2024 Spring Hack and Learn
07 March – Kick off session

@golaboxford

golab.ox.ac.uk

INDIGO

Better data for better social outcomes

INDIGO is a community of peers from different countries and policy domains with an interest in sharing data about projects that seek to address complex social problems.

Our agenda for today

- Welcome and introductions
- Introduction to our Hack and Learn event
- Challenge pitches
- Hack-teams, Slack channels and development support
- Questions?

Hack and Learn phases

Kick-off → Hack, hack, hack → Show & Tell → Reflections & Learning Report

1. **Kick off session: 07 March 2024**

HACK HACK HACK -> use your Slack channels.

2. **Show and tell session: 21 March 2024**

Come and show your results and share your learnings. There will be a virtual social gathering after this session, all welcome!

All invited to reflect on their experiences and contribute to co-authoring a technical and learning report ☺

Hack and Learn tips

- Your challenge leader is your main point of help. Feel free to ask him or her any questions that you may have.

- You will get 15 minutes to show your results at the Show and Tell session. We don't expect you to have a final solution for such complex problems, but just an idea of potential ways to address them. There will be expert practitioners and researchers giving feedback.

- While you are working, write down your ideas and opinions about the experience. We will collate all of them in technical and learning report that we will publish in the Government Outcomes Lab's Global Knowledge Hub.
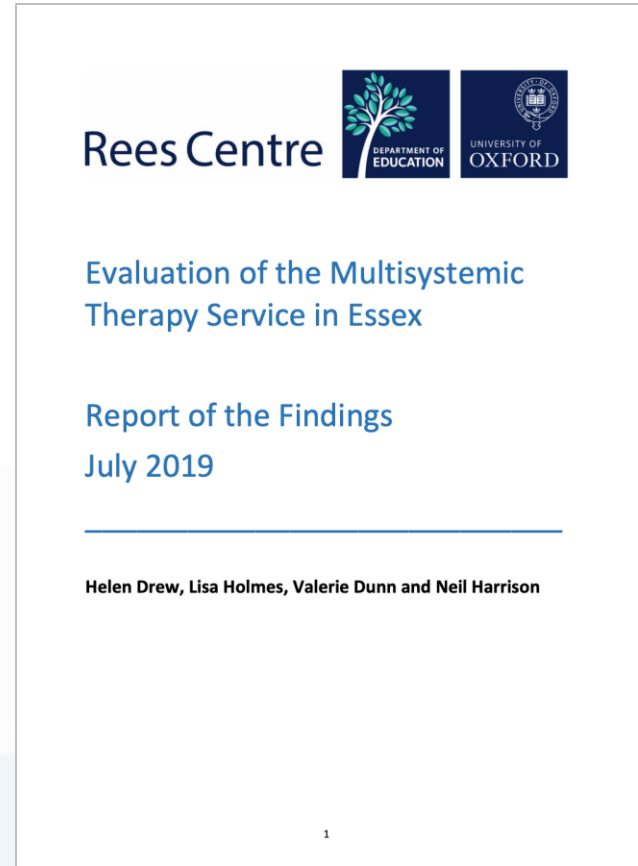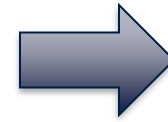
Our challenge for today

Data extraction using Artificial Intelligence -> hackteam#33-chatgpt-and-data-extraction

Manual process for data extraction and upload to database

Manual process for data extraction and upload to database

support for children and young people on the edge of care, arising from breakdown of family relationships and those at risk of custody. All referrals to the MST service were routed through the Essex County Council's social care locality-based panels. These panels oversee all social care decision-making about allocation of interventions and resources for children and families and acted to ensure that referrals to MST were in line with the agreed referral protocol and criteria.

Aims of the Evaluation
This evaluation aimed to investigate whether, and how, the MST service in Essex supported young people and their families, and to what extent it supported the key aim of keeping young people out of care. Although keeping young people out of custody is also a key aim, we did not have access to this data, and so this report cannot comment on periods of custody or subsequent rates of offending. This report provides a summative evaluation, carried out over a five-month period, at the end of the five and half years of the Essex MST service provision (April 2013 to December 2018). It does not evaluate the SIB structure or the process of implementation of the SIB. A separate three-year evaluation was undertaken regarding these aspects of the SIB by the OPM group on behalf of Essex County Council.[1]

The key questions addressed in this evaluation are:

- What did practitioners and families hope and expect MST to achieve and to what extent have these been fulfilled?

- What have been the most important factors that have facilitated and/ or acted as barriers to positive impact during and after MST?

- What impact has MST had on families and young people?

- What are the outcomes for young people post-MST?

- What recommendations can be made for future MST interventions?

[1] 'Top tips for developing and implementing a SIB: Learning from the Essex MST SIB', OPM group, Autumn 2016

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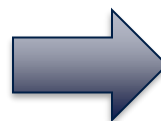
INDIGO-POJ-0130

Essex County Council Multi-Systemic Therapy (MST)

Aligned SDGs

3 GOOD HEALTH AND WELL-BEING

General overview

Location

Involved organisations

Outcome metrics

Results

Other resources

Spreadsheet of data

General overview

Stage of development: Complete

Policy sector: Child and family welfare

Start date of service provision: Apr 2013

Capital raised (minimum): GBP 3.13m (USD 4.89m)

Service users: 335 individuals

Intervention

The intervention used Multi-Systemic Therapy (MST) which involves an intensive evidence-based therapeutic treatment model that aims to promote positive social behaviours by breaking negative cycles and removing specific problems in the young person's life. Young people in Essex demonstrating anti-social or offending behaviours were assigned a therapist who worked with them in their home, school, and community, and with family and peers. This therapist was available 24/7 and worked with the young person for an average of 4-5 months to change their social behaviours.

1. Data Harvest Fest

Basic Extraction: Participants start with extracting essential variables like project names, countries, and key dates from project reports. The focus is on utilizing ChatGPT to interpret and summarize content effectively.

Advance to deeper textual analysis of project descriptions and notes: Use ChatGPT to dissect text, extracting themes, sentiments, and categorizations, enriching the database with nuanced insights. 44

2. Precision Peak Marathon Challenge

Automated Data Enrichment: Automatically identify and fill missing data points using ChatGPT's analysis to detect patterns and suggest accurate fill-ins.

Predictive modelling for Data Integrity: Employ Python or R for data cleaning, preprocessing, and constructing predictive models to validate data accuracy and ensure database integrity."

3. Auto Flow Fiesta

Temporal and geographical automation: Automate the analysis and visualization of temporal and geographical trends using basic programming and ChatGPT, making the database dynamic and reflective of real-time changes.

Advanced Automated Integration Workflows: Develop intricate automated workflows for ongoing data scraping, validation, and integration, ensuring the database remains up-to-date and comprehensive. Utilize scripting and ChatGPT for efficient data handling.

Materials for Participants
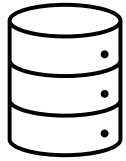
Access to the comprehensive INDIGO Database for project data and insights.
https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/

Example of a detailed project evaluation to serve as a reference.
https://www.gov.uk/government/publications/fair-chance-fund-evaluation-final-report

Access to ChatGPT for AI-assisted data analysis and extraction.
https://chat.openai.com/auth/login

Additional Considerations for AI and Data Management

Ethical use of AI: Ensure ethical use of AI by addressing data privacy, accuracy, and bias, maintaining the integrity of AI applications.
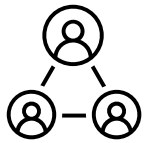
Collaboration with data stewards: Foster effective collaboration with data stewards, analysts, and officers for practical and impactful solutions, leveraging their expertise and insights.
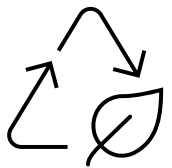
Sustainability of solutions: Focus on the sustainable integration of AI tools and processes into the INDIGO database management to ensure enduring benefits.

Challenge escalation and AI potential: These challenges escalate in complexity to unlock AI's full potential, enhancing data extraction, analysis, and automation for the INDIGO impact bond dataset.

Come join challenge#33!
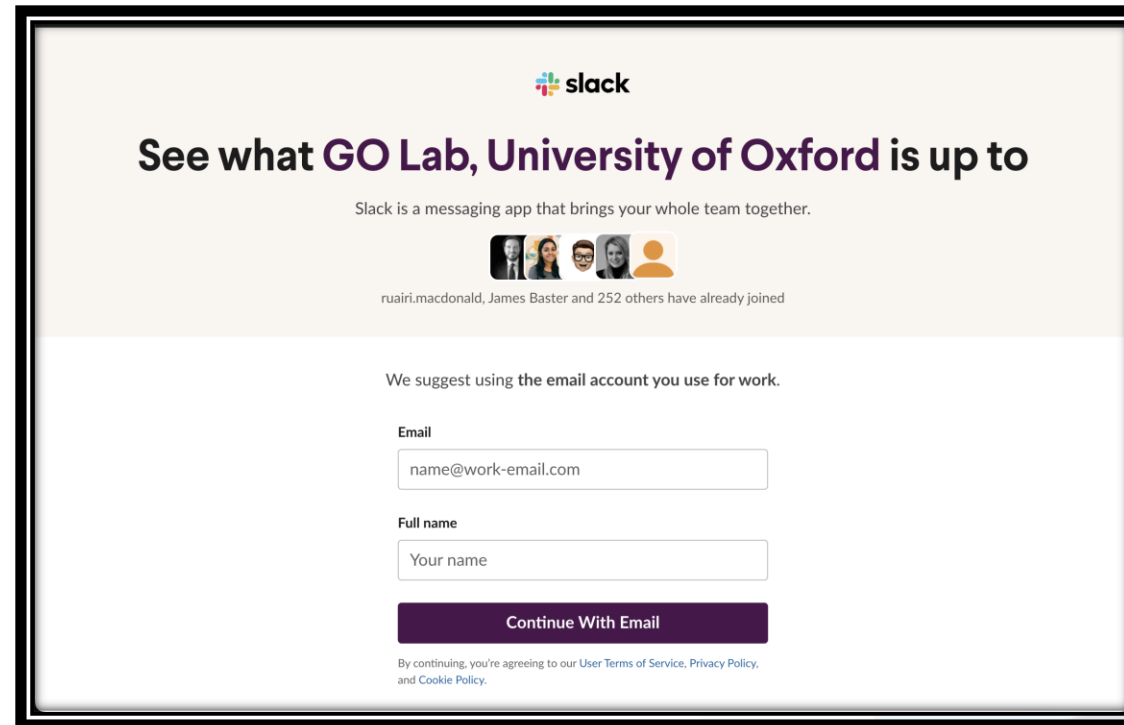
Questions?

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matheus.assuncao@bsg.ox.ac.uk

Slack channels

How to find your hackteam: first, join our Slack workspace (click the link on the chat)
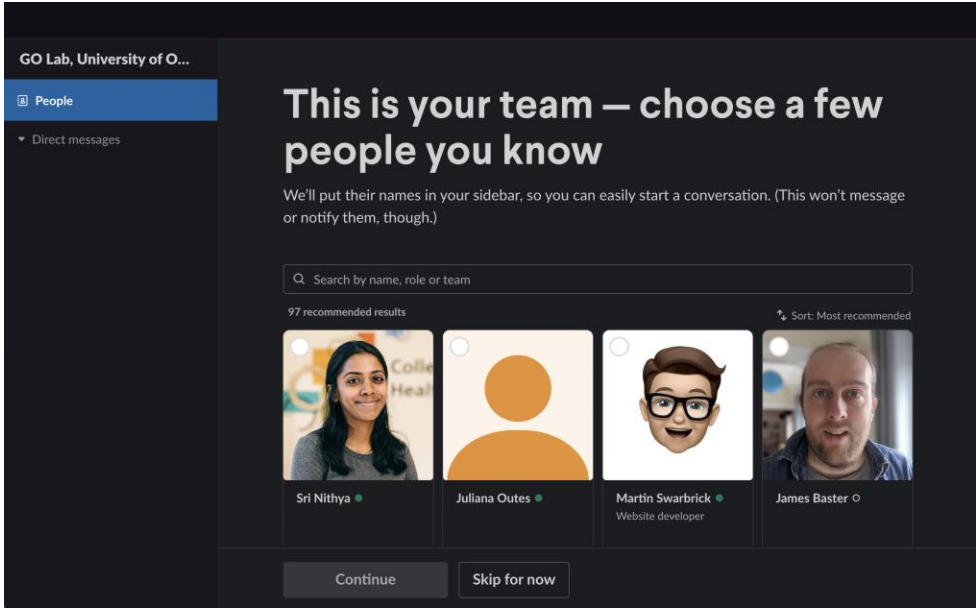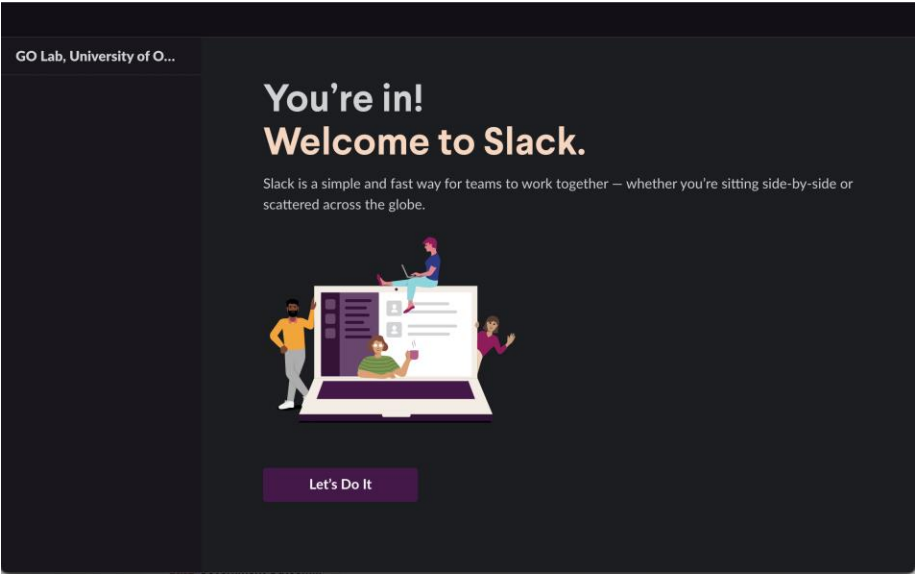
Slack channels

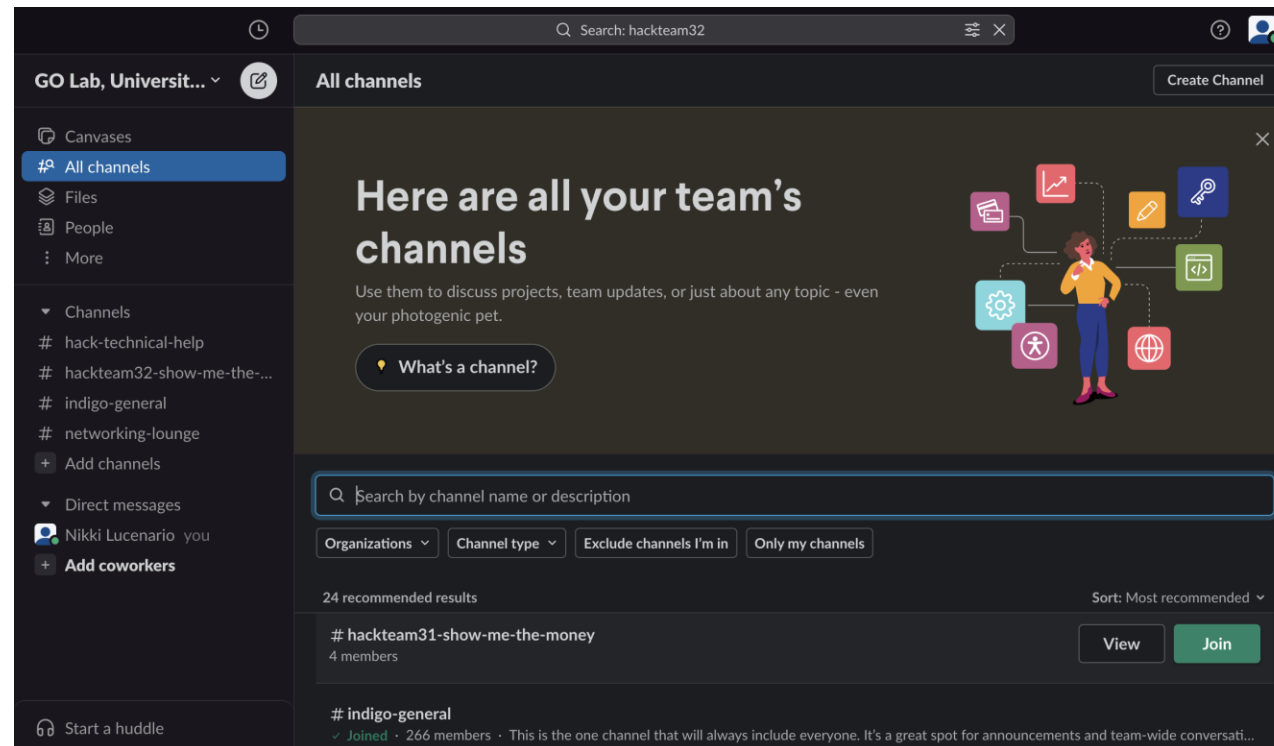## Verification – Check your email for a code
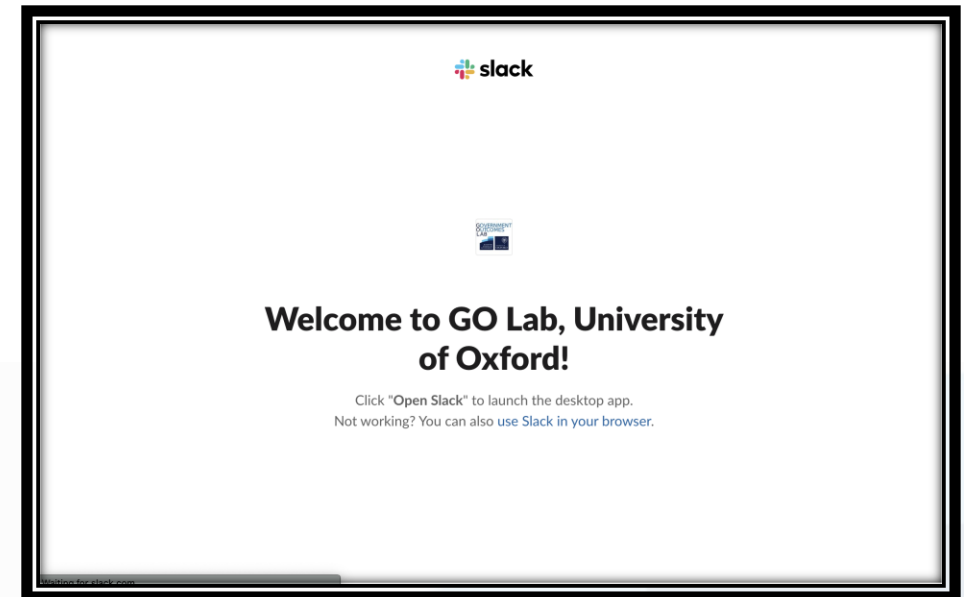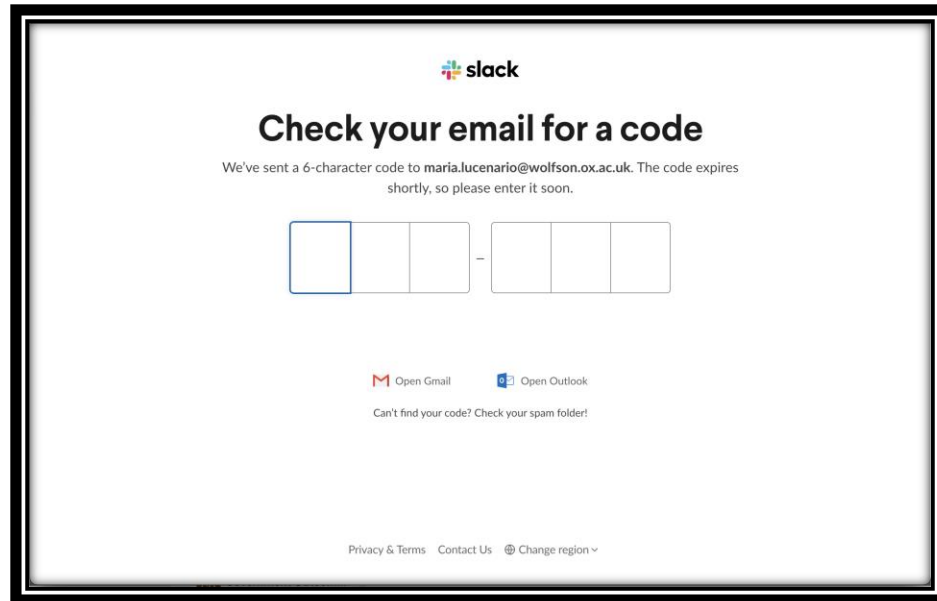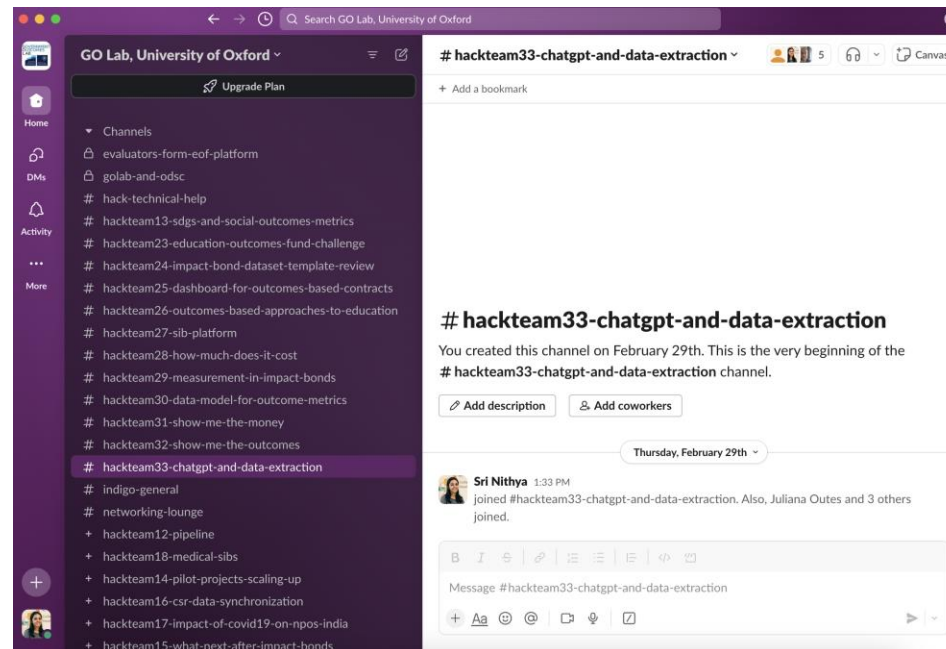
Slack channels

You're in!

Slack channels

Scroll to the end of the left side of Slack and click on "All Channels." Type in the team you would like to join, and it should pop up

Slack channels

- ## Data extraction using Artificial Intelligence

hackteam33-chatgpt-and-data-extraction

Development support

Need help with your data?

hack-technical-help

Want to chat with other participants?

networking-lounge

Any questions?

WE WOULD LOVE TO HEAR YOUR THOUGHTS ON INDIGO