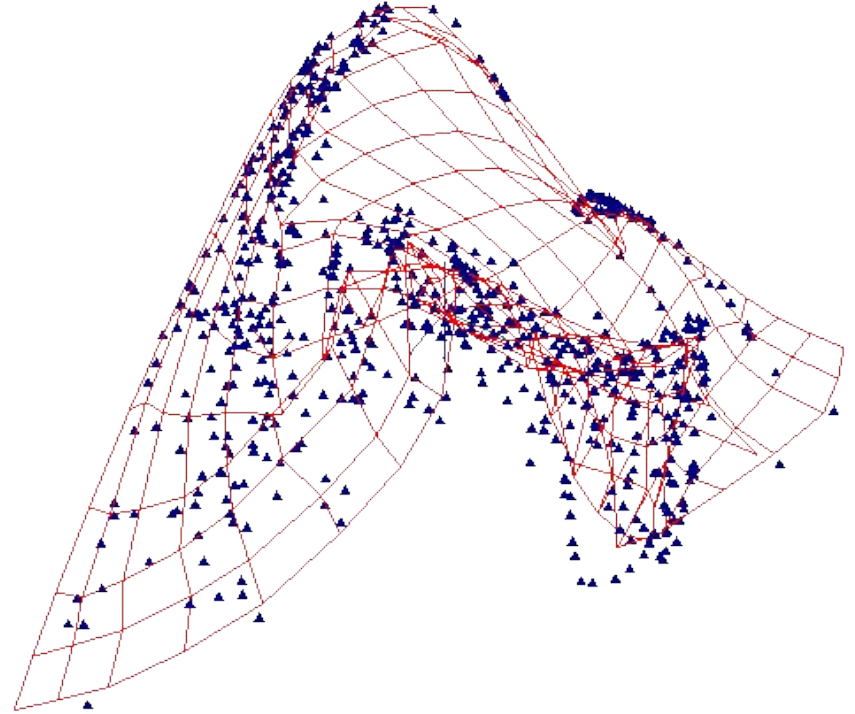


Translating Customer Feedback to Indicators



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dataworks

Welcome!



Hassan Shaban, PhD
Principal, Empower Dataworks
(East Wenatchee, WA)

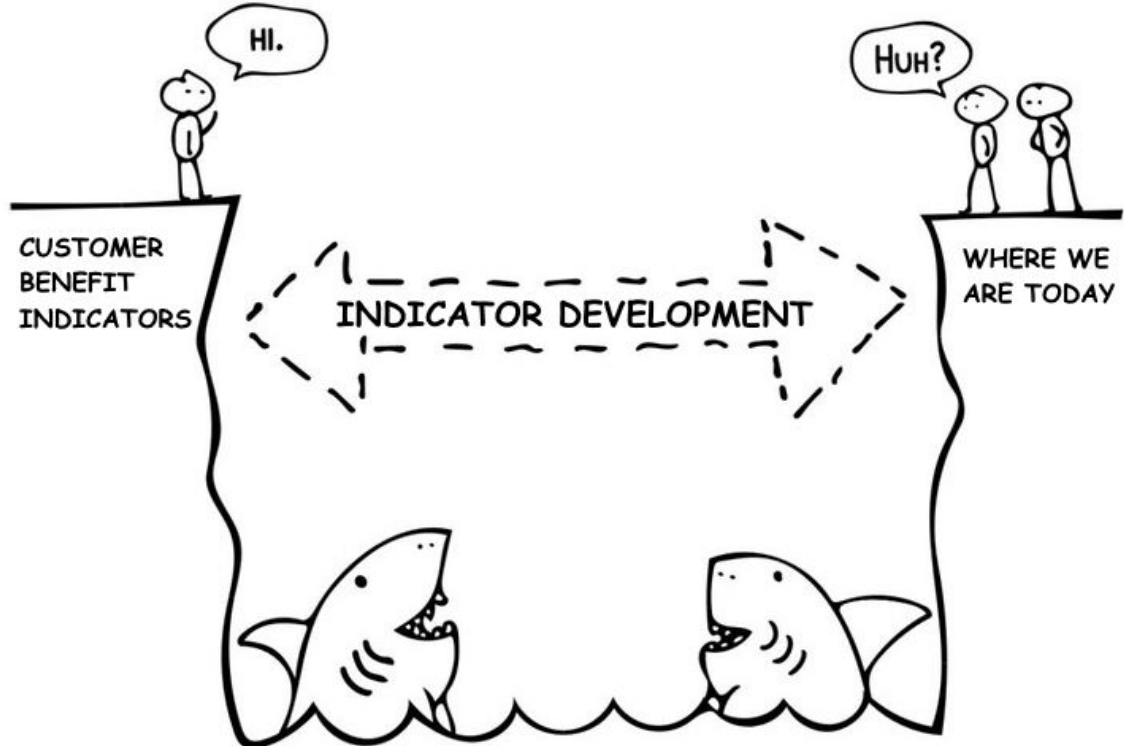
Ask me about:

Data and metrics

Equity-focused/CETA programs:
evaluation, planning and marketing

hassan@empowerdataworks.com

Indicator development is the bridge



Step 1: What **kind** of process is this?

Easier

Hard

Hardest

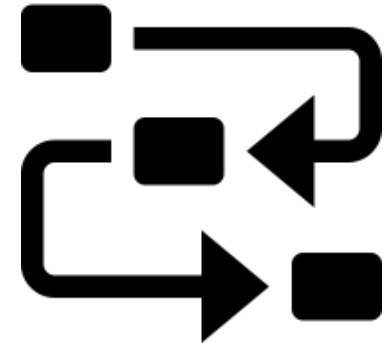


Public Comment



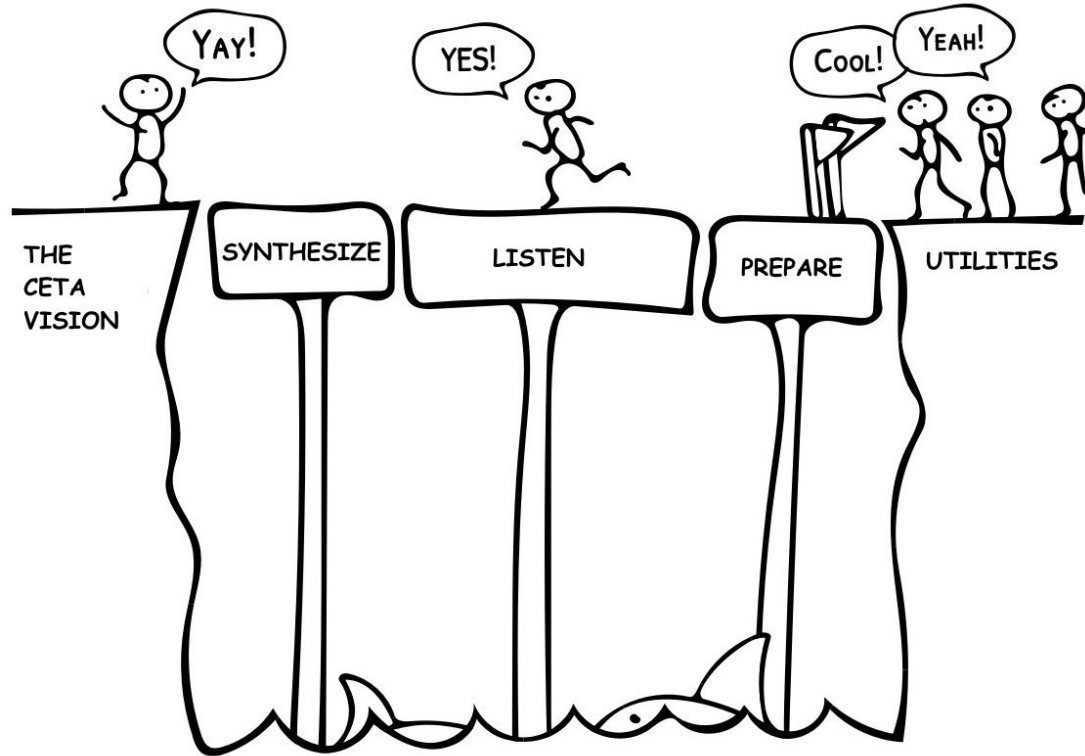
Indicator Development or
Target Setting

This is us

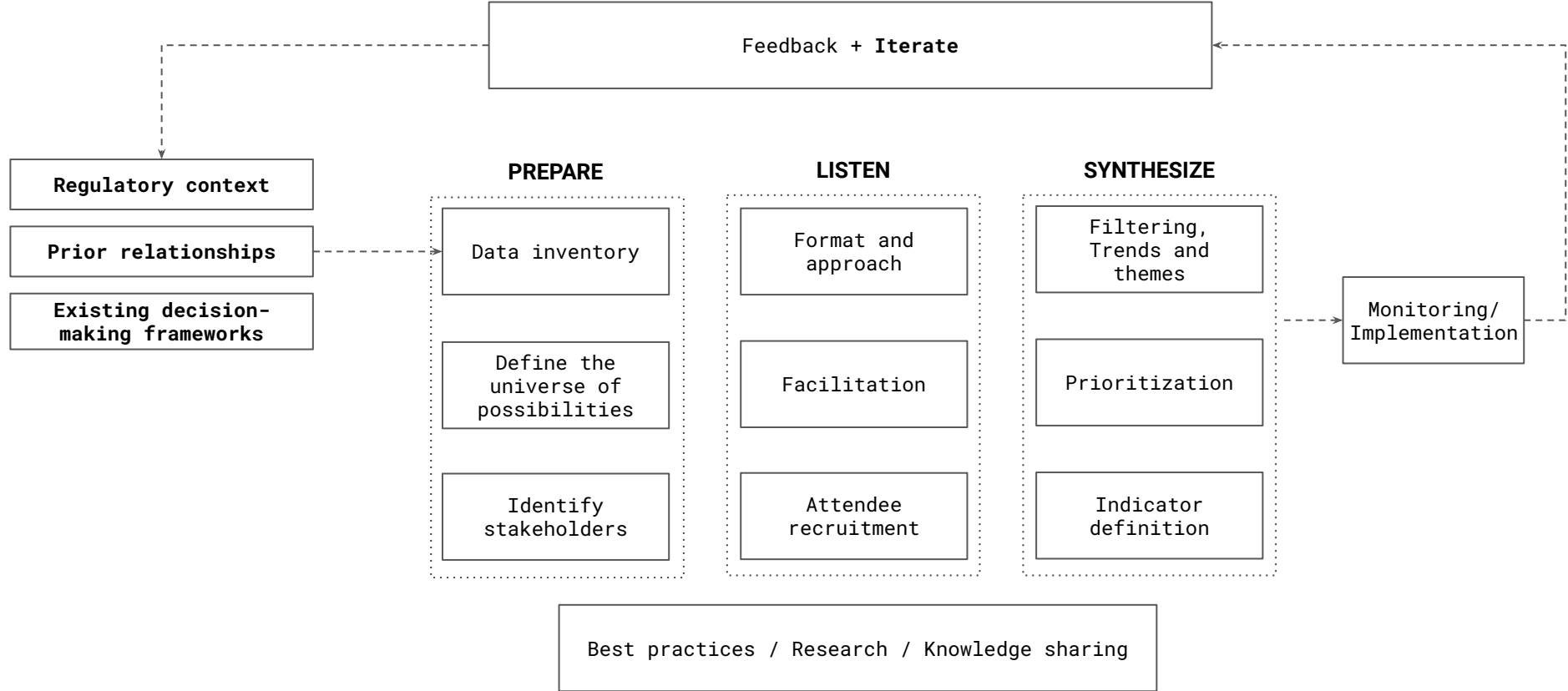


Methodology Development

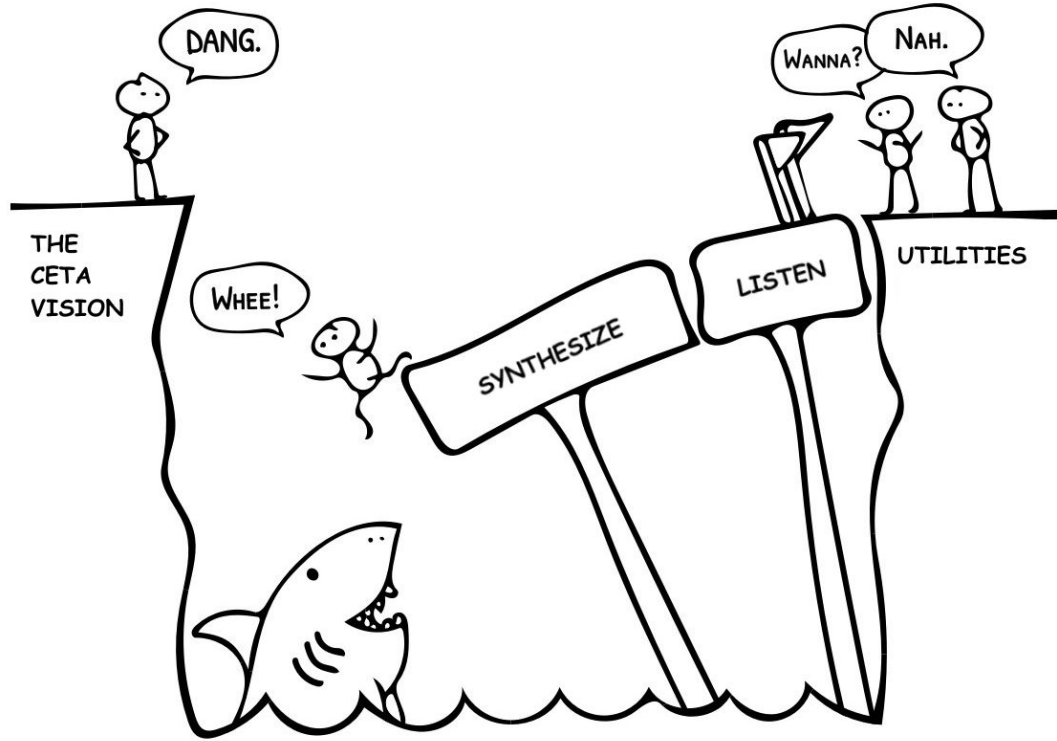
Indicator development can be done in **three phases**



How do we develop **Indicators** from **Qualitative** Feedback?

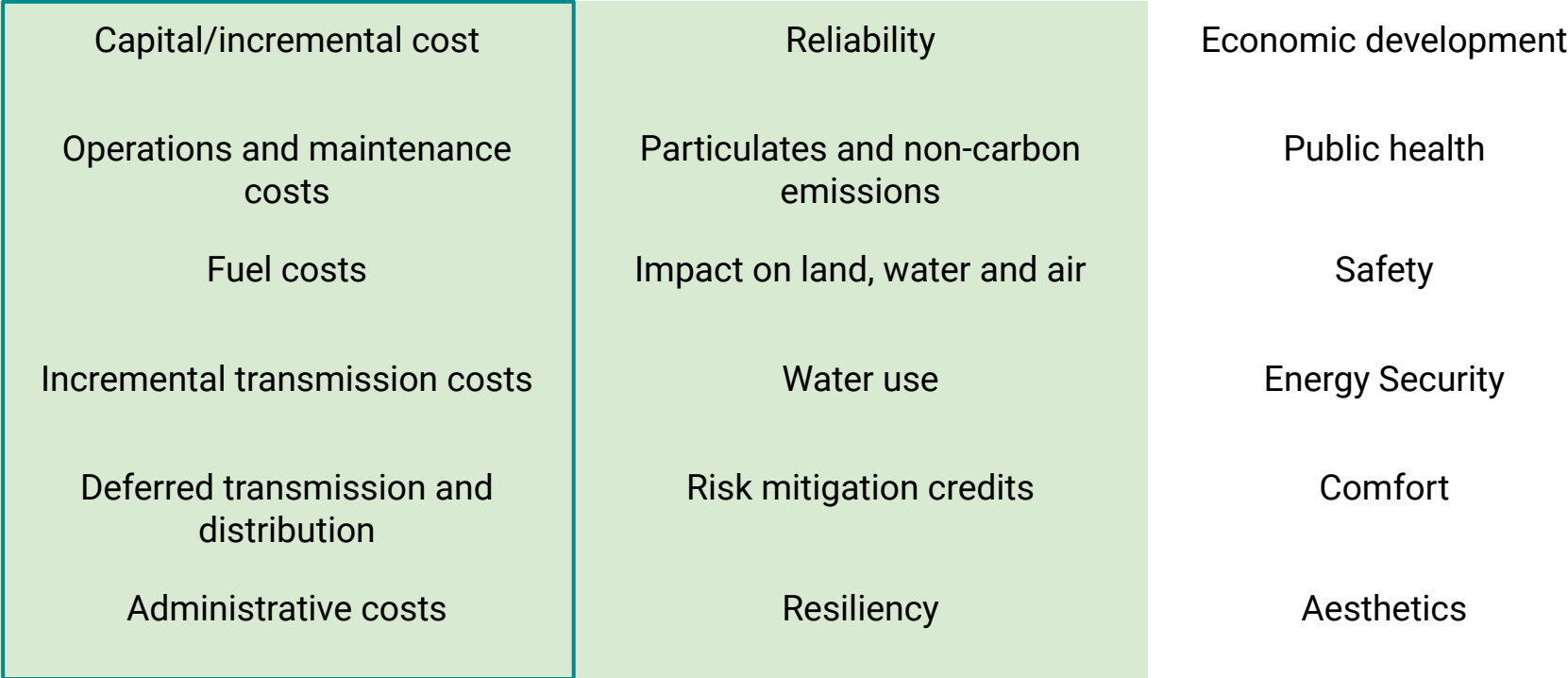


When developing metrics and indicators, **preparation** is key



Define the universe of possibilities

For example, starting with the Northwest Power Council's Direct Resource Cost Framework

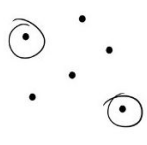


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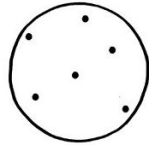
Related to energy affordability

Considered in the Regional Power Plan

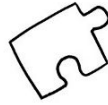
Filtering and identifying themes



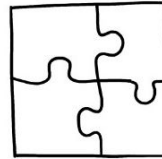
ANALYSIS



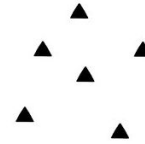
SYNTHESIS



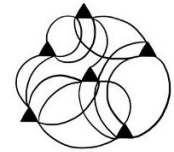
PARTS



WHOLE



ISOLATION



RELATIONSHIPS

“A system that is affordable,
reliable and clean for everybody”

“A reliable and affordable energy
system that brings good health,
comfort and economic vitality to
the frontline”

“Energy burdens reduced for all.
Lifting unheard and
underrepresented voices in all
aspects of a just energy
transition”

Prioritization

Which do you think is better for creating a greener, greater New York City?

Install clean energy production technologies on City-owned buildings

Require building owners to install outdoor lighting that directs light down onto the street and not up into the sky or apartment windows.

I can't decide

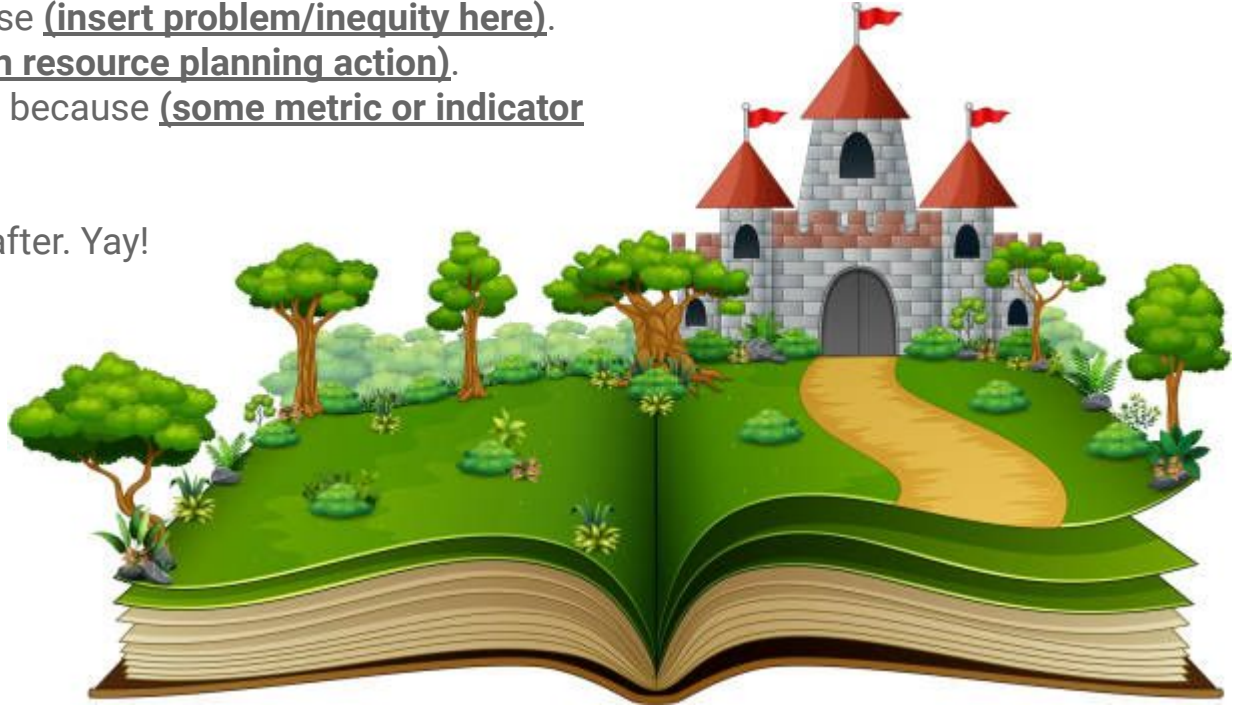
136119 votes on 268 ideas

Add your own idea here...

Defining the Indicators: **The Fairy Tale**

Once upon a time there, was a (community/customer segment etc.).
Most days, they struggled because (insert problem/inequity here).
One day, the utility (took a certain resource planning action).
The (community's) life got better because (some metric or indicator improved).

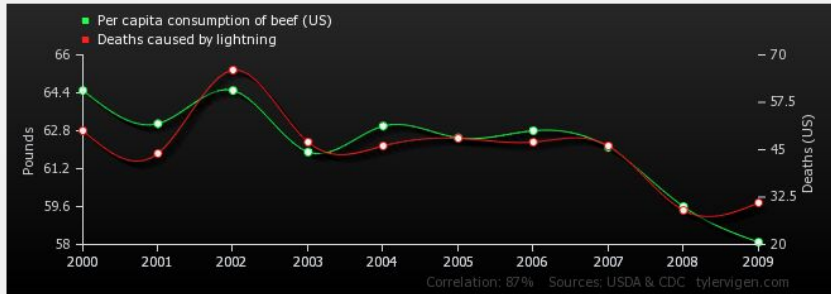
And everyone lived happily ever after. Yay!



Defining the Indicators: **Causality**

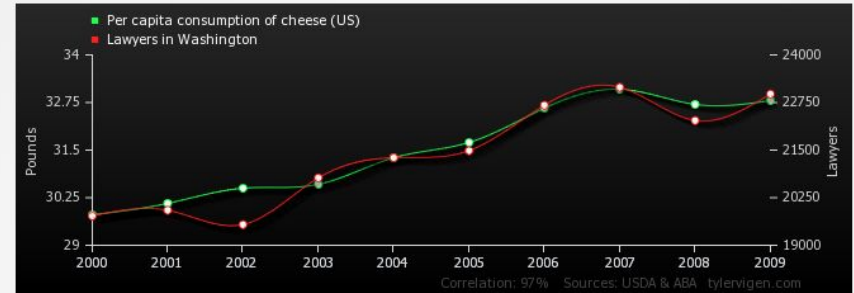
Correlation is not causation - the resource actions should be linkable to the indicators.

Per capita consumption of beef (US)
correlates with
Deaths caused by lightning



[Upload this chart to imgur](#)

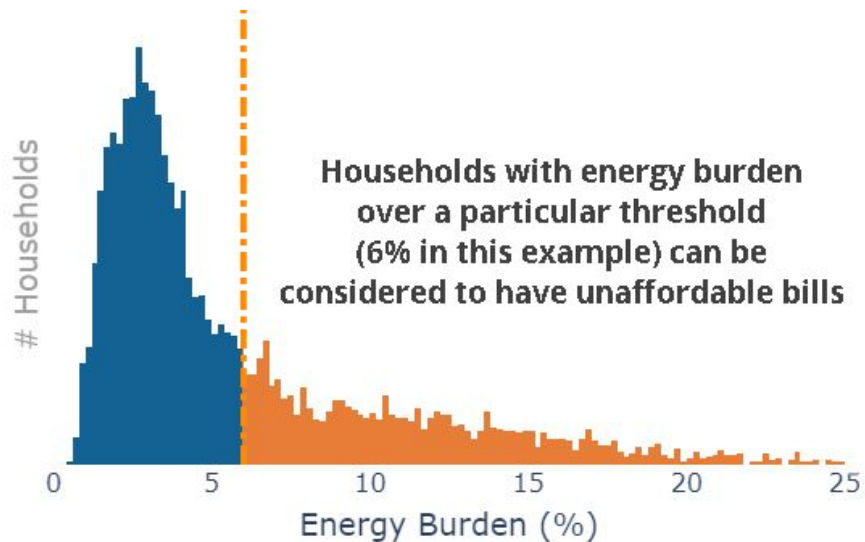
Per capita consumption of cheese (US)
correlates with
Lawyers in Washington



[Upload this image to imgur](#)

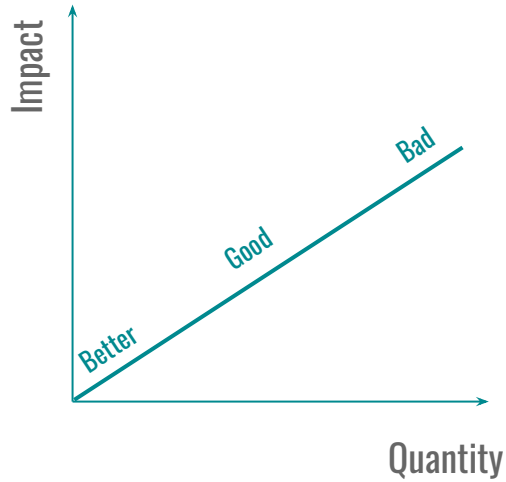
Defining the Indicators: **Distributional vs. Systematic**

Equity indicators should generally be attributable to different customer segments.

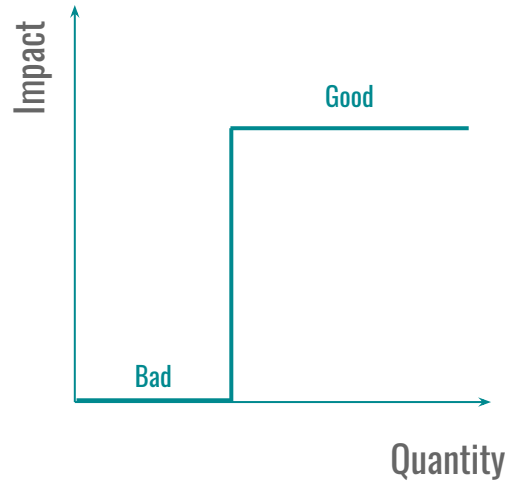


Defining the Indicators: **Behavior**

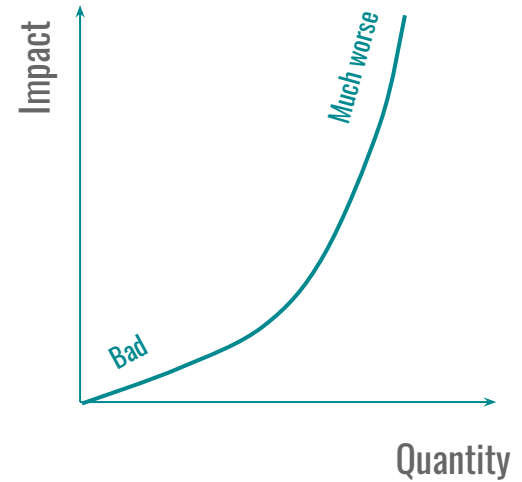
Analog indicator



Threshold indicator



Marginal indicator



Defining the Indicators: **Other factors**

- Frequency of evaluation
- Feasibility and complexity of estimating the indicators
- Signal-to-noise ratio: do externalities have a big impact on your indicator?

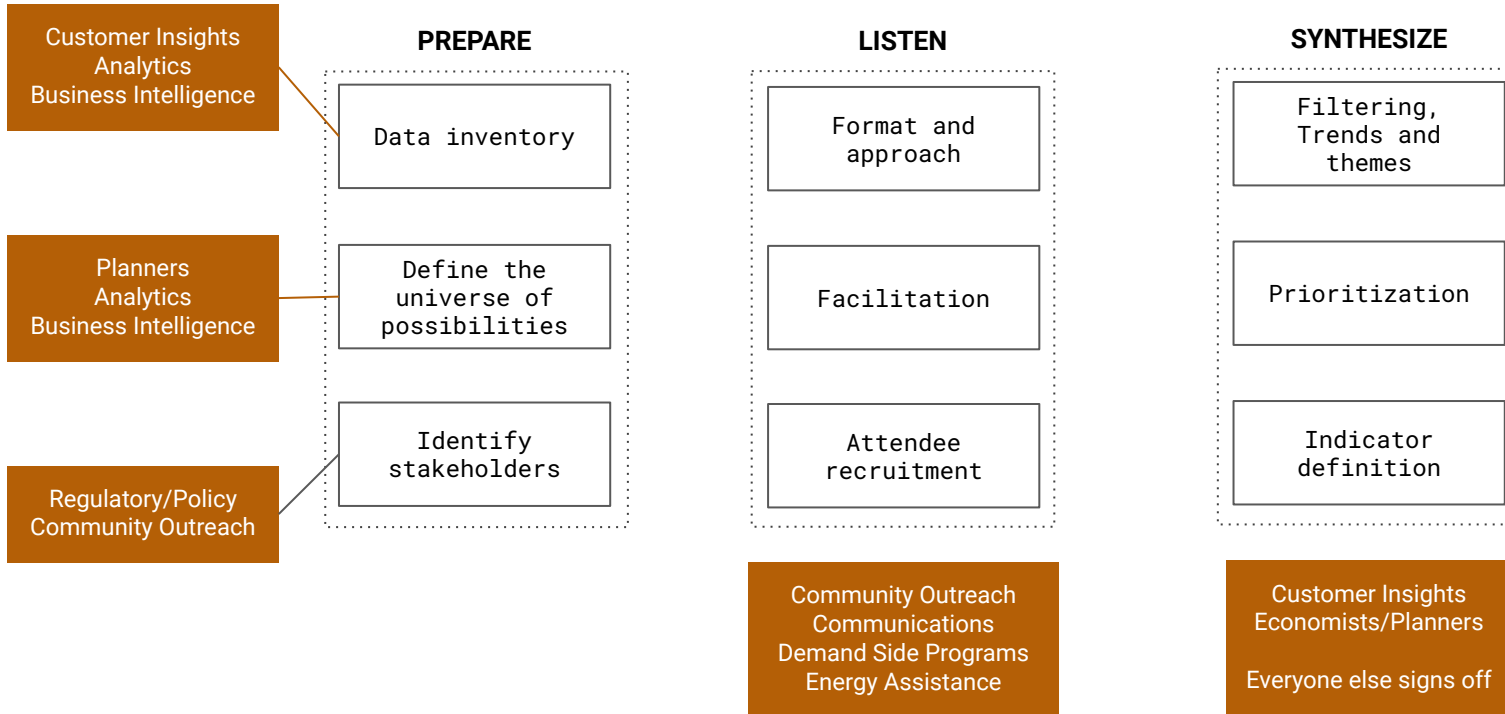
So, what are the best practices for developing **Indicators** from **Qualitative** Feedback?

Rule #1: Garbage in, Garbage out - invest in preparation and guard rails for public input

Rule #2: Fully define your indicators: Type, behavior, quality, causality, granularity, feasibility, complexity, frequency

Rule #3: This is an **iterative process** that takes time - it will not and does not need to be perfect

And who does what within the utility?



empower dataworks



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