Secret Box: Augmenting Big Data with Local Data

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Introduction

Data can be dehumanizing (Eubanks, 2018). Divorced from context, big data is easily **manipulated** to back up stories data collectors or purchasers want to tell (Knaflic, 2015), and algorithms that use big data sets often reproduce or reinforce systems of marginalization for already vulnerable populations (Noble, 2017; O'Neill, 2016). Quantitative data's ostensible objectivity obscures these realities, so we must continue bringing to light the material consequences of relying only on big data. In **non-profit settings** specifically, funders' requirements for data collection can negatively impact organizations' efficacy and even cause "data drift," which may precede mission drift — but researchers have shown that funders often prefer easily digestible data narratives and "feel-good quotes" to nuanced analyses (Bopp, Harmon, & Voida, 2017).

Food Finders, a medium-sized non-profit food bank working in Tippecanoe county and the surrounding area, collects a great deal of data about visitors; Food Finders' ability to obtain and maintain funding sources depends on the data they collect being consistent with funders' expectations, but that data isn't always what is most beneficial for clients to share. Based on a pilot study conducted with two other graduate students (Elizabeth Geib and Eliza Gellis) in Fall 2018, where we placed a "secret box" (Punch, 2002) in Food Finders' main pantry waiting area and invited clients to write, I ask:

How can Food Finders leverage local knowledges through methods such as a secret box to address inaccuracies or inconsistencies in "objective" quantitative datasets?

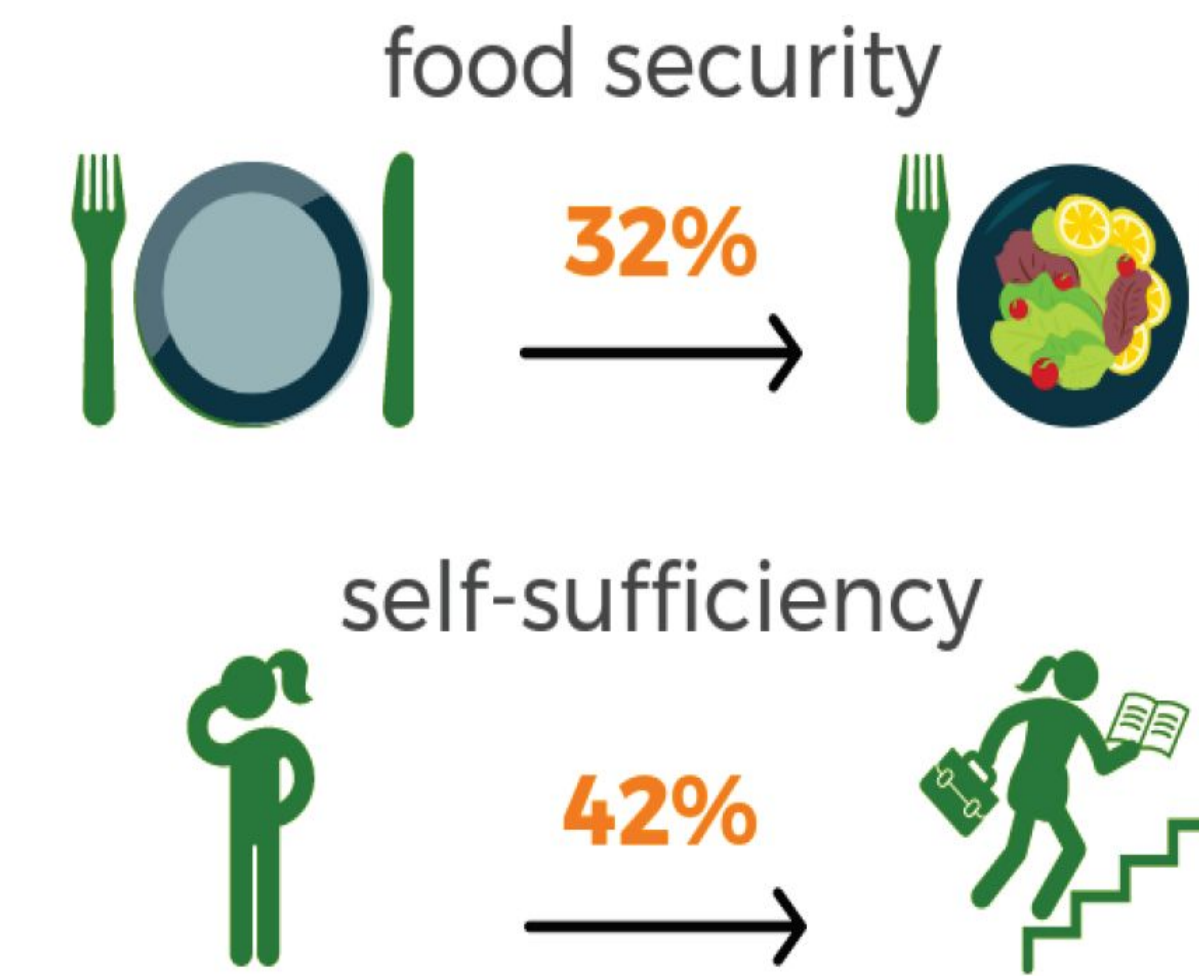## Food Finders & Aid Landscape

Food Finders' functions include:
- Deliver food to other pantries in the county, conduct mobile pantries
- Distribute food at the JP Lisck Community Food Bank (uses as-needed & choice models)
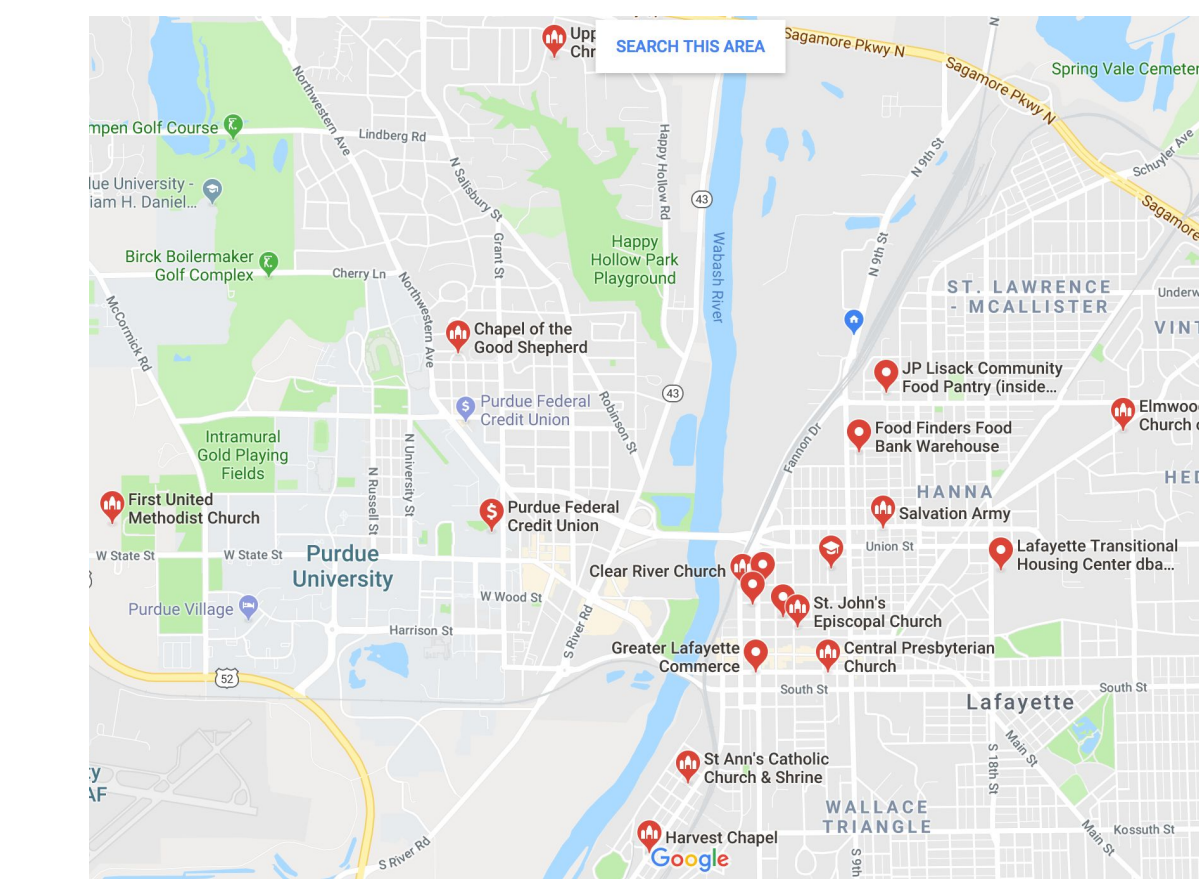
Success metrics are changing:
- Metrics changing from lbs of food distributed to impact on clients
- Demographic and food security data is collected from clients at first visit and subsequent visits, plus extra data for other resources outside pantry, but data practices unsustainable for various reasons

Aid landscape is shifting, to the detriment of nonprofits and clients:
- Client traffic has shifted to Food Finders' pantry, resulting in closure of many pantries pictured at right
- Food Finders cannot sustain current growth — need more funding, potentially larger space, etc.

food security 32%

self-sufficiency 42%

Increases in food security and self-sufficiency reported from 2016 to 2017. Figure from Food Finders, Inc. *Food Resource and Education Center Impact Report 2016-2017*, 2017.
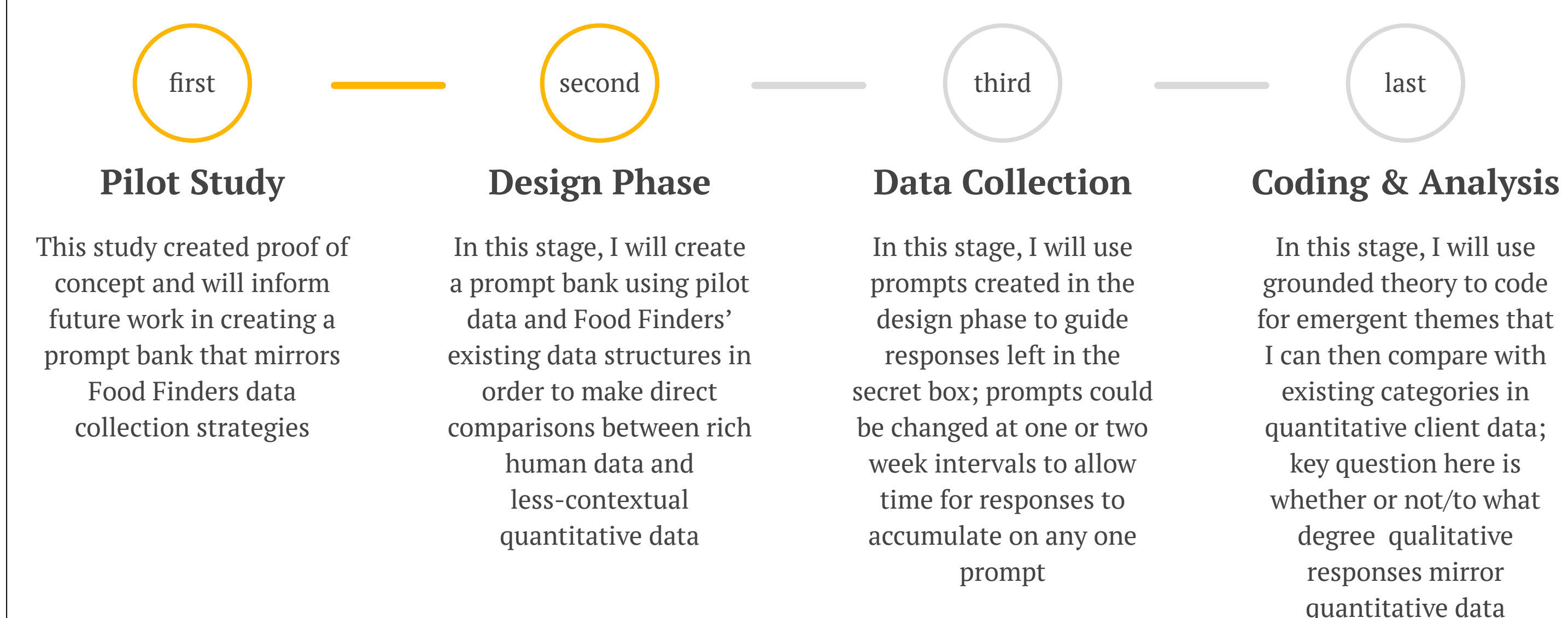

Google map of food pantries in Greater Lafayette — some of these are permanently closed or will soon be closed.

Secret Box Method

The secret box works because it:
- Offers anonymous space to share thoughts and feelings
- Avoids barriers to entry like need for smartphone (QR code) or facility with technology (survey on tablet)
- Leaves almost total agency with participants, since box is anonymous and prompt is optional

Other secret box users include:
- Punch (2002), where secret box augmented focus groups and various kinds of task-based interviews with adolescents ages 13-14
  - Emphasized that secret box helped mitigate uneven power distributions between young participants and adult researchers
  - Anonymity allowed participants to express thoughts and feelings they were unable or unwilling to share in group interviews or out loud where their responses would be associated with them (experiences of sexual abuse, for instance)
  - Suggested secret boxes as part of a larger group of methods in studies where power dynamics are unequal (like working with vulnerable populations at Food Finders, for instance)
- Lyndon (2018) based her work on Punch (2002).
  - Participants were adults, unlike Punch, but power dynamics still existed in focus groups, and secret box was used to allow participants to share thoughts they were unwilling to share in front of others

Pilot Study

We implemented a secret box in the waiting area of the pantry in Fall 2018 for approx 3 weeks, with prompt "What is your biggest struggle today?"
- Clients could share anything (i.e., prompt was a suggestion, not a directive) totally anonymously
- Data included a range of responses:
  - Lists of needs/struggles
  - Longer narratives
  - Explicit requests for aid w/name & number
  - Complaints about Food Finders' services
  - Single issues/concerns

Overall, pilot data suggested a disconnect between quantitative data Food Finders collects and qualitative data clients provided.
- Food Finders' metrics are based on specifically food security levels and factors such as income and number of dependents, but client data suggested other factors impacted food security and necessary resources.
- Open prompt solicited variety of responses, but didn't allow for direct comparison with Food Finders survey data; staff used responses to connect clients with resources at Food Finders and elsewhere, but response data may not be helpful for use with funders.

The pilot secret box placed in the JP Lisack Food Pantry, Fall 2018

Study Design - Next Steps

To carry the pilot study forward in a way that is useful for Food Finders, next steps would include:
- Implement a set of prompts for the secret box at the JP Lisack Community Food Pantry that mirror the questions Food Finders staff and volunteers use to measure clients' self-sufficiency on official forms, which should elicit the same kinds of local, particular, personal data we found in the pilot study.
- Code for emergent themes in the secret box data, using a grounded theory approach, and compare these with standard client data
- Work with Food Finders staff to compare the interventions that are happening based on each kind of data, both for individual clients and for larger funding narratives

first

Pilot Study
This study created proof of concept and will inform future work in creating a prompt bank that mirrors Food Finders data collection strategies

second

Design Phase
In this stage, I will create a prompt bank using pilot data and Food Finders' existing data structures in order to make direct comparisons between rich human data and less-contextual quantitative data

third

Data Collection
In this stage, I will use prompts created in the design phase to guide responses left in the secret box; prompts could be changed at one or two week intervals to allow time for responses to accumulate on any one prompt

last

Coding & Analysis
In this stage, I will use grounded theory to code for emergent themes that I can then compare with existing categories in quantitative client data; key question here is whether or not/to what degree qualitative responses mirror quantitative data

Projected Takeaways

- Since big, quantitative data is often dehumanizing, agency-denying, and marginalizing, especially to already vulnerable populations, being mindful of how we collect data from participants in settings such as non-profits is crucial.
- Methods such as the secret box, which are anonymous, have a low barrier to entry (as compared to digital surveys, for instance), and suggest but do not require a given prompt can empower participants to give data they want to share and hold onto data they don't.
- Non-profits usually cannot avoid participating in big data collection, but using qualitative methods to collect thick, rich data from individual clients can help augment fragmented quantitative data and avoid "data drift" and other negative impacts
- Ultimately, data that clients have more power over is data that helps nonprofits better serve clients.

Looking for a bibliography and further reading? Scan for my one-pager!