

Data Storytelling Fundamentals



- Combining data, visuals, and narrative to drive a specific decision



- Core skill for analysts, business leaders, educators, and report creators



- Turning evidence into decisions: from raw findings to clear action



- A chart shows patterns; a complete data story moves the audience



- Structured learning path from analysis fundamentals to actionable outcomes



Why Data Alone Is Not Enough



- Raw numbers and tables don't automatically reveal meaning



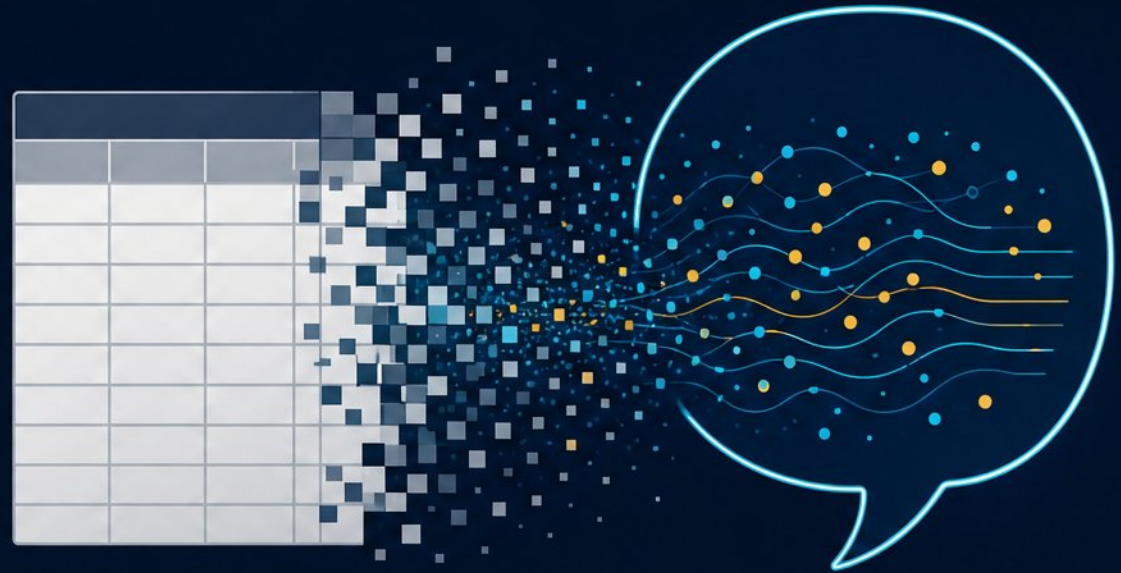
- Research shows data stories improve speed and accuracy of understanding



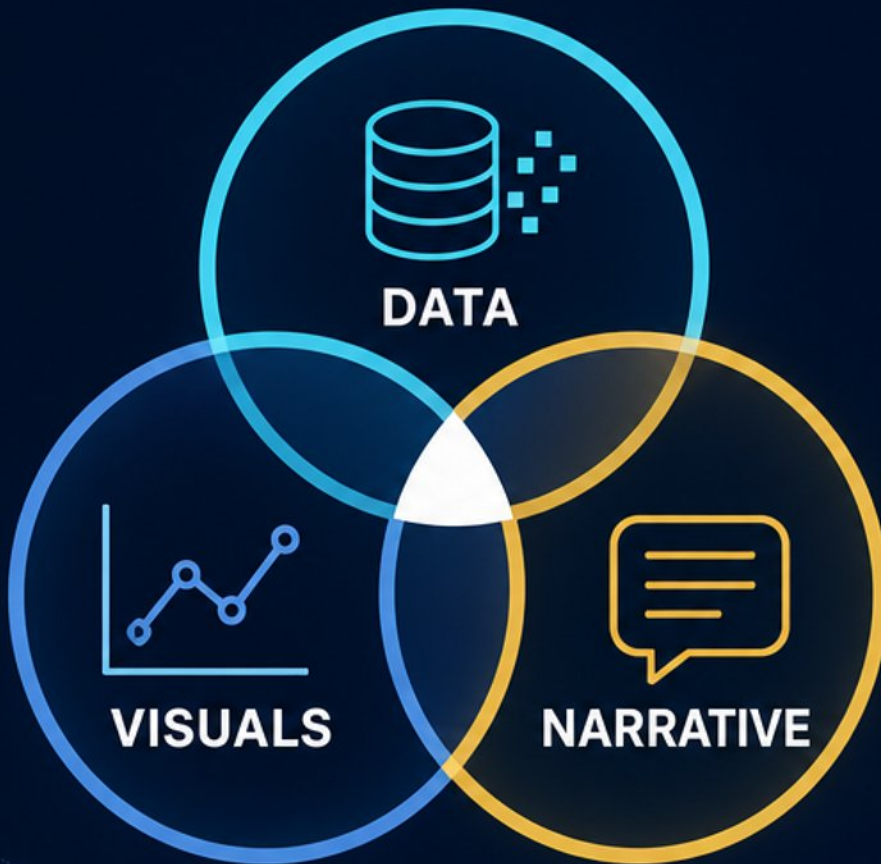
- Findings without narrative often get a "so what?" response



- Charts show patterns; stories explain why they matter



Defining Data Storytelling



- Combining data, visuals, and narrative to drive a specific decision
- More than reporting or dashboards: it argues what the findings mean
- Data provides checkable evidence, proves the case
- Visuals make the key pattern obvious at a glance
- Narrative explains why it matters and what to do

Core Building Blocks



- Data = checkable evidence; visuals = visible pattern; narrative = why it matters
- Foundation: audience, context, and the decision to drive
- Explanatory stories guide; exploratory views let audiences investigate
- Context-Turn-Ask spine: baseline, insight, action
- One Turn per story; multiple Turns mean multiple stories

Audience and Message First



- Identify decision-makers, their priorities, and data fluency level



- Write one clear key message before building visuals



- The 'Big Idea' test: can you state it in one sentence?



- Tailor depth, terminology, and examples to the audience



- Avoid overclaiming; keep the story accurate and relevant



Choosing the Right Visuals



Match chart types to tasks: compare, trend, distribution, relationship, part-to-whole



Simplest familiar charts are usually clearest; one message per chart



Position and length are easiest to read; area, volume, and color are harder



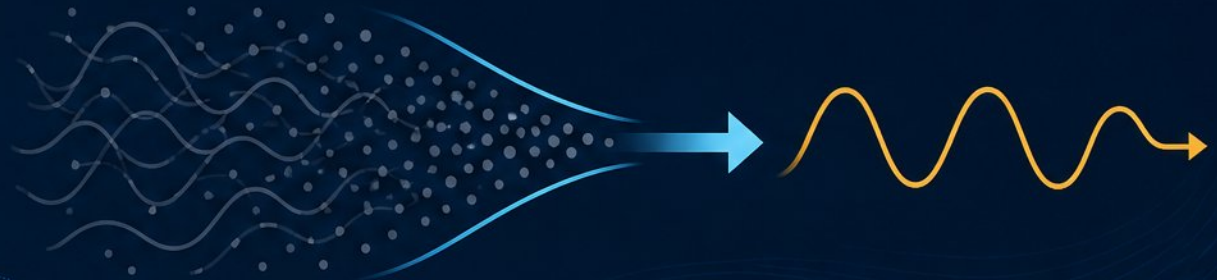
Avoid misleading axes and 3D pie charts; start numeric axes at zero



Highlight the signal through color, annotation, and removing clutter

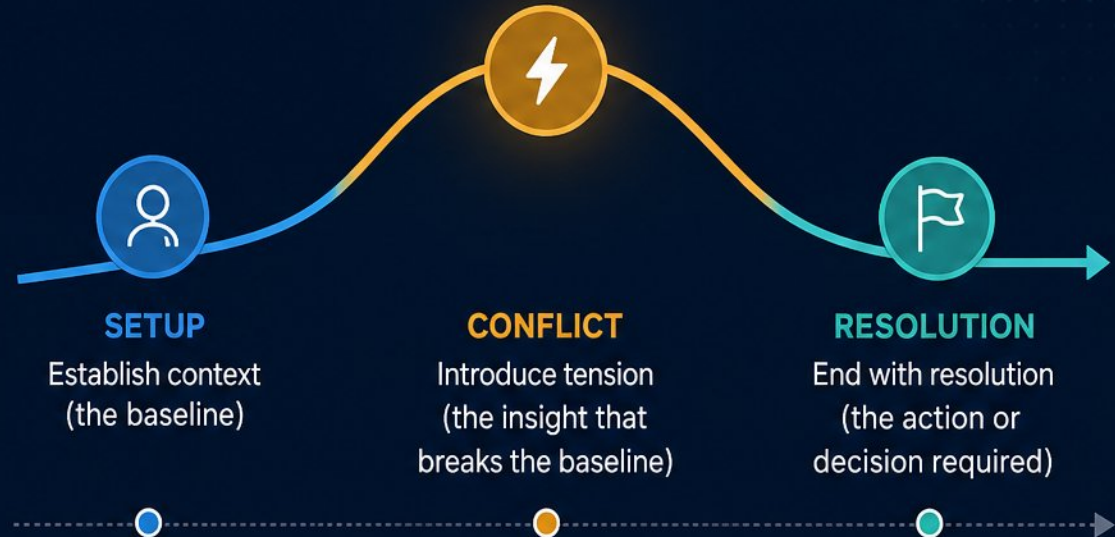
MATCH CHART TYPES TO ANALYTIC TASKS

 COMPARE	 TREND	 DISTRIBUTION	 RELATIONSHIP	 PART-TO-WHOLE
				
				
				



Structuring the Narrative

- Use setup, conflict, and resolution to build professional data presentations
- Apply situation-complication-resolution or context-tension-resolution frameworks
- Establish context first: the baseline everyone accepts
- Introduce tension: the single insight that breaks the baseline
- End with resolution: the specific action or decision required
- Follow the inverted pyramid: conclusion first, then evidence, then details



Building Credible Stories



- Cite data sources, limitations, and methods to maintain trust



- Separate correlation from causation; avoid overclaiming and misleading axes



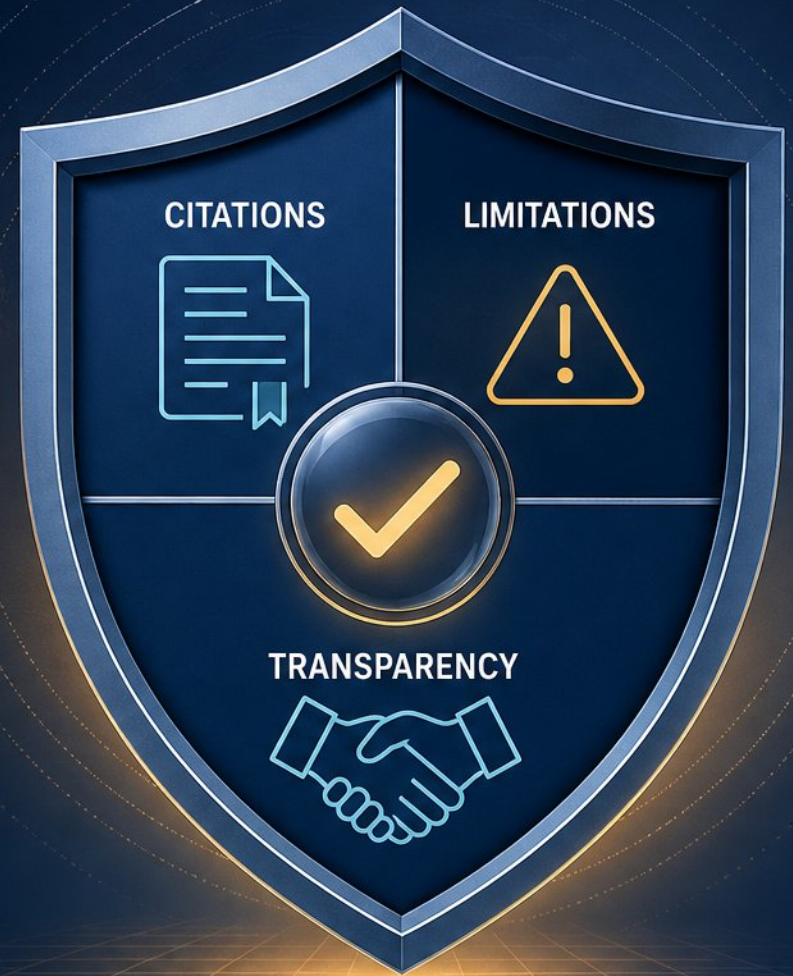
- Never cherry-pick outliers or impose a story the data does not support



- Disclose scope limits and uncertainty; let the audience verify the evidence



- Practice transparency, fairness, and accountability in persuasive communication



Avoiding Common Pitfalls



Leading with method, not insight;
audiences want the answer first



Treating all findings as equal;
a clear takeaway needs hierarchy



Overloading visuals with clutter
that competes with the signal



Every element should support
the single decision you are driving



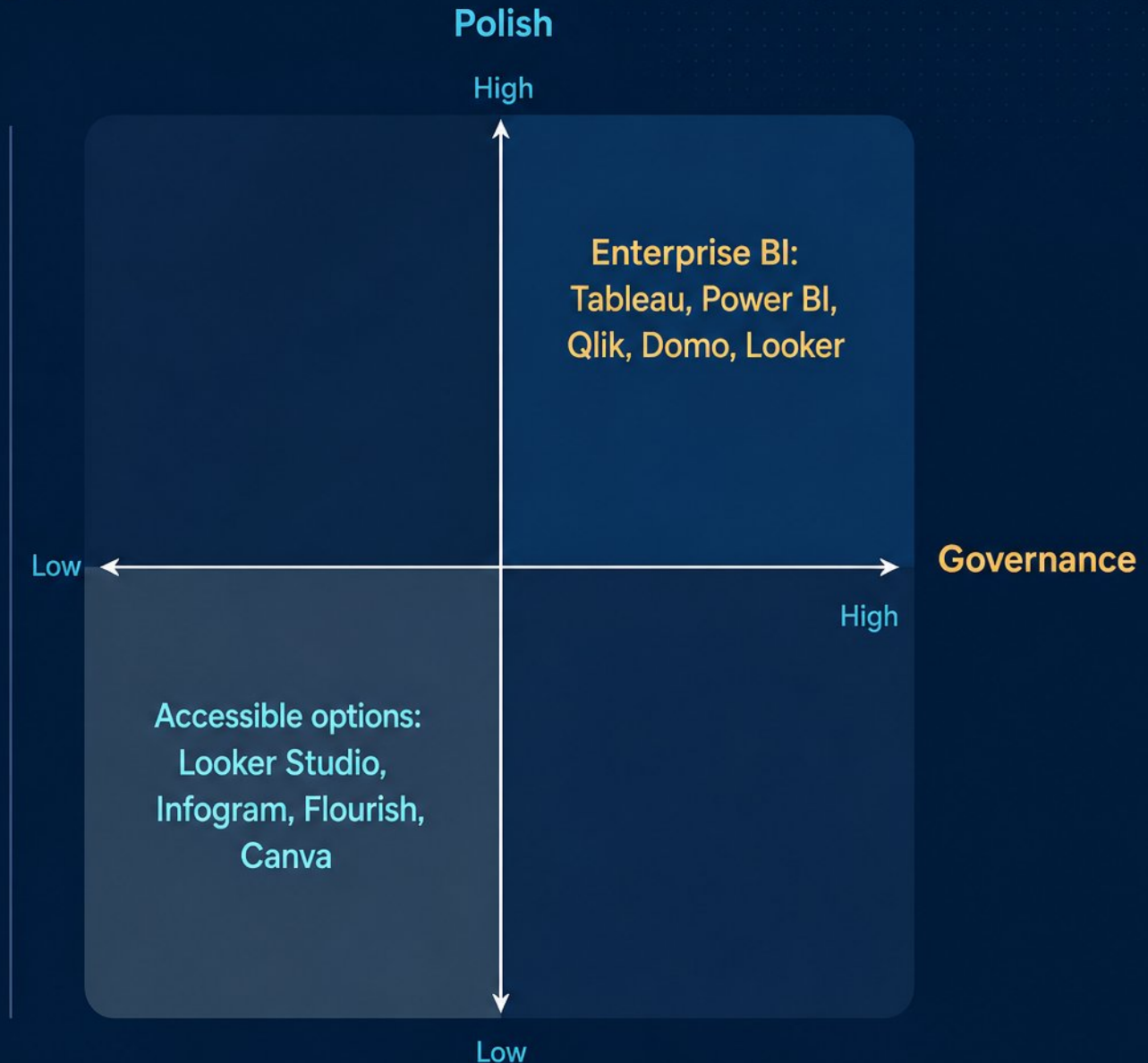
Practical Storytelling Workflow

- Repeatable process: question, data prep, insight, narrative, storyboard
- Storyboard before chart polish: sticky notes and action titles
- Sequence the argument, then refine each visual
- Iterate with feedback and cut non-load-bearing elements
- Edit ruthlessly so every element serves the narrative

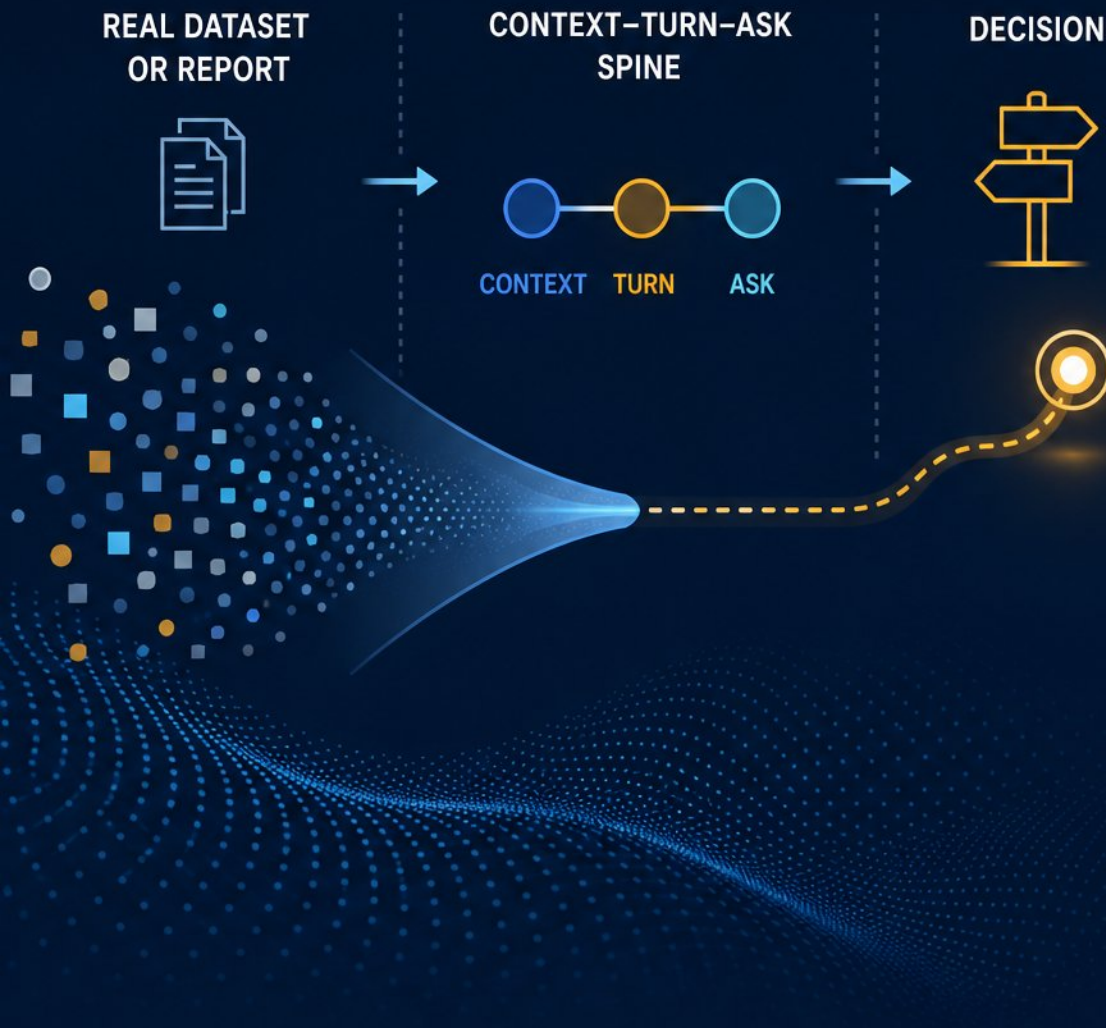


Tools That Support Storytelling

- Match the tool to your data stack and team skill
- Weigh polish against governance, speed, and audience reach
- Enterprise BI: Tableau, Power BI, Qlik, Domo, Looker
- Accessible options: Looker Studio, Infogram, Flourish, Canva
- Pick for storytelling goals, not a feature checklist



Practice and Next Steps



- ✓ Pick a real dataset or report
- ✓ Write the Context-Turn-Ask spine first
- ✓ Peer review: does the story move a decision?
- ✓ Use structured feedback prompts
- ✓ Commit to repeated practice and editing

Key Takeaways and Action Checklist

- ✓ Check audience, message, evidence, visuals, narrative, ethics, and action
- ✓ A chart shows, a story moves
- ✓ Write the Context-Turn-Ask spine before slides
- ✓ Lead with the insight, then show the proof
- ✓ End with one clear decision or next step
- ✓ Commit: apply this to your next report



PersonWise.

PersonWise • AI digital-human course platform



Scan the code or click anywhere to watch this course live, with voice Q&A

personwise.ai/t/3d850f19/public