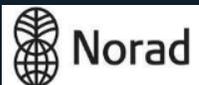




DOING DEVELOPMENT DIFFERENTLY

DANIEL ROGGER | MARIA JONES, DIME, WBG

MARCH 2023



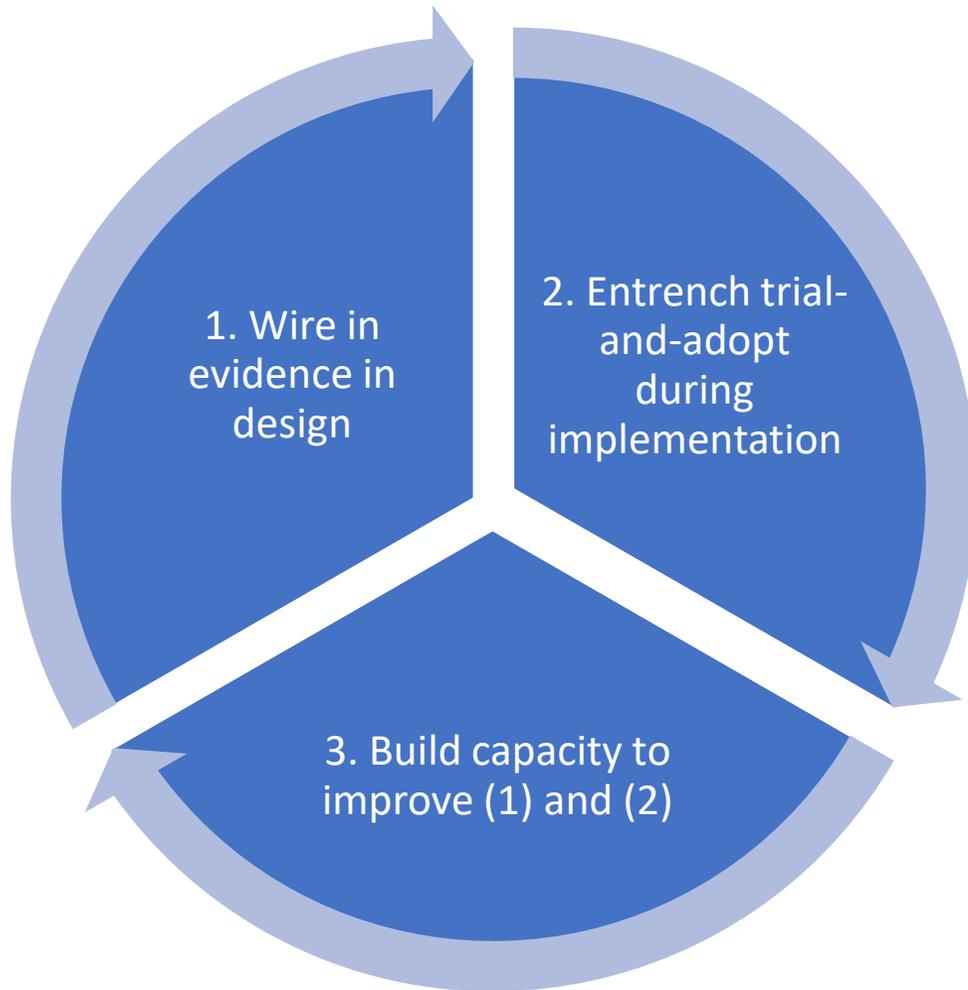
DO DEVELOPMENT DIFFERENTLY

USING TRIAL-AND-ADOPT TO CHANGE THE WORLD



scale is not
determined
by size or
budget
but by the
change it
brings in

(1) WIRE EVIDENCE INTO PROJECT DESIGN

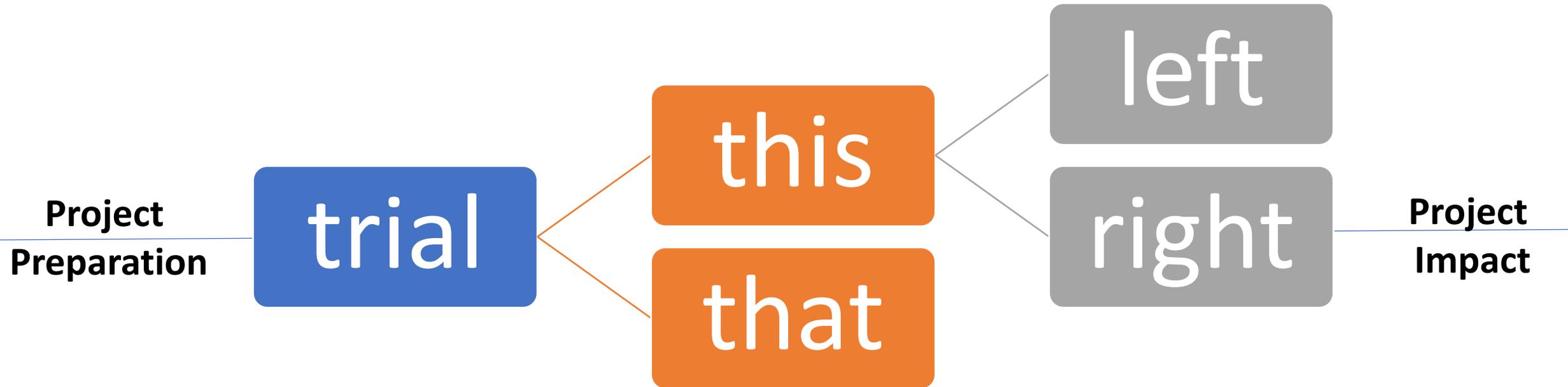


Design workshops:

- Training and facilitated sessions to embed evidence in project design
- Economies of scale in portfolio preparation
- Healthy competition and cross-team learning

Bottom line: Change development culture

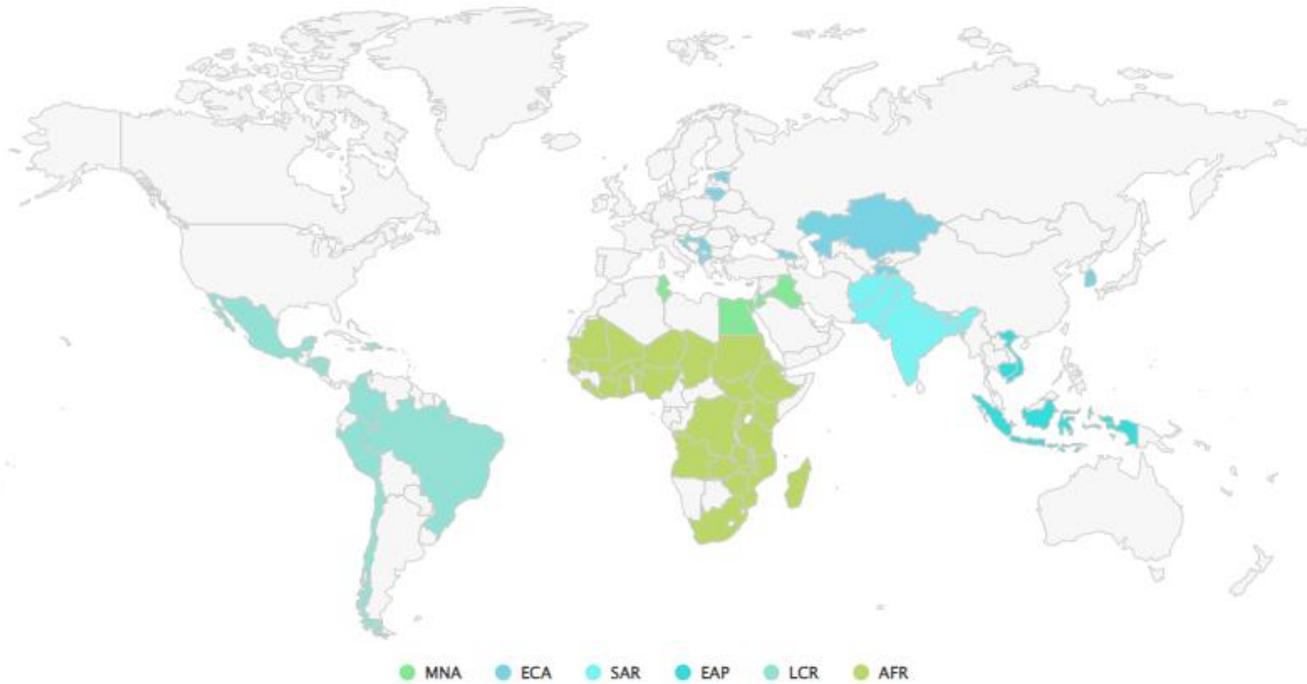
(2) TRIAL-AND-ADOPT APPROACH TO PROJECT DESIGN



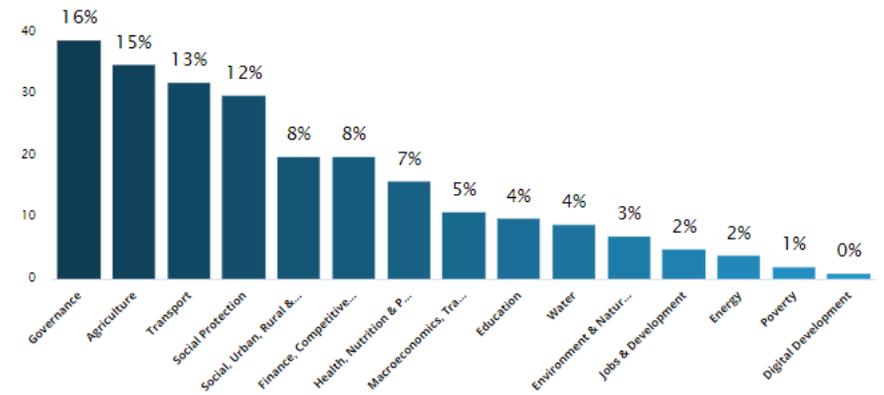
Test alternative approaches to project delivery side-by-side to identify what works and make smarter choices

WHERE CAN THIS HAPPEN?

EVERYWHERE



IN ALL SECTORS



DO WE WANT TO REMAIN IN A LOW-RETURN EQUILIBRIUM?

	Status Quo	Proposal
1. Learn from past mistakes	✘	+
2. Rank interventions by effectiveness and cost-effectiveness	✘	+
3. Trial and adopt to maximize impact	✘	+
Return on investment	X	2X

EXAMPLE 1: CASH TRANSFERS REDUCE POVERTY

Problem:
reduce poverty

Trial: Transfer cash and asset to poor households

Result: cash and asset transfers are highly cost-effective and have persistent effects years after intervention

UCT studies	Consumption Impacts
Carneiro et al. (2021)	+
Haushofer & Shapiro (2016; 2018)	+
Gilligan et al. (2013)	+
Blatmann et al, (2019)	+
McIntosh & Zeitlin (2018; 2020)	+
Hidrobo et al. (2013)	+
+ 30 other studies	+

CONT. EXAMPLE 1: COMMUNITY-DRIVEN DEVELOPMENT DOES NOT

Problem:
reduce poverty

Trial: Transfer resources to communities to build infrastructure

Result: Across 8 randomized control studies CDD has zero impact on poverty reduction

UCT studies	Consumption Impacts
Carneiro et al. (2021)	+
Haushofer & Shapiro (2016; 2018)	+
Gilligan et al. (2013)	+
Blatmann et al. (2019)	+
McIntosh & Zeitlin (2018; 2020)	+
Hidrobo et al. (2013)	+
+ 30 other studies	+

CDD Studies	Consumption Impacts
Indonesia KDP	×
Philippines KALAHI-CIDSS	×
Sierra Leone Go-Bifo	×
Senegal PNIR	×
Andra Pradesh India DPIP	×
Liberia CDRP	×
Afghanistan NSP	×
China SWP	×
DRC CDD	×

EXAMPLE 2: RANK INTERVENTIONS BY COST-EFFECTIVENESS

- **Problem:** 830 women die every day during pregnancy and childbirth
- **Ideas:** incentivize the performance of health facilities in Cameroon, Nigeria, Rwanda, Zambia, and Zimbabwe
- **Trial:** different incentive schemes:
 1. Performance-based incentives
 2. Direct facility financing
 3. Financial incentives to mothers



Effectiveness	Cost	Coverage
✓	1	X
✓	½	2X
✓	½	2X

WHAT ARE WE PROPOSING?

3. BUILD LOCAL CAPACITIES TO MANAGE FOR IMPACT

- Develop data management systems, skills, and digital tools
 - Shown to speed up disbursements, increase compliance with plans, and increase development impact.
 - It builds longer-term institutional capacity
- Train government staff to use administrative data to improve day-to-day management of government functions
 - Shown to improve workflows, address inefficiencies and reduce delays in government functions
- Develop integrated data systems for economic management
 - Shown to improve real-time information for policy response, especially during crises

CRAFT KNOWLEDGE CAREFULLY

DIME ANALYTICS APPROACH TO DEVELOPMENT KNOWLEDGE

DIME ANALYTICS APPROACH



Take advantage of the scope and scale of DIME research to develop and test technical solutions

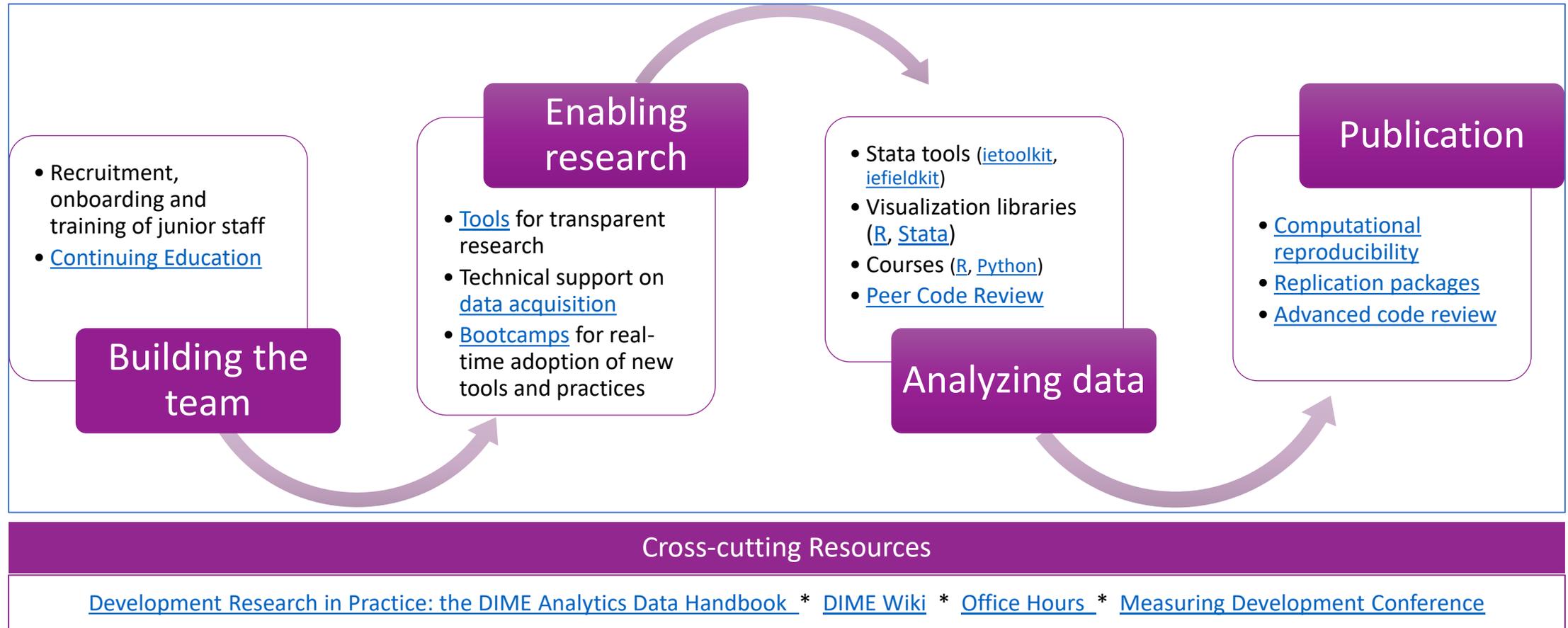


Improve the credibility, transparency and reproducibility of World Bank research



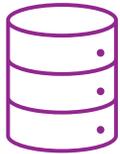
Create public goods in the form of open-source tools and open-access resources and trainings

LIFECYCLE APPROACH TO CREDIBLE RESEARCH



WHY DOES REPRODUCIBILITY MATTER TO DIME?

People who use evidence to make decisions should be able to scrutinize and recreate results easily. THIS REQUIRES:



Publicly accessible data



Publicly accessible (and clearly written) analytical code



Validation that all results can be reproduced

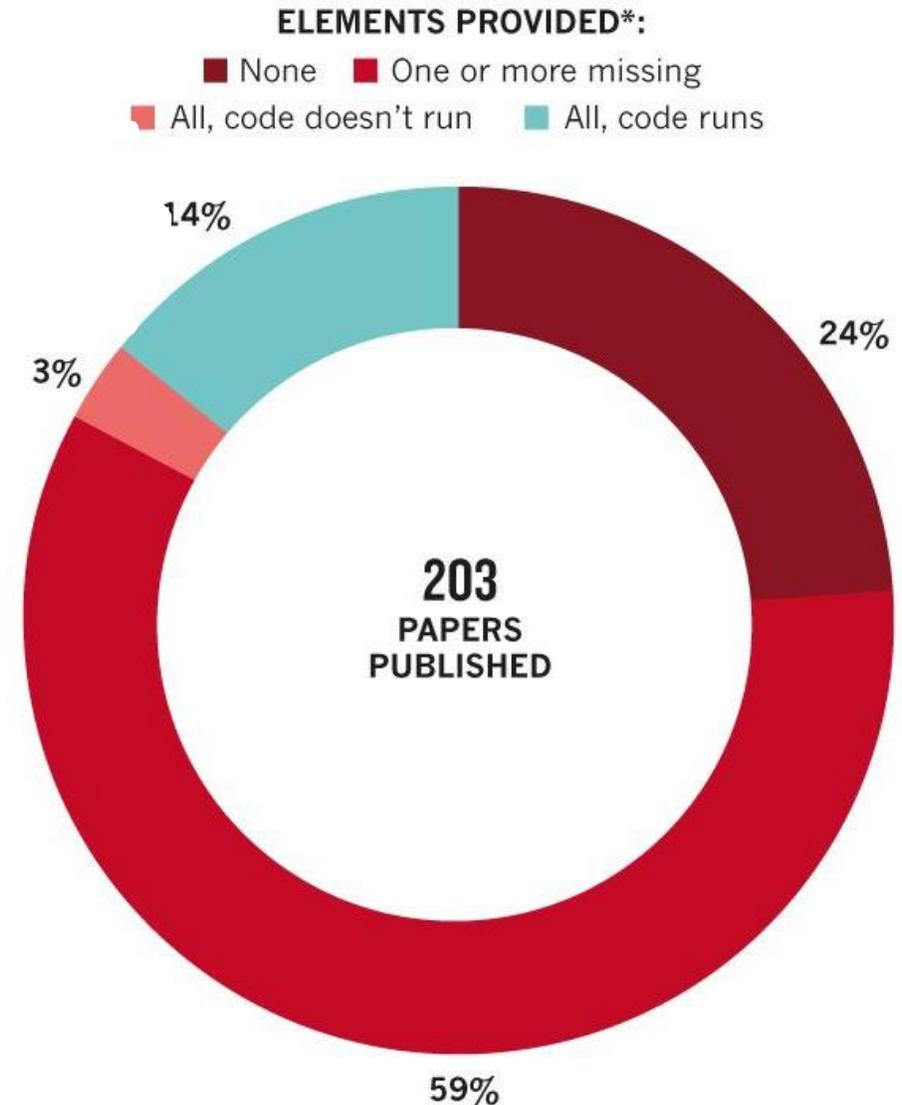
Establishing a norm of reproducible research

Before a working paper is published, verify computational reproducibility:

- Does the code run on a different computer using only the files provided?
- Does the code produce stable outputs over multiple runs?
- Do the outputs exactly match the results in the paper?
- Is the reproducibility package complete and ready to publish?

REPLICATION RARELY POSSIBLE

An analysis of 203 economics papers found that fewer than one in seven supplied the materials needed for replication.



*The elements assessed were raw data, raw code, estimation data and estimation code.

OPEN SCIENCE INCREASES RESEARCH CREDIBILITY

Kondylis et al, *Demand for 'Safe Spaces' : Avoiding Harassment and Stigma*

Open knowledge

- <https://openknowledge.worldbank.org/handle/10986/33853>

Open data

- <https://microdatalib.worldbank.org/index.php/catalog/11600>

Open code

- <https://github.com/worldbank/rio-safe-space/tree/master/Reproducibility%20Package>
- DOI [10.5281/zenodo.7412059](https://doi.org/10.5281/zenodo.7412059)

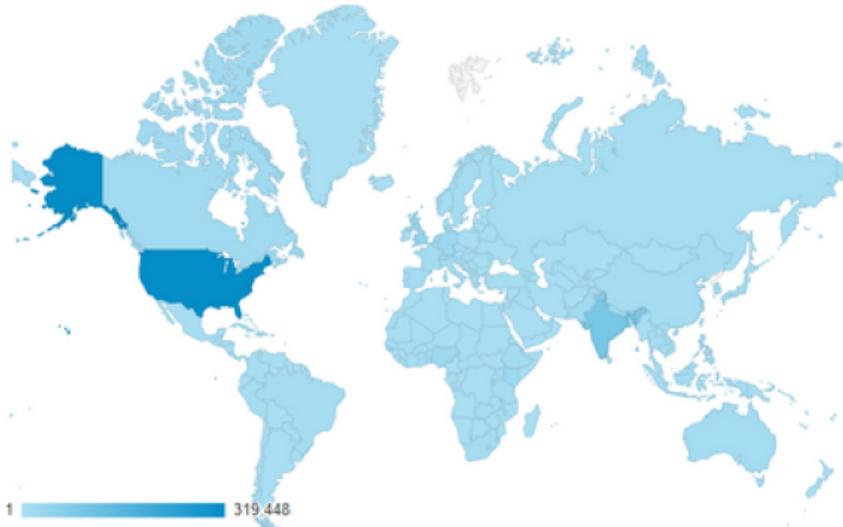
PUBLIC GOODS ATTRACT SUBSTANTIAL GLOBAL INTEREST

DIME Wiki

597 Registered Contributors

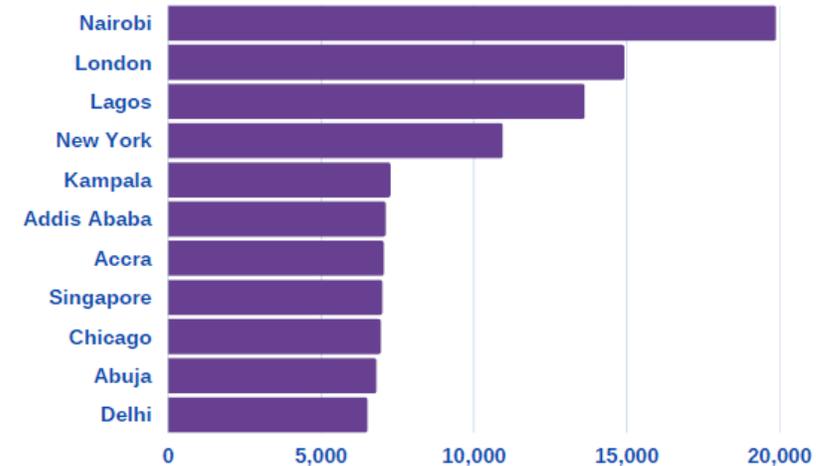
724,027 Total Users and 1,322,684 Views

Global Usage



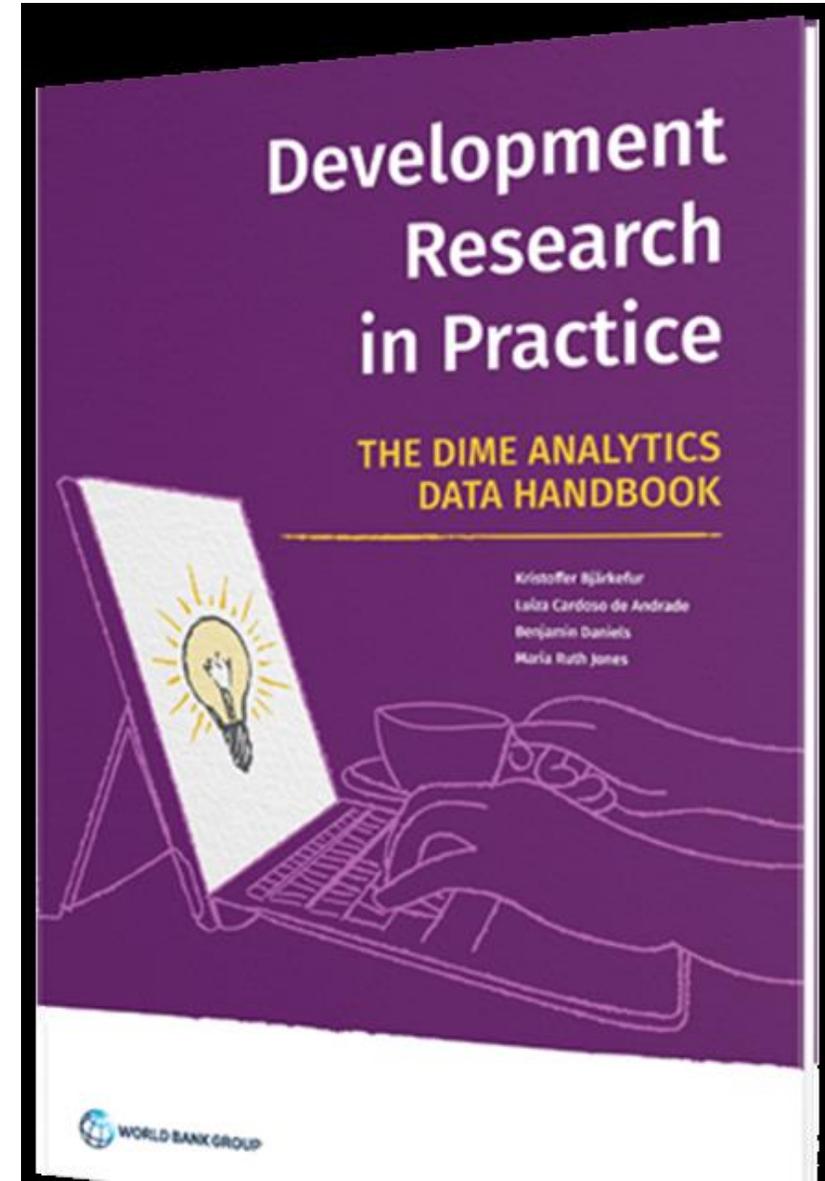
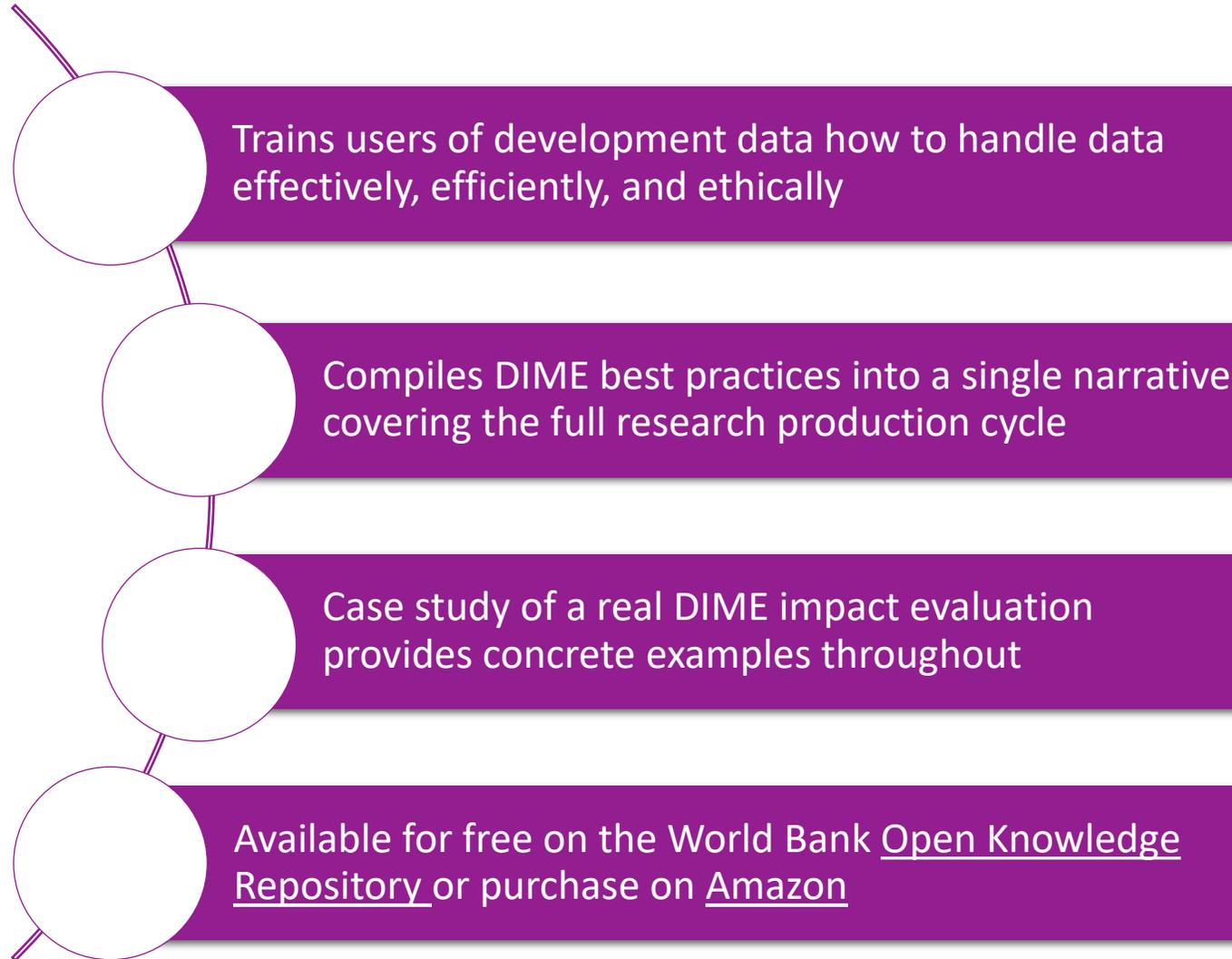
Top 10 countries by number of viewers:
US, India, UK, Germany, Ghana, Nigeria,
Spain, Philippines, Netherlands, Ethiopia

Most Active Cities (outside D.C.)



Viewership has expanded to cities like
Dar es Salaam, Dhaka, Lusaka, Kigali,
Cotonou, Sydney, Jakarta, and Guwahati

DEVELOPMENT RESEARCH IN PRACTICE: THE DIME ANALYTICS DATA HANDBOOK



STATA TOOLS TO IMPROVE EFFICIENCY & REPRODUCIBILITY

Automation of common tasks saves time and reduces errors

ietoolkit

Suite of commands to automate routine impact evaluation analysis tasks ([repository](#))

Launched 2017 ([blog](#))

iefieldkit

Suite of commands to automate routine data collection and processing tasks ([repository](#))

Launched 2020 ([blog](#)), published in [Stata Journal](#)

style guide

First “style guide” for common tasks in Stata. Makes code easier to read and review across projects

Published as part of *Development Research in Practice* ([online](#))

linter

Stata command to flag and correct problematic coding practices in do-files

Released 2023 ([blog](#))

FLAGSHIP COURSES INSTITUTIONALIZE CREDIBLE RESEARCH

- Plan for and supervise high-quality field research
- Develop and implement a data quality assurance strategy
- Ensure fidelity to research design
- Integrate monitoring and evaluation systems with research data
- Design and program electronic survey instruments
- Manage complex datasets and produce descriptive analysis for policymakers

Manage Successful Field Research



- Why reproducibility matters for economics research
- How to use GitHub for transparent and effective collaboration
- Programming 101
- How to manage, clean and tidy raw datasets
- Best practices for data analysis
- Principles for working with personal data
- How to create reproducible research outputs

Reproducible Research Fundamentals





MEASURING DEVELOPMENT 2023

MEASURING THE RISKS AND IMPACTS OF CLIMATE CHANGE

<https://www.worldbank.org/en/events/2023/05/04/measuring-development-2023>



Thank you!
