Lecture 6:
Storytelling and Functions

March 2, 2026

Course Administration

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   - sign up for slots April 2, 9 or 10, link is on Lecture 11
   - let me know if you cannot make any slot or all slots are full

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2. In-class workshop: March 30, instructions posted
3. Will return Tutorial Quiz 4 after class
4. Fully composed chart feedback in a minute
5. Anything else?

Fully Composed Chart Feedback

- Most of you could make a graph!
- With novel data!
- Some had annotations!
- Some success

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Moving forward

- Your feedback may say "see comment A"
- See notes here

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- Your feedback may say "see comment A"
- See notes here
- The biggest improvement is usually adding THE POINT
  - Description: troop levels over time
  - The Point: troops gathering strength in days before war
- We'll work on this today

Today

On Telling Stories

1. Components of a story
2. Pulling a story apart
3. You try

In R – functions

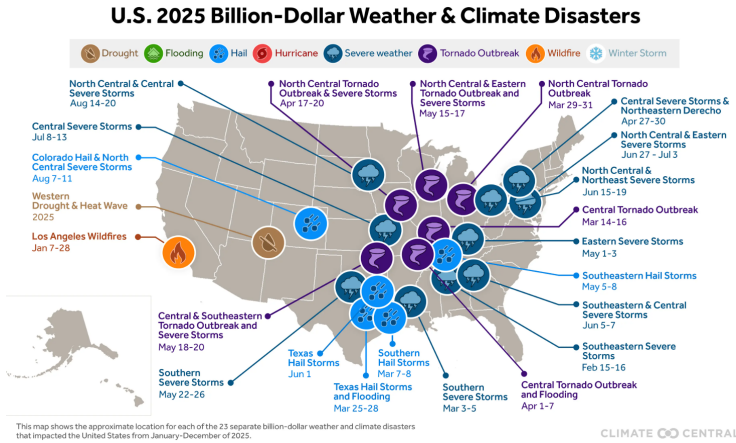
1. Why functions?
2. Defining a function
3. Getting things out of a function
4. Modifying a dataframe
5. Functions and `ggplot`

Next Week's Assignment

Find a storytelling graphic. Post link to google sheet by Wednesday noon.

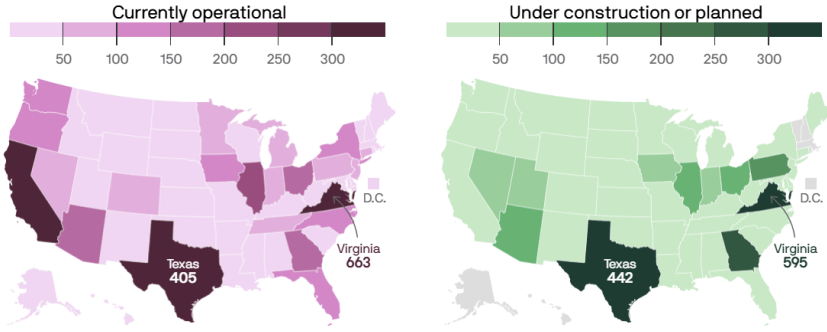
Finder	Commenter
Halle	Philip
Philip	Elly

Halle on Elly's graphic



"US Billion-Dollar Weather and Climate Disasters," *Climate Central*, Date unclear, link.

Eva on George's graphic



Data: American Edge Project and Technology Councils of North America; Map: Axios Visuals

"America's Data Center Hot Spots, Mapped," *Axios*, December 18, 2025. link.

Stories

Today

1. Components of a story
2. Pulling apart a graph

1. Components of a Story

Act 1

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- introduce characters
- set up problem

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Act 2

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- main character changes as a result of problem

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1. Components of a Story

Act 1

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- set up problem

Act 2

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- main character changes as a result of problem

Act 3

- climax
- resolution of problem

What Does this Mean for a Policy Brief?

1. Pose the problem, showing its importance
2. Give evidence for the problem or magnitude
3. Propose resolutions

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Alternatively

1. Start with conclusion – like White Lotus
2. Pose problem
3. Given evidence
4. Return to resolution

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  - In this work, it can be the lead-up to a conclusion
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- Call to action

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- Call to action
  - people want a resolution
  - make sure these relate to evidence
- All parts should be linked

Helpful Tips You Can Apply

- Do slide headers read as a story? aka horizonal alignment
- Vertical alignment – within slide agreement
- Use headers to work out your story, then build inside
- Be wary: things that work for a presentation don't always work for a written product

Common Pitfalls

- Failure to motivate problem or issue
- Too little definition
- Too much information
- Conclusion without evidence

Telling a Story with Graphics

FIG0801

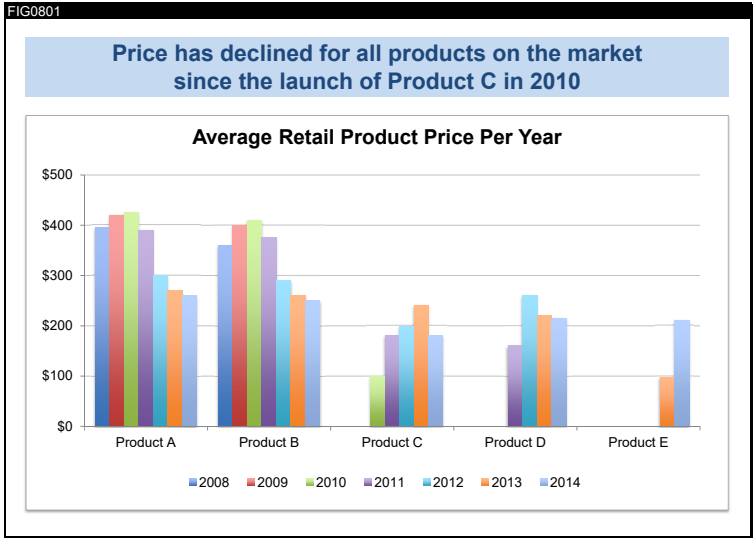
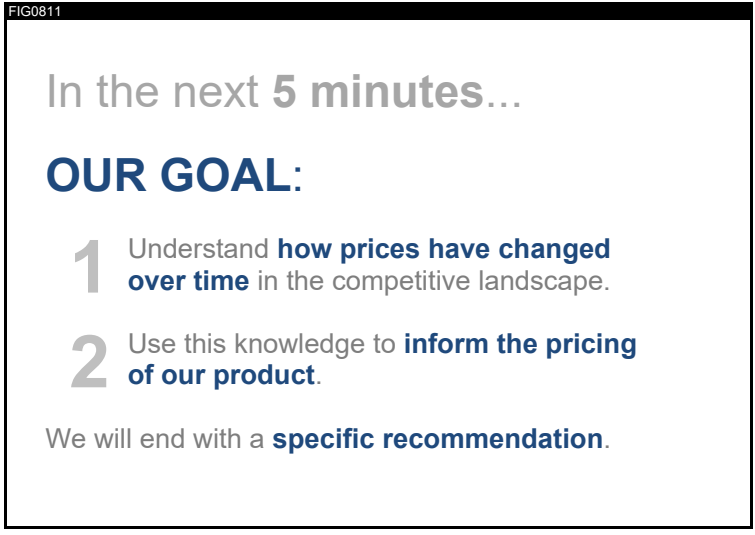


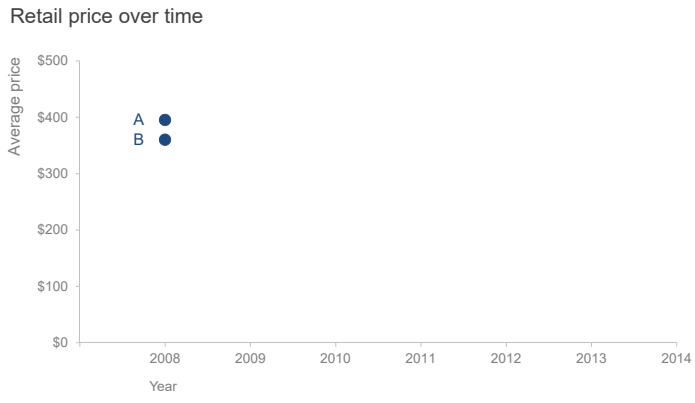
FIG0811


In the next **5 minutes**...
OUR GOAL:
1 Understand **how prices have changed over time** in the competitive landscape.
2 Use this knowledge to **inform the pricing of our product**.
We will end with a **specific recommendation**.

Telling a Story with Graphics

FIG0812

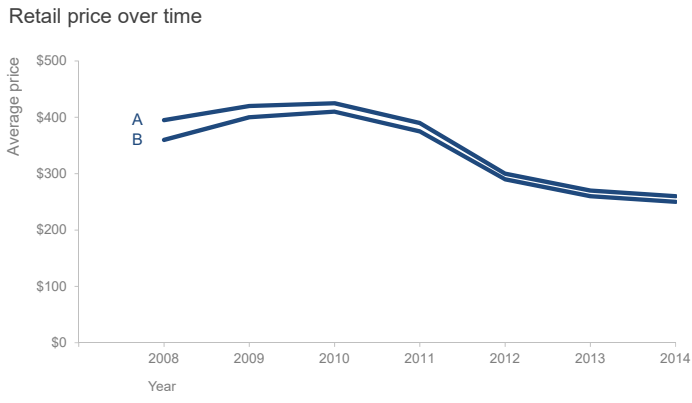
Products A and B were launched in 2008 at price points of **$360+**



Telling a Story with Graphics

FIG0813

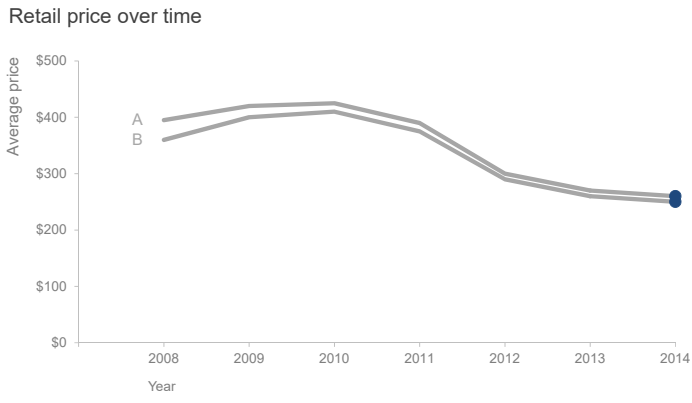
They have been priced similarly over time, with B consistently slightly lower than A



Telling a Story with Graphics

FIG0814

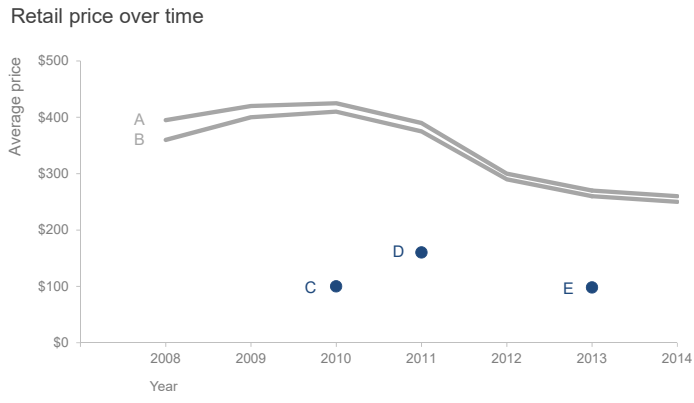
In 2014, Products A and B were priced at **$260** and **$250**, respectively



Telling a Story with Graphics

FIG0815

Products C, D, and E were each introduced later at **much lower price points**...

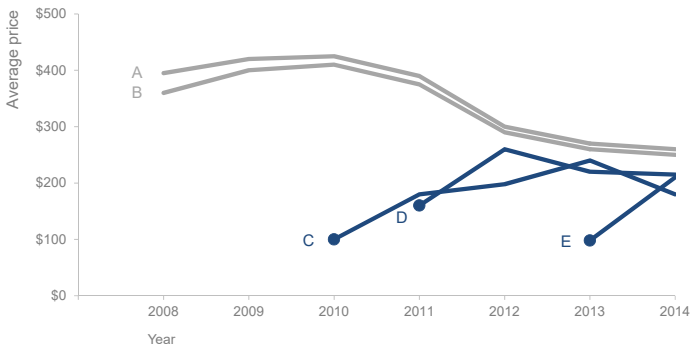


Telling a Story with Graphics

FIG0816

…but all have **increased in price** since their respective launches

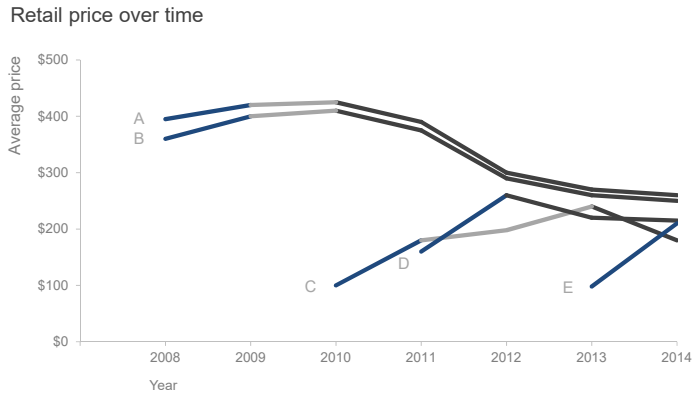
Retail price over time



Telling a Story with Graphics

FIG0817

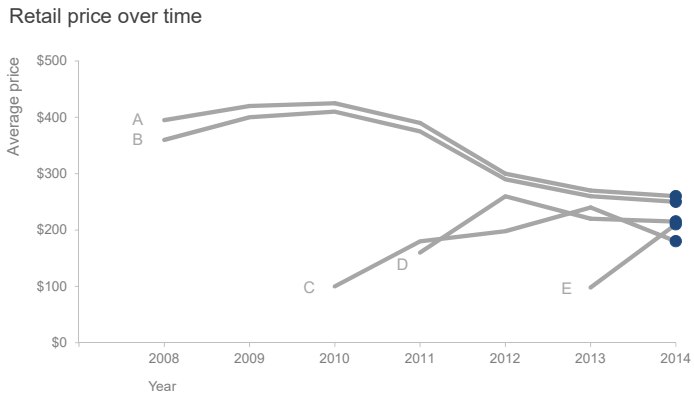
In fact, with the launch of a new product in this space, we tend to see an **initial price increase**, followed by a **decrease** over time



Telling a Story with Graphics

FIG0818

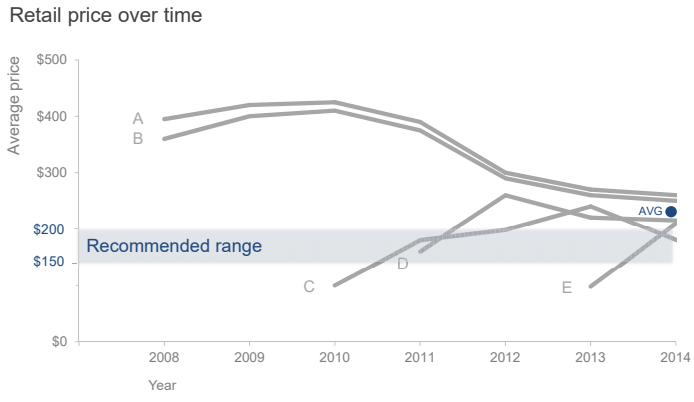
As of 2014, retail prices have converged, with an **average retail price of $223**, ranging from a low of $180 (C) to a high of $260 (A)



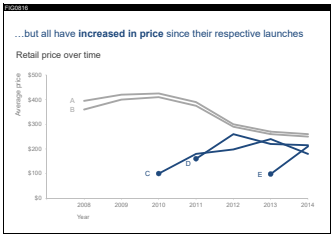
Telling a Story with Graphics

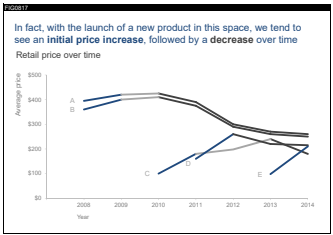
FIG0819

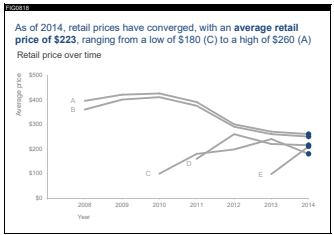
To be competitive, we recommend introducing our product *below the $223 average* price point in the **$150-$200 range**



Three Potential Stories



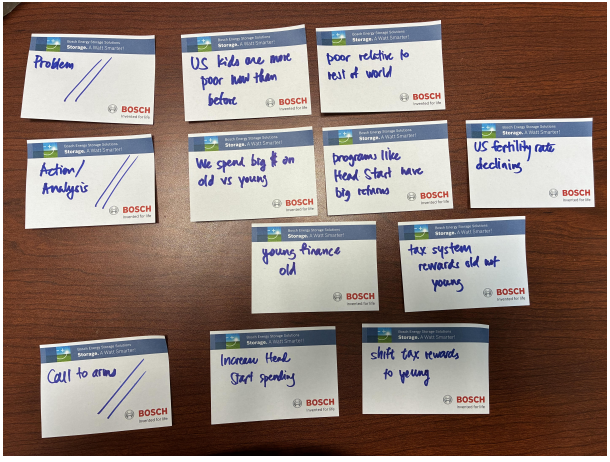




Be Aware that the Presentation Version is Not the Print Version

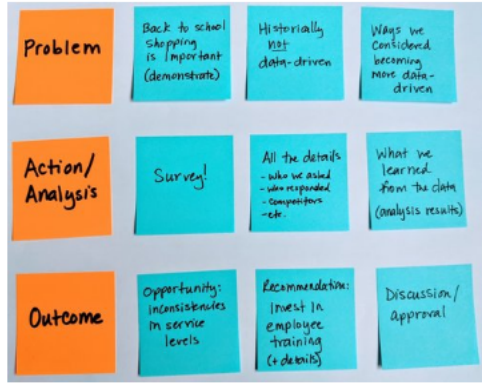
- The final graph of the sequence just before is not a good explanation
- You may need to limit the points along the way
- And make sure you highlight the finding

Telling a Story with Post-its



Telling a Story with Post-its

- Goal today is brainstorming
- Write down your key points
- One per post-it note
- Re-organize and delete as needed
- Tell your story to your group
- I'll wander around to see if you want input



From Knaflic's webpage

R – Slides here

Next Lecture

- Next week: Spring break!
- Next next week: Maps 2 of 2
- Read
  - Manson, Chapter 5
  - Goats from the *Post*
  - *NYT* on elections maps
- Lecture 9: March 30 in-class workshop