

Lecture 6: Storytelling and Functions

March 6, 2023

Course Administration

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- sign up for slots April 11, 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: April 3, instructions posted
3. Meet a visualizer: Kate R., Graphics Editor, *Wash Po*, April 3
4. Fully composed chart feedback in a minute
5. Anything else?

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

- Your feedback will say “see comment A”
- See notes [here](#)

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- Your feedback will say “see comment A”
- See notes [here](#)
- The biggest improvement will be 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

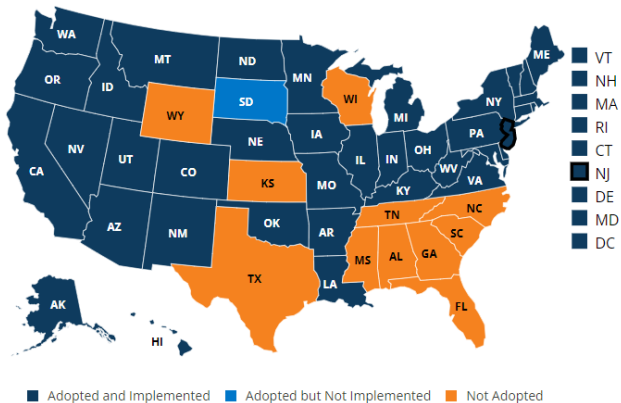
1. Why functions?
2. Defining a function
3. Getting things out of a function
4. Modifying a dataframe
5. Functions and ggplot

Next Week's Assignment

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

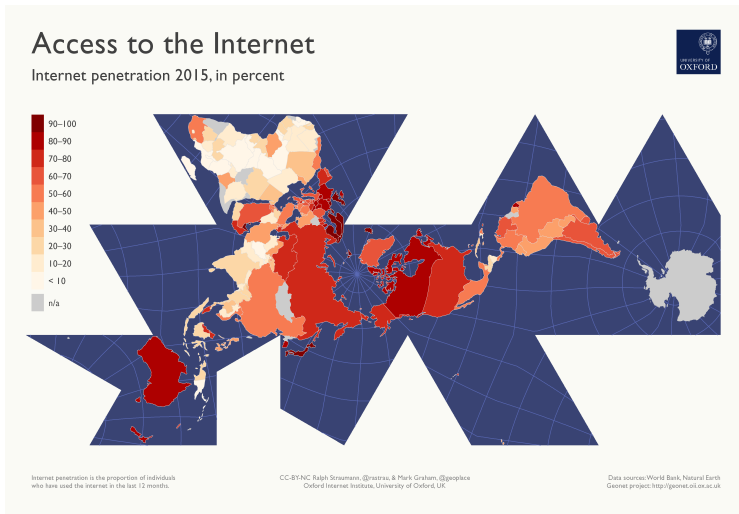
Finder	Commenter
Maddy	Bryan
Lancy	Anna

Isabel on Bryan's graphic: Internet Penetration



“Status of State Medicaid Expansion Decisions: Interactive Map,” *KFF*, [link](#).

Gio on Tara's graphic



“Who can access the internet?,” *Geonet*, Oxford, June 25, 2017. [link](#).

Stories

Today

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

1. Components of a Story

- Act 1:

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1. Components of a Story

- Act 1: introduce characters, set up problem
- Act 2: working on the problem, main character changes as a result of problem
- Act 3: climax and resolution of the problem

What Does this Mean for a Policy Brief?

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

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- Storyboard

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 - In Knaflic's book this is the lead-up to a policy
 - In this work, it can be the lead-up to a conclusion
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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 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

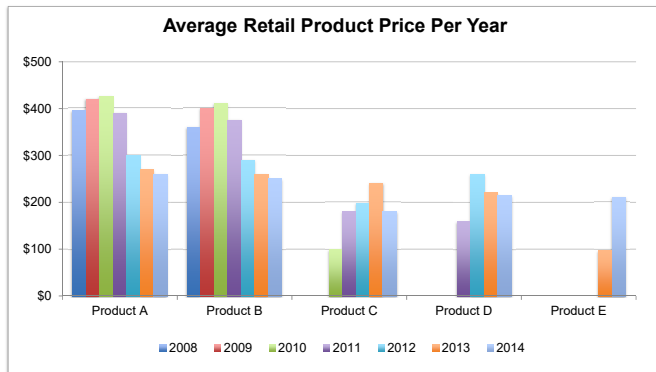
Common Pitfalls

- 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

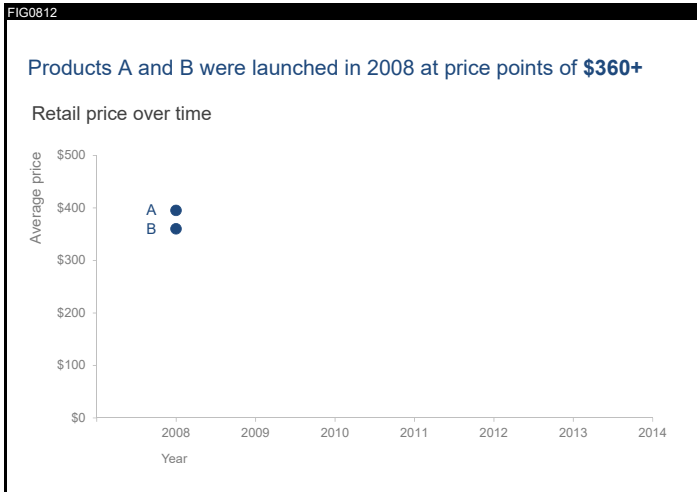
In the next **5 minutes...**

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

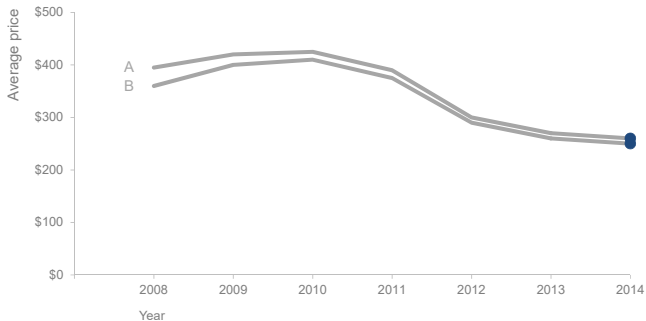


Telling a Story with Graphics

FIG0814

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

Retail price over time

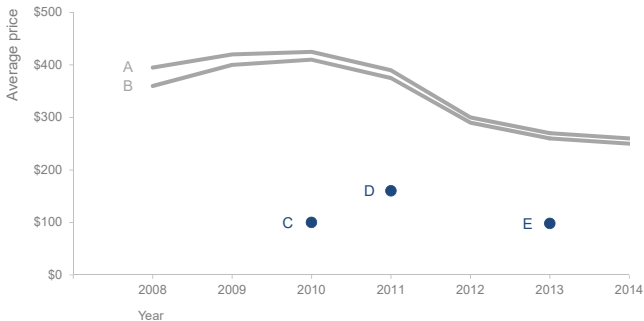


Telling a Story with Graphics

FIG0815

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

Retail price over time

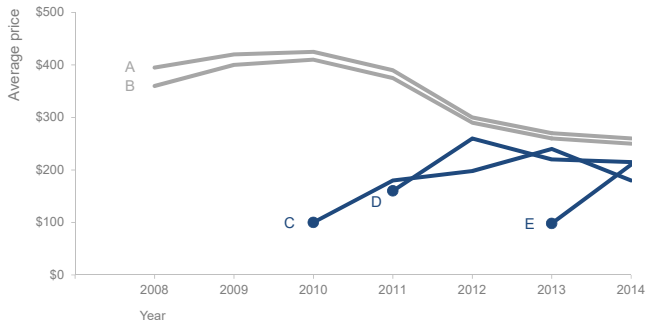


Telling a Story with Graphics

FIG0816

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

Retail price over time

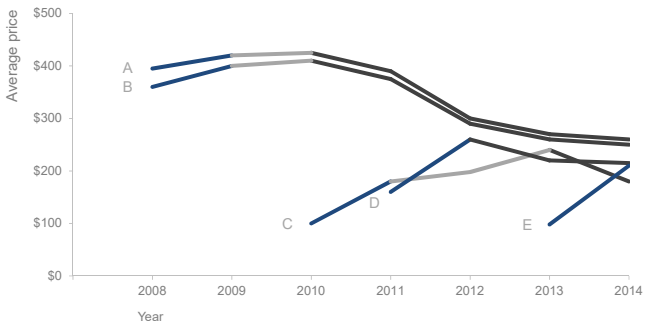


Telling a Story with Graphics

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

Retail price over time

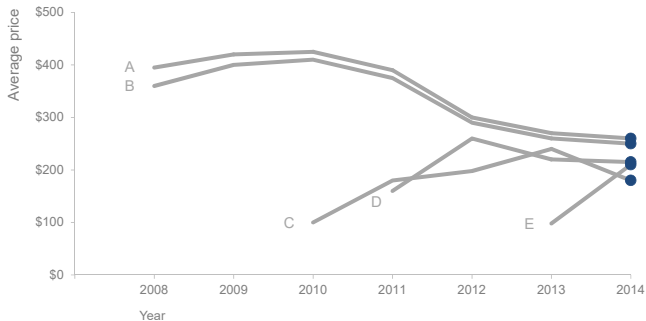


Telling a Story with Graphics

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

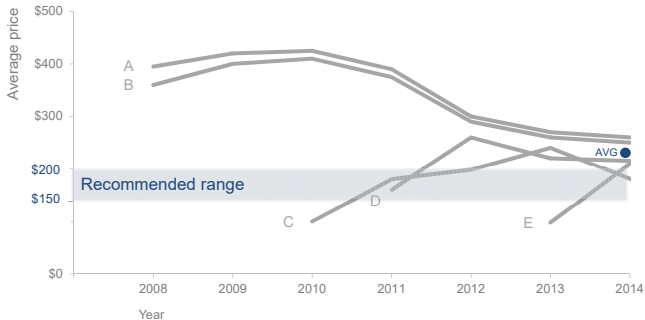


Telling a Story with Graphics

FIG0819

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

Retail price over time



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 3 – lecture 9 – works better when you bring something to show