Presentation Link

STAT 390: Presentation 1

What did you do?

Our team is developing a Power BI dashboard to analyze Legal Aid's phone system and identify inefficiencies in how clients navigate automated menus. The goal is to reduce caller frustration and support data-driven decisions for simplifying call flows.

- **Data Cleaning:** Imported August 2025 and CAR datasets; converted `Called number` to text, removed duration = 0 rows, standardized session IDs.
- **Exploratory Analysis:** Built visuals showing call outcomes, duration distribution, submenu usage, and path depth (steps per call).
- **Filtering:** Focused on inbound calls representing clients seeking help.
- **New Metrics Created:**
    - **Submenu Efficiency:** Average number of menu steps before a failed outcome (caller must call back).
    - **Redirection Performance:** % of redirected calls that successfully connect or are answered post-transfer.
- **Dashboard Design:** Created an aggregate-view Power BI dashboard (no time axis) with interactive filters and KPI cards for total calls, success rate, and new metrics.

How does it help the project?

- Most inbound calls are **redirected or unanswered**, especially for "Follow Me" and "No Answer."
- **Unconditional** and **Deflection** redirects take the longest, indicating inefficiencies.
- Submenu and redirection metrics quantify caller effort and reveal over-complex paths.

Issues Faced

- **Data type errors:** Fixed by converting columns to *Text* in Power Query.
- **Zero-duration calls:** Filtered out to prevent skewed averages.
- **Unstable caller IDs:** Used `Contact Session ID` for consistency.
- **Web Power BI limits:** Moved to **Power BI Desktop** for full functionality.

Next Steps

- Refine Submenu Efficiency and Redirection Performance with new data.
- Add metrics for **Closed Queue Exposure** and **Navigation Time Wasted**.
- Improve dashboard interactivity and present findings to stakeholders for feedback.