





Technical Workshop on International Migration and Temporary Mobility Statistics

session9: Innovative data sources for international migration and temporary mobility

17 July 2024 Simone Holladay, IOM-GDI











BIG DATA FOR MIGRATION ALLIANCE (BD4M)

LAUNCHED IN 2018, CONVENED BY IOM'S GMDAC, THE EC KCMD AND THE GOVLAB AT NYU

Building knowledge

Facilitating research

Connecting stakeholders

Capacity development



Launch of the Big Data for Migration Alliance, Joint Research Centre, Brussels, 25 June 2018. © European Commission 2018

https://data4migration.org/













Examples of BD4M Activities





BLOG SERIES: PART 7

Selecting Anticipatory Methods for Migration Policy: Eight Key Elements To Consider

Over the past several weeks, we've embarked on a journey exploring anticipatory methods for migration policy. Our exploration has taken...

By Sara Marcucci, Stefaan.















Harnessing Data Innovation for Migration Policy: A Handbook for Practitioners

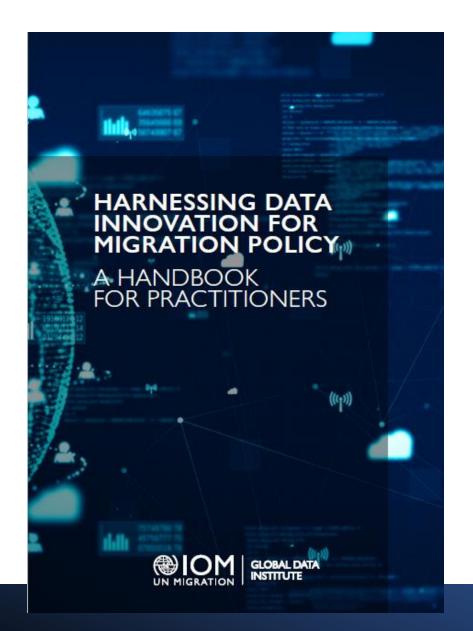




































































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Marzia Rango and Niklas Sievers

HARNESSING DATA INNOVATION FOR MIGRATION POLICY: THEMATIC APPLICATIONS



	SURING AND FORECASTING MIGRATION
STOC	CKS AND FLOWS
1.	Geospatial data integration to capture small-area population
	dynamics
	Andrew J. Tatem, Claire A. Dooley, Shengjie Lai, Dorothea Woods, Alex
	Cunningham and Alessandro Sorichetta
2.	Harnessing data from mobile network operators for migration
	statistics
	United Nations Global Working Group on Big Data for Official Statistics
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	Jisu Kim, Emilio Zagheni and Ingmar Weber
4.	An innovative framework for analysing
	asylum-related migration
	Constantinos Melachrinos, Marcello Carammia and Teddy Wilkin
5.	Artificial intelligence-based predictive analytics in the humanitarian
	sector: The case of Project Jetson
	Catherine Schneider, Rebeca Moreno Jimenez and Sofia Kyriazi
6.	Bridging survey-based estimates and airline passenger data to
	produce Puerto Rico net migration estimates in the aftermath
	of Hurricane Maria80
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MIGR	ANT COMMUNITIES91
7.	How can big data analytics help understand
	migrant integration?
	Tuba Bircan, Albert Ali Salah and Alina Sîrbu
8.	Using Twitter data to monitor immigration sentiment
	Francisco Rowe, Michael Mahony, Eduardo Graells-Garrido,
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9. The sampling of migrants through advertisements

11. The challenges of using new data sources and methods for Niklas Sievers and Marzia Rango







ETHICAL FOUNDATIONS OF DATA INNOVATIONS FOR

12. Big data, big responsibility - fundamental-rights implications of using artificial intelligence in migration management: David Reichel and Tamás Molnár 13. Data innovation governance in humanitarian contexts:



REGULATORY FRAMEWORKS FOR

Robert Trigwell, David Eduardo Zambrano and Gretchen Bueermann

14. Understanding population movement under uncertainty in Miguel Luengo-Oroz, Katherine Hoffmann Pham and Rebeca Moreno Jiménez 15. Mobility evidence from mobile network operators data Michele Vespe, Stefano Maria lacus, Umberto Minora, Carlos

Santamaria, Francesco Sermi, Spyridon Spyratos and Dario Tarchi

Stefaan G. Verhulst and Andrew Young



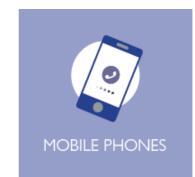








Non-Traditional data sources











Policy and programmatic needs



MEASURING MIGRANT STOCKS AND FLOWS



TRACKING HUMAN DISPLACEMENT



SAMPLING MIGRANTS AND DIASPORAS



MONITORING
PUBLIC SENTIMENT
FOWARDS MIGRANTS



UNDERSTANDING MIGRANT INTEGRATION



FORECASTING HUMAN MOBILITY



DISPLAYING SOCIAL CONNECTIONS



BUILDING DATA
PARTNERSHIPS



ESTABLISHING ETHICAL FRAMEWORKS



TACKLING COVID-19











Challenges

Data privacy and informed consent

Bias and discrimination

Data security



ETHICAL CHALLENGES

Earning public trust in the face of new data privacy and security risks



QUALITY CHALLENGES

Distilling accurate information from biased and erroneous data Selection bias Errors and uncertainties Reliability

Data ownership
Private-public sector collaboration
Accountability frameworks



DATA AVAILABILITY CHALLENGES

Ensuring effective and secure data access across sectors and countries





DATA ANALYTICS CHALLENGES

Integrating requirements of traditional and innovative sources and methodologies

Interpretation of results
Data interoperability
Skills and capacities











Key takeaways

New regulatory and ethical frameworks are necessary to reap the benefits and limit the risks of using new data sources and methods

Cross-sectoral,
interdisciplinary
partnerships and
collaborations are
critical to make
progress in this area

A clear articulation and definition of problems and needs where data can be used meaningfully should be starting point, avoiding tech-solutionist approaches

Data innovation should aim at preventing asymmetries in digital data capacities and addressing existing digital divides and inequalities

RESPONSIBLE

COOPERATIVE

PURPOSE-DRIVEN

INCLUSIVE

BD4M Studios

3. DATA HOLDERS

Who holds or has access to those types of data within the region?



INCENTIVES AND CHALLENGES

What are incentives and/or challenges for data holders to engage on the questions at hand? (e.g., corporate, social responsibility, strategy, organization, reputation, etc.)

ENABLING CONDITIONS

What are enabling conditions for data holders toward establishing a collaboration? Who can act as enablers? What lessons have you learned from similar efforts in other contexts, if any?

- Internal capacity (data literacy, lega etc.)
- External support for data initiativ

2. DATASETS

What are the minimum viable datasets needed? What are the required characteristics?

- Location data? Time based da
- Structured/Unstructured? PII?



1.
PROBLEMS TO
BE ADDRESSED

What are the key questions What is the context?

7.
BD4M DATA
COLLABORATIVES

What type of Collaborative would work bes given the context, partners and needs? What can the BD4M Alliance support with? 4.

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DATA USERS

Who needs access to the data and/or can act upon the insights?



CAPACITY AND OTHER NEEDS

What are capacity and other needs to address through a collaborative? (expertise, resources, et al.)

ENABLING CONDITIONS

What are enabling conditions for data users to establishing a collaboration? Who can act as enablers? What lessons have you learned from similar efforts in other contexts, if any?

- Build long-term data capabilities fo responsible re-use
- Legal and ethical framework for the data used













3 country cases- Malaysia, Hungary, Italy











Thank you