

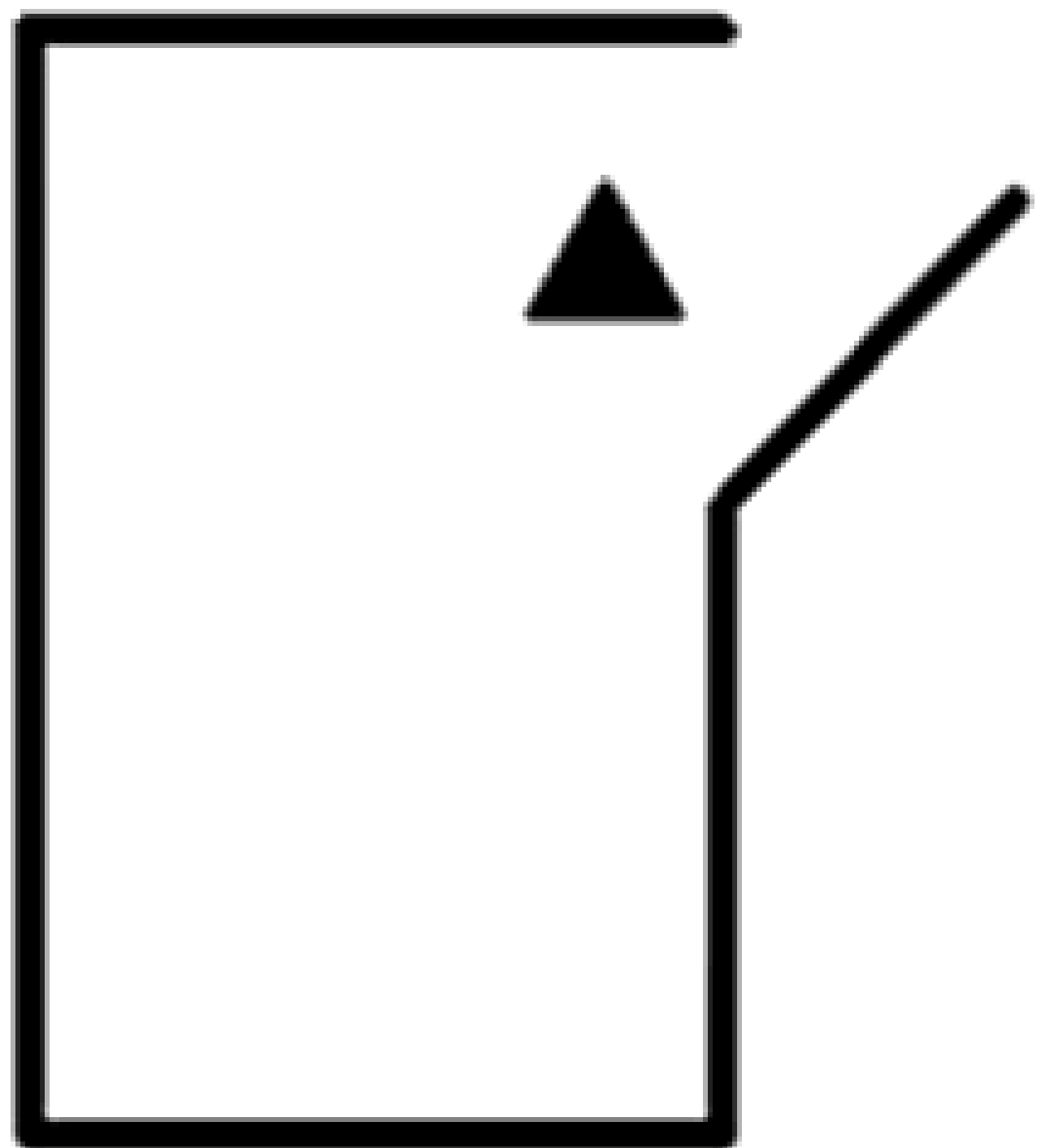
**JONATHAN MCGREA**

# **STORY TELLING**

MAKING MEANING FROM DATA



**WE ARE  
MEANING-MAKING  
MACHINES**



	A
1	0.13
2	0.3
3	0.4
4	0.13
5	0.22
6	0.9
7	0.13

PERFECTLY OBJECTIVE. PERFECTLY MEANINGLESS.

A man with a frustrated expression is surrounded by a chaotic storm of papers. The papers are flying through the air, some showing various data visualizations like bar charts, line graphs, and pie charts. The man is wearing a light blue button-down shirt and has a pained, squinted look on his face, suggesting he is overwhelmed by the sheer volume of information.

# THE DATA DUMP

AN UNDERSTANDABLE INSTINCT.

THE IMPORTANCE OF

# DATA STORY- TELLING

---

Statisticians are the closest to the data and the best placed to **understand its meaning**.





**WHAT COUNTS  
AS SUCCESS?**

# THE SMALL PRINT

---

- NO PROOF YET THAT MEN LIVE LONGER.
- BENEFITS ARE REAL, BUT OFTEN MODEST.
- COMPARED WITH AN UNUSUAL TREATMENT PATHWAY.
- EXTRA SIDE EFFECTS AND LIFE IMPACT UNCLEAR.



# A MORAL IMPERATIVE

BEHIND ALL THESE STATISTICAL ANALYSES AND DATA POINTS  
ARE REAL PATIENTS.

**THE METHOD**

**HOW DO WE  
APPROACH  
THIS?**



**WHAT DO I WANT PEOPLE TO  
DO WHEN I'VE FINISHED?**

"Out of 1,000 people, X benefited and Y had this harm. The evidence suggests that..."

#### WE SHOULD

- EXPLORE THIS AREA FURTHER
- EXTEND THE TRIAL PERIOD
- RECRUIT MORE PATIENTS
- INCREASE PATIENT VISIT TIME
- CHANGE DOSAGE



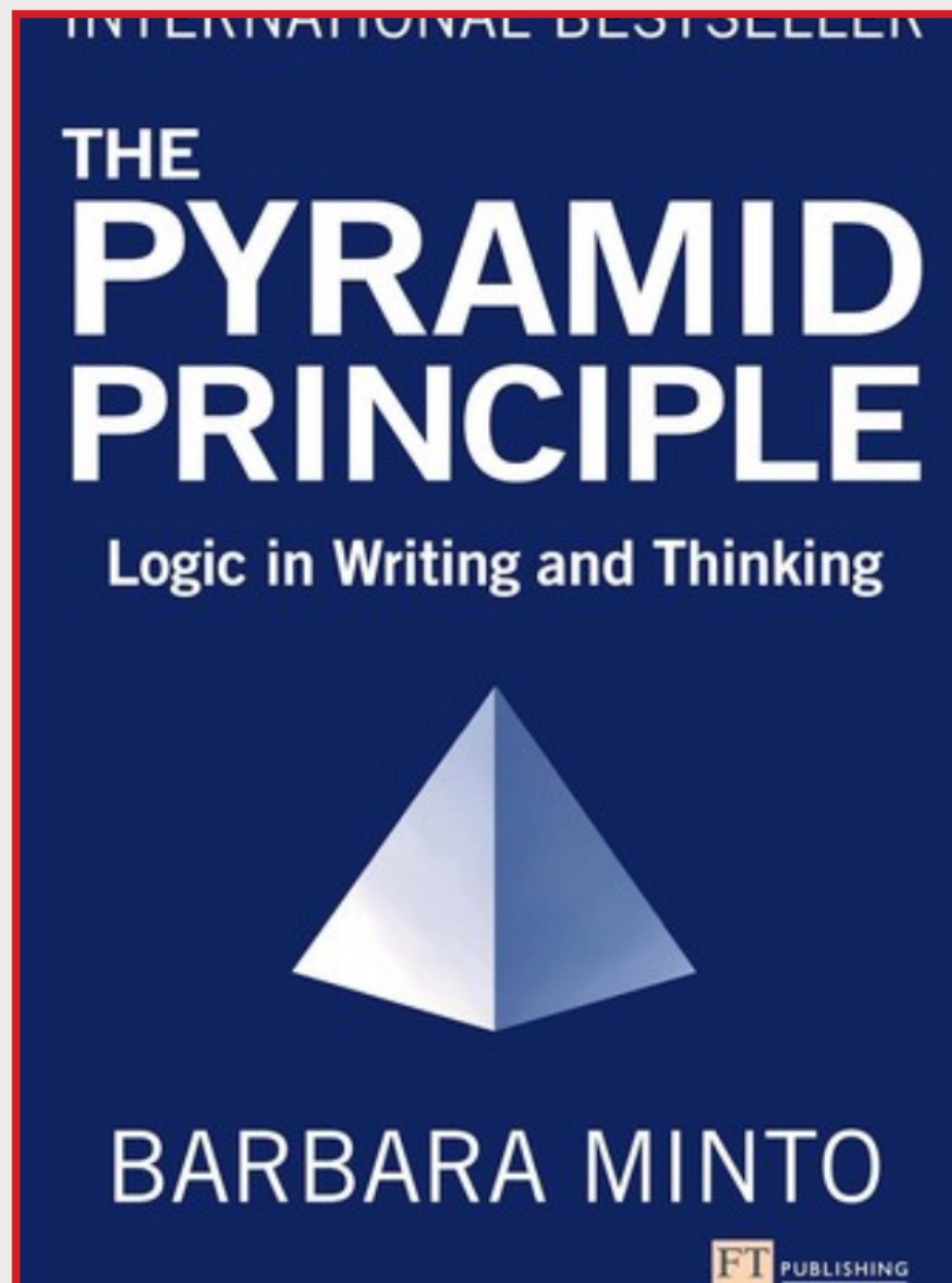
**WHAT ARGUMENTS DO I NEED  
TO MAKE TO SUPPORT THIS  
CHANGE?**

**BARBARA MINTO - THE PYRAMID PRINCIPLE**

# **START WITH THE ANSWER**

---

Structure the argument top-down: lead with the conclusion, then group the supporting evidence beneath it.



# CONTENT TOOL

WHY?

WHO?

WATCHOUT!

MESSAGE 1:

MESSAGE 2:

MESSAGE 3:

## STRUCTURE THE STORY

**S**

**SITUATION**

**C**

**COMPLICATION**

**Q**

**QUESTION**

**A**

**ANSWER**

# S

## SITUATION

We ran a study to compare a new treatment with usual care. We measured how patients did after treatment and compared the two groups.

# C

## COMPLICATION

- Some patients dropped out
- Some records are missing
- Some patients were sicker than others
- The result is not crystal clear

**Q CAN WE TRUST THE RESULT AND PROGRESS THIS RESEARCH?**

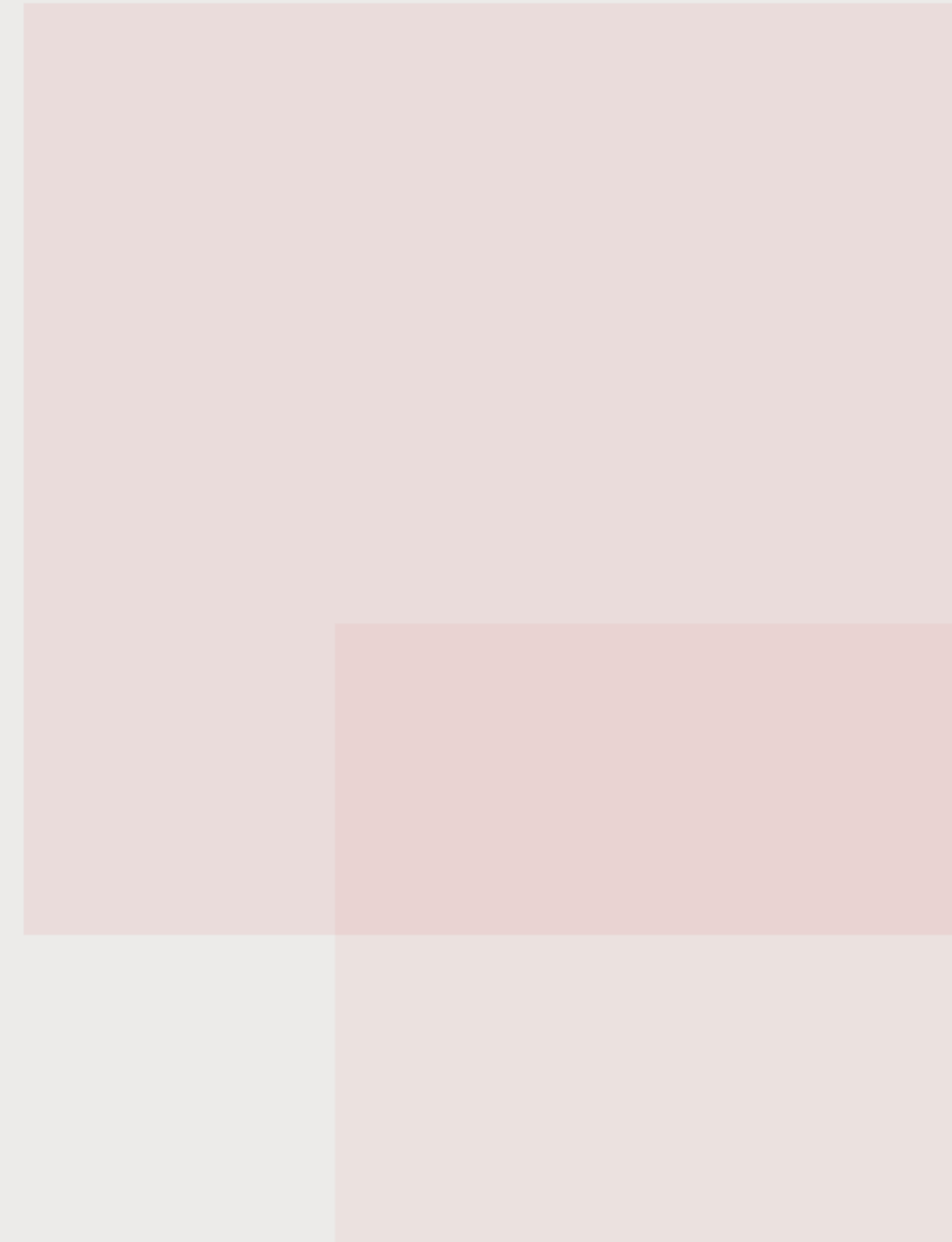
**YES.**

This is a reliable result (with some caveats). Here's why...

# MECE

**M**MUTUALLY **E**EXCLUSIVE

**C**COLLECTIVELY **E**EXHAUSTIVE



# ENGAGING?

**01**

**STORY**

**02**

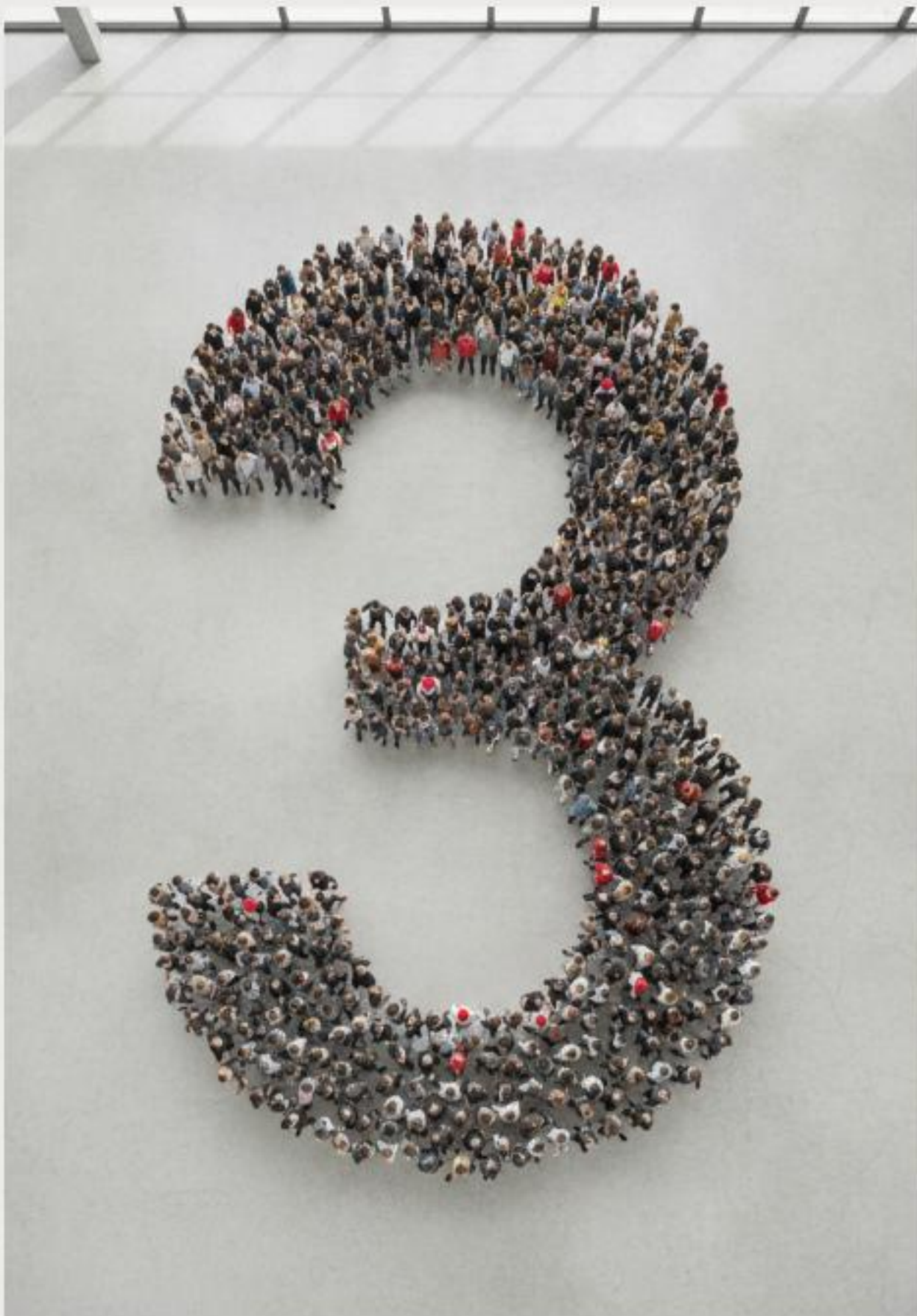
**VOICE**

**03**

**VISUALS**

**04**

**INTERACTION**



**WHAT'S THE **MINIMUM** DATA  
(FAIRLY PRESENTED) THAT  
ACHIEVES THIS?**

# COGNITIVE LOAD

---

- **INTRINSIC LOAD** — MEET PEOPLE WHERE THEY ARE.
- **EXTRANEIOUS LOAD** — CUT THE CLUTTER.
- **GERMANE LOAD** — MAKE THEM THINK HARD IN THE RIGHT WAY.

# FOCUS ON THE STORY





**HOW DO I EXPLAIN THIS DATA  
CLEARLY?**



# CONTEXT IS EVERYTHING

WHY THIS GROUP? WHY THIS TOOL? WHAT DOES IT DO  
— AND WHAT BIASES HIDE IN IT?



**HOW CAN I MAKE THIS MORE  
ENGAGING?**

# HUMAN

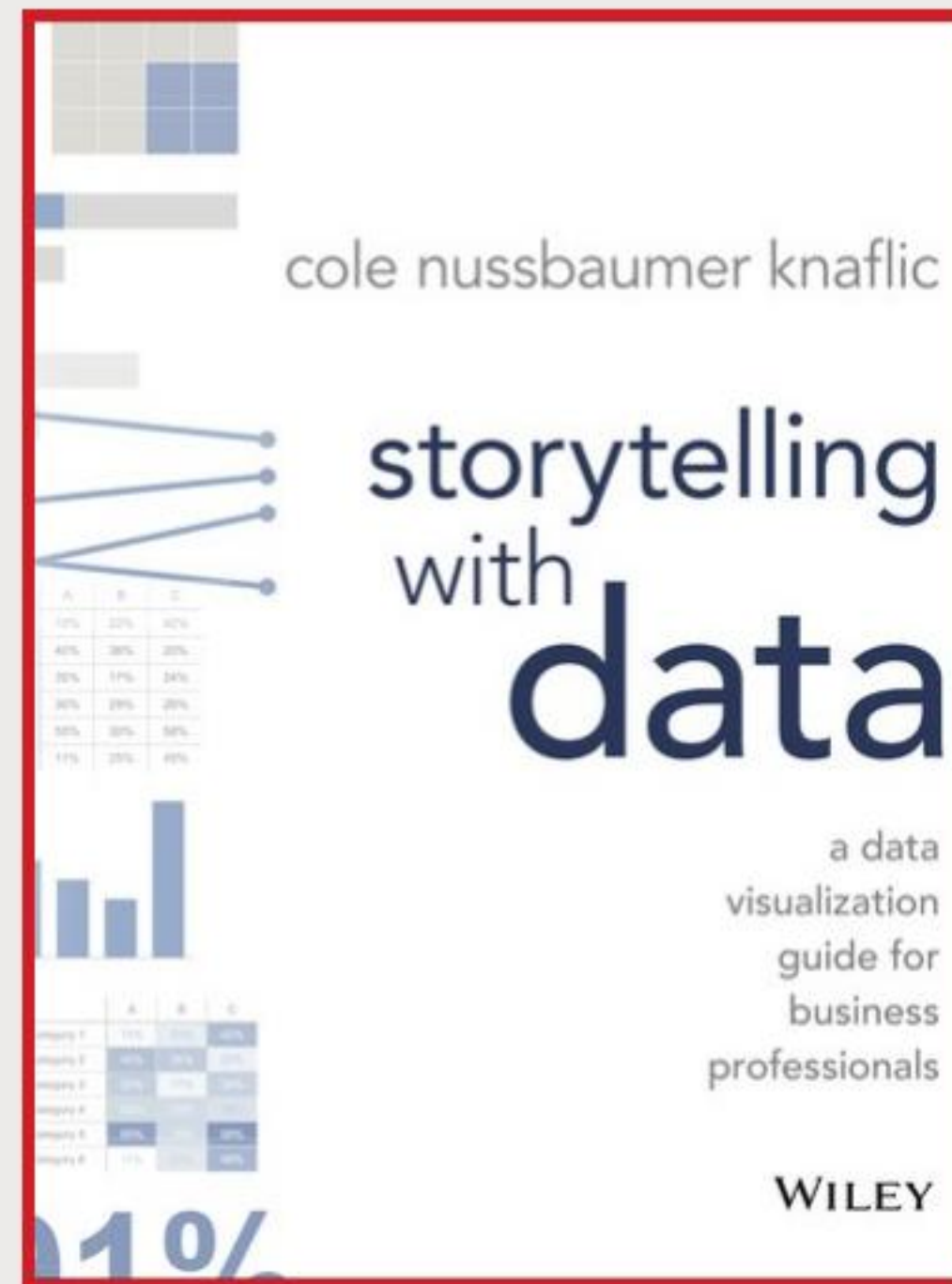


**W&M**  
WHIPSMART  
MEDIA



## STORYTELLING WITH DATA

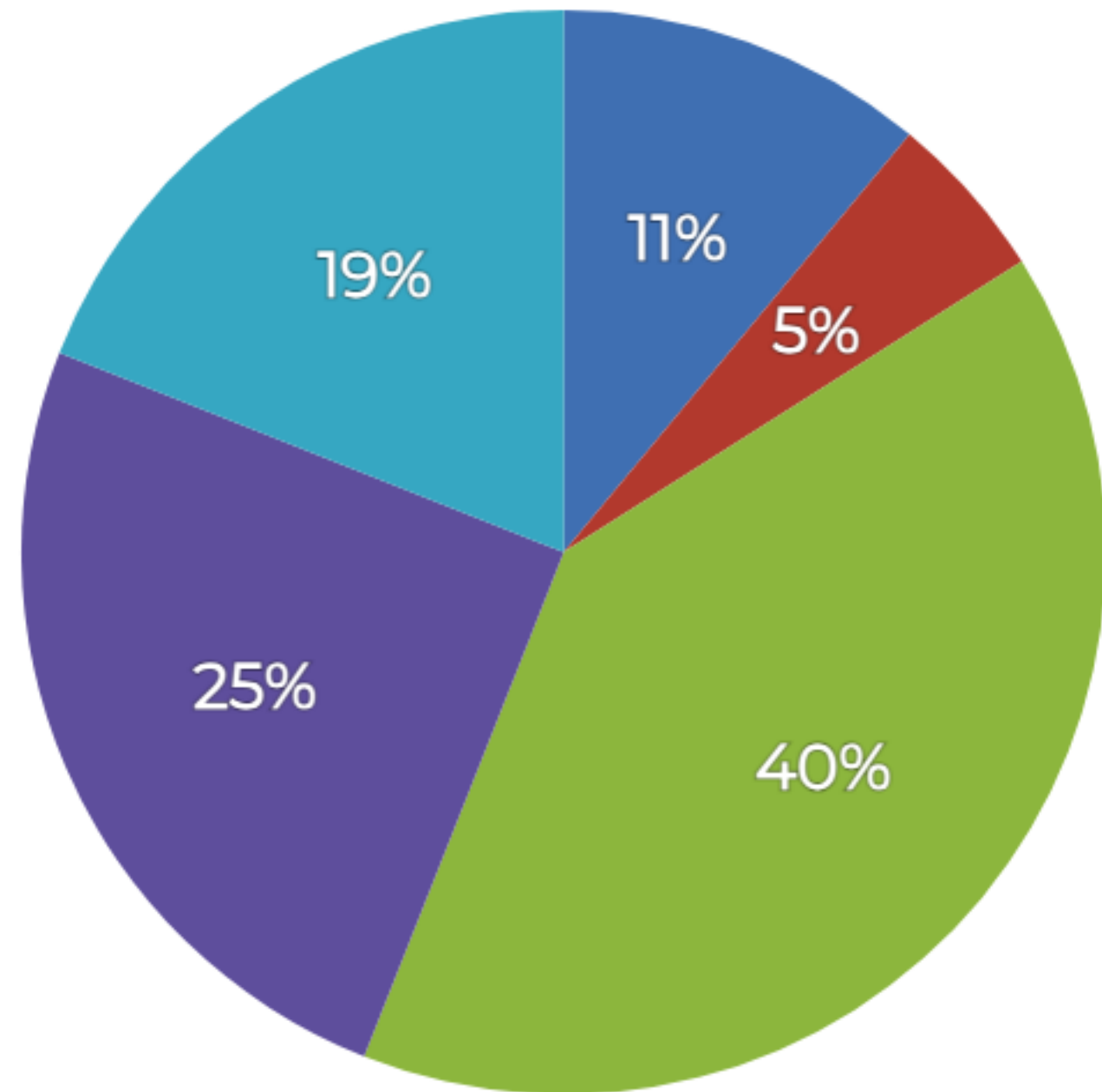
# VISUALS + STORY



# Survey Results

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

PRE: How do you feel about doing science?



POST: How do you feel about doing science?

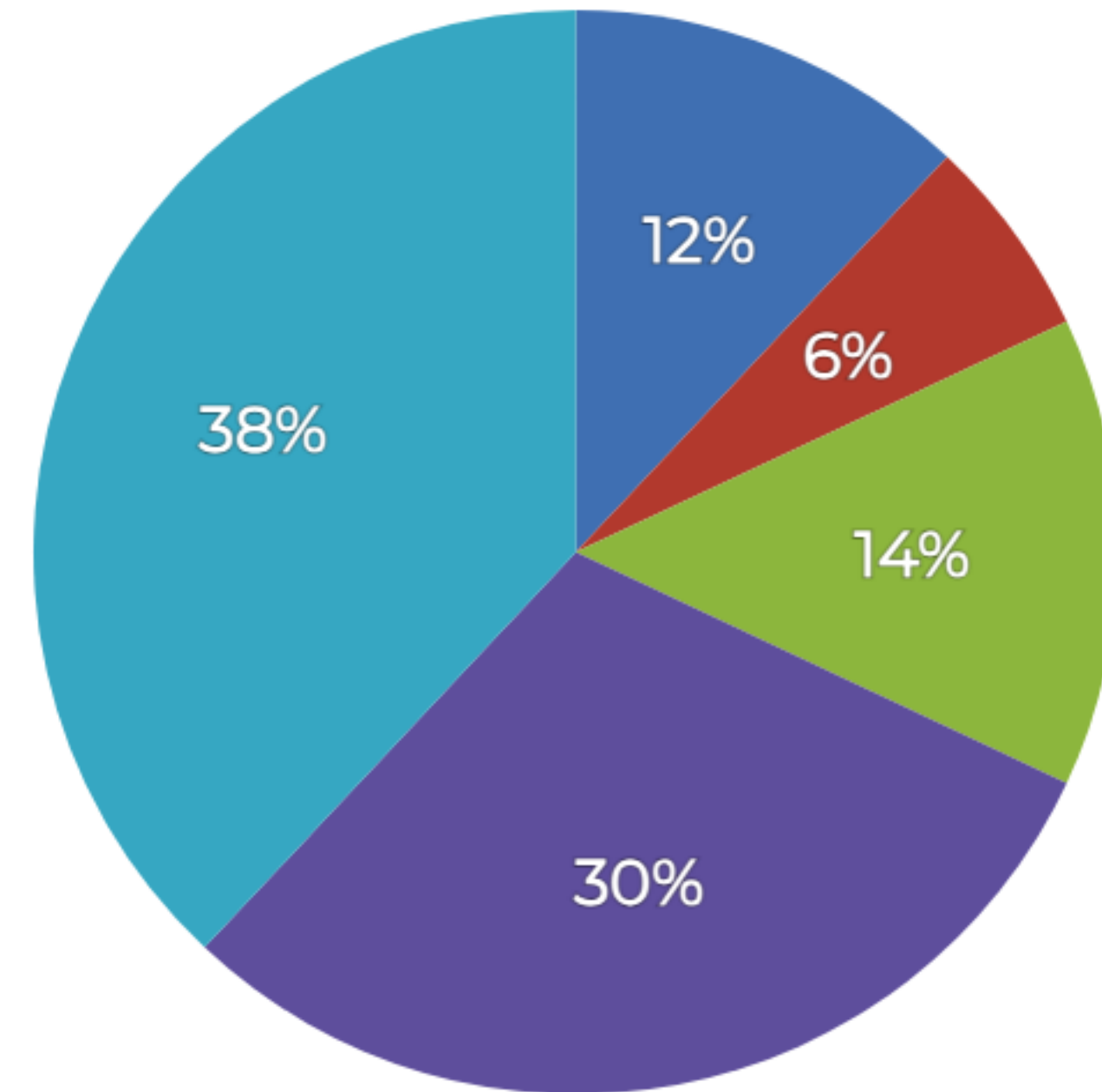
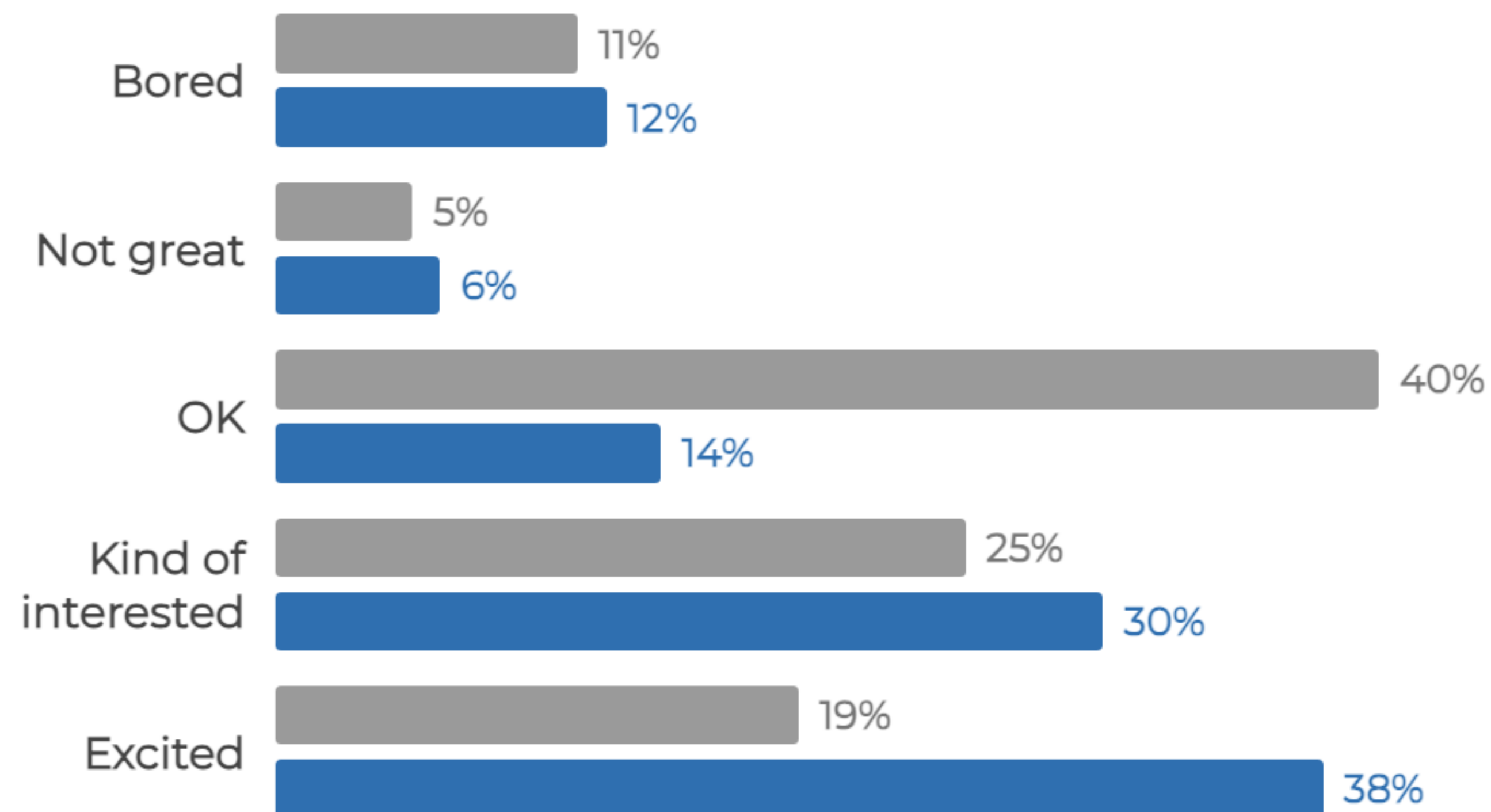


FIGURE 0.4 Example 2 (before): showing data

# Pilot programme was a success

How do you feel about science?



BEFORE programme, the majority of children felt just OK about science.

AFTER programme, more children were Kind of interested & Excited about science.

Based on survey of 100 students conducted before and after pilot programme (100% response rate on both surveys).

FIGURE 0.5 Example 2 (after): storytelling with data

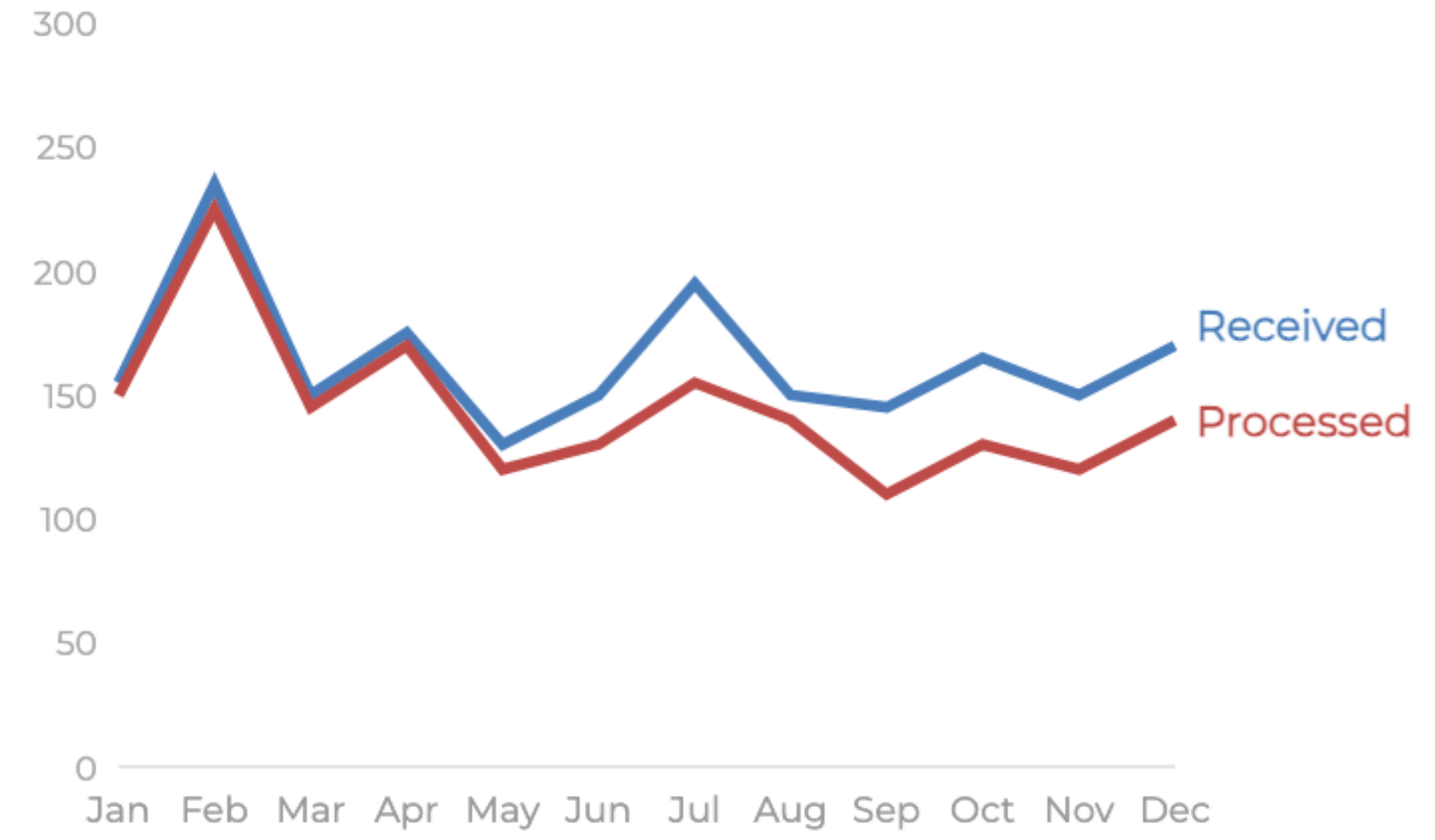
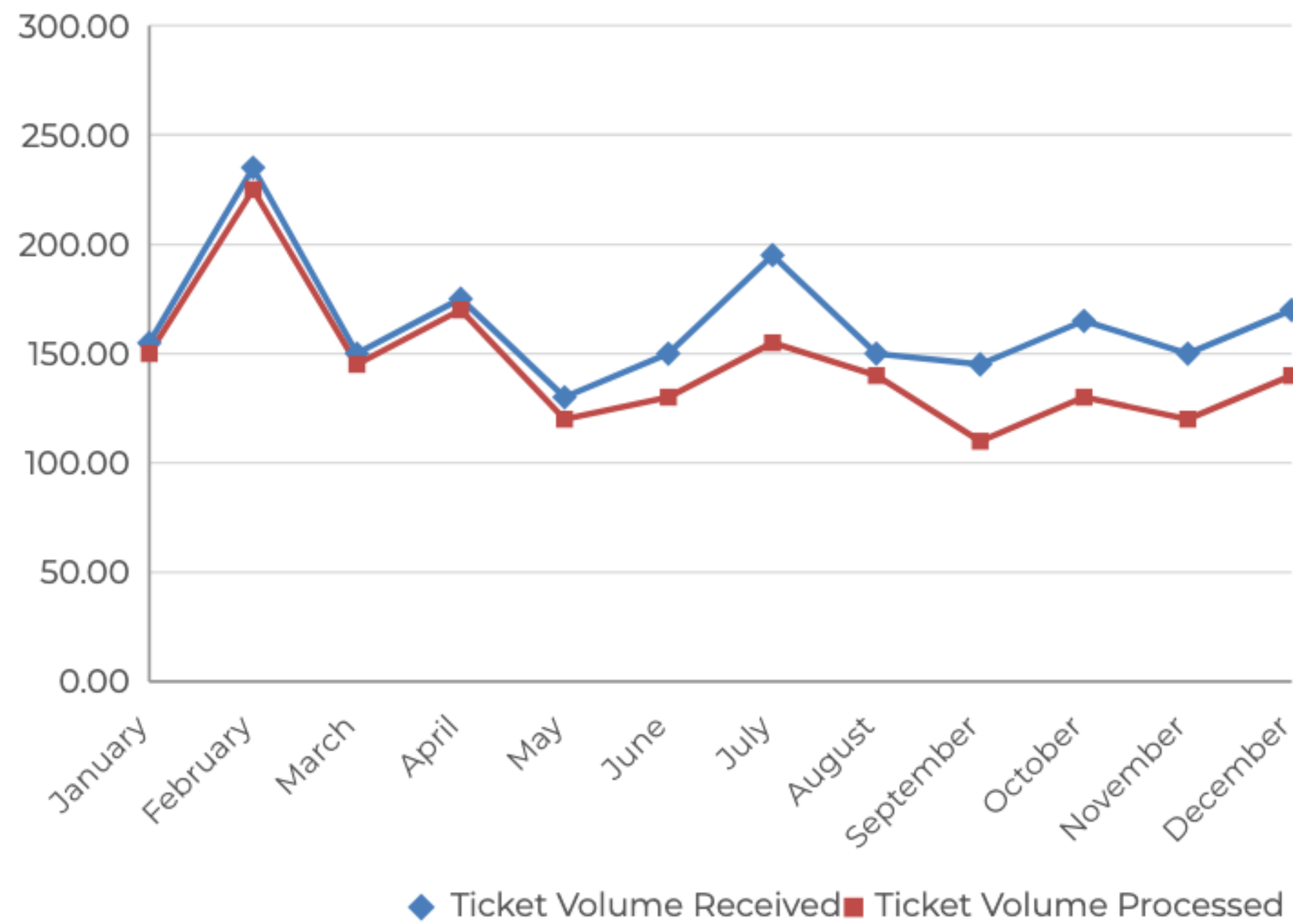
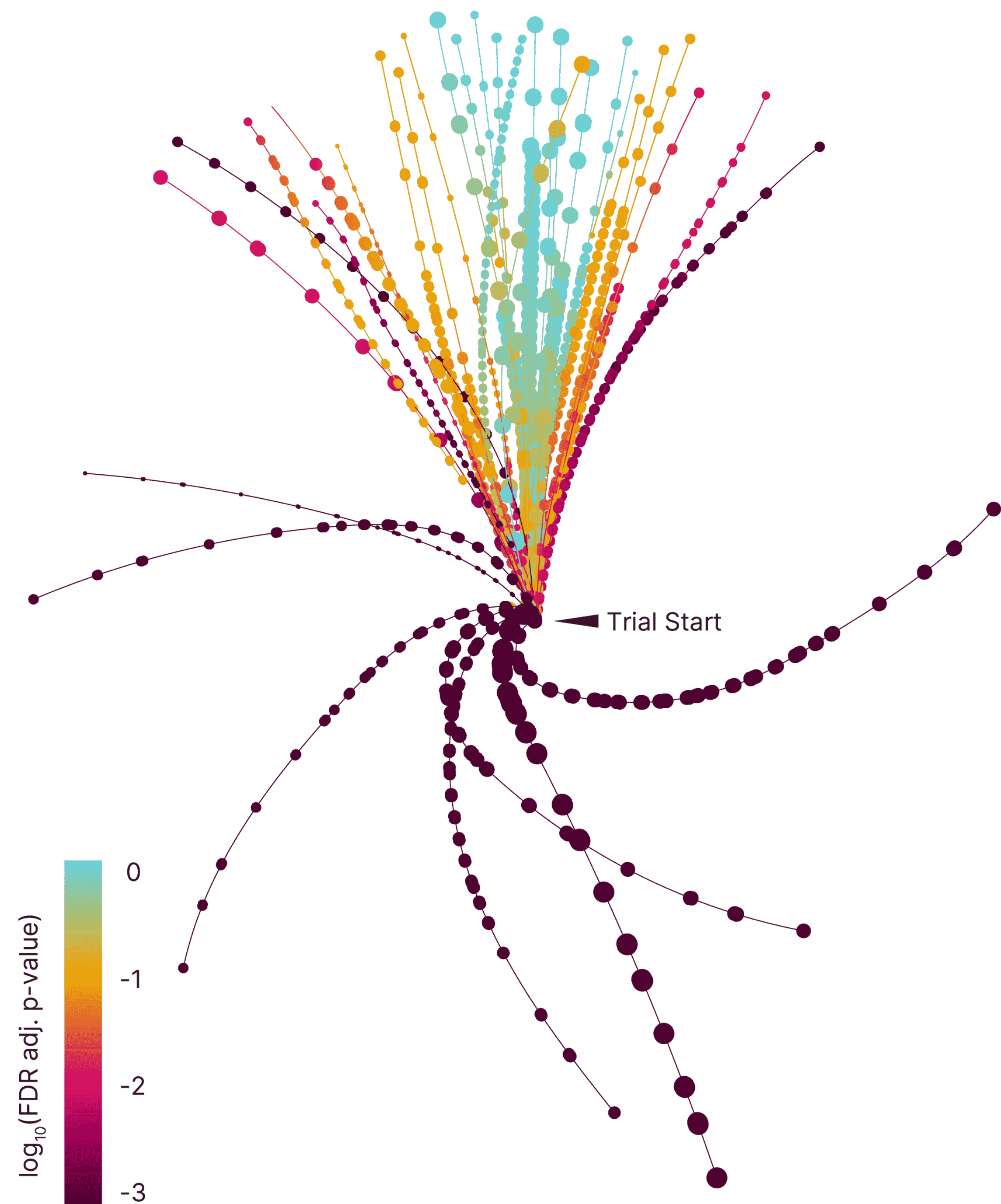
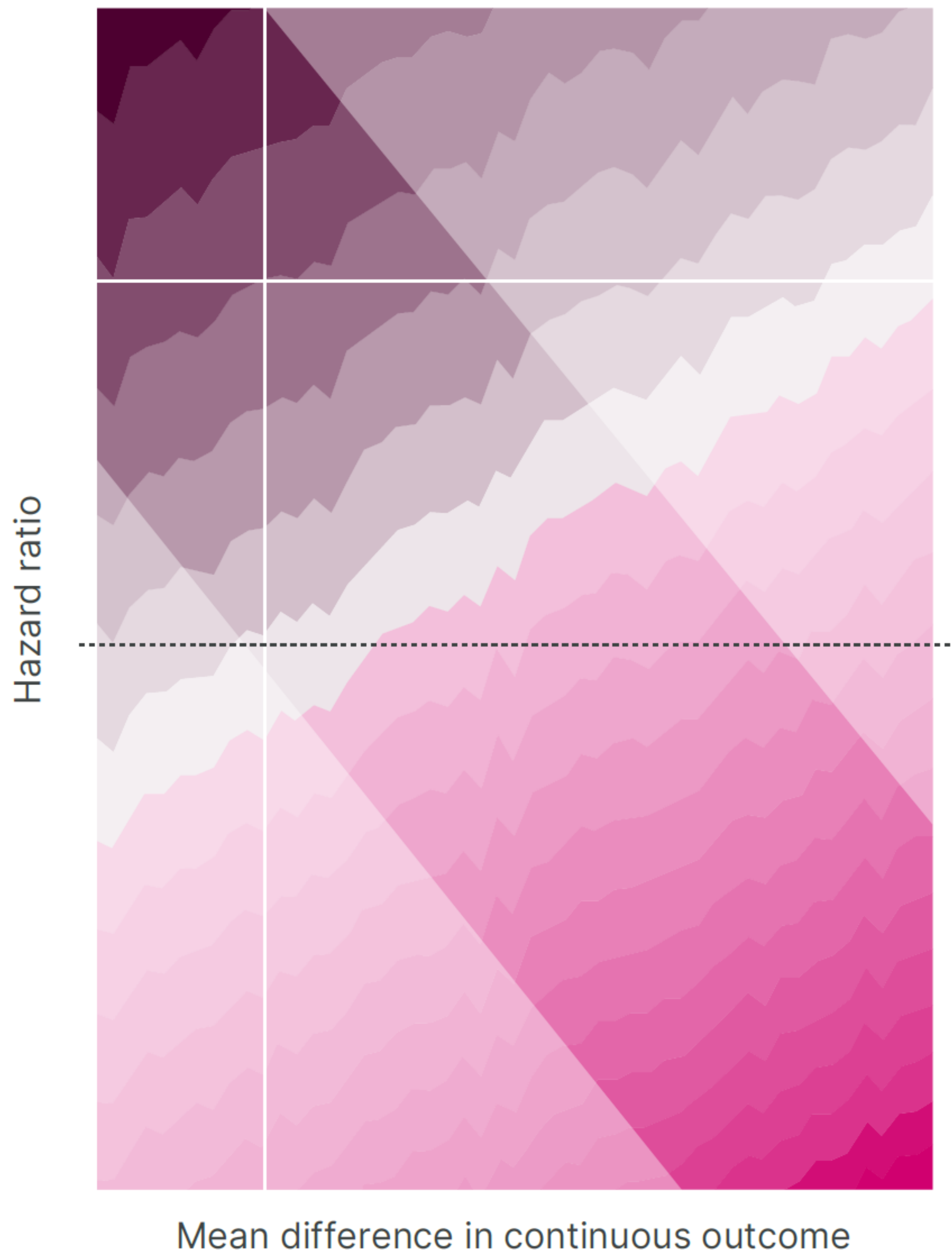


FIGURE 3.24 Before-and-after



EVERY DATA STORY NEEDS...

**A BEGINNING.  
A MIDDLE.  
AN END.**

---

It may have no hero — but it must have **humanity**. It may have no happy ending — but it must have an **ending**. And one thing is non-negotiable: a **moral**. What should we do, now we know the story?

**R.I.P.**

WILL ANY HUMAN ACTUALLY EVER READ YOUR NEXT  
REPORT?

CLINICAL-TRIAL  
REPORT

# #UnitedCancerVoicesIE



## Our focus

Highlight issues and drive solutions on systemic issues impacting the cancer community

## Who are we?

United Cancer Advocates Network Ireland is a voluntary network of cancer advocates from the island of Ireland

We are stronger together



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



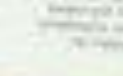
**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



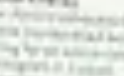
**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland



**Michelle O'Connell**  
Co-ordinator, Cancer Support Ireland

Launching 2nd April



- AI IS GETTING BETTER
- EVERYONE IS USING AI
- ...AND THAT AI IS OWNED BY **WHOM, EXACTLY?**



# "DR." CHATBOT WILL SEE YOU

PATIENTS ALREADY USE AI FOR BETTER TREATMENT —  
BUT IT WON'T ALWAYS CATCH THE NUANCE.

# THE GOOD NEWS...

AI CAN ALREADY HELP US TELL BETTER DATA STORIES —  
GOOGLE'S NOTEBOOKLM IS EXTRAORDINARY.

**BIG IDEA 1**

**TRIALS NEED  
THEIR OWN  
LLM**



**BIG IDEA 2**

# **PERSONALISED INSIGHTS**



**JONATHAN MCGREA**

**THANK  
YOU.**

LET'S TELL BETTER DATA STORIES.

