

Lecture 6: Storytelling and Functions

March 3, 2025

Course Administration

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- sign up for slots March 19 and 20, link is on Lecture 8
- let me know if you cannot make any slot or all slots are full

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3. Meet a visualizer and alum: McCall P., Graphics Consultant, Duke U., April 7
4. Fully composed chart feedback in a minute
5. Anything else?

Fully Composed Chart Feedback

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- See notes [here](#)

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 - Description: troop levels over time
 - The Point: troops gathering strength in days before war
- We'll work on this today

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- Why did you sometimes scan?

Today

On Telling Stories

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

In R – functions

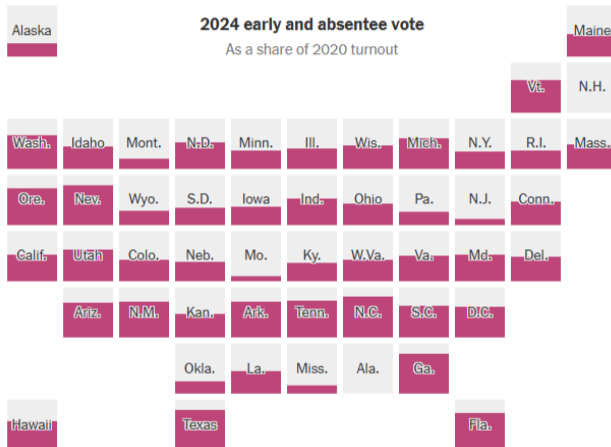
1. Why functions?
2. Defining a function
3. Getting things out of a function
4. Modifying a dataframe
5. Functions and ggplot

Next Week's Assignment

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

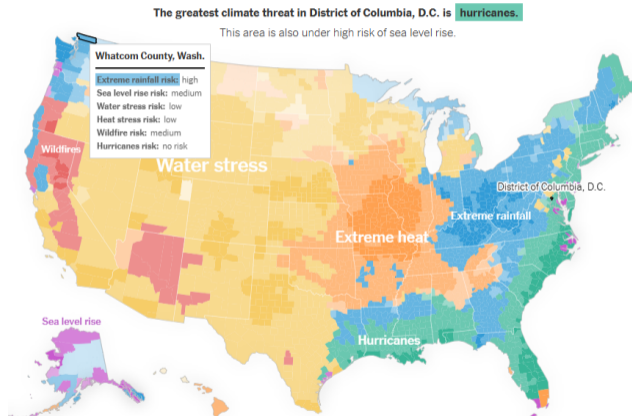
Finder	Commenter
Cade	Liz
Natalie	Caroline

Caden on Emma's graphic: Early Voting



“More Than 80 Million Voters Cast Ballots Before Election Day. See the Early Vote Breakdown.,”
New York Times, November 7, 2024, [link](#).

Maddie on Caroline's graphic



“Every Place Has Its Own Climate Risk. What Is It Where You Live?,” *New York Times*, Sept. 18, 2020. [link](#).

Stories

Today

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

1. Components of a Story

Act 1

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- set up problem

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- working on the problem
- main character changes as a result of problem

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- set up problem

Act 2

- working on the problem
- 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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 - 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 horizontal 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

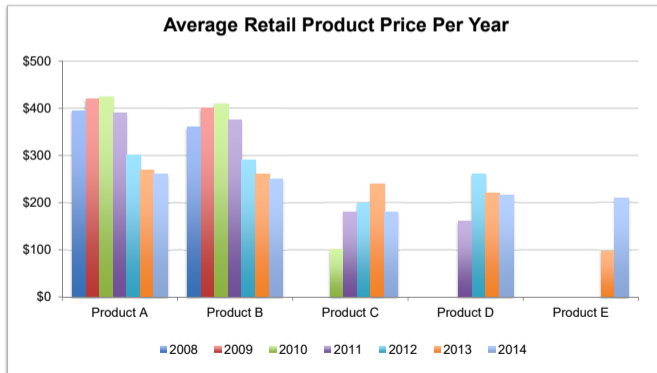
Common Pitfalls

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

Telling a Story with Graphics

FIG0801

Price has declined for all products on the market since the launch of Product C in 2010



Telling a Story with Graphics

FIG0811

In the next **5 minutes**...

OUR GOAL:

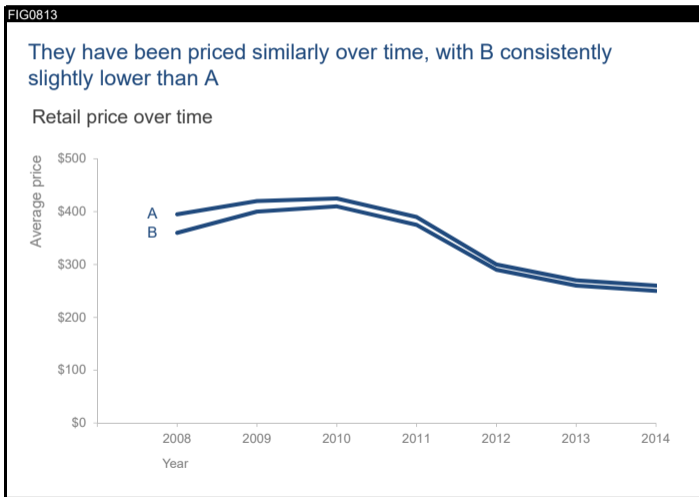
- 1** Understand **how prices have changed over time** in the competitive landscape.
- 2** Use this knowledge to **inform the pricing of our product**.

We will end with a **specific recommendation**.

Telling a Story with Graphics



Telling a Story with Graphics

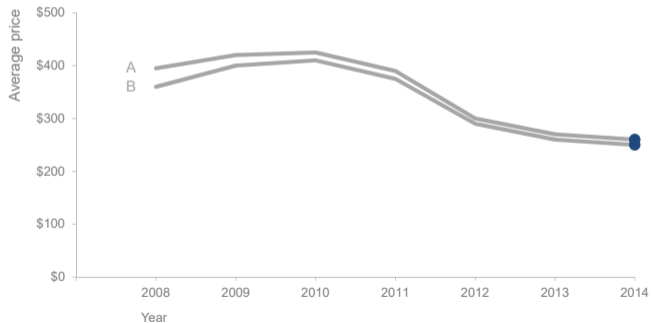


Telling a Story with Graphics

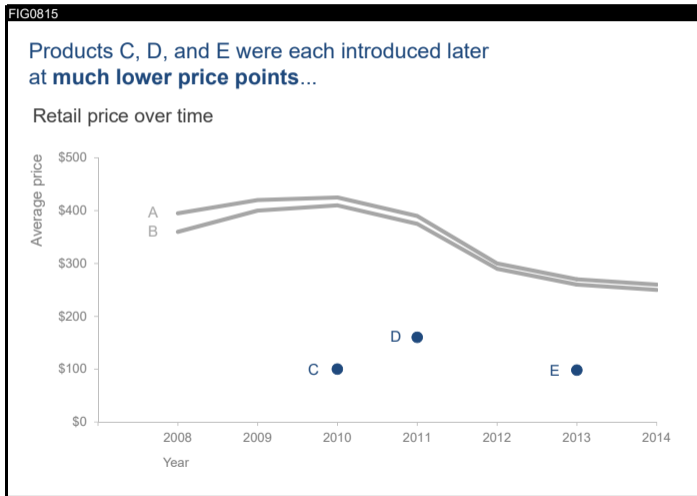
FIG0814

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

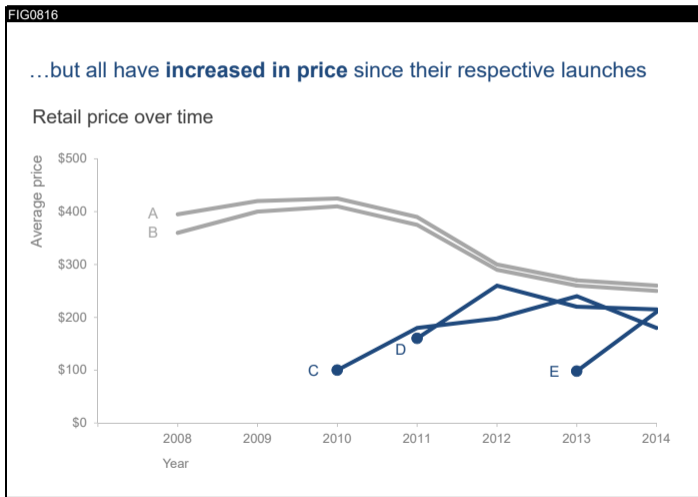
Retail price over time



Telling a Story with Graphics



Telling a Story with Graphics

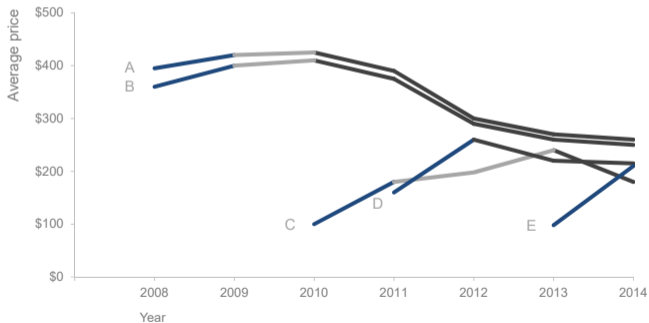


Telling a Story with Graphics

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

Retail price over time

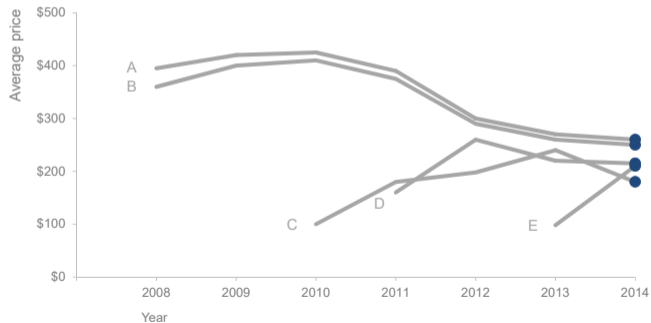


Telling a Story with Graphics

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)

Retail price over time

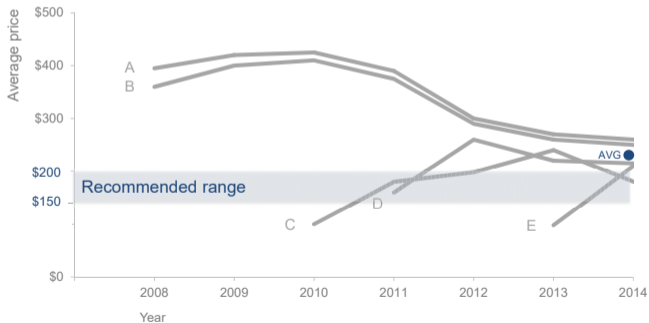


Telling a Story with Graphics

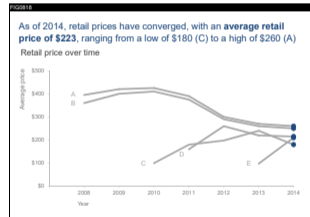
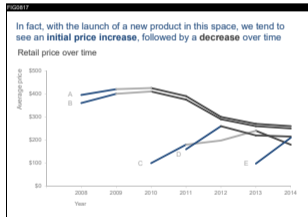
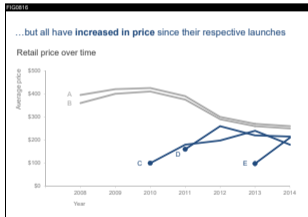
FIG0819

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

Retail price over time



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

- 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
 - Monmonier, Chapter 6
 - Goats from the *Post*
 - *NYT* on elections maps
- Heads-up: In-class workshop April 7 – lecture 10 – works better when you bring something to show