UN Data Science Cell

Joseph Aylett-Bullock
Katherine Hoffmann Pham
UN Global Pulse

UN GLOBAL PULSE

The UN Secretary-General's Innovation Lab

Vision: A future in which digital innovation is used responsibly for the public good

Mission: Accelerate discovery and adoption of data analytics
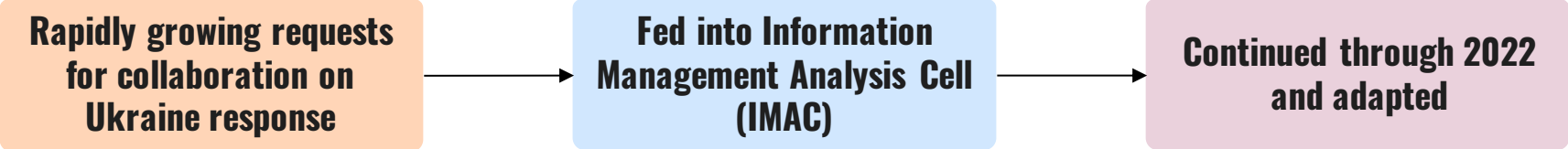for sustainable development and humanitarian action

Labs in **New York**, **Kampala**, **Jakarta**, and **Helsinki**
are a space for joint experimentation, where we work with
academia, the private and public sectors, and civil society

UN GLOBAL PULSE

UN Data Science Cell Membership

Initial Formulation of the UN Data Science Cell

Rapidly growing requests for collaboration on Ukraine response → Fed into Information Management Analysis Cell (IMAC) → Continued through 2022 and adapted

Smartphone based (non-CDR) mobility

Call data records

Mobility data from different sources

Satellite data

Night time lights data

AI/machine learning

Facebook for good

Facebook marketing API

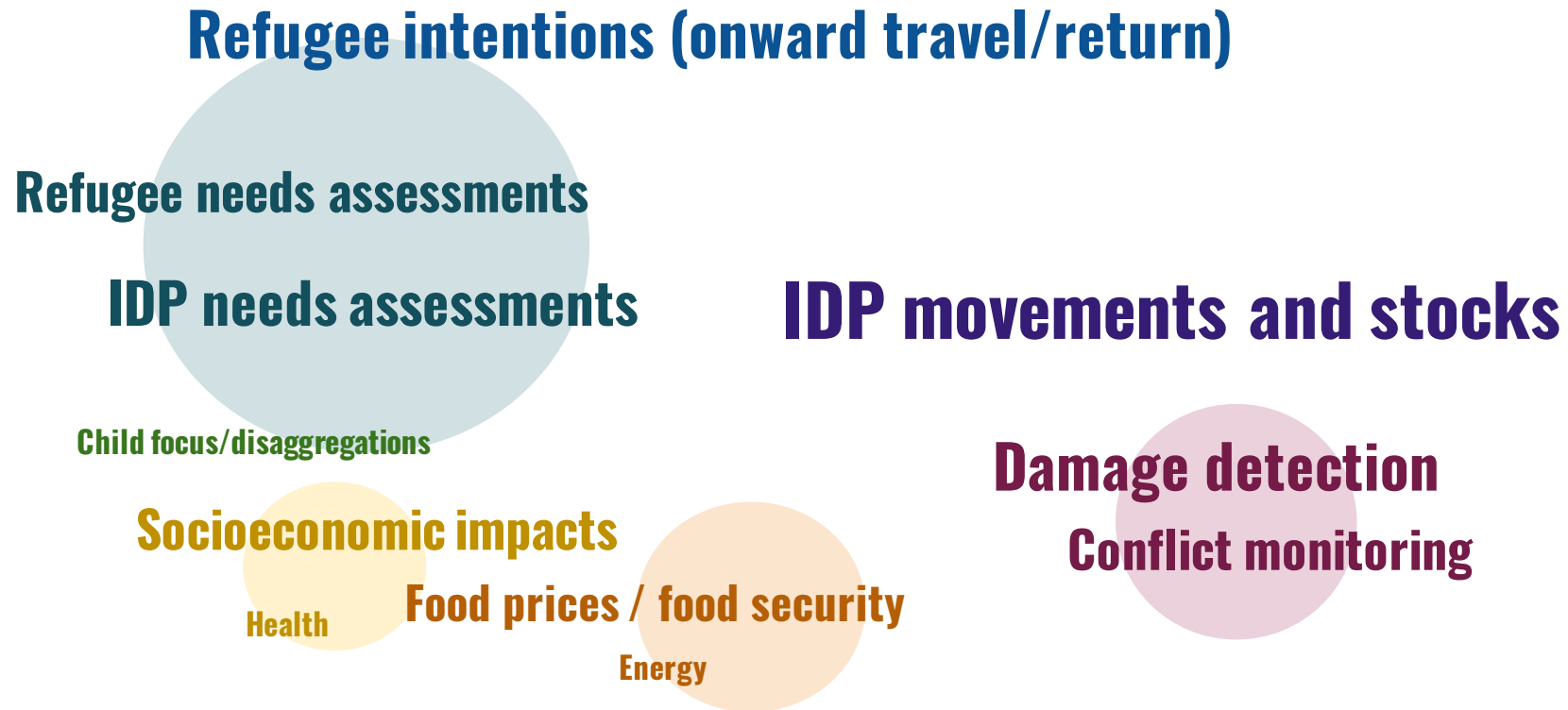Social media data

Econometric/demographic modeling

Crowd-sourced data, Secondary data

Online surveys

Qualitative survey

Triangulation against ground surveys

UN system enumerators, Ukraine government

Ethics and privacy assessments

UN GLOBAL PULSE

A Typology of Thematic Areas of Work

Refugee intentions (onward travel/return)

Refugee needs assessments

IDP needs assessments

IDP movements and stocks

Child focus/disaggregations

Damage detection

Socioeconomic impacts

Conflict monitoring

Health

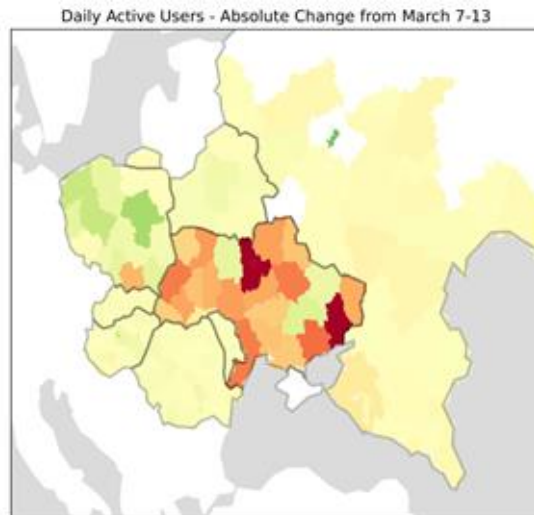Food prices / food security

Energy

UN Data Science Cell: Member Activities and Requests

Population Estimation

Alternative data sources

Socioeconomic Assessment

Return intentions

Situational Awareness

Damage assessment

Daily Active Users - Absolute Change from March 7-13

UNHCR
The UN Refugee Agency

LIVES ON HOLD: PROFILES AND INTENTIONS OF REFUGEES FROM UKRAINE
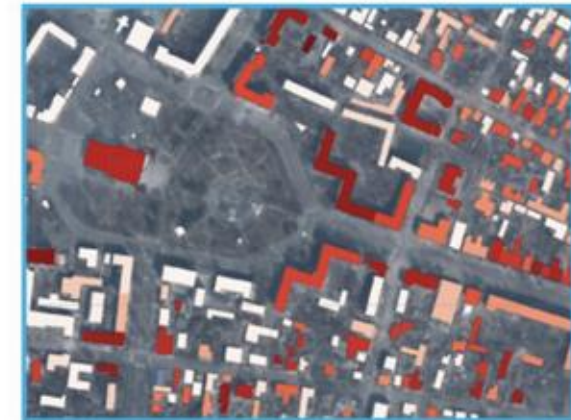
Advising on use of new datasets

Needs and Challenges

Need for more resources and connections

Need for better communication

Need for improved coordination

Need for more community-building

Need for collaborative spaces

Future Plans

- A **standing capacity** for future crisis response

- **Sharing information** about data sources and methodologies for using them (including mobility data, social media data, remote sensing data, and online survey data)

- **Brainstorming** around outstanding needs and coordinating on requests for new data sources

- **Discussing ethical considerations** surrounding the use of the data

- **Inviting internal and external guest speakers** to present new research and methodologies (joseph.bullock@un.org)