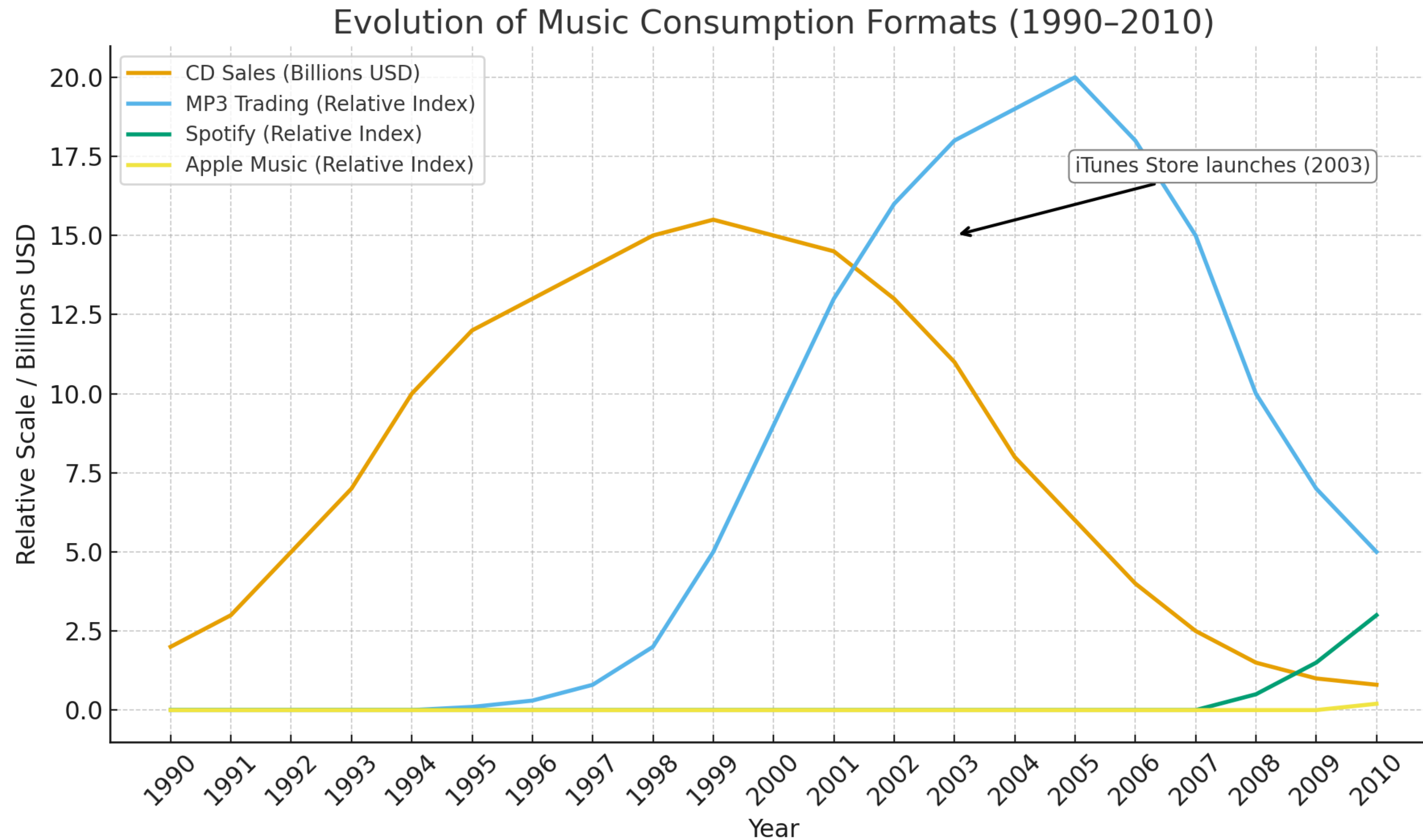


Communicating with Data

aka Storytelling

Disruption in the Music Industry



SCQA

A way to organize your thoughts and quickly and succinctly set the context for what you want to say

Situation: The background. A statement of ‘what is’. Sometimes the problem statement.

Complication: Why are we looking at this now? What has, or is going to, change?

Question: What were you tasked to do?

Answer: What did you find? What are you recommending?

Disruption in the music industry – Imagine it is 2001. What is Sony going to do?

The MP3 audio format was standardized in **1993**, but most listeners still used CDs. By **1997–1998**, a few artists and labels began posting MP3s online, but bandwidth limits kept audiences small. In **June 1999** with the launch of **Napster**, a peer-to-peer (P2P) file-sharing service, millions of users could easily trade MP3s.

Situation

During the past year (2000) after a peak in 1999 of roughly **\$14–15 billion in U.S. revenue**, CD sales began to fall. At the current rate sales will decrease by more than half within a decade and shatter the industry business model of recorded-music commerce.

Complication

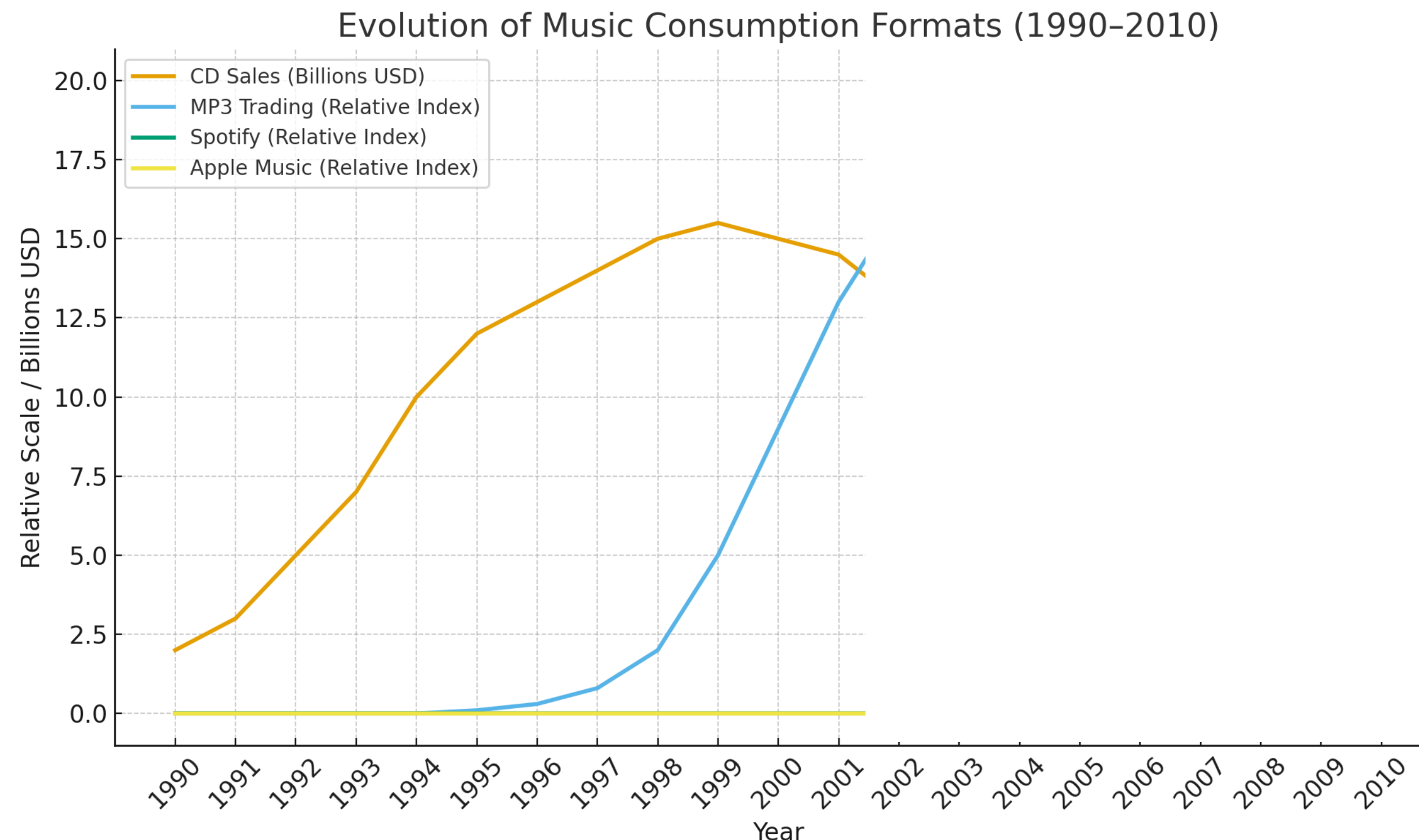
Sample 1 – Music Industry Disruption

Short and concise

You work for Sony. It is the Year 2001

The MP3 audio format was standardized in **1993**, but most listeners still used CDs. By **1997–1998**, a few artists and labels began posting MP3s online, but bandwidth limits kept audiences small. In **June 1999** with the launch of **Napster**, a peer-to-peer (P2P) file-sharing service, millions of users could easily trade MP3s.

During the past year (2000) after a peak in 1999 of roughly **\$14–15 billion in U.S. revenue**, CD sales began to fall. At the current rate sales will decrease by more than half within a decade and shatter the industry business model of recorded-music commerce.



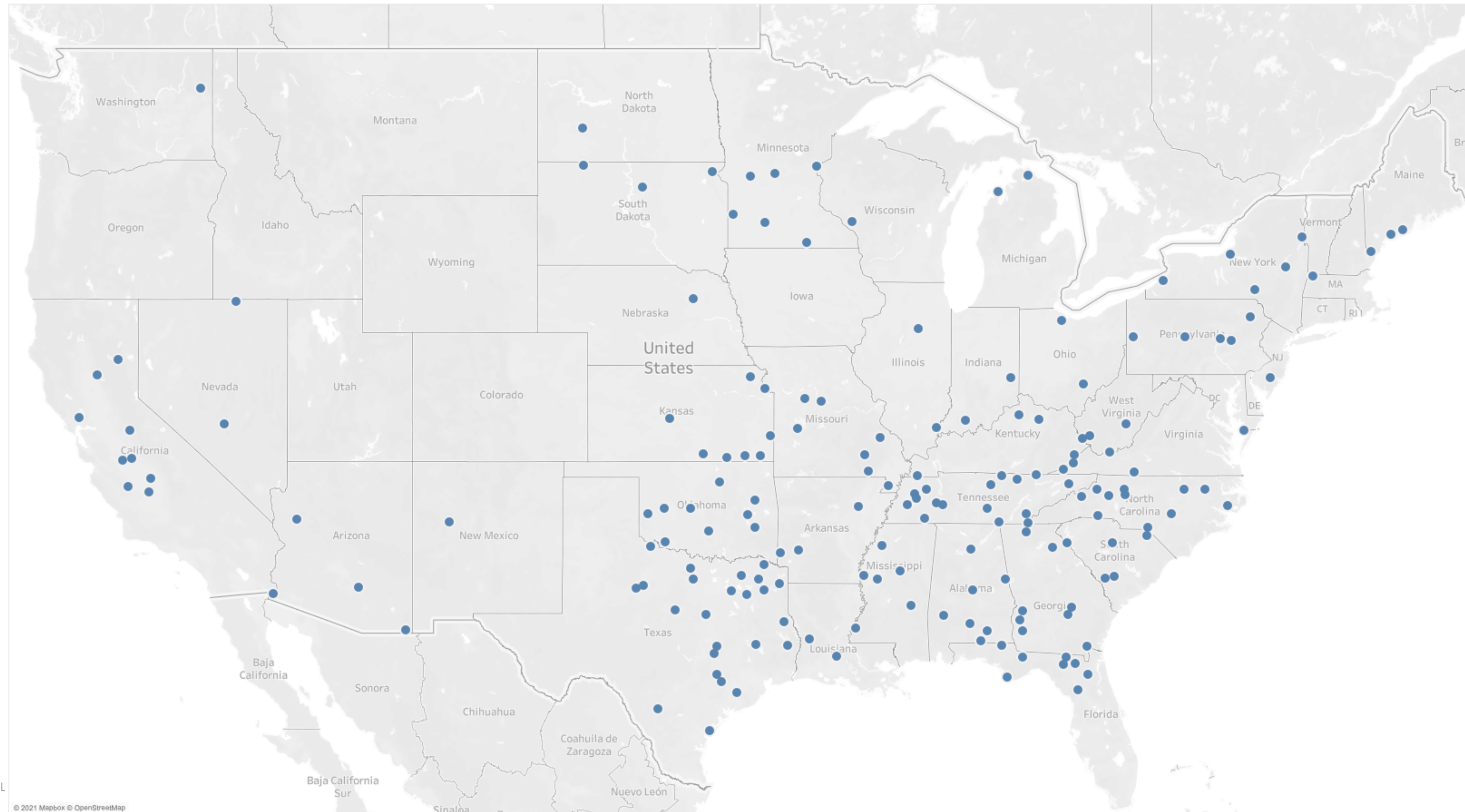
Sample 2 – Rural Hospitals

Multiple slides for S,C & Q

Since 2005 there have been 180 rural hospital closures

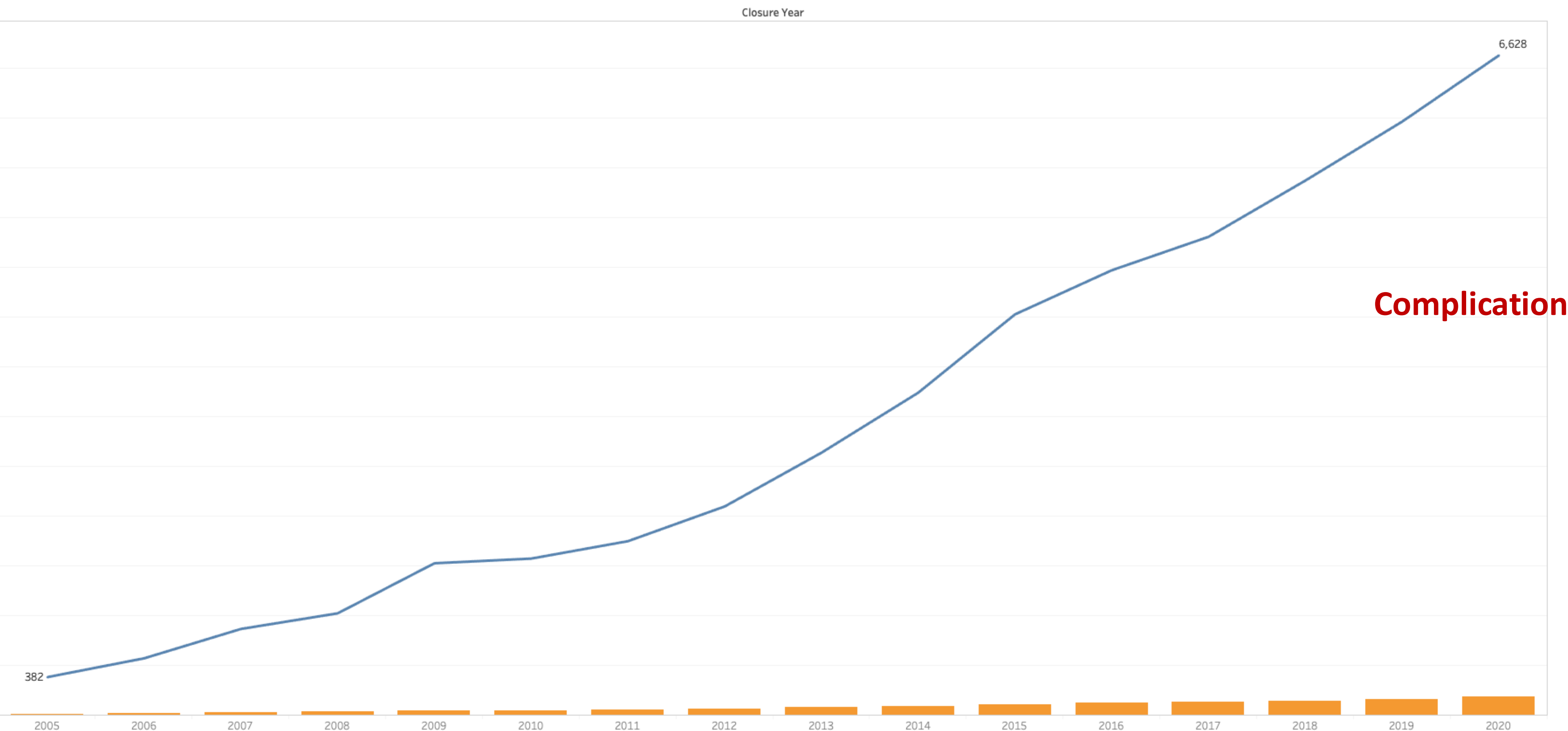
180 rural hospitals closed since 2005

Situation



Over the last 8 years the rate of bed loss has increased

6,628 beds lost



What is the impact on residents in rural areas?

No facilities, no qualified medical staff

'The ambulance became our emergency room'

When a hospital closes, the elderly, the chronically ill, mothers and babies lose access to the specialized care they need. Ambulance services are seriously stretched as they try to respond to emergencies that now demand extra hours in transit. People worry about what will happen in emergency situations. What if their child has an asthma attack at school or their wife goes into premature labor? What if a tourist is injured? With the nearest hospital over an hour away, in the words of one rural resident, "The ambulance became our emergency room." That is not an acceptable alternative.



Question



"As an 80-year-old, I'm scared. I've had one heart attack. It's a dangerous situation for us elderly people, not to have access to at least emergency care."

BEATRICE TALLENT

Polk County resident and former chair of the Copper Basin Medical Center's District Board of Directors

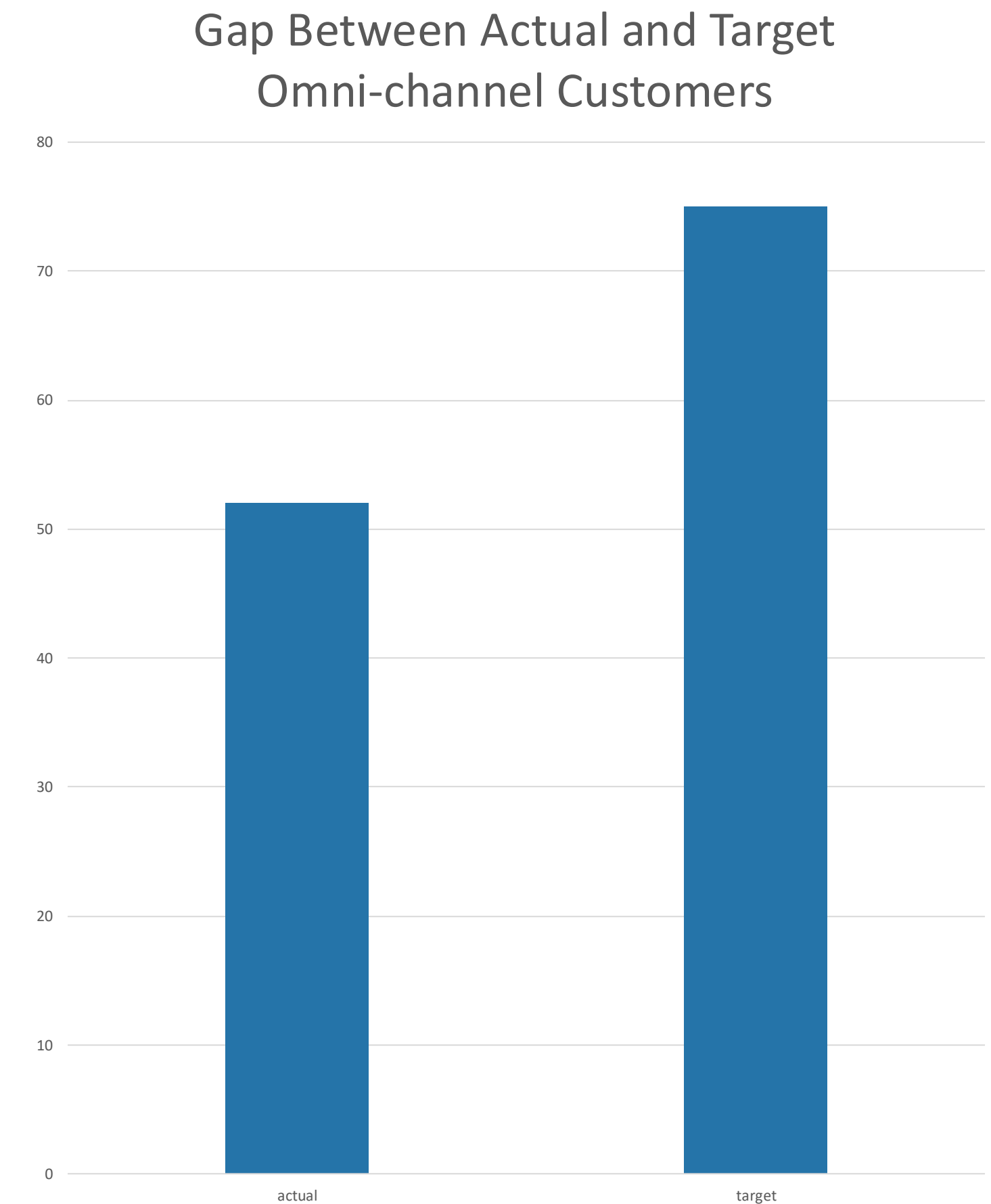
**It isn't a mystery novel.
Report your findings and then show the supporting
data and other *related* interesting facts.**

Our Omni-channel Diagnosis

There is a 23% gap between the number of omni-channel customers and our target

The organization is currently carrying out several projects to increase flat in-store sales and reverse declining digital sales.

Limited visibility into how channels impacts sales and customer experiences has masked a gap between the number of customers that are omni-channel (52%) and the target (75%)



Question – what are the root causes?

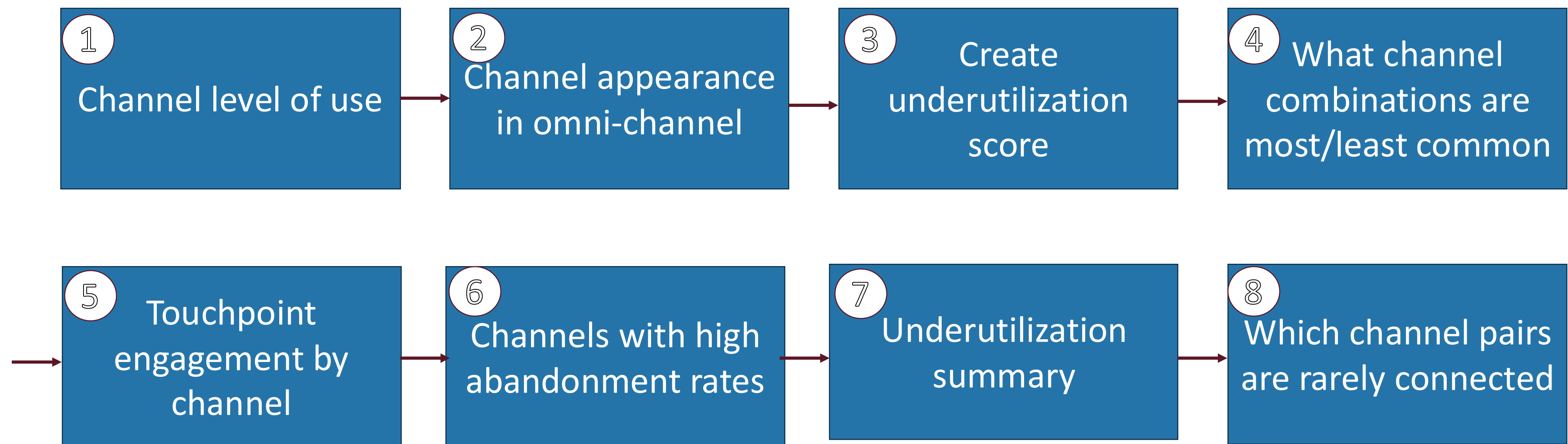
There are several places to look.

**People, product, process, price, place,
promotion, platform**

- Fragmented customer experience across channels
 - Limited mobile app adoption and engagement
 - Insufficient staff training and in-store technology
 - Weak incentive structure for cross-channel behavior
 - Poor data integration and personalization gaps
-
- Which channels act as 'dead ends' rather than bridges to other channels?

Going from the work we did to presenting

This slide is not part of the presentation. It is here to show you how we were thinking about getting the data we needed



Which channels act as 'dead ends' rather than bridges to other channels?

These are our answers.

Problem channels

1 Channel level of use

2 Channel appearance in omni-channel

3 Create underutilization score

Abandonment

5 Touchpoint engagement by channel

6 Channels with high abandonment rates

Connection Gaps

4 What channel combinations are most/least common

8 Which channel pairs are rarely connected

Executive Summary

7 Underutilization summary

Note

The **Social** channel in omnichannel retail refers to social media platforms used for commerce and customer engagement. This includes site such as:

- **Shopping-Enabled Networks**
 - **Instagram** - Shoppable posts, Stories, Instagram Shop, product tags
 - **Facebook** - Facebook Shops, Marketplace, shoppable ads
 - **Pinterest** - Product Rich Pins, Shopping ads, Try-on features
 - **TikTok** - TikTok Shop, Live shopping, shoppable videos
 - **YouTube** - Shoppable videos, product shelves

Answer/Argument 1: Problem Channels

Call Centers and Social are laggards in Omni-channel Journeys

Results (just now)

TableChart

6 rows91ms

	CHANNEL_NAME	ADOPTION_RATE	OMNI_PARTICIPATION_RATE	CONVERSION_RATE	LOYALTY_CORRELATION	UTILIZATION_SCORE
1	Call Center	22.00	26.19	68.18	77.27	37.53
2	Social	30.00	35.71	60.00	83.33	41.29
3	Mobile App	53.00	59.52	81.13	83.02	64.05
4	Store	52.00	55.95	94.23	69.23	66.25
5	Website	61.00	65.48	81.97	73.77	69.08
6	Email	60.00	69.05	78.33	85.00	69.12

- Underutilization score (lower = more underutilized)
- Calculations using total users and total customers were weighted for adoption and omni participation.

Answer/Argument 2: Abandonment

Social’s high abandonment rate indicates a friction point between it and other channels.

Results (just now)

TableChart

5 rows48ms

	FIRST_TOUCH	# TOTAL_JO	# COMPLETED_PURC	# ABANDONED_JO	# ABANDONMENT_RAT	# AVG_DAYS_BEFORE_ABAI	# ABANDONED_AT_BROW	# ABANDONED_AT_CART	# ABANDONED_AT_CHECKOUT	# AVG_DEVICE_SWITCHES	# AVG_RESEARCH_HOURS
1	Social	18	6	12	66.67	6.000000	0	0	0	2.000000	6.411111
2	Mobile App	19	16	3	15.79	2.000000	0	0	0	1.789474	3.921052
3	Website	22	20	2	9.09	4.000000	0	0	0	1.363636	3.631818
4	Store	22	21	1	4.55	2.000000	0	0	0	1.272727	2.700000
5	Email	19	19	0	0.00	null	0	0	0	1.368421	3.642105

Answer/Argument 3: Connection Gaps

There is a need to improve all connections. Even ‘strong’ connections are at the low end of the scale

Results (just now)					
Table Chart					
	CONNECTION	# CONNECTIONS	# SOURCE_USERS	# CONNECTION_RATE	CONNECTION_STRENGTH
1	Website → Store	25	61	40.98	Moderate Connection
2	Email → Store	27	60	45.00	Moderate Connection
3	Mobile App → Store	26	53	49.06	Moderate Connection
4	Social → Store	17	30	56.67	Moderate Connection
5	Social → Website	19	30	63.33	Strong Connection
6	Mobile App → Website	34	53	64.15	Strong Connection
7	Email → Website	41	60	68.33	Strong Connection

■ Connection Rate = # Connections/# Source Users

■ Connection rate (Developed with SMEs)

■ < 20 THEN 'Critical Gap'

■ < 40 THEN 'Weak Connection'

■ < 60 THEN 'Moderate Connection'

■ > 60 THEN 'Strong Connection'

■ Call center connections (not shown) are all 'Critical'

Summary

Store, Mobile App, Email and Website are common in omni-channel customers. The lower-than-expected utilization of d Social and the Call Center is a factor not achieving our 75% target

Results (just now)

TableChart

6 rows330ms

	CHANNEL	TOTAL_USERS	CONNECTS_TO_OTHER_CHANNELS	CROSS_CHANNEL_RATE	AVG_ORDER_VALUE	UTILIZATION_STATUS
1	Call Center	22	22	100.00	379.17	Underutilized - Low Adoption
2	Social	30	30	100.00	435.93	Underutilized - Low Adoption
3	Store	52	47	90.38	556.54	Adequately Utilized
4	Mobile App	53	50	94.34	590.71	Adequately Utilized
5	Email	60	58	96.67	584.49	Adequately Utilized
6	Website	61	55	90.16	516.11	Adequately Utilized