

Data Visualization In The Real World

An interactive session on how we consume data every day
without realizing it.



10 Examples + Class Discussion



"When was the last time you looked at a chart today?"

(Hint: You probably looked at your phone.)

1. The Weather App

Concept: Abstraction

You don't need raw barometric pressure data.

You need a **Cloud Icon**.

- The app hides the complex math.
- It answers the user's core question: *"Do I need an umbrella?"*
- **Lesson:** Simplify until the meaning is obvious.



EXAMPLE 2 OF 10

2. Fitness Rings

Concept: Gamification

Why do we care about "closing the rings"?

Because the human brain hates unfinished tasks. An open circle feels "broken."

Apple uses this simple donut chart to **hack your brain** and motivate physical activity.



"Spot the Lie"

Look at the chart on the next slide.

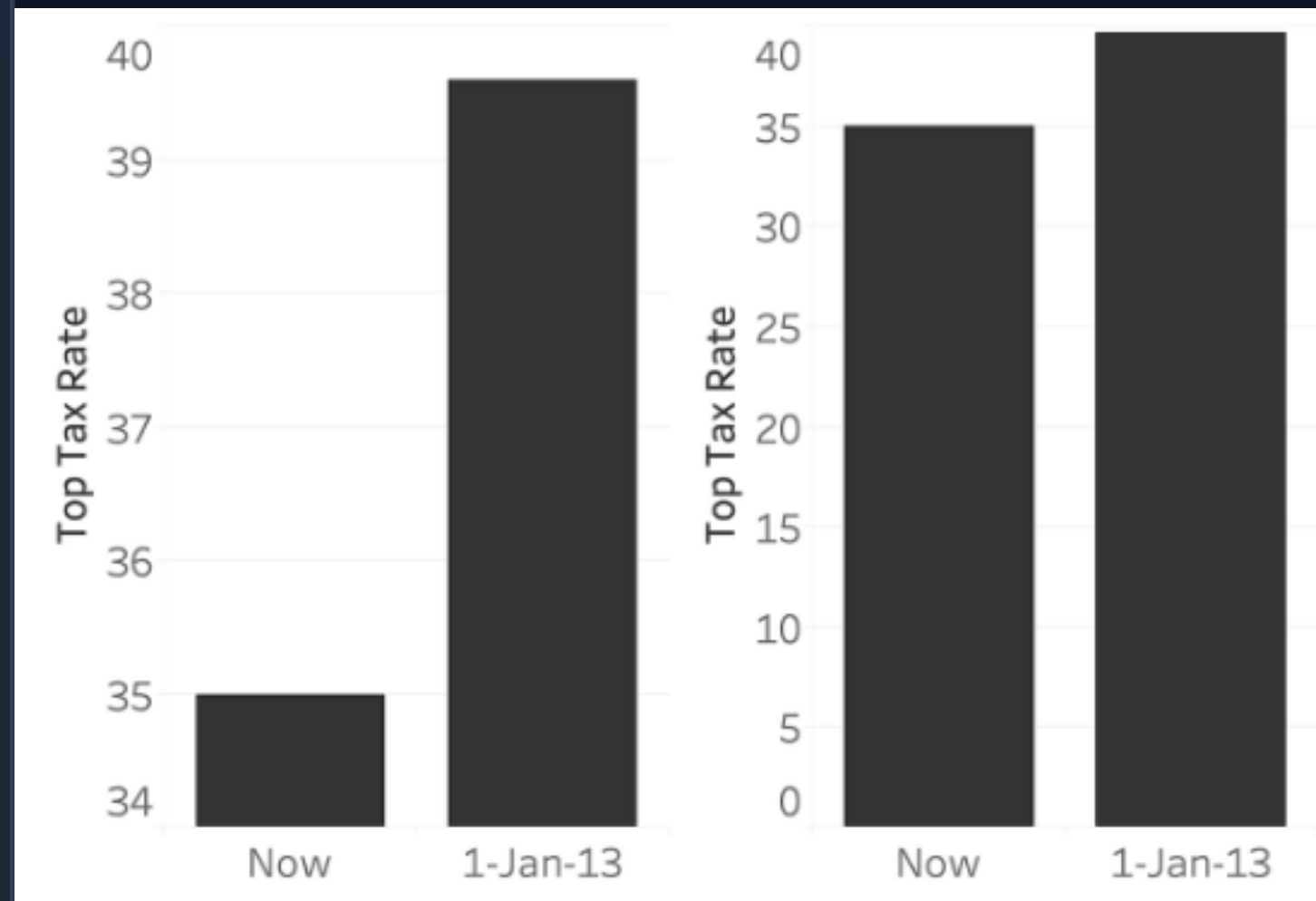
What is manipulative about it?

3. The Truncated Axis

Concept: Manipulation

Did you spot it? The Y-Axis doesn't start at zero.

- This technique makes a tiny 1% difference look like a massive gap.
- **Real World:** News channels use this to make election results or stock drops look dramatic.
- **Rule:** Always check the baseline!



Concept: Color Norms

- Green = Fast
- Red = Stop

Lesson: Leverage cultural color norms.
Don't use Red for "Profit" unless you want to confuse people.



"Does data make you act?"

Some charts are just for info. Others demand immediate action.

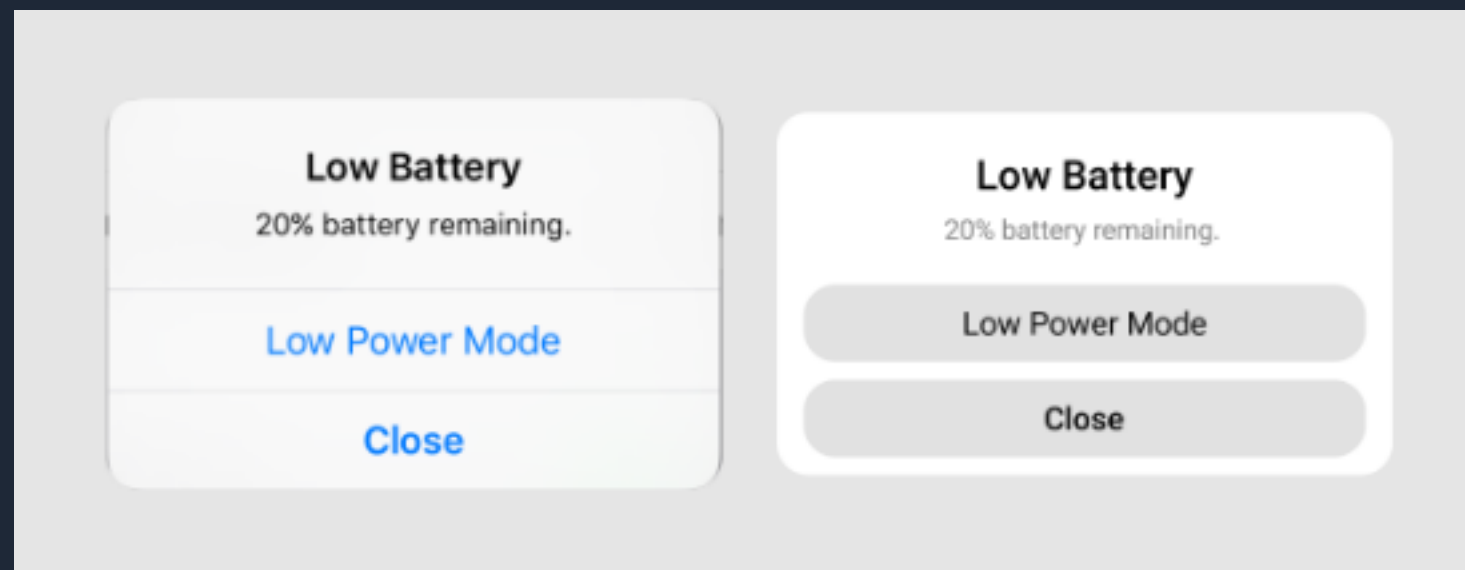
6. The Battery Icon

Concept: Urgency

When the battery bar is green, you ignore it.

When it turns **Red**, you panic.

- This is a simple gauge chart, but it drives **behavior**.
- **Lesson:** Good visualization doesn't just inform; it prompts the user to take action.



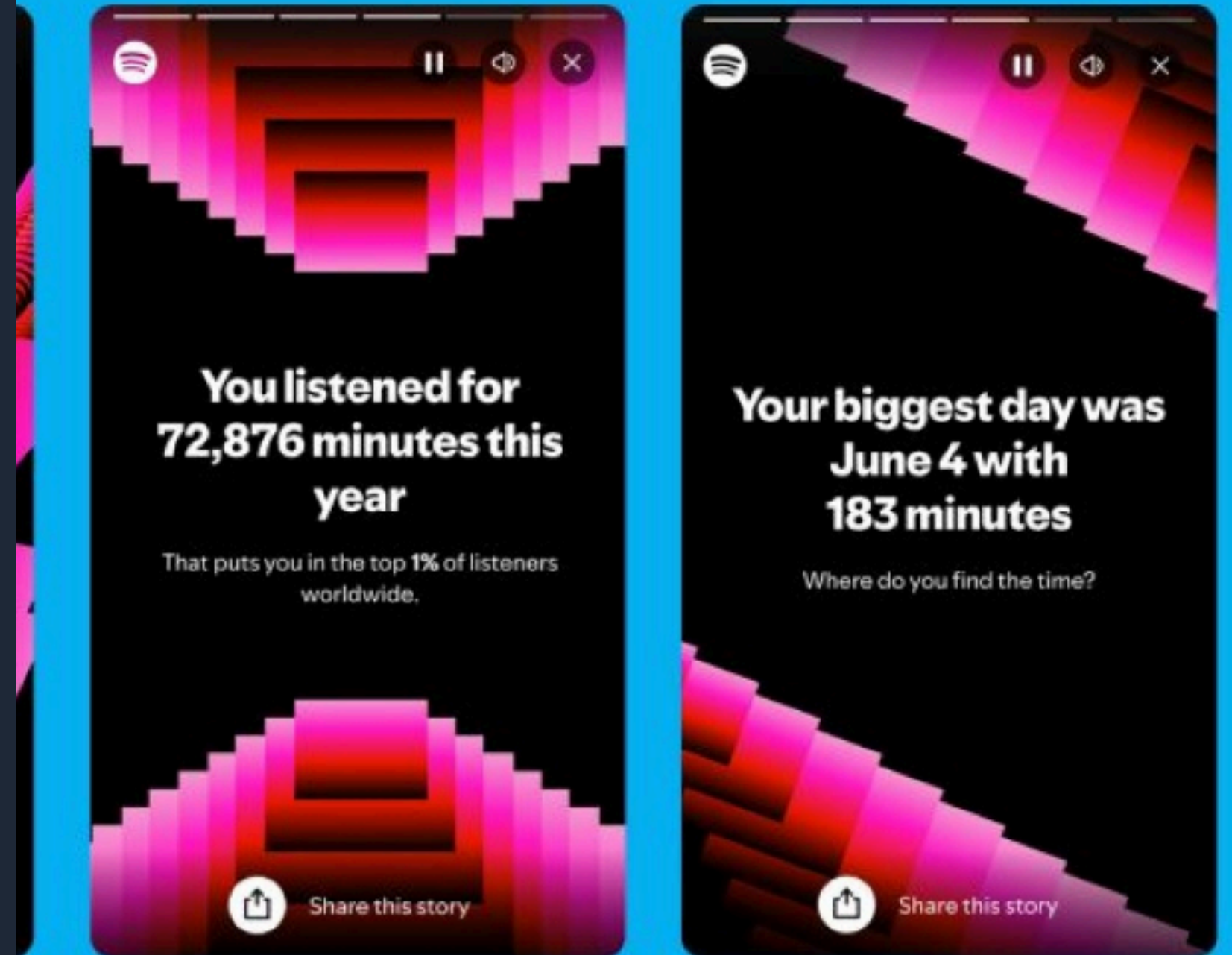
7. Spotify Wrapped

Concept: Storytelling

Why do people share this data on Instagram?

Because it turns raw numbers into an **Identity**. It doesn't say "500 hours listened." It says "You are a Superfan."

It makes the data feel personal and emotional.

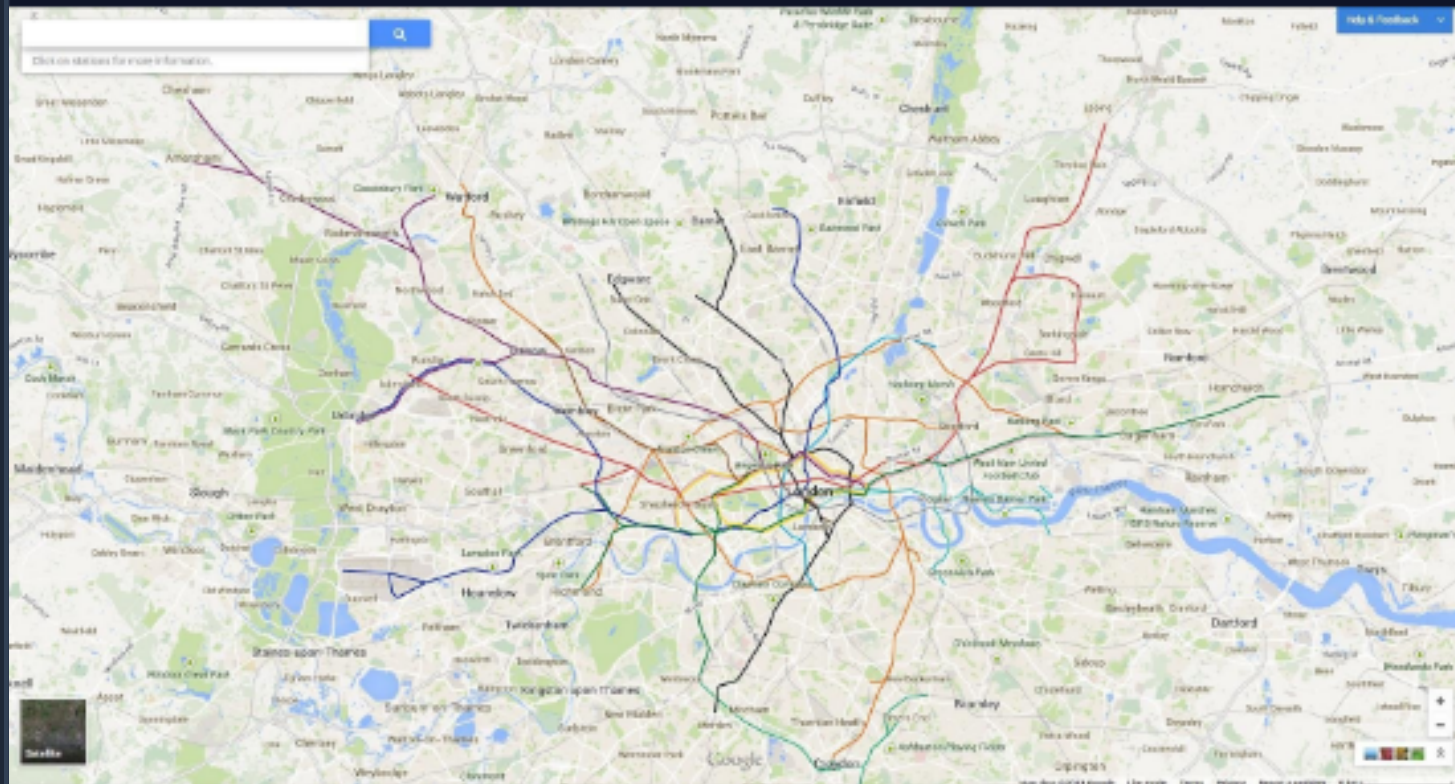


8. The Tube Map

Concept: Distortion

This map is geographically **wrong**! The real tunnels are messy and curved.

- Harry Beck realized riders don't care about geography; they care about **connections**.
- **Lesson:** Sometimes you must distort reality to make the data useful.



9. Nutrition Labels

Concept: Hierarchy

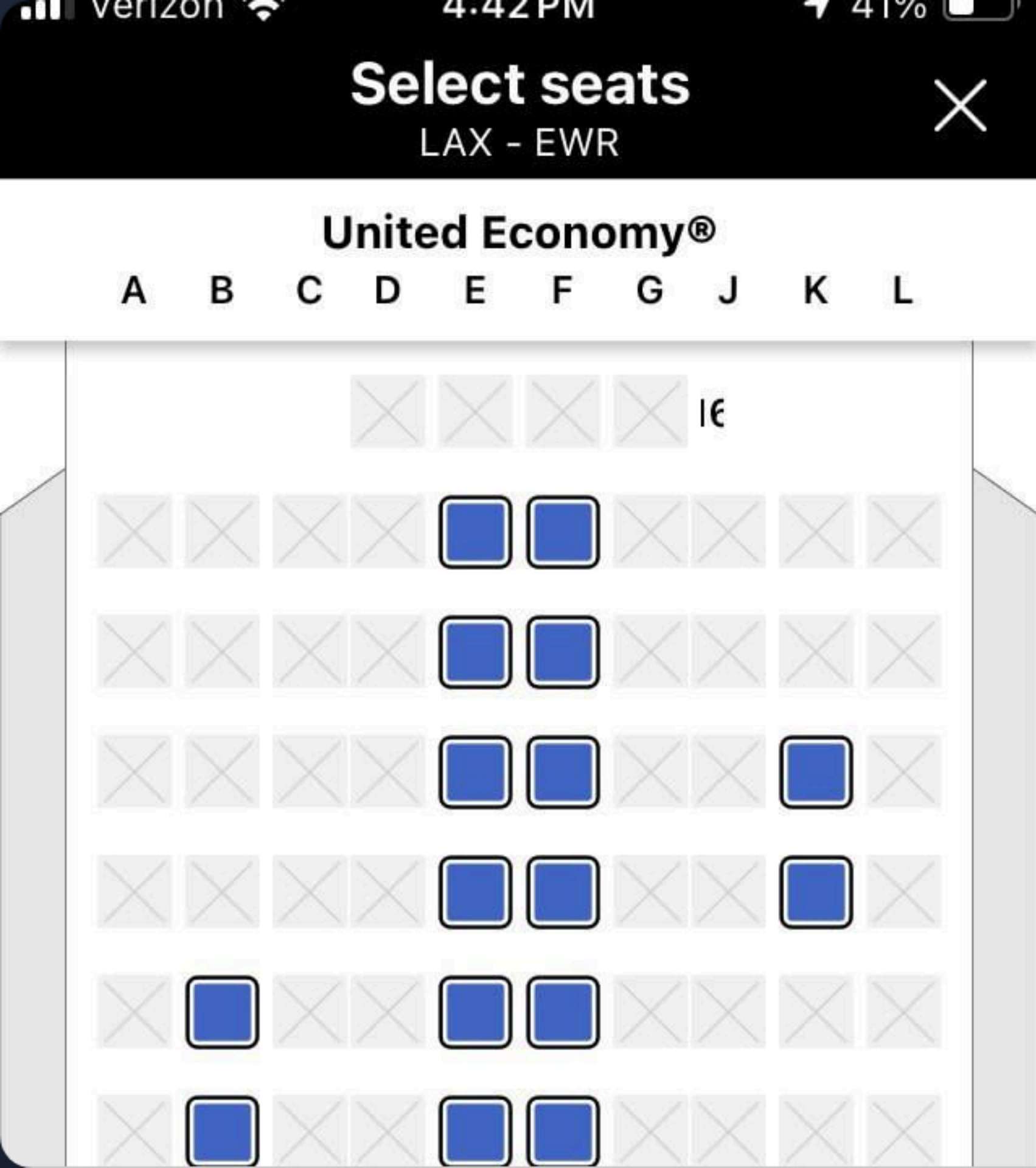
This is just a table of numbers, but look at the design.

- **Calories** is massive and bold.
- **Fat** is bold, but sub-types are indented.
- Typography is visualization. It tells your eye what to read first.



The image shows a yellow cereal box with a white nutrition label. The label is titled 'Nutrition Facts' and provides information about the serving size, servings per container, and the amount of various nutrients per serving. The label is designed with a clear hierarchy, using bold text for key nutrients and percentages to draw the viewer's eye.

Nutrition Facts		
Serving Size 2/3 cup (51g)		
Servings Per Container About 9		
Cereal with 1/2 cup Cereal Skim Milk		
Amount Per Serving	Cereal	Skim Milk
Calories	240	280
Calories from Fat	70	70
% Daily Value**		
Total Fat 8g*	12%	12%
Saturated Fat 2.5g	13%	13%
Trans Fat 0g		
Cholesterol 0mg	0%	0%
Sodium 50mg	2%	5%
Total Carbohydrate 37g	12%	14%
Dietary Fiber 3g	12%	12%
Sugars 13g		
Protein 4g	8%	16%
Vitamin A	0%	4%
Vitamin C	0%	0%
Calcium	2%	15%
Iron	6%	6%



EXAMPLE 10 OF 10

10. Flight Seat Map

Concept: Spatial Viz

Imagine choosing a seat from a list:

"Seat 12A (Window), Seat 12B (Middle)..."

It would be impossible to visualize your
comfort.

Lesson: If data has a physical location, visualize it spatially so the brain can



Summary

Data visualization isn't just for analysts.

It's for **everyone**.

Simplify

Motivate

Clarify