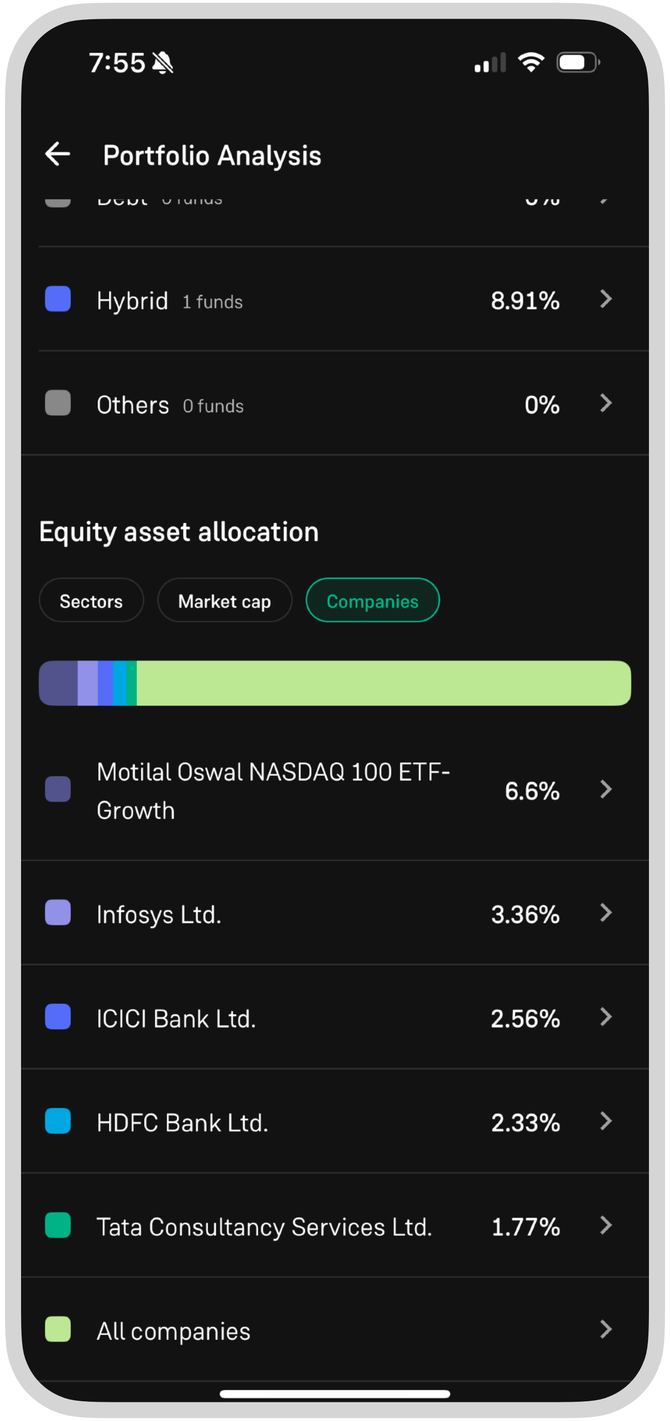





7:55
Portfolio Analysis
Hybrid 1 funds 8.91%
Others 0 funds 0%
Equity asset allocation
Sectors
Market cap
Companies
Financial 14.53%
Technology 12.4%
Healthcare 10.56%
Services 7.93%
Capital Goods 5.99%
All sectors


7:55
Portfolio Analysis
Hybrid 1 funds 8.91%
Others 0 funds 0%
Equity asset allocation
Sectors
Market cap
Companies
Large Cap 61.39%
Mid Cap 26.94%
Small Cap 10.3%


7:55
Portfolio Analysis
Hybrid 1 funds 8.91%
Others 0 funds 0%
Equity asset allocation
Sectors
Market cap
Companies
Motilal Oswal NASDAQ 100 ETF-Growth 6.6%
Infosys Ltd. 3.36%
ICICI Bank Ltd. 2.56%
HDFC Bank Ltd. 2.33%
Tata Consultancy Services Ltd. 1.77%
All companies

Make the viewer think about data insights, not the method of representation or the technology

Data ——— Dashboards

The ‘WHY’

Ask: what is the reason someone would look at this data?

What are the actions they might want to perform based on the data?

Data —— Dashboards

The ‘WHEN’

Dashboards are usually constantly updated with new data, but you may want to view data for a given time period or compare with a different time period.

Also - how frequently will someone look at your dashboard?

Hourly

Daily

Weekly

Monthly

Tufte’s 8 principles for graphical excellence

Graphical displays should:

- show the data
- induce the viewer to think about the substance
- avoid distorting what the data says
- present many numbers in small space
- make large data sets coherent
- encourage comparison between data
- reveal the data at several levels of detail
- clear purpose: description, exploration, tabulation or decoration

Data to Ink Ratio

Watch video from 7:20

learnBI.online

WHY YOUR DASHBOARDS LOOK BAD

*And how to fix them