

# Best Practices – Enhancing the Story

Bring Stories to life  
Instead of just Showing Data



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# Contents

- Enhancing the Story
  - Annotation
  - Decluttering
  - Use color sparingly and strategically
  - Visual hierarchy of information

# Data + Narrative = Tale



- Data Storytelling
- Narrative
- Explanation

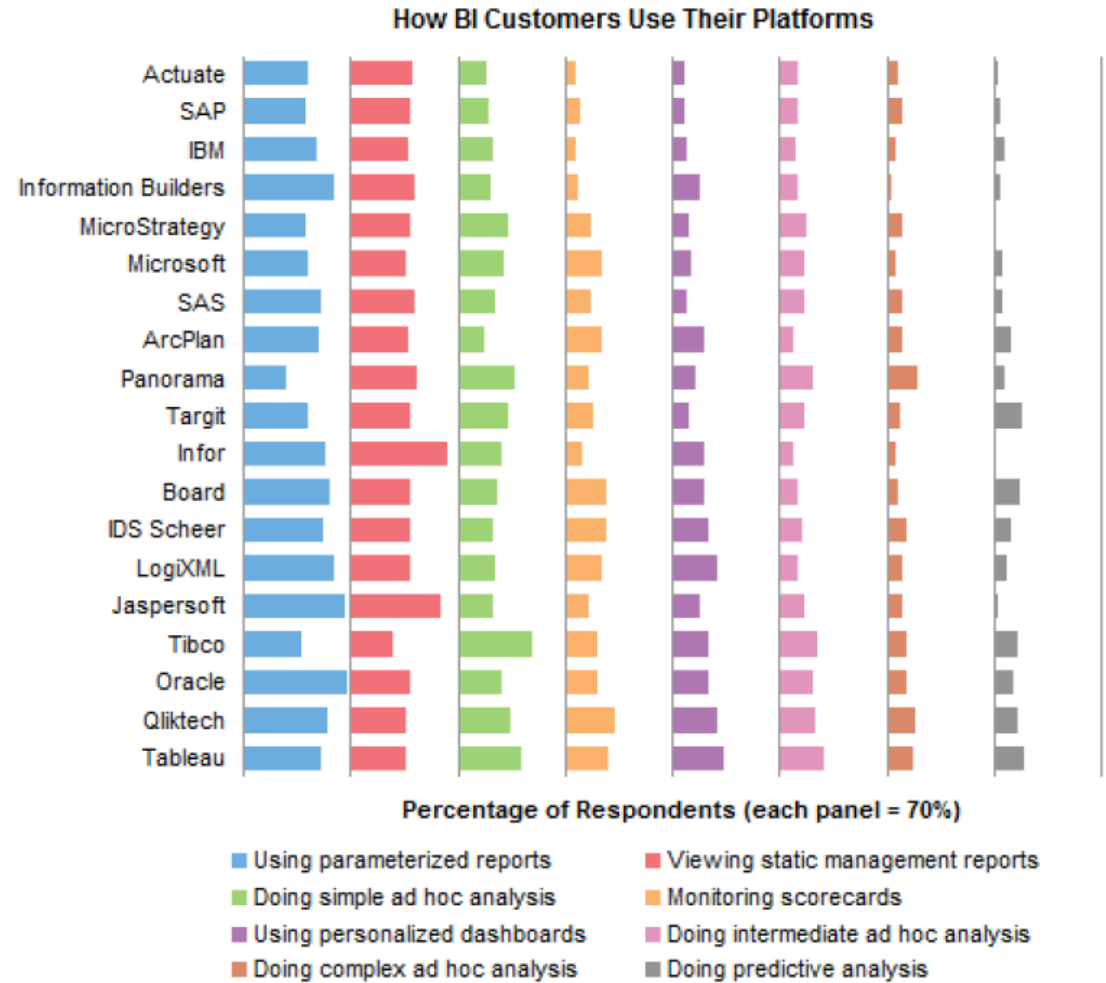
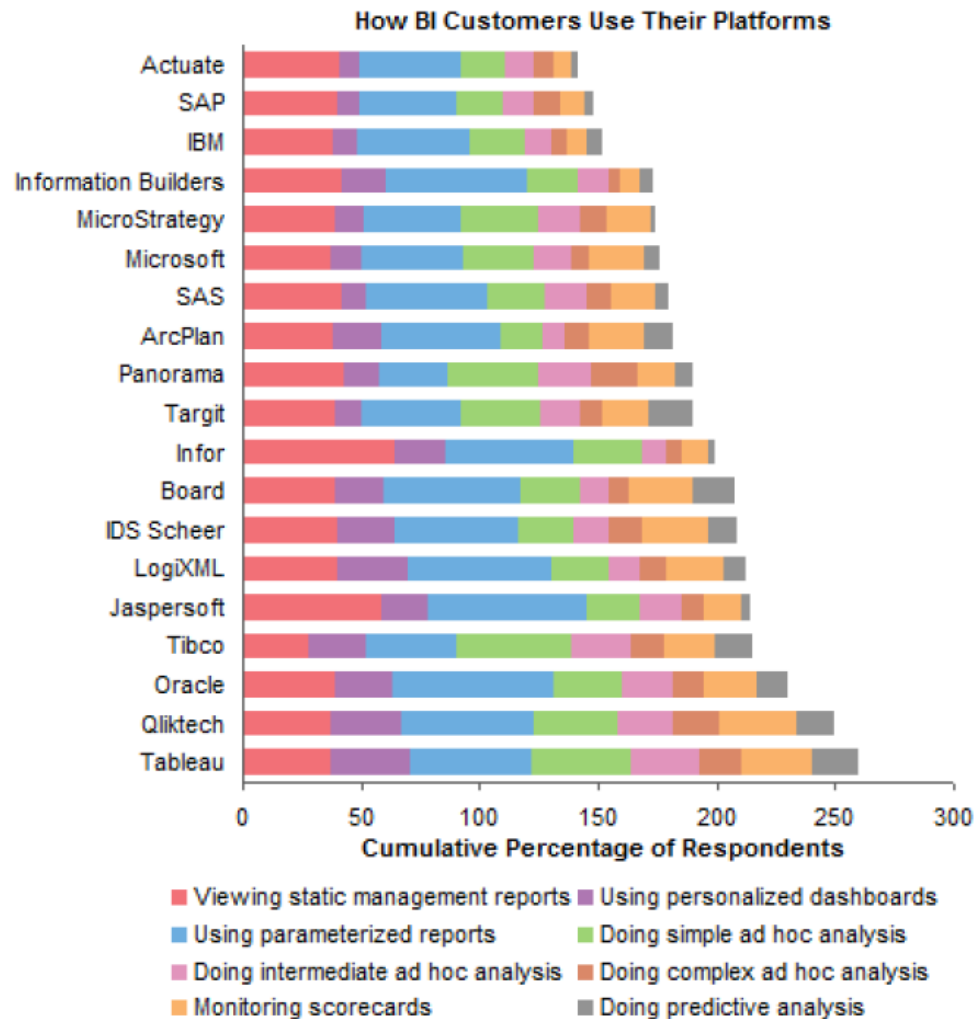
- **Telling Compelling Stories**
- **Think Stories, not Charts**

# Showing Data vs Storytelling with Data

Before and After

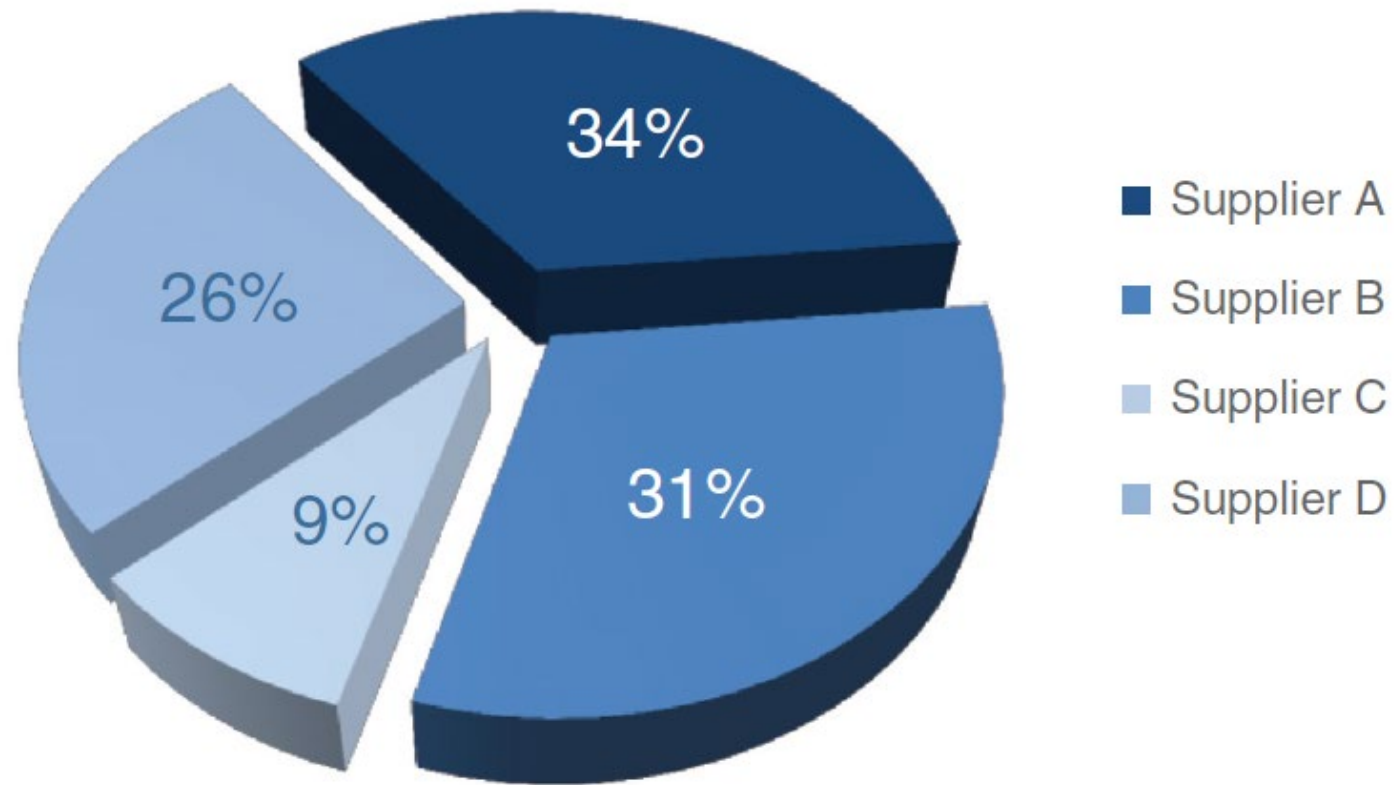


# Before & After: Choosing the Right Chart



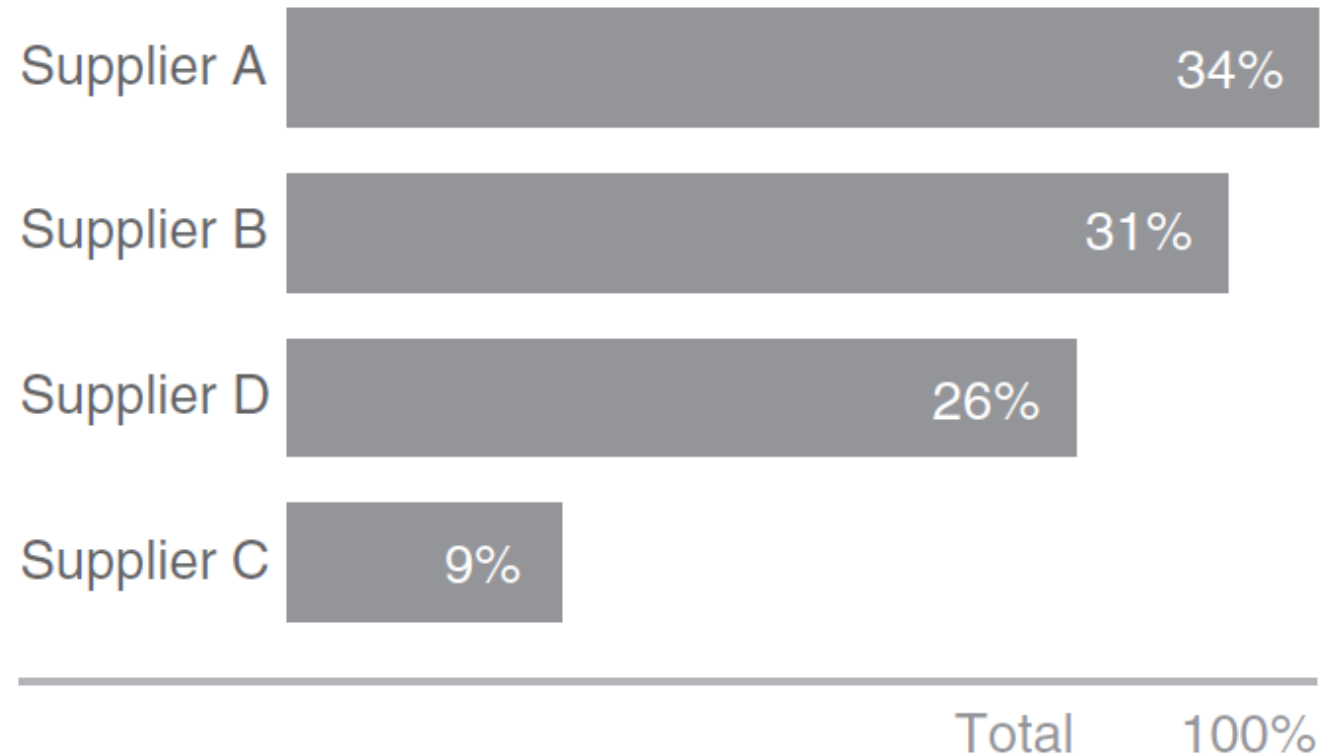
# Before: Choosing the Right Chart

Supplier Market Share



# After: Choosing the Right Chart

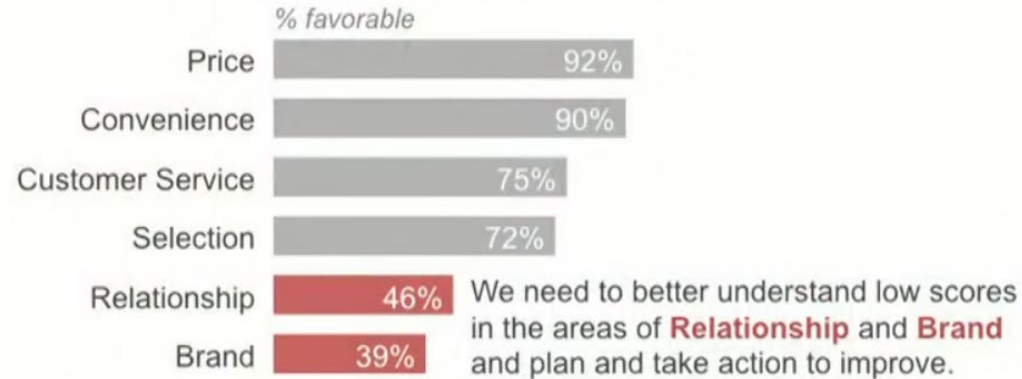
## Supplier Market Share



# A preattentive attribute example

...However, there are also **areas in need of change**.

## Annual Customer Survey: Results Overview

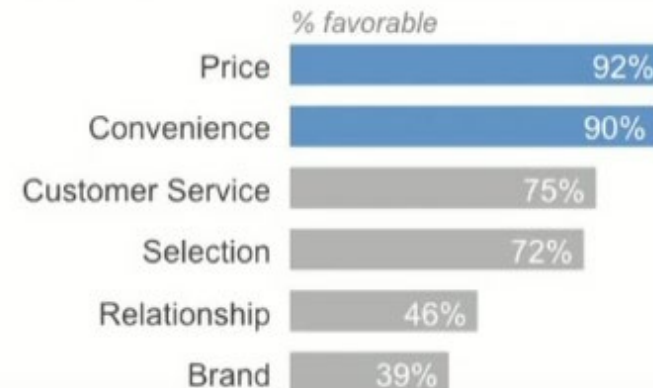


# A preattentive attribute example

**Celebrate where we're doing well!**

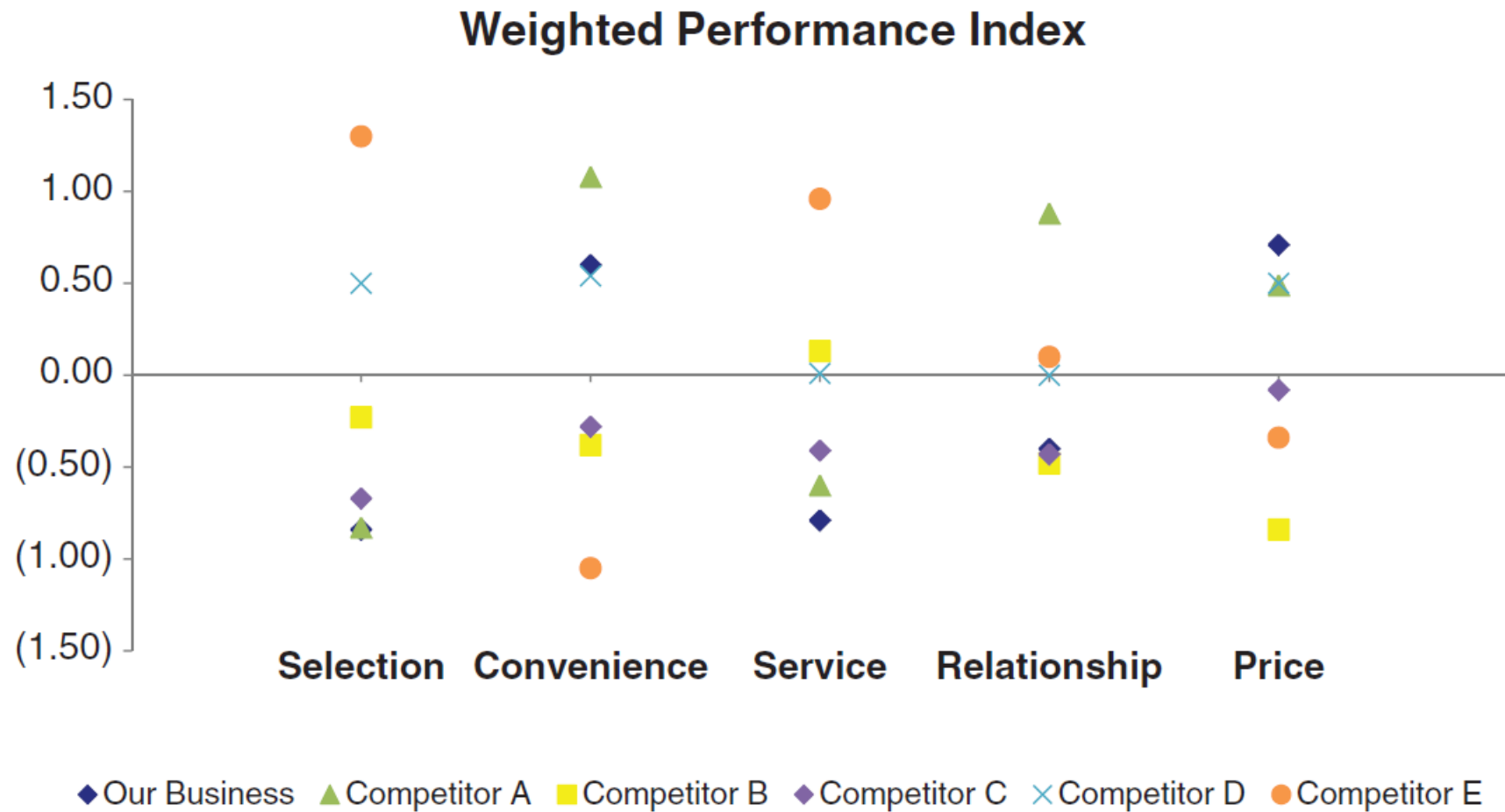
Survey respondents are highly satisfied with **price** and **convenience**.

## Annual Customer Survey: Results Overview





# Non-strategic use of contrast

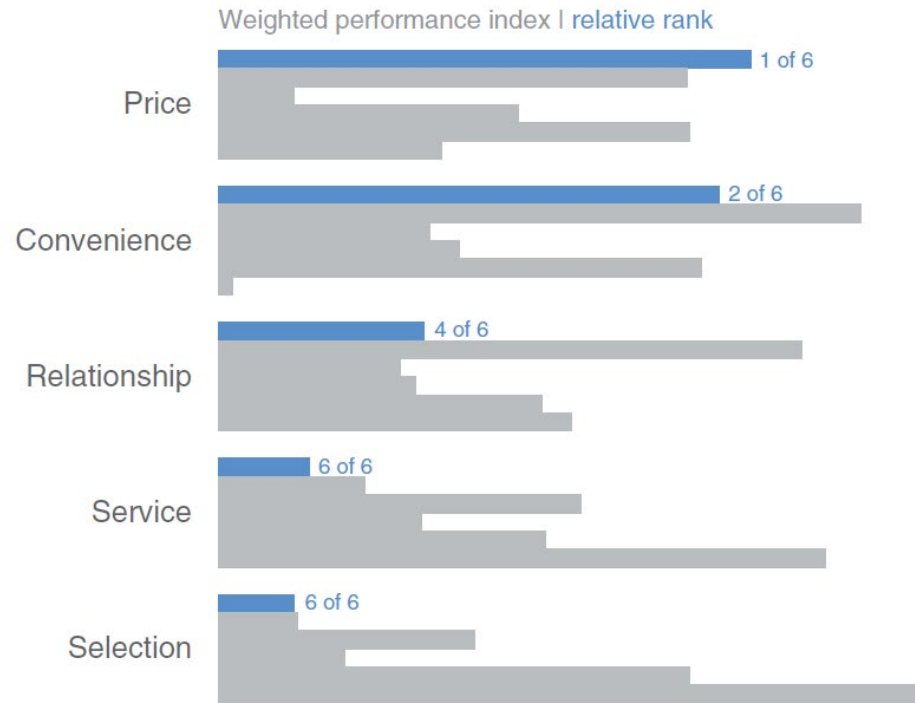


# using contrast strategically

## Performance overview

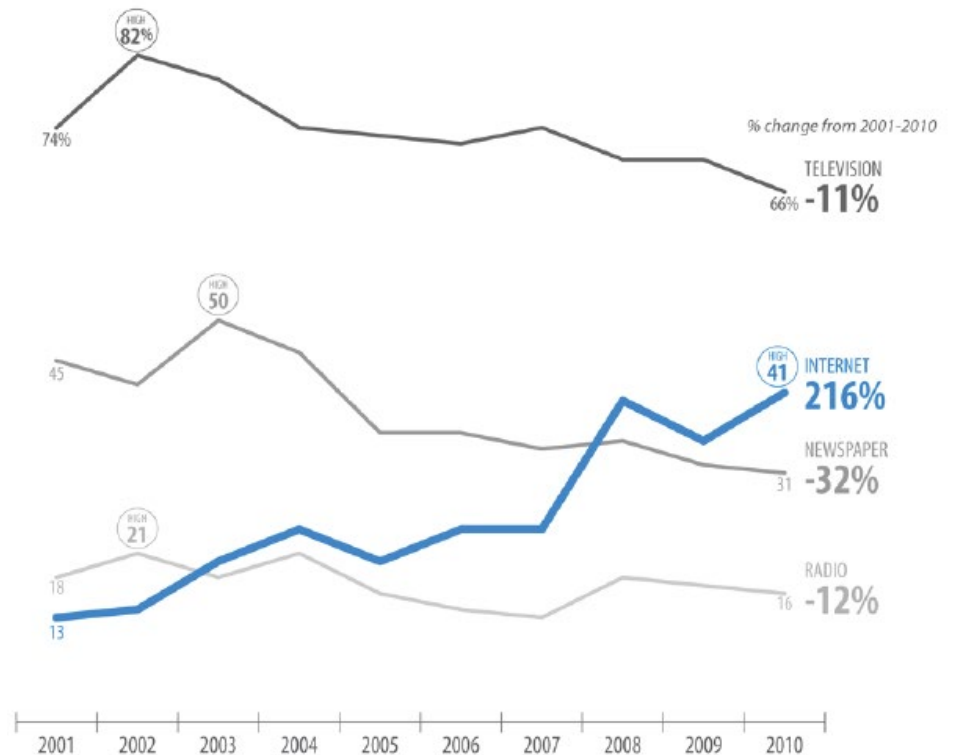
### ■ Our business

- Competitor A
- Competitor B
- Competitor C
- Competitor D
- Competitor E

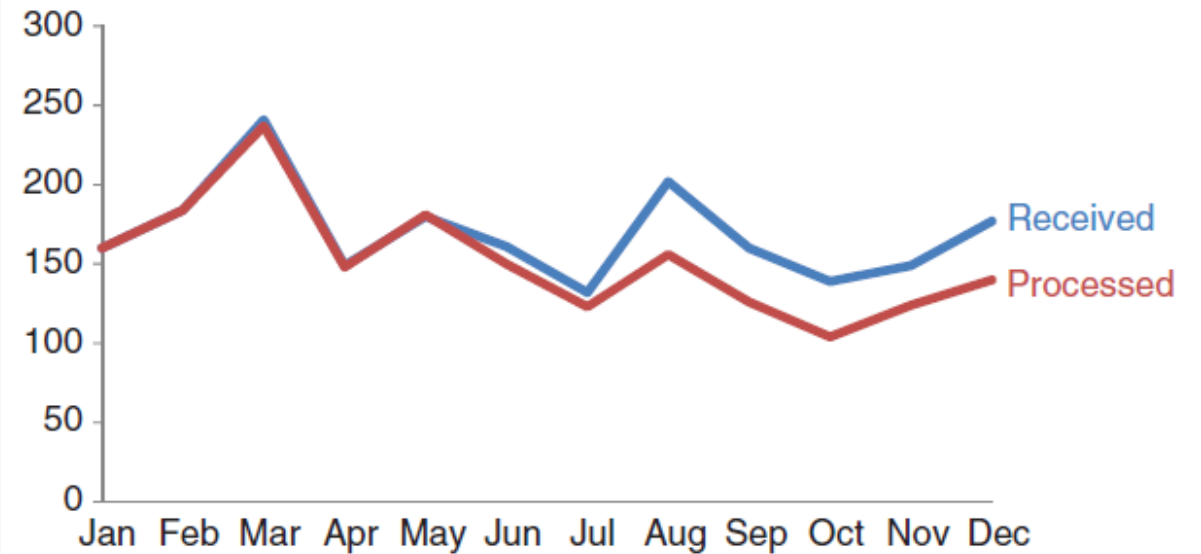
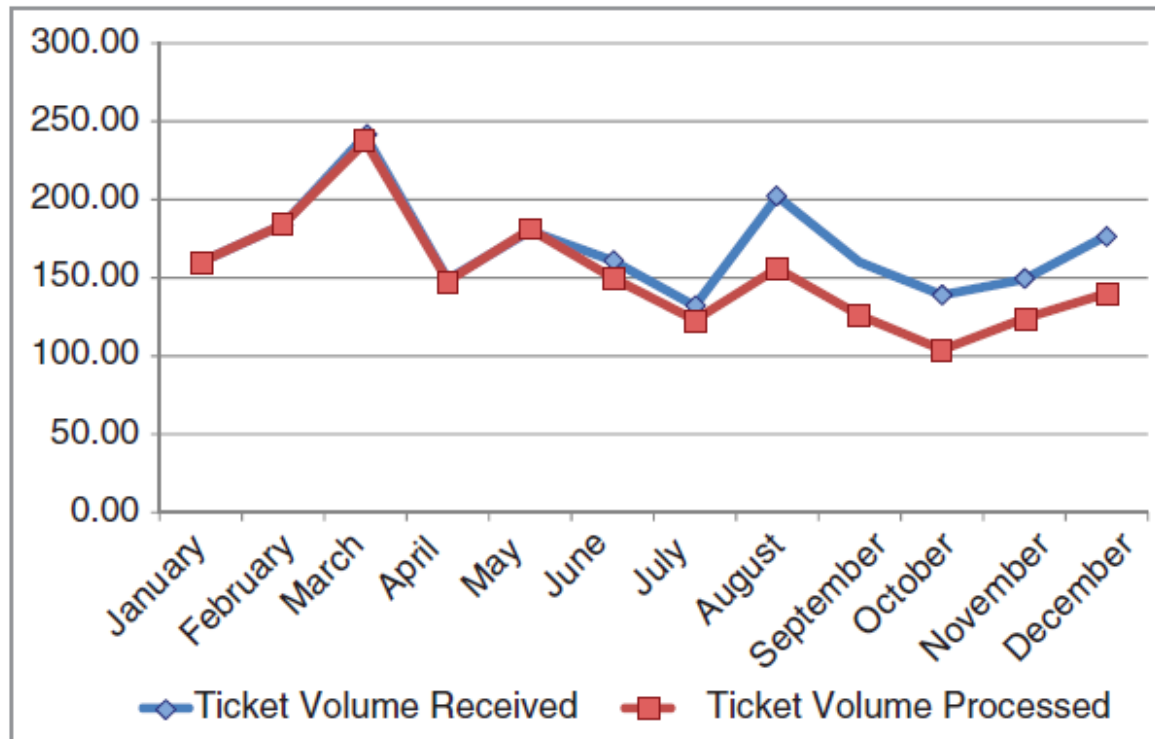


## Where do you get most of your news about national and international issues?

Percent of respondents identifying main source(s) of news.  
Each respondent could volunteer up to two sources.



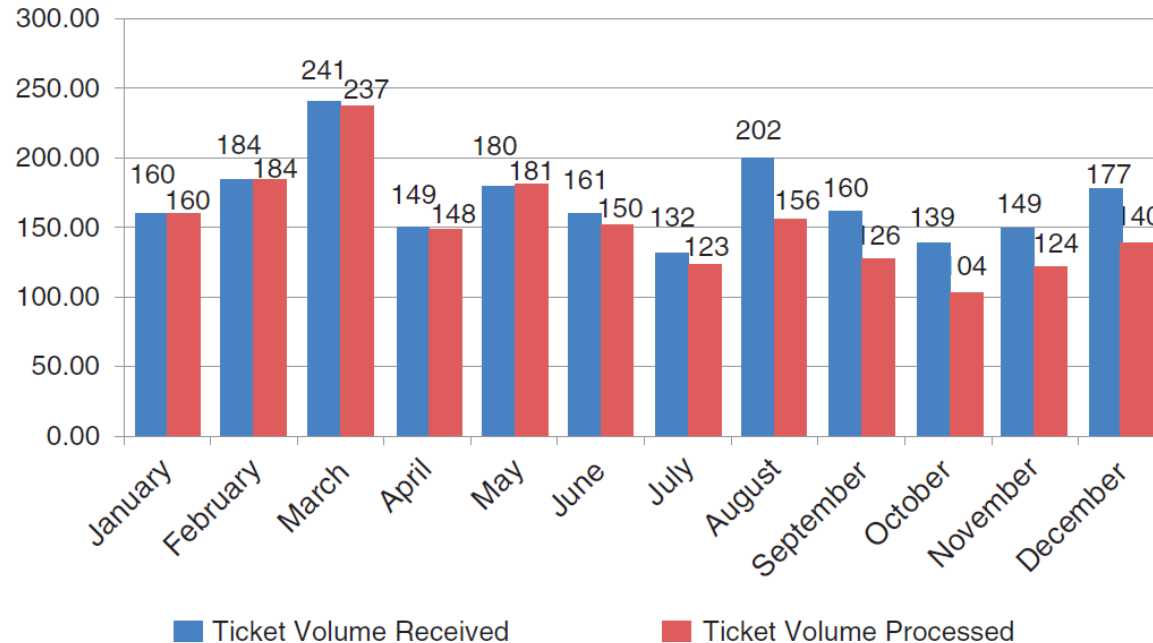
## Before & after Decluttering



# Before: Showing Data After: Storytelling with Data

Add action title and annotation

### Ticket Trend



## Please approve the hire of 2 FTEs

to backfill those who quit in the past year

### Ticket volume over time



Data source: XYZ Dashboard, as of 12/31/2014 | A detailed analysis on tickets processed per person and time to resolve issues was undertaken to inform this request and can be provided if needed.

# Color

## Use color sparingly

### Country Level Sales Rank Top 5 Drugs

Rainbow distribution in color indicates sales rank in given country from #1 (red) to #10 or higher (dark purple)

Country	A	B	C	D	E
AUS	1	2	3	6	7
BRA	1	3	4	5	6
CAN	2	3	6	12	8
CHI	1	2	8	4	7
FRA	3	2	4	8	10
GER	3	1	6	5	4
IND	4	1	8	10	5
ITA	2	4	10	9	8
MEX	1	5	4	6	3
RUS	4	3	7	9	12
SPA	2	3	4	5	11
TUR	7	2	3	4	8
UK	1	2	3	6	7
US	1	2	4	3	5

### Top 5 drugs: country-level sales rank

RANK	1	2	3	4	5+
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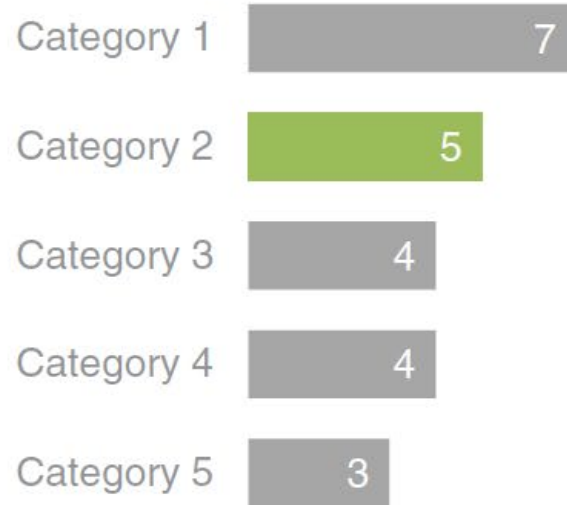
COUNTRY | DRUG

	A	B	C	D	E
Australia	1	2	3	6	7
Brazil	1	3	4	5	6
Canada	2	3	6	12	8
China	1	2	8	4	7
France	3	2	4	8	10
Germany	3	1	6	5	4
India	4	1	8	10	5
Italy	2	4	10	9	8
Mexico	1	5	4	6	3
Russia	4	3	7	9	12
Spain	2	3	4	5	11
Turkey	7	2	3	4	8
United Kingdom	1	2	3	6	7
United States	1	2	4	3	5

# Color options with brand color

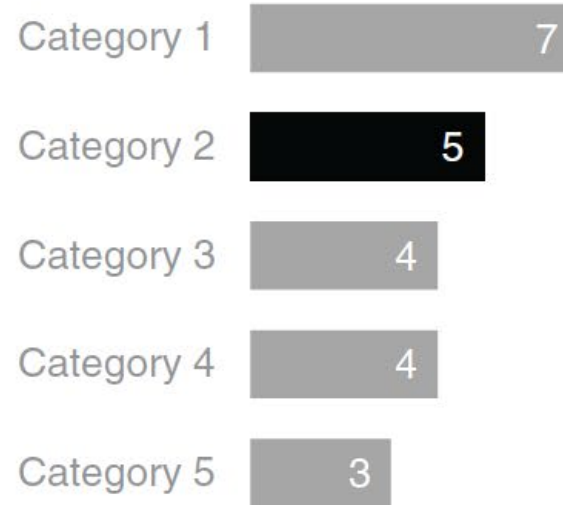
Brand colors: to leverage or not to leverage?

Leverage **brand color**



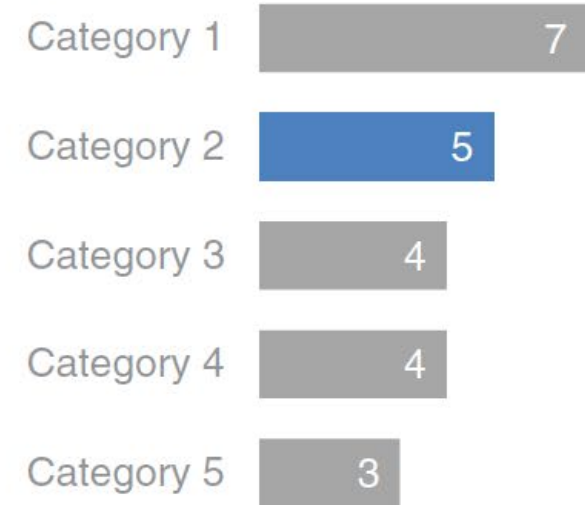
*ClientLogo*

Draw attention with **black**



*ClientLogo*

Use **complementary color**

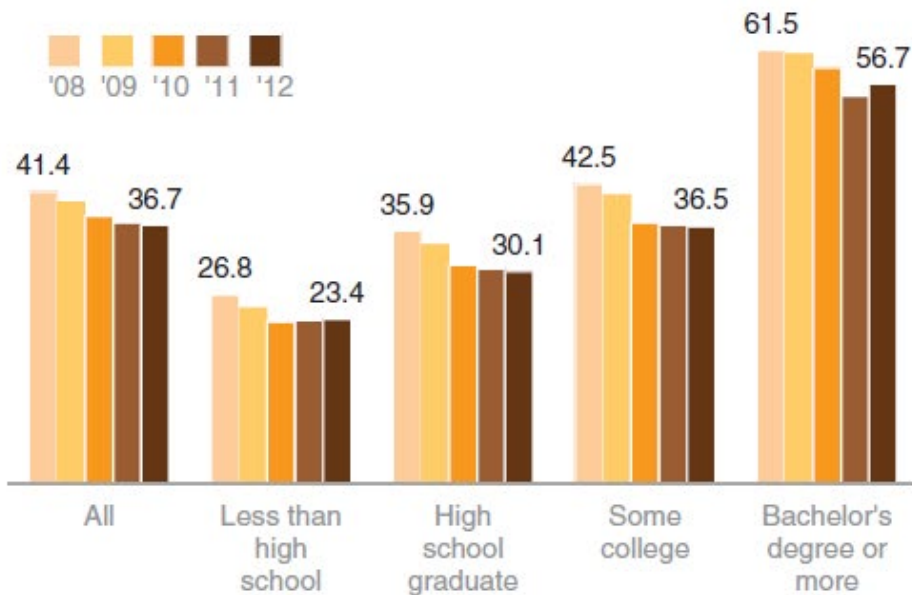


*ClientLogo*

# Highlighting the Important Stuff & Eliminate Distractions

## New Marriage Rate by Education

Number of newly married adults per 1,000 marriage eligible adults



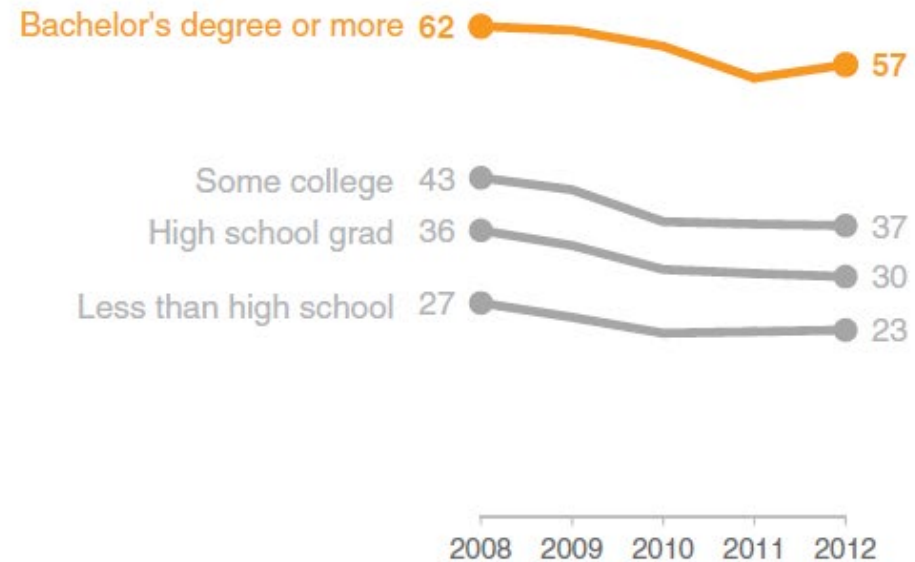
Note: Marriage eligible includes the newly married plus those widowed, divorced, or never married at interview.

Source: U.S. Census

Adapted from PEW RESEARCH CENTER

## New marriage rate by education

Number of newly married adults per 1,000 marriage eligible adults



Note: Marriage eligible includes the newly married plus those widowed, divorced, or never married at interview.

Source: U.S. Census

Adapted from PEW RESEARCH CENTER



# Visual Hierarchy of Information

Create Clear Visual Hierarchy of Information

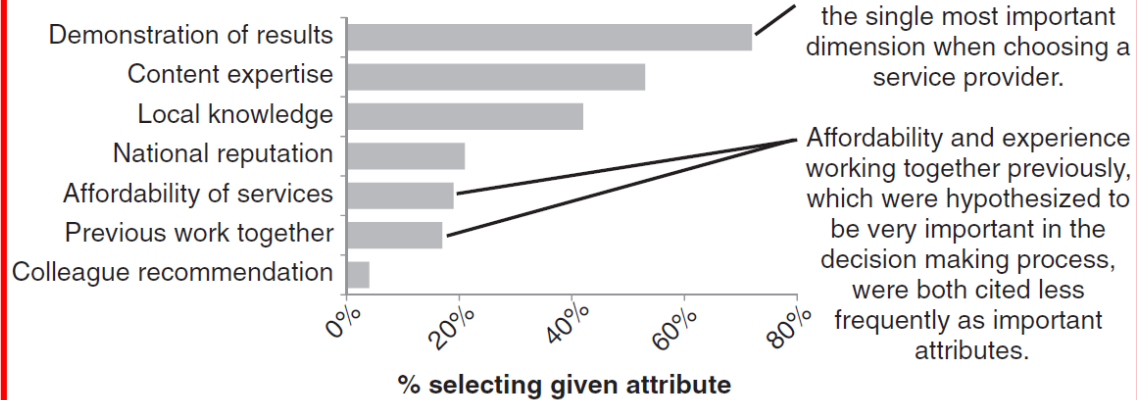
**Issues vs. Satisfaction by Model**





## Demonstrating effectiveness is most important consideration when selecting a provider

In general, what attributes are the most important to you in selecting a service provider?  
(Choose up to 3)



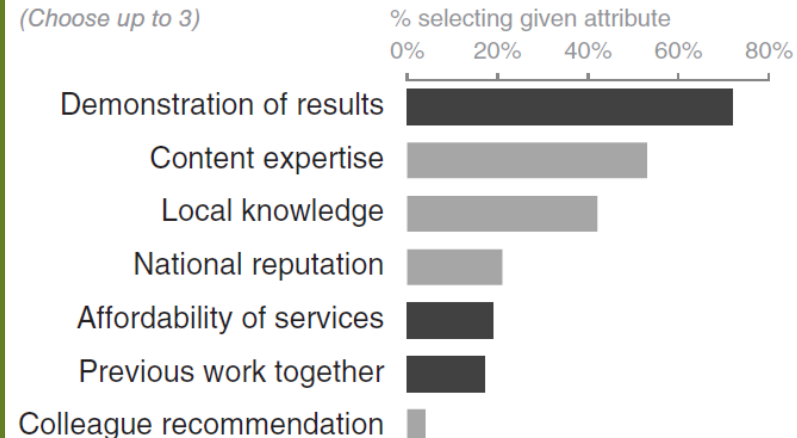
Data source: xyz; includes N number of survey respondents. Note that respondents were able to choose up to 3 options.

## Lack of Visual Order vs Improvised with Visual Order

### Demonstrating effectiveness is most important consideration when selecting a provider

In general, what attributes are the most important to you in selecting a service provider?

(Choose up to 3)



Survey shows that **demonstration of results** is the single most important dimension when choosing a service provider.

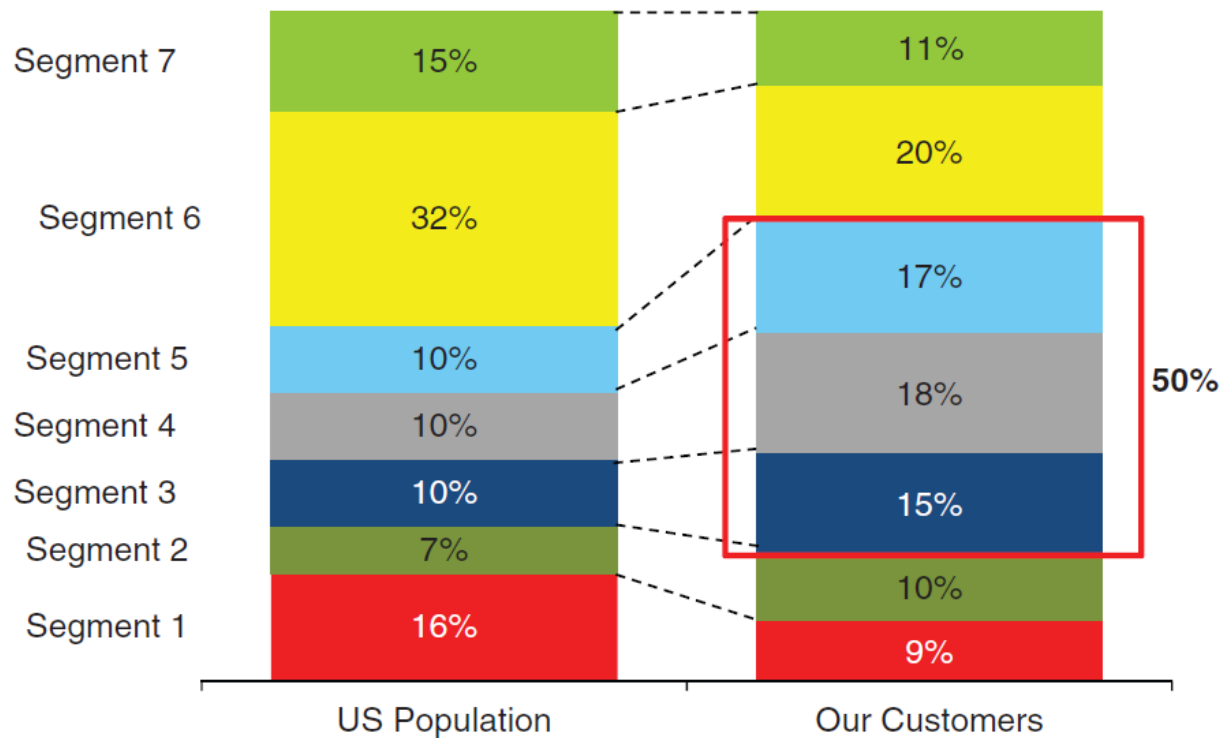
**Affordability** and **experience working together previously**, which were hypothesized to be very important in the decision making process, were both cited less frequently as important attributes.

Data source: xyz; includes N number of survey respondents. Note that respondents were able to choose up to 3 options.

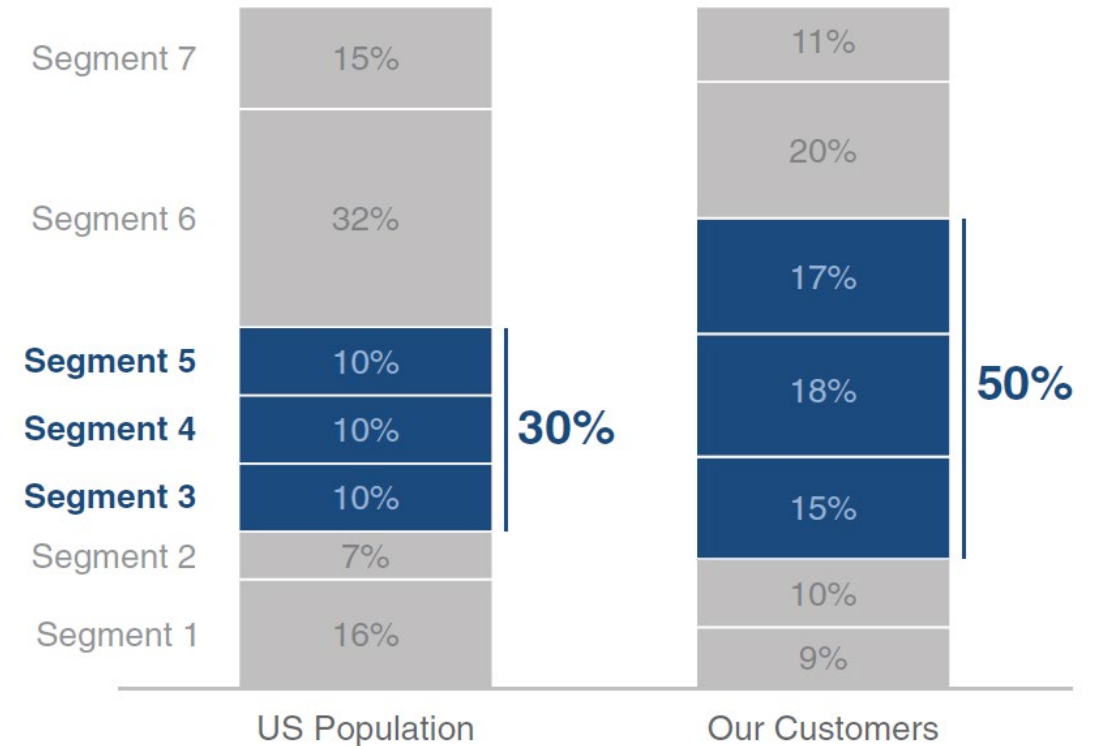
# Aesthetic Design

Sense of Visual Organisation: Alignment, Colour, White Space

Distribution by customer segment

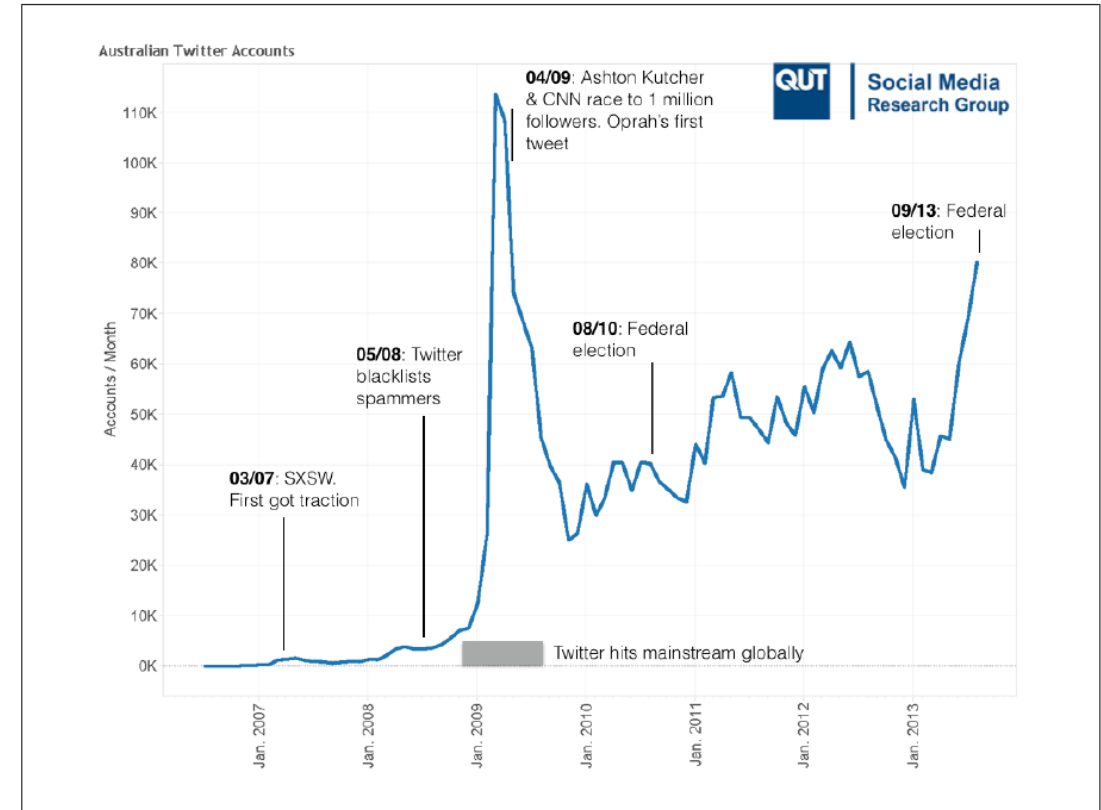
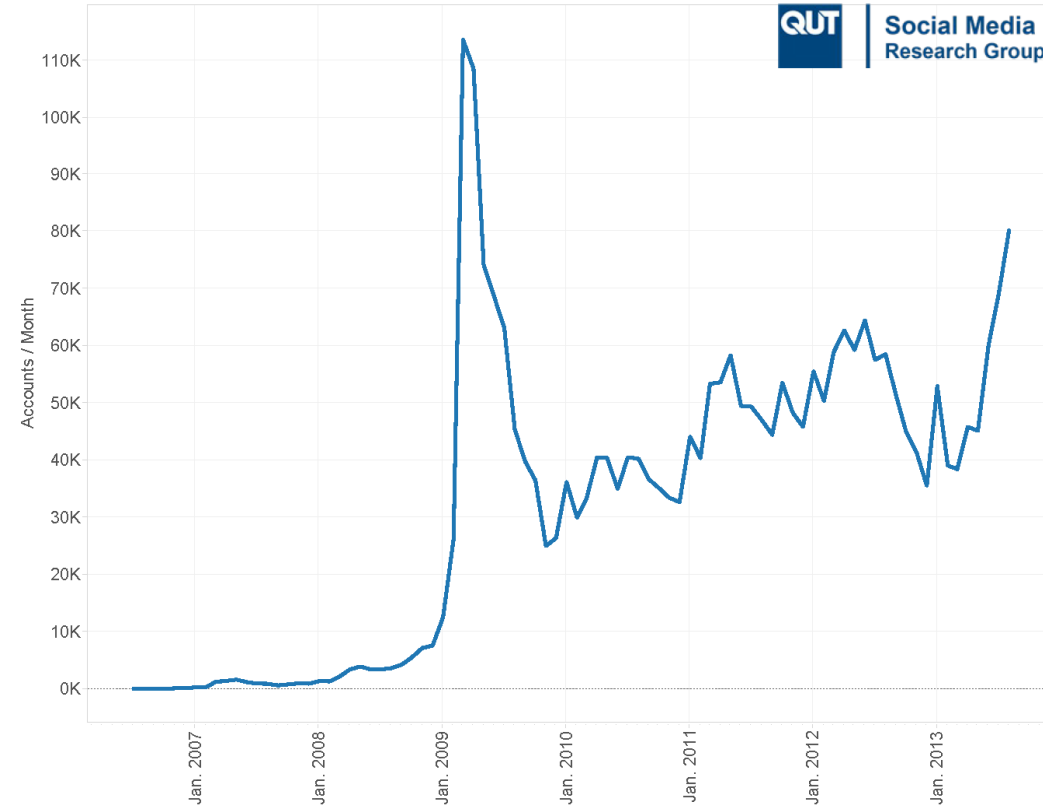


Distribution by customer segment



# Annotation

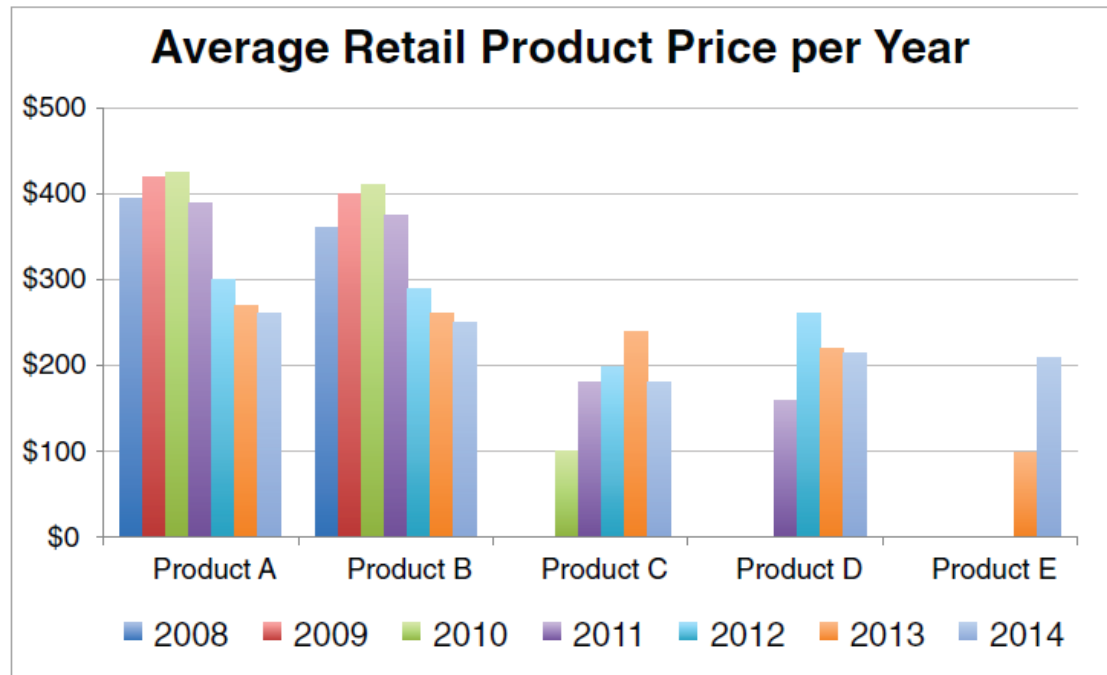
Australian Twitter Accounts



Before : Showing Data

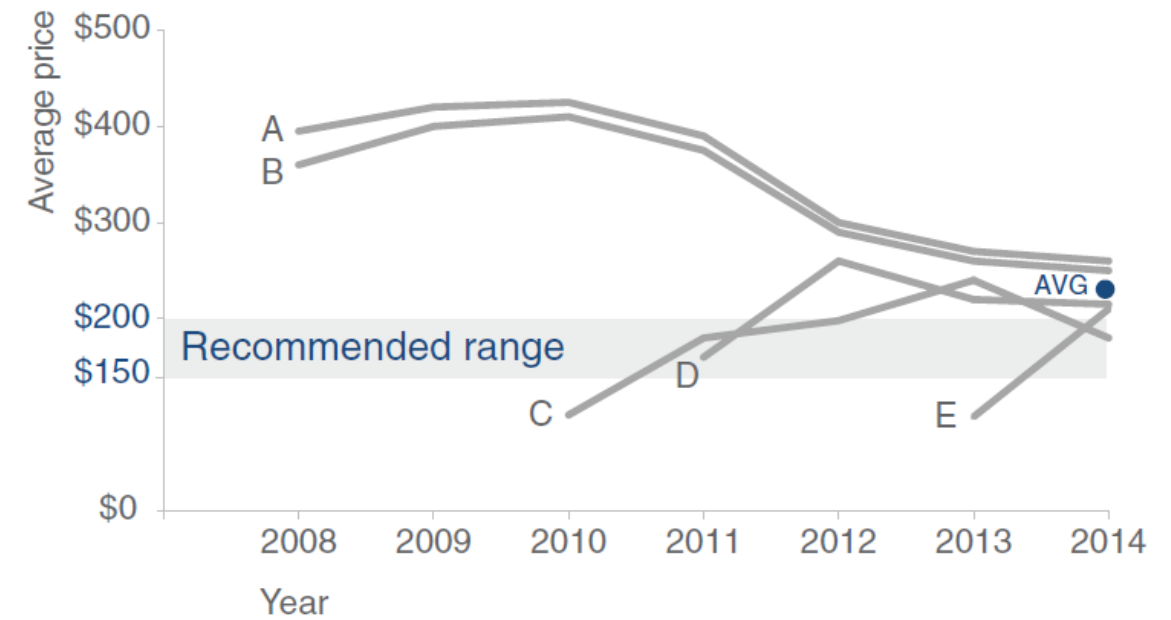
## After: **Storytelling with Data**

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



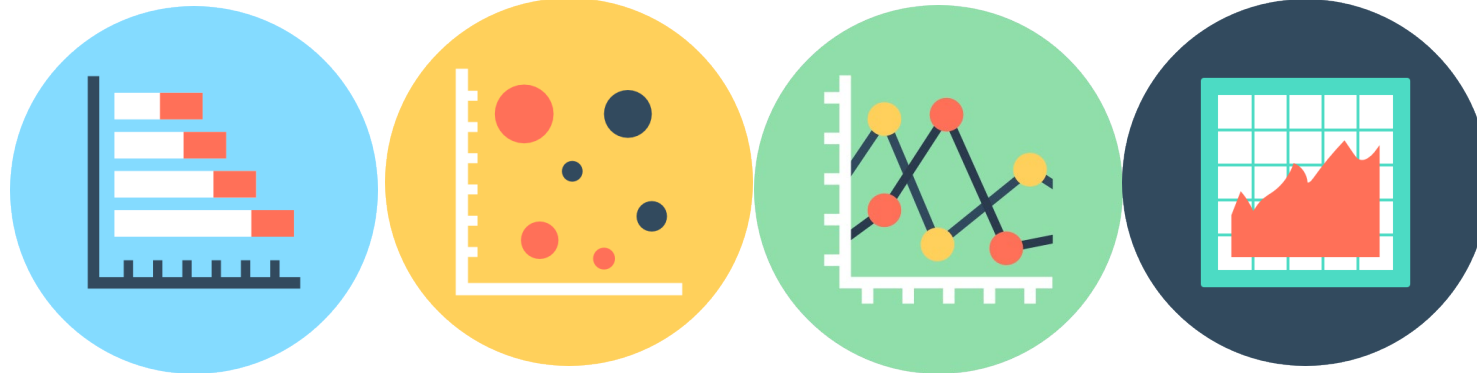
To be competitive, we recommend introducing our product *below the \$223 average price point in the \$150–\$200 range*

Retail price over time

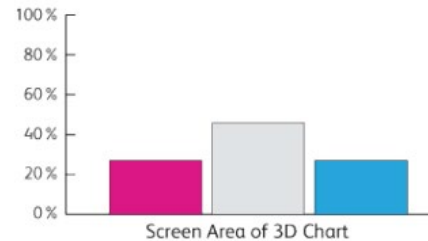
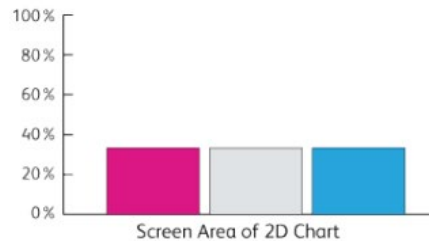
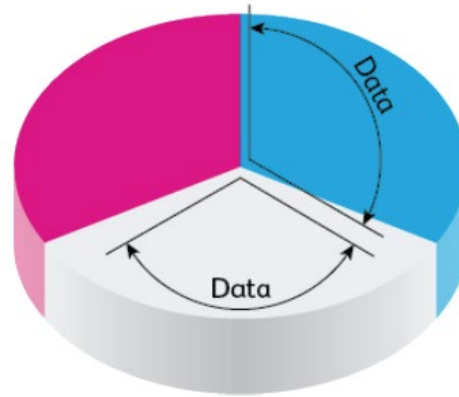
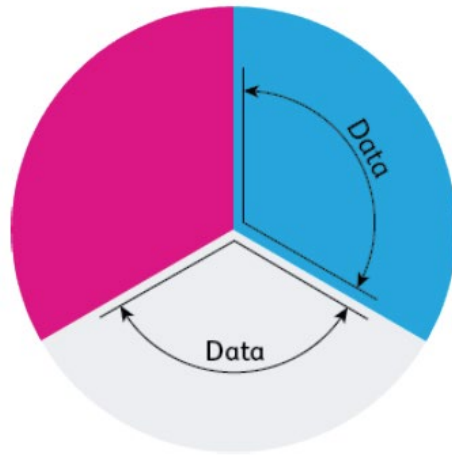




## CASE STUDY: Alternatives to pies



# Pie Chart?? Think Twice



- Some critics have come crashing down hard on pie charts.
- **Edward Tufte** says
  - “the only thing worse than a pie chart is several of them.”
- **Stephen Few** says
  - “save the pies for dessert”.
- **Cole Nussbaumer** says
  - “Death to pie charts.”

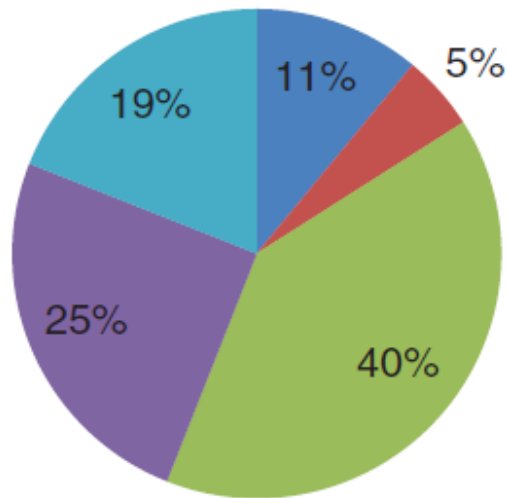
Before: Showing Data

# Alternatives to pies

## Survey Results

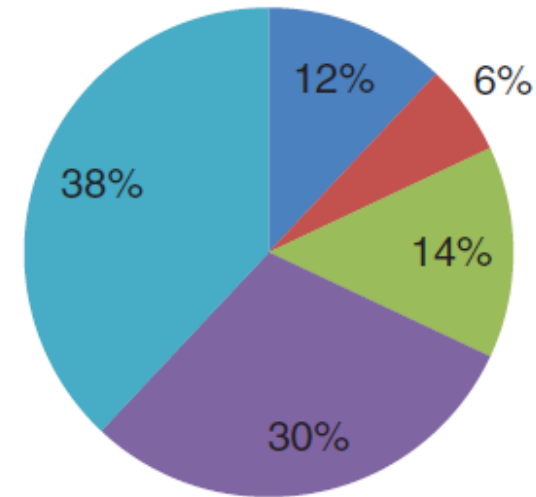
PRE: How do you feel about doing science?

■ Bored ■ Not great ■ OK ■ Kind of interested ■ Excited



POST: How do you feel about doing science?

■ Bored ■ Not great ■ OK ■ Kind of interested ■ Excited



# CASE STUDY:

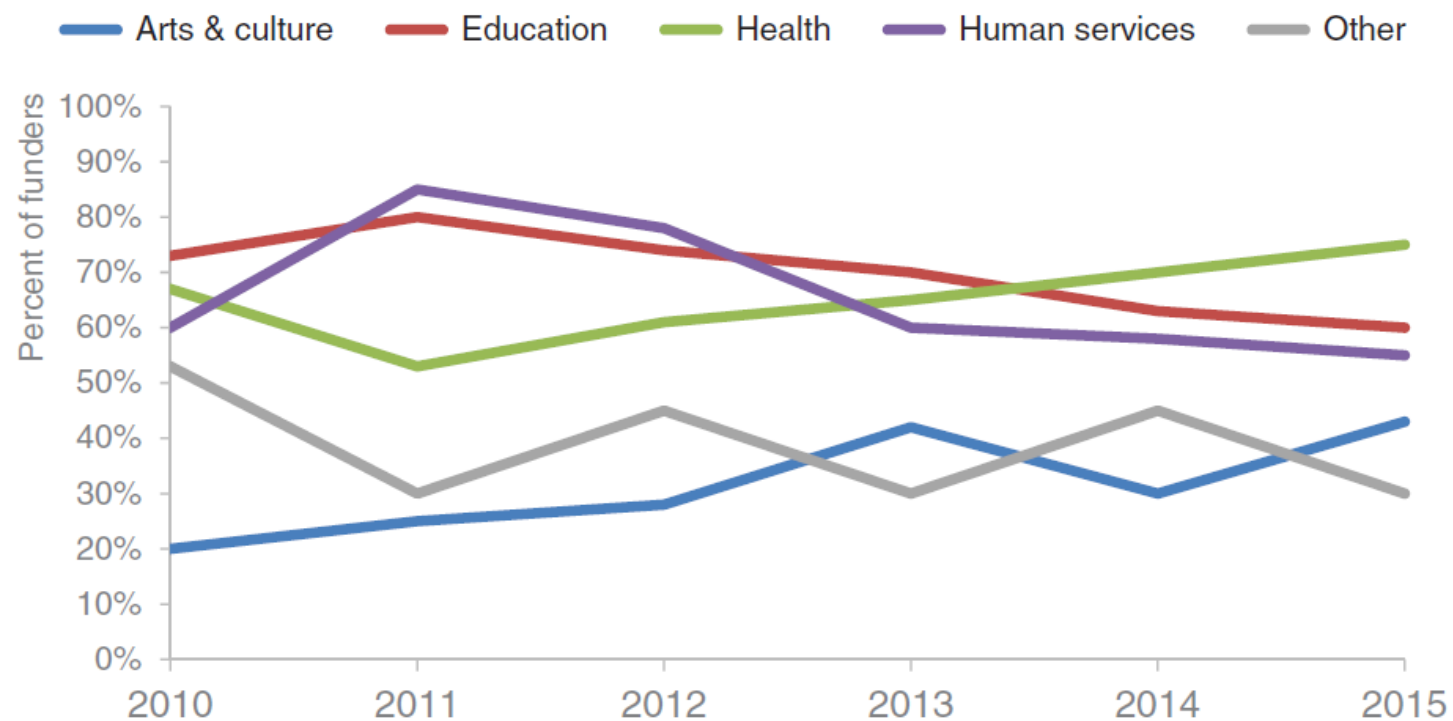
## Strategies for avoiding the spaghetti graph





# Spaghetti graph

## Types of non-profits supported by area funders



Data is self-reported by funders; percents sum to greater than 100 because respondents can make multiple selections.

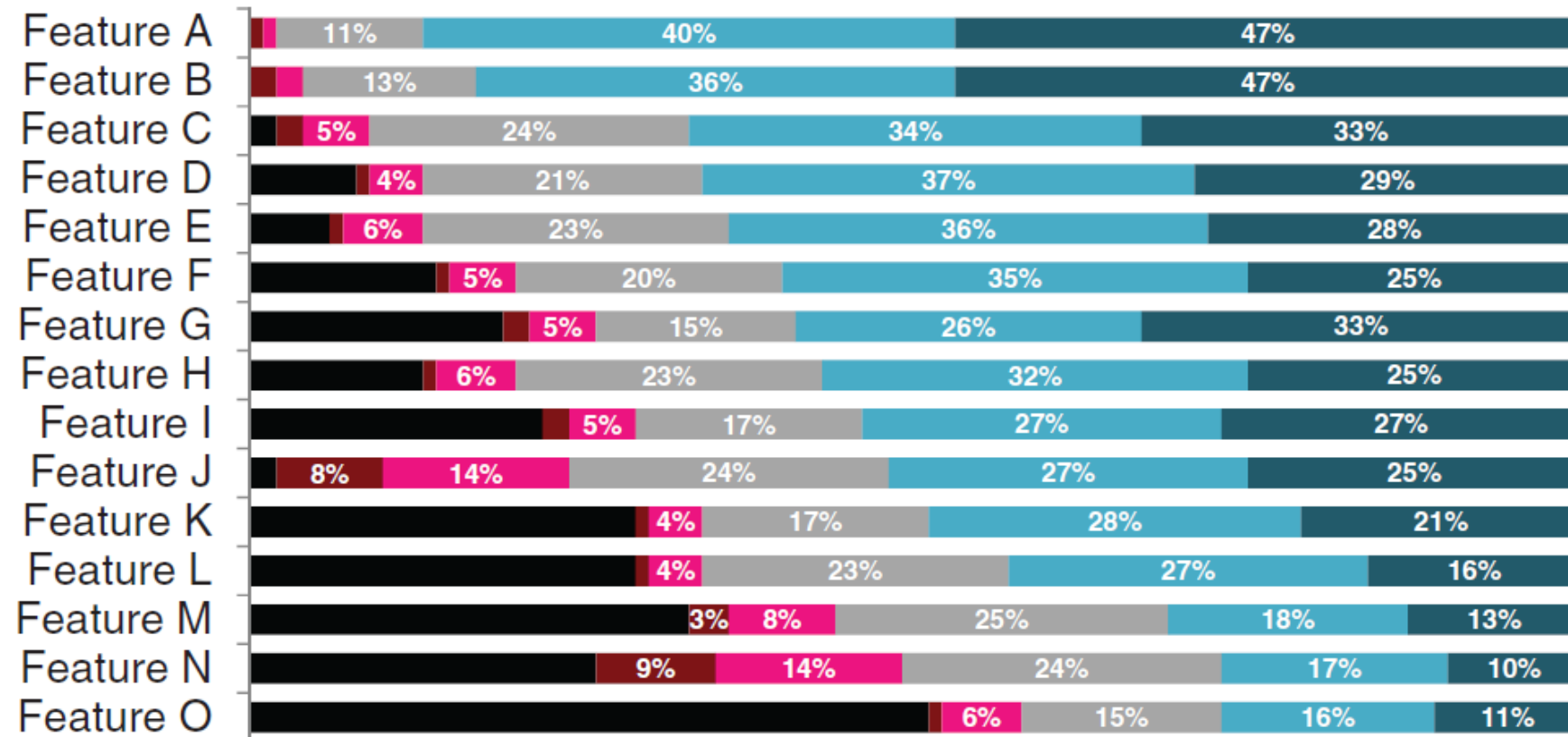
# CASE STUDY: Logic in order



# User satisfaction, original graph

How satisfied have you been with each of these features?

■ Have not used ■ Not satisfied at all ■ Not very satisfied ■ Somewhat satisfied ■ Very satisfied ■ Completely satisfied



## Approaching **FINISHING** Line

You know you've achieved perfection in design,  
NOT when you have nothing more to add,  
BUT when you have nothing more to take away.

-Antoine de Saint-Exupery

# Summary

- Tale = Data + Narrative
- Graph = Data + Visual
- Art = Visual + Narrative
- **Tale + Graph + Art = Storytelling**
- Storytelling with data instead of Showing Data

