

Designed For Impact

The Statistical

Collaborator's Workflow

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Results

Tool

Motivation

Agenda

01 Motivation

02 Tool

03 Results

What you'll walk away with

- A deeper understanding of what it means to do **impact-centric** consulting and collaboration
- A **tool** that builds this process into your workflow and **helps you teach** impact-centric consulting to statistics students

Big Idea

accurate analysis $\nrightarrow$ automatic impact

Impact comes from:

- Deep commitment to the domain
- An understanding of the stakes and expectations
- Close attention to the intended result
- Intentional analytical choices
- Crafting a story in context

Why stories matter

Stakeholders don't remember models.

They remember outcomes and they act on narratives.



Existing frameworks

- Attitude, Structure, Content, Communication, Relationship

(Vance & Smith, 2019)

- QQQ (Vance et al., 2025)

- What's the problem?
- What did you do?
- What does it mean?

What I like

- ASCCR captures the key dimensions of excellent partnership.
- QQQ reflects the organic lifecycle of a project (learn the context, execute the analysis, interpret the results).
- What the frameworks don't facilitate yet:
structured impact **planning** and **evaluation**.

Designed For Impact Tool

A collaborative scaffolding tool for translating evidence into action.



The tool

- Fillable tool
- Five dimensions

Designed For Impact: A collaborative scaffolding tool for translating evidence into action.

Project:

Collaborator:

Date:

Domain Expert:

Engagement Period:

Vision

Q₁



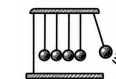
Partnership

Q₁



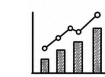
Impact

Q₁



Analysis Pathway

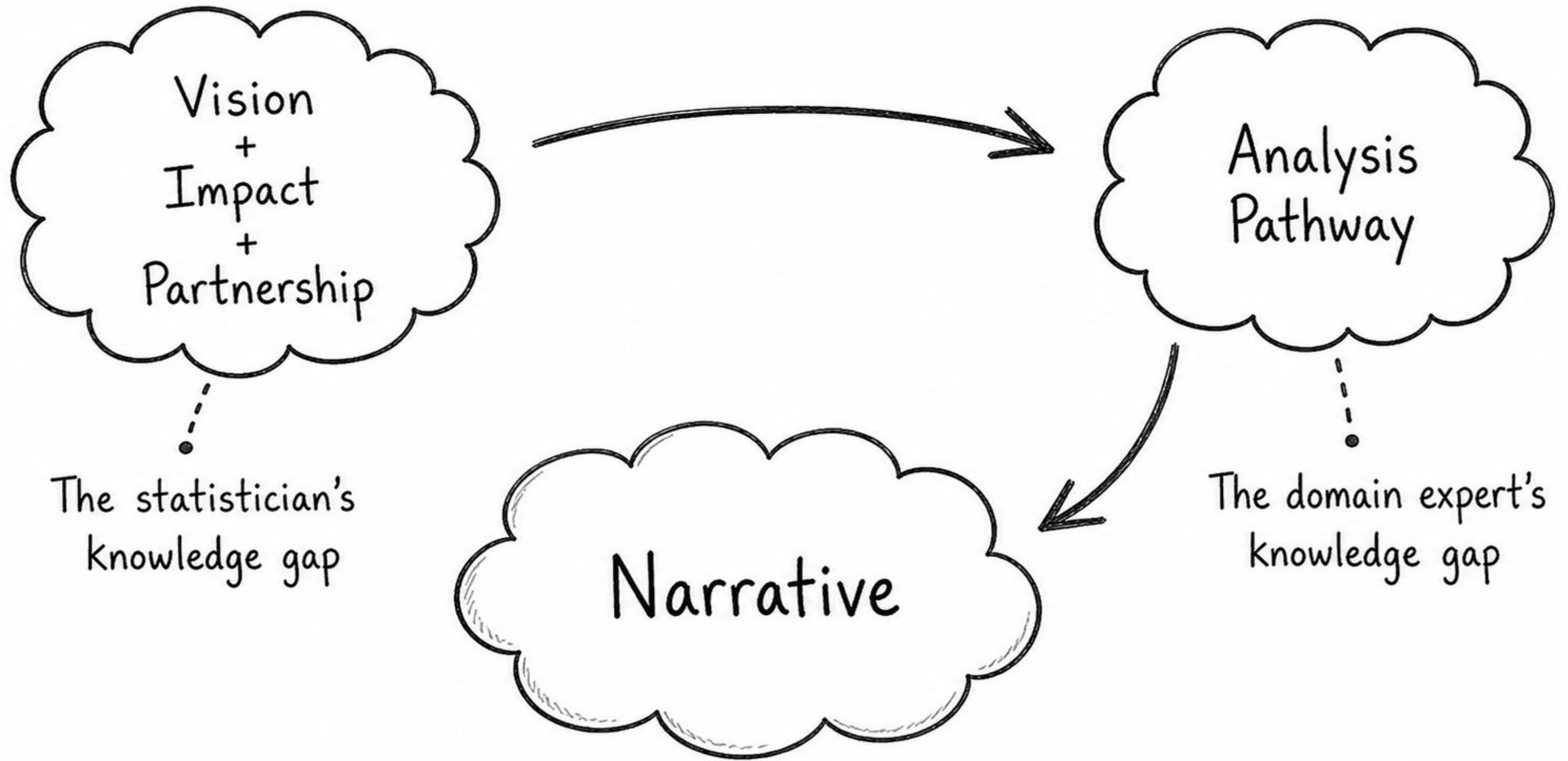
Q₂



Narrative

Q₃





Impact emerges from combining domain and statistical knowledge

Vision

A concise, forward-looking declaration about the long-term goal of the company, department, or team.

- What broad, societal impact does this project contribute to?
- What's our north star?

Partnership

How this engagement builds trust, alignment, and opportunity for future collaboration.

- What would make this collaboration exceptionally successful?
- How might the collaborator benefit from this project?

Impact

The operational, strategic, economic, or knowledge-driven outcome of this collaboration.

- How will this project impact primary stakeholders, the decisions they need to make, or the actions they need to take?

Analysis Pathway

How the analytical approach enabled the intended impact.

- Does the intended impact lend itself more to prediction or inference?
- What kind of models or visualizations enable the intended impact?

Narrative

How findings translate to an immediate or future impact on stakeholders or the decisions they need to make.

- To what extent was the intended impact realized?
- How did this project contribute to the vision, partnership, and intended impact?

Here's a bad example: We analyzed soil data using logistic regression.



Designed For Impact: A collaborative scaffolding tool for translating evidence into action.

Project:

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Vision

Q₁

Advance the goals of viticulture (e.g., better grape quality) and the environment, **simultaneously**.

Partnership

Q₁

Align analytical rigor with the domain experts' interests to produce **publishable** and **co-authored** results.

Impact

Q₁

Help **viticulturists** decide how to **manage their land** in ways that balance sustainability and agricultural outcomes.

Analysis Pathway

Q₂

Identify latent constructs from 74 predictors using **multiple correspondence analysis**, and investigate key relationships further with **logistic regression**.

Narrative

Q₃

Grazing is associated with **lower odds of disease pressure** and **composting** is associated with **higher odds of insect pressure**. A follow-up study should investigate these causally and, until then, growers might invest more in grazing and less in composting.

An example

- More examples and prompts at jettpalmer.github.io/designed-for-impact
- Using this tool might look different in industry v.s. academia

Preliminary results (students, n = 39)

- “Future students of this class should be taught about impact planning and evaluation.”
92% (36/39) of students agree or strongly agree.
- “Future students of this class should be taught how to use the Designed For Impact Tool.”
90% (35/39) of students agree or strongly agree.

Preliminary results (students, n = 39)

- “I liked the idea of partnership, it’s not something I always think about.”

New ideas
- “I think it gives me a clear, organized structure for the project’s arc.”

Helpful structure

Preliminary results (practitioners, n = 7)

- “Overall, the Designed For Impact Tool is useful for statistical consulting practice.”
7/7 practitioners slightly agree, agree or strongly agree.
- “I would consider using the Designed For Impact Tool to teach students or junior consultants...”
7/7 practitioners agree or strongly agree.

Next steps

- Finish data collection
- Larger scale mixed methods analysis
- Iterate and improve the tool

Big Idea

Impact doesn't just **fall into place** at the end of a project.

We should **plan** for it from the **outset**.



Tiers of adoption

1. Download or print the tool at jettpalmer.github.io/designed-for-impact and use it for one of your projects.
2. Download or print the tool and use it to teach your students or junior team members.
3. Use the Designed For Impact Tool as a mental model.

Why this matters

- Translate evidence into action for the benefit of society.
- Statisticians and data scientists are more than just *technical* experts.

Impact-centric collaboration helps us communicate our value as decision-makers.

- AI armor: Impact + communication becomes our strength.
- Frameworks like these aren't often scientifically validated.