

# Data products aren't just for data teams!

Building products for multiple  
user personas with ⚡ **Lightdash**



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Lightdash community!



I'm **Katie**, and I work  
at Lightdash





# Data literacy is the new computer literacy.



**Productivity**



**Innovation**



**Customer + employee experiences**



of leaders expect all employees to have basic data literacy

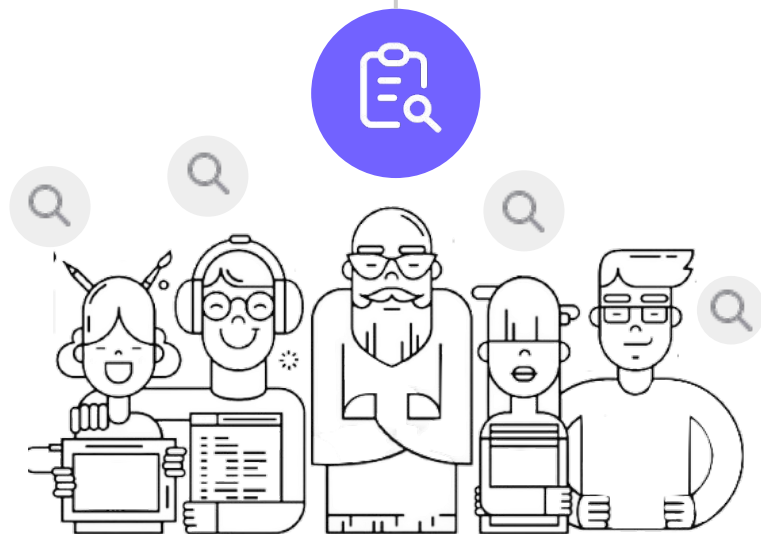


of employees are expected to heavily use data by 2025, up from 40% in 2018

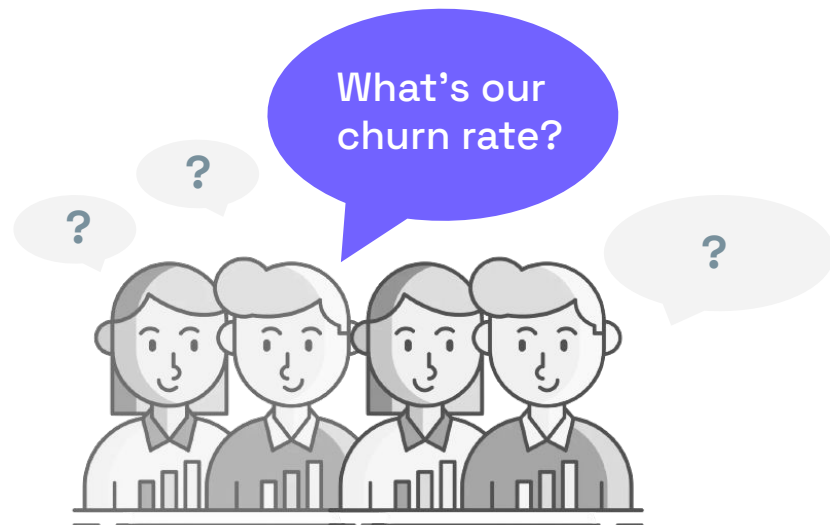


# Data isn't *just* for the data team...

Enable better decisions, *faster*



The data team



The rest of the company



I think that...




Data products are no longer *just* for data teams.

We need to build data products that can be used by data teams, but also by the rest of the company!



# 3 design principles to consider when building for 2 personas:

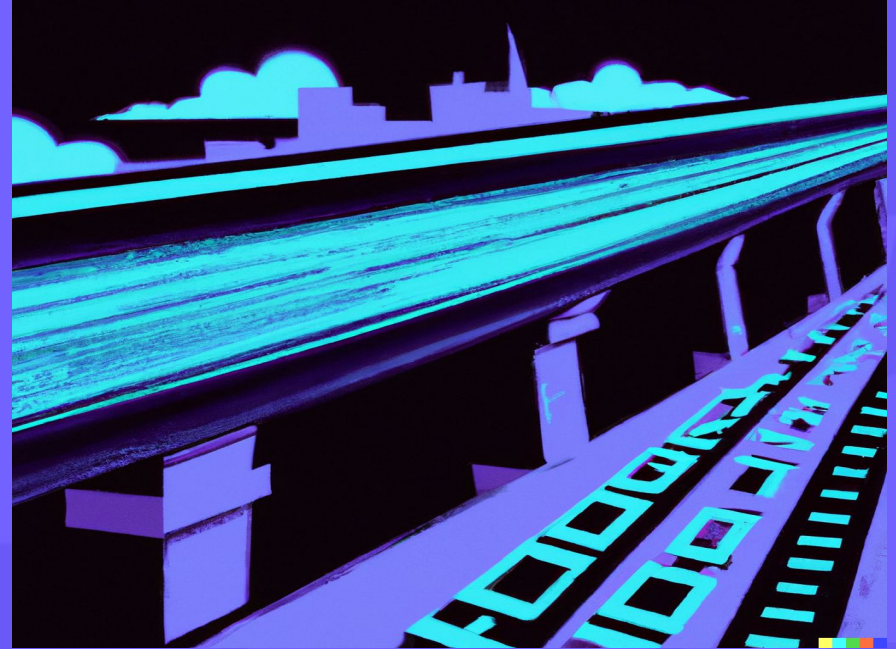
 Flexibility  
vs. Usability

 Forgiveness

 Familiarity



We're going to talk about these through the lens of building a BI tool.





# ⚖️ Flexibility vs. usability

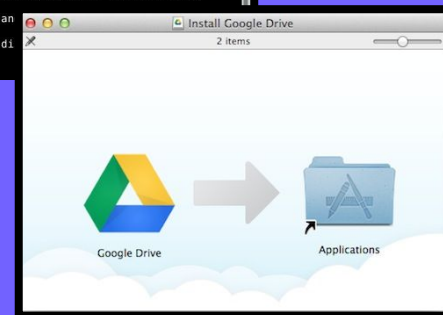
Installing software...

## Linux machine vs. Mac

Which one was built to be super flexible?

Which one was built to be super usable?

```
Terminal - su
File Edit View Terminal Tabs Help
root@debianstretch:/home/nick# apt install kodi
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  fonts-roboto-hinted kodi-bin kodi-data kodi-repository-kodi
  kodi-visualization-spectrum libcec4 libcrossguid0 libjs-iscroll
  libmicrohttpd12 libnfs8 libp8-platform2 libtinyxml2.6.2v5 python-imaging
  python-olefile python-pil
Suggested packages:
  python-pil-doc python-pil-dbg
The following NEW packages will be installed:
  fonts-roboto-hinted kodi kodi-bin kodi-data kodi-repository-kodi
  kodi-visualization-spectrum libcec4 libcrossguid0 libjs-iscroll
  libmicrohttpd12 libnfs8 libp8-platform2 libtinyxml2.6.2v5 python-imaging
  python-olefile python-pil
0 upgraded, 16 newly installed, 0 to remove an
Need to get 28.3 MB of archives.
After this operation, 67.6 MB of additional di
Do you want to continue? [Y/n]
```







# ⚖ Flexibility vs. usability

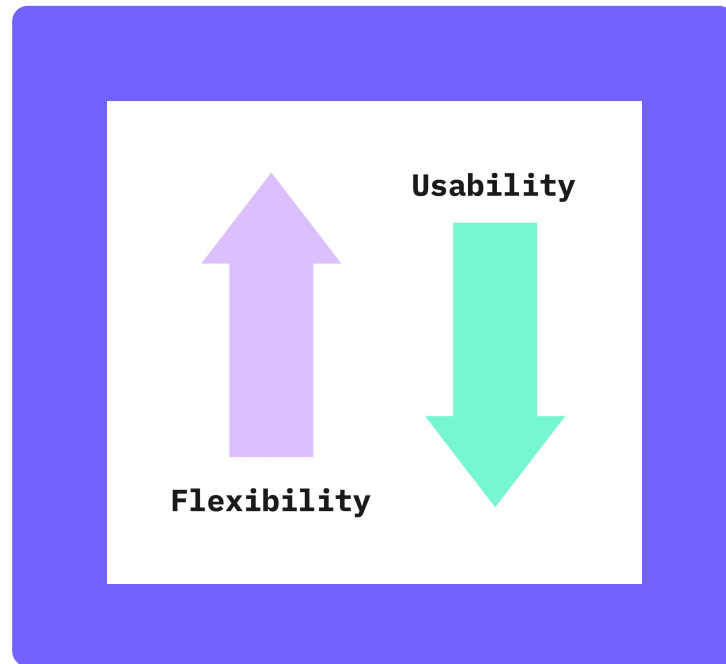
When flexibility goes up, usability goes down...

Key question: **What are the user's goals?**

- Want customization + control over the way they complete tasks? **Flexibility**
- Want to make the least amount of decisions to accomplish the goal?

**Usability**

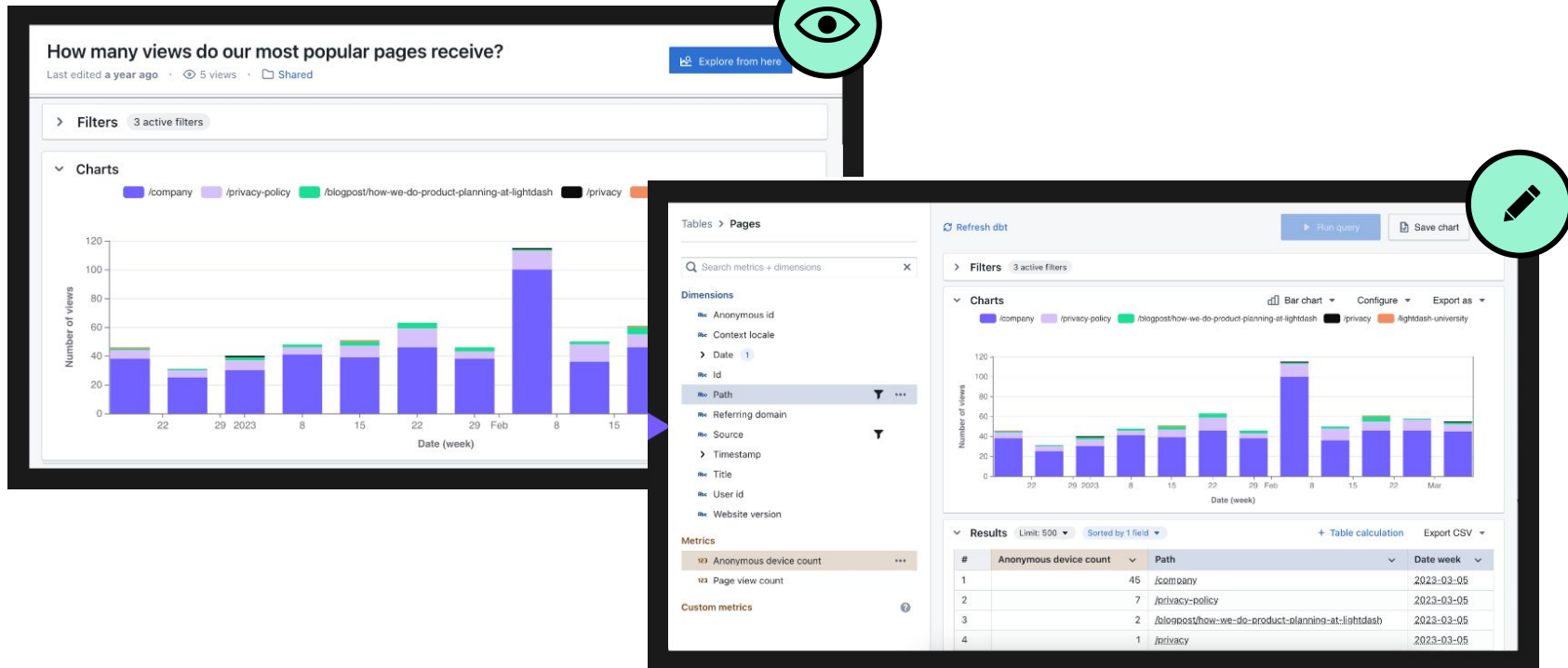
- Have a mix of both? Create a way for users to see the difference so they can **pick the kind of experience they want.**





# ⚖️ Flexibility vs. usability

## Example





# ✓ Forgiveness

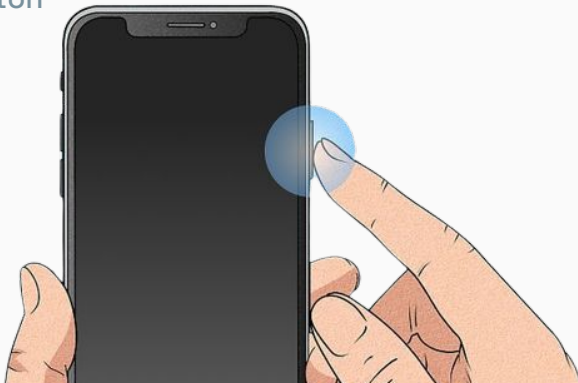
## 2- step operations for critical actions

### Turning off your phone

Users are more likely to complete 2-step operations intentionally than actions that only require one step.

#### Step 1.

Press & hold power button



#### Step 2.

Drag right





# ✓ Forgiveness

Prevent errors when you can, but make them easy to fix when they happen.

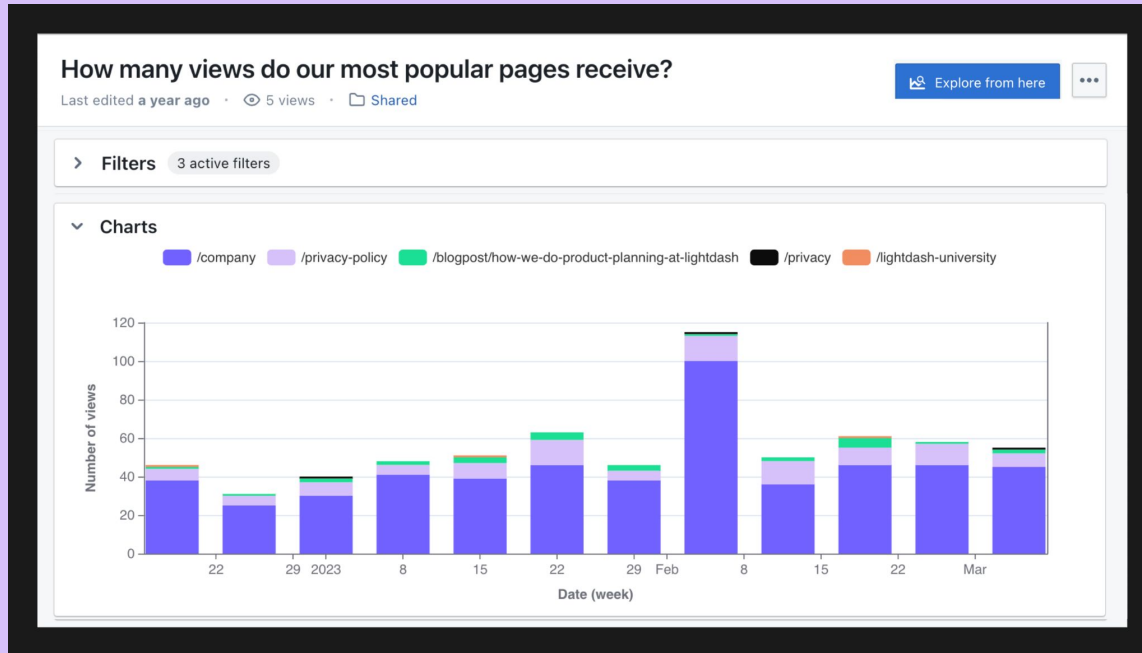
Key question: **What's the worst thing that can happen here?**

- Talk to both sets of users to understand the “scariest” consequences.
- Design to make this unlikely to happen.
  - Use established usability patterns (e.g. red button = bad)
  - Add previews of changes
  - Use confirmations and warnings



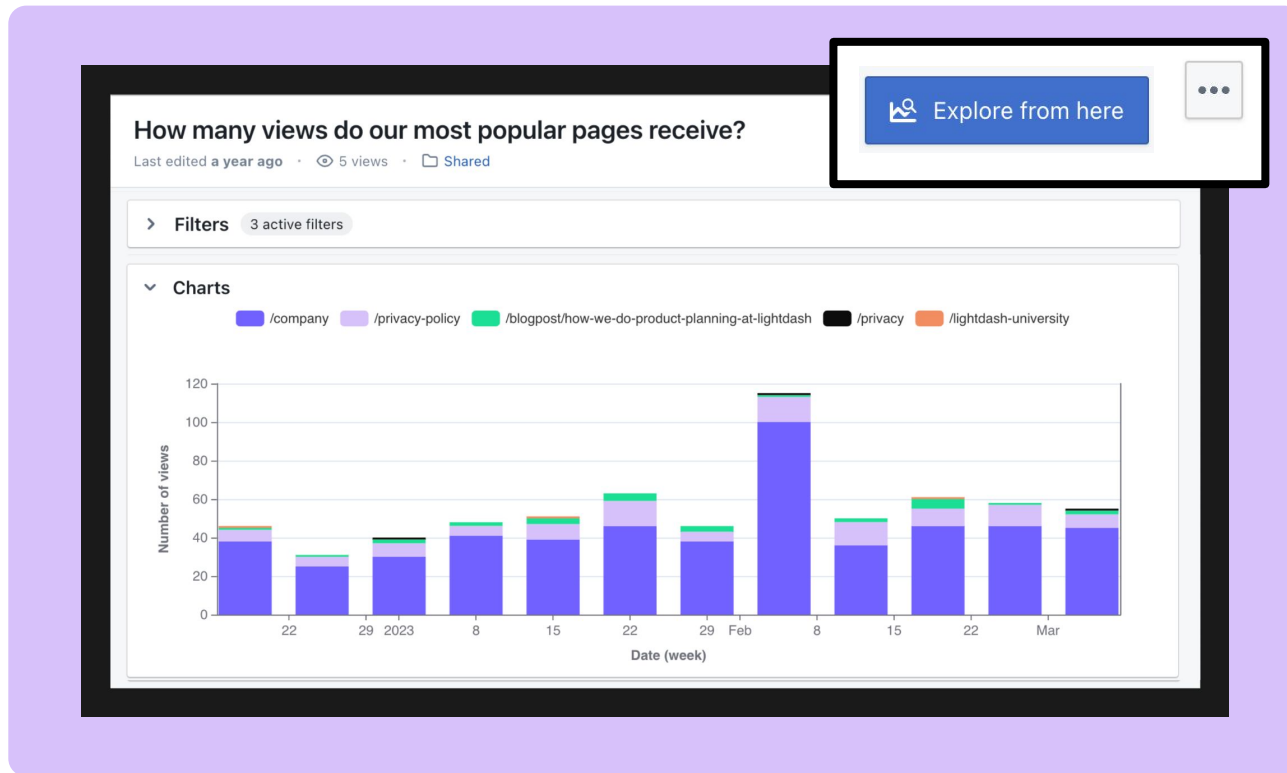
# Forgiveness

## Example



# Forgiveness

## Example



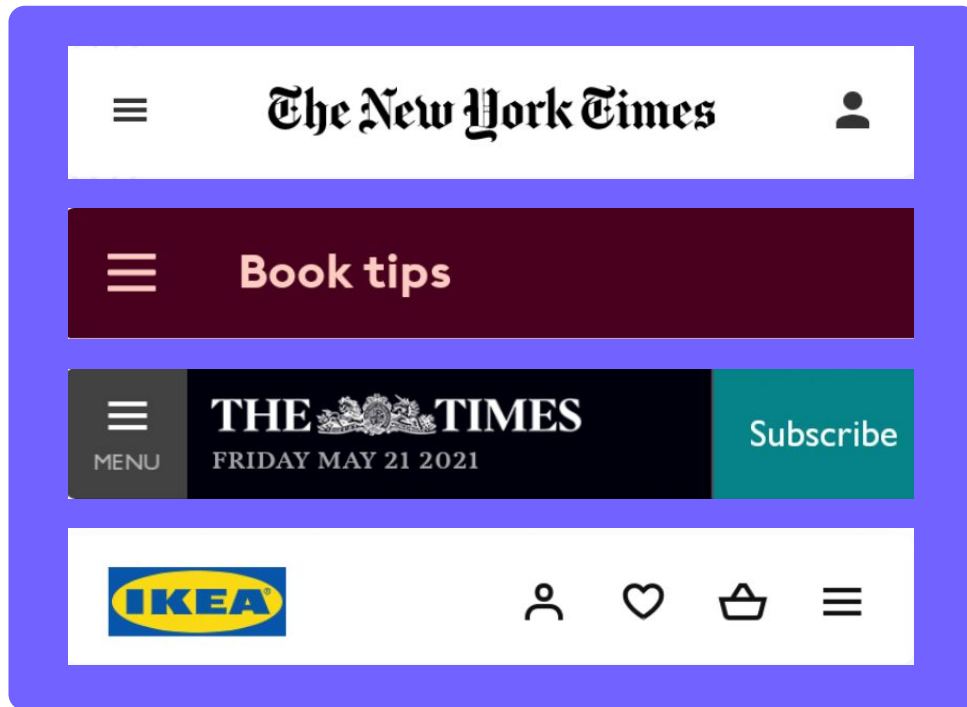


# Familiarity

## Using familiar design patterns

### Menu icons

How would you access the menus from these headers?





# Familiarity

## Heading

Key question: **Is there a familiar experience for *both* personas that we can use here?**

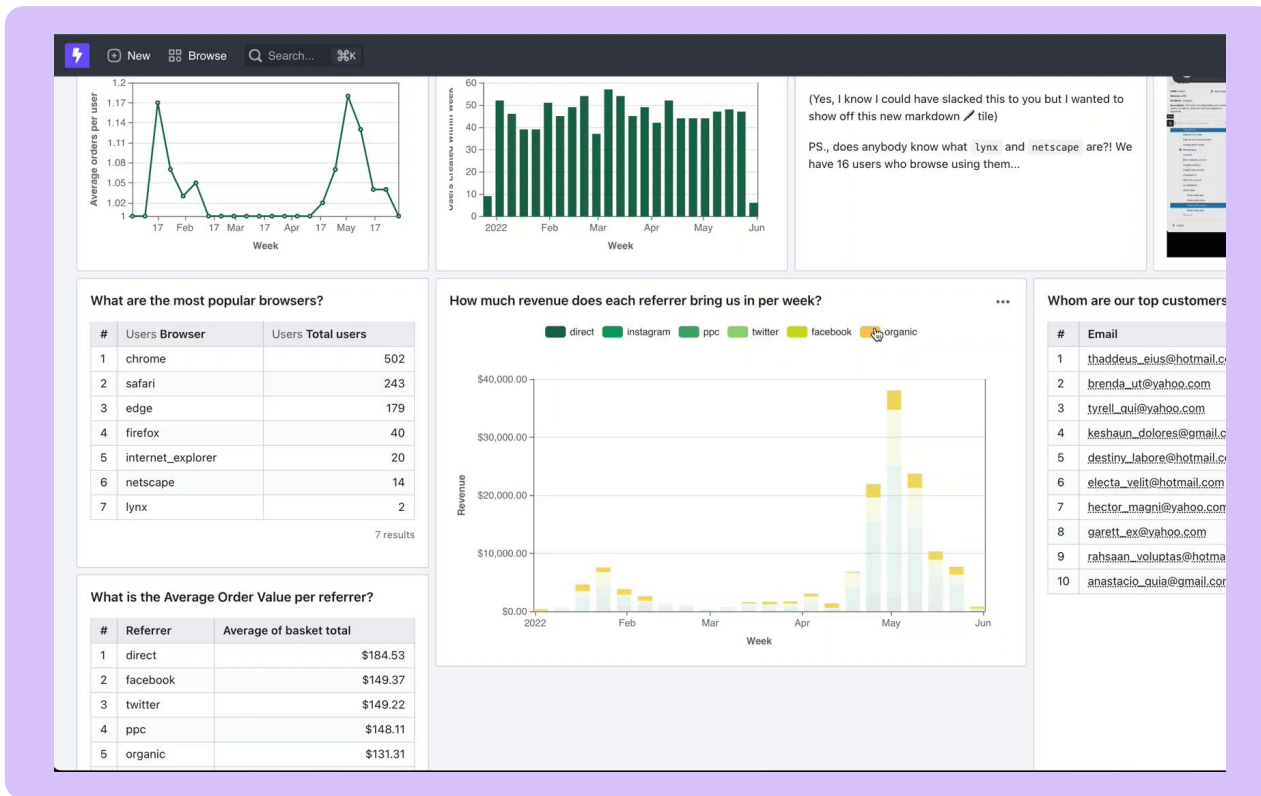
- Do competitor research to see if there are existing patterns.
- Use basic established usability patterns.
- Give users a prototype and use it to test familiarity:
  - Can they guess what it does?
  - Can they complete the task successfully?

	A	B	C
1			
2			
3			
4			
5			
6			
7			
8			



# Familiarity

## Example





Okay, those are 3 useful design principles...  
...**Now what?**



Flexibility  
vs. Usability



Forgiveness



Familiarity

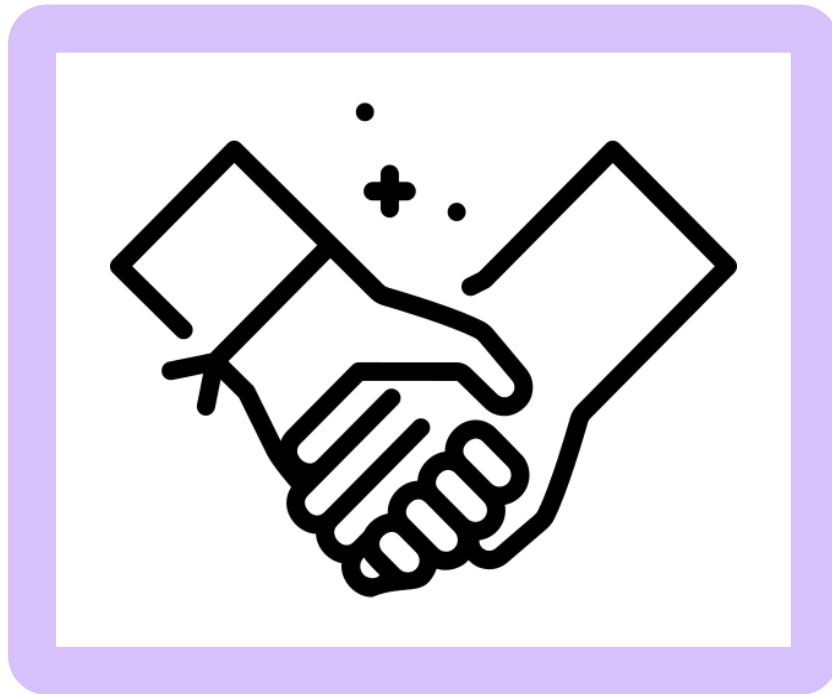


The increase in data literacy is going to be limited by data tools **unless we make changes in how we build them.**



# We need to start building tools for a data literate future.

- Building tools for business users means **thinking about their preferred UX**:
  - Native integrations in Slack or Notion?
  - Using natural language for querying data?
- Helping them **use data in decision-making** means:
  - Increased and standardized context in data tools.
  - Better leveraging of metadata to help them feel confident in self-serve decision making.
- Otherwise, **data tools will be the limiting factor in how much we can increase data literacy.**





# How can we do this?

Build data tools with **both** data teams and business users in mind.

We can use design principles to help us, like:

- Flexibility vs. usability
- Forgiveness
- Familiarity

# Join the Lightdash Community!

Thank you! ⚡



Scan me!