Region of Waterloo

Social Assistance Data Jam

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Agenda

1. Review the data jam concept & purpose
2. Discuss Waterloo's experience
3. Share lessons-learned
4. Gauge interest in a provincial social services data event

What is a Data Jam?

- Structured event where small groups conduct rapid data analysis on a defined topic & present results to guide planning & service
- +/- competitive element

Similar concepts:

1. **Data party / data sense-making**
2. **Datathon** – often with a data science focus
3. **Hackathon** – more popular modality, where focus is on coding
4. **Integrated knowledge translation (iKT)** – involving end-users early leads to better Qs, better analysis, more relevant results, more uptake of results into practice

How is a Data Jam different? (1)

- Service delivery is often siloed from analysis/planning functions
  - *E.g., Case workers provide service - Planners/ analysts/ leaders look at the data*
- Not a bad model, but it has limitations

- Similar to **Lean Six Sigma** and **Integrated KT, Data Jams** with staff aim to get those who deliver service more involved

How is a Data Jam different? (2)

- Intensive, time-bound, collaborative, exploratory data analysis can be foreign to the culture of local government (and public service more broadly)

- This approach challenges some ways we work in public service
  - *E.g., many unionized staff with strictly defined roles, goals already defined, limited/no R&D function*

Why we wanted to hold a Data Jam?

- Administering OW (and other programs) creates tons of data

- Senior Leadership desired to deliver data-driven services
  - We have a responsibility to analyze this data because **it can help us provide better service**
  - Data checks our opinions, biases & experiences
  - Others will judge us by our data (our bosses, funders, the courts, the media, academics, the public, etc.)

Also … Diverse staff and leader opinions about SAMS data

SAMS was a good database for our Data Jam because of its size, senior leaders wanted to see SAMS data more widely used, and there was varied interpretations about SAMS:

“the data is bad!” *vs.* **"the data is great!"**

“there's so much good data" *vs.* **“there's no useful data”**

Alignment with the Emerging Ontario Data Strategy:

Enabling Better, Smarter Government: *Unlocking the value of government data by building the data skills and capabilities of public sector employees and promoting the use of data-driven technologies to ultimately serve Ontarians better.*

"…creating an efficient, data-driven government is more important than ever…Beyond training and skills development, we also need to shift our organizational culture to embrace data-driven solutions and consider how data can fit into every aspect of our work."

Government of Ontario. (2019). Ontario's Data Strategy.
Available at: https://www.ontario.ca/page/ontarios-data-strategy

It's better than the alternative…

"Government by guesswork is not solving the nation's problems. A fundamentally different approach is needed."

2018, Arnold Foundation (Straight Talk on Evidence Blog)

Our Data Jam Goals :

1. Develop staff knowledge of SAMS data
2. Develop staff analysis skills
3. Enhance our understanding of how SAMS database can guide service delivery
4. Determine opportunities to enhance SAMS data quality
5. Test the Data Jam method to see if it works in our context & could work for other areas & databases

Our Process – High level

- 5 teams of 5 staff
  - Each team had a defined lead, 1-2 planners, 1-3 caseworkers (or similar frontline roles)
  - Each team had a defined topic, a room, laptops, projector, and brainstorming materials, etc.
- 3 data coaches – roaming support
- Full day event, Food provided

Team Lead vs. Data Coach Responsibilities

Team Lead	Data Coach
1. Team introductions 2. Review topic, task & divvy up work 3. Ensure final presentation is completed 4. Help everyone have fun & learn something 5. Redirect frustration into learning 6. Ask for help if needed 7. Encouragement & positive attitude (this is an experiment!)	1. Excel help (1:1 or group) 2. Suggest visualization & analysis approaches 3. Trouble-shoot IT/Excel issues 4. Encouragement & positive attitude (this is an experiment!) 5. Get the teams food

Leads get to crunch #s too – It's not your job to hand-hold and teach someone Excel – call a data coach

Pre-work (1)

- Senior leadership support
  - Approval, buy-in, funding, communication, etc.

- Topics determined by senior leadership as areas of high interest (required back-and-forth)

- Data prep:
  - 1-2 Custom Excel files created for each topic/group
  - 1-page Team instructions prepared on data tips, ideas, cautions

Topic	Description
Changing Caseload	Assess major demographic changes in OW caseload over time, such age, sex, location, type, length, etc.
Long-term Clients	Determine key characteristics of longstanding clients; Does this differ by office/geography? What's changed over time? Are their clear groupings by years receiving OW? (4 categories suggested)
Participation	What are the links b/w participation & client types or length on OW (e.g., does participation in X or Y, and/or having an updated participation agreement, reduce time on OW?) For which client groups? What has changed over time?
Additional Benefits	Describe key differences between households that receive additional benefits and those that do not; Describe key differences between our AB spending from 2019 vs now
Integration Focus	Explore if & how those on CCS or those 'precariously housed' are different/similar to OW caseload ; Determine any trends that will help inform integrated planning & service delivery

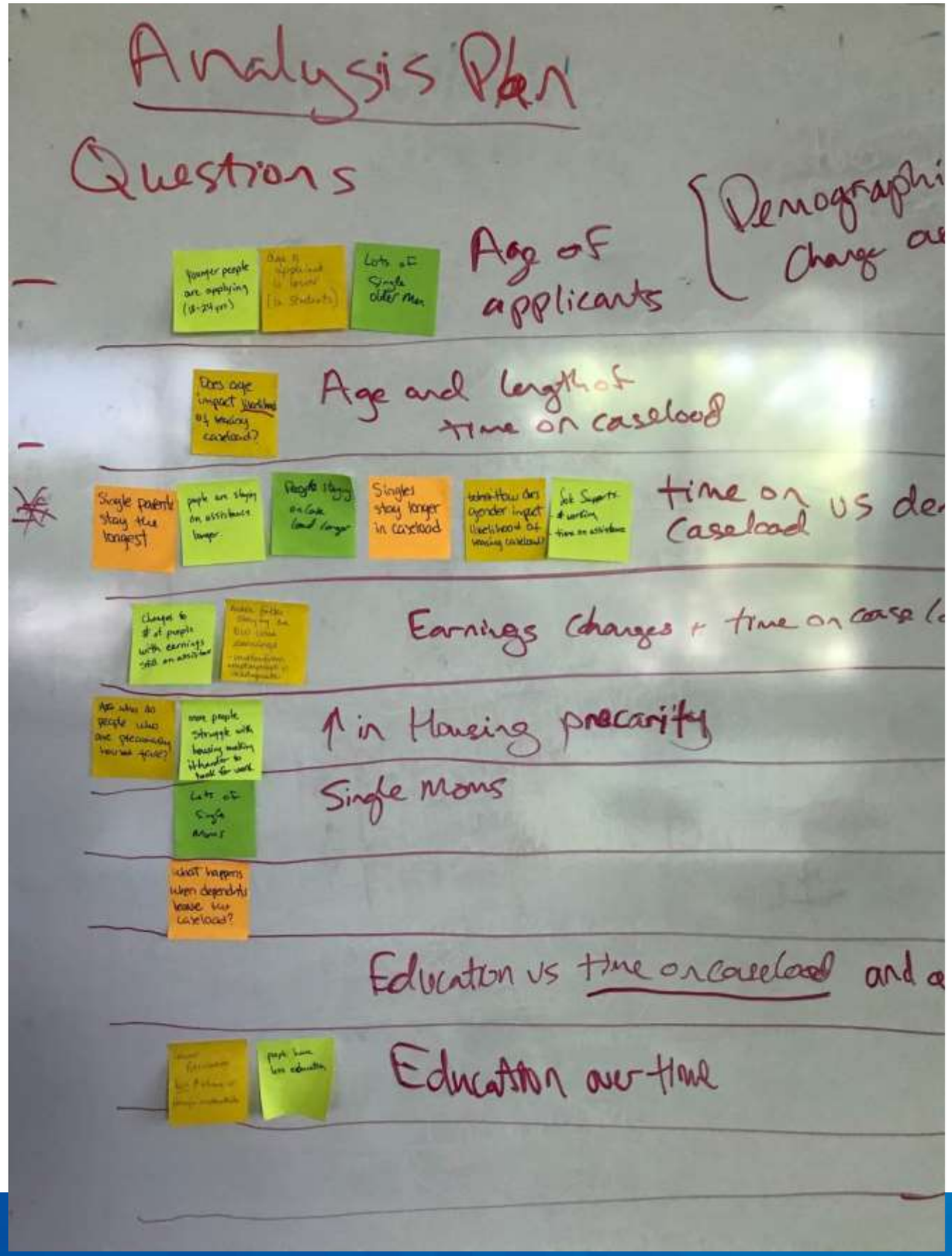
Pre-work (2)

- Participant recruitment – Volunteers must have
  - (a) interest in analysis, or analysis/critical-thinking named in their professional development plan
  - (b) some knowledge/familiarity with MS Excel
- Strong team leads identified
  - Leads orientated to the process, their topic & their data (so they could hit the ground running) – but no early analysis!
- No observers!

Data Jam Agenda

Item	Time
Setup	8:00
Kick-off *(welcome, motivation, instructions recap)*	9:00
Team huddle #1 *(greetings, review topic, plan work)*	9:20
Analysis Period #1	9:45
Lunch dropped off & coach check-in	Noon
Team huddle #2 *(check-in)*	~1:00
Analysis #2 & presentation prep	1:20
Rapid showcase, wrap-up, next steps & gratitude	3:30
Clean up	4:10


How
Age of applicants
Age and length of time on caseload
time on caseload vs demographics
Earnings change - time on caseload
↑ in Housing precarity
Single Moms
Education vs time on caseload
Education over time



Team did much more planning & discussing the data than we through

Potential Topics
Karen - 2019 Data tab
-Sole support parents
-2019 Data tab
Sarah - Singles w post secondary edu.
-2019 Data tab
Ryan - couples + couples w Dependents
Chase - OWDB
-general trends.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No major changes in Family Composition

What we found/learned from the data

- Some of the data quality is questionable – we now know what we are looking for and it does exist
- 4 Main Categories were Analyzed;
  - Education & Time on Assistance (no education – Post Secondary)
  - Household Type & Number of Children (5569)
  - using (231 households)
  - 230 households)

Afterward

- Presentations sent to participants
- Online cross-sectional evaluation survey
- Debrief focus group with 3 coaches & 5 leads
- Findings shared & debrief meeting with senior leaders
  - Focus on implications for use of SAMS data in service delivery

Results

- 63 slides produced of valuable results/graphs/insights
  - Major focus on myth busting

- **Nearly all participants**
  - Enjoyed the event & process (overall)
  - Felt their SAMS data knowledge improved

- **Approx. 75% of participants**
  - Felt their analysis skills improved

Key Lessons learned

Went Well	Change for Next Time
• Overall format (team lead, defined topic, data prepped - vs. pure exploration) • Robust data (even low quality variables) • Mixed teams • Leadership involvement • Pace – nearly all worked asa a team through lunch & breaks	• Final presentations were rushed • Some planners felt ill-equipped to support their team • Could have used more data coaches • Lot of work for team leads • Quiet doesn't always mean high functioning • More plain language communication beforehand

Key References

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