MAKING A DIFFERENCE THROUGH DATA

WORKING GROUP ON EVALUATION OF PUBLIC POLICIES AND PROGRAMS

Julia Lane
New York University

FOCUS OF THE FORUM

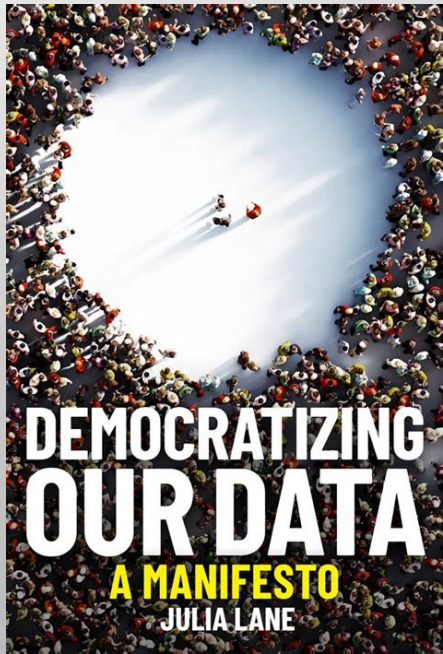
How data analysis can be embedded into our practice

and how it can help generate performance audits and evaluations

that make a difference

OUTLINE

- THE CONTEXT
- DEMOCRATIZING DATA..AND ANALYSIS
- NEW APPROACH TO EVALUATION
- OPPORTUNITIES



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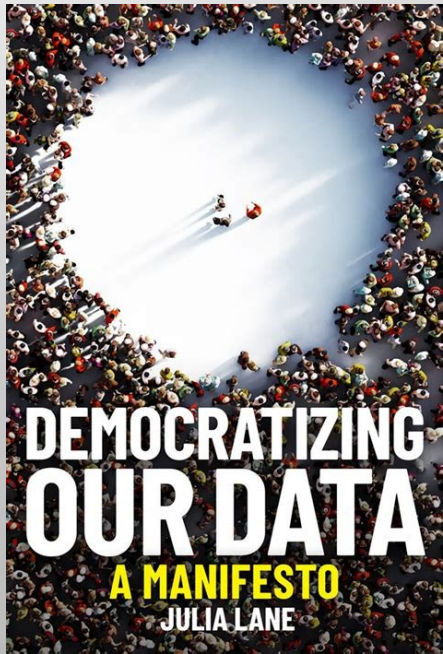
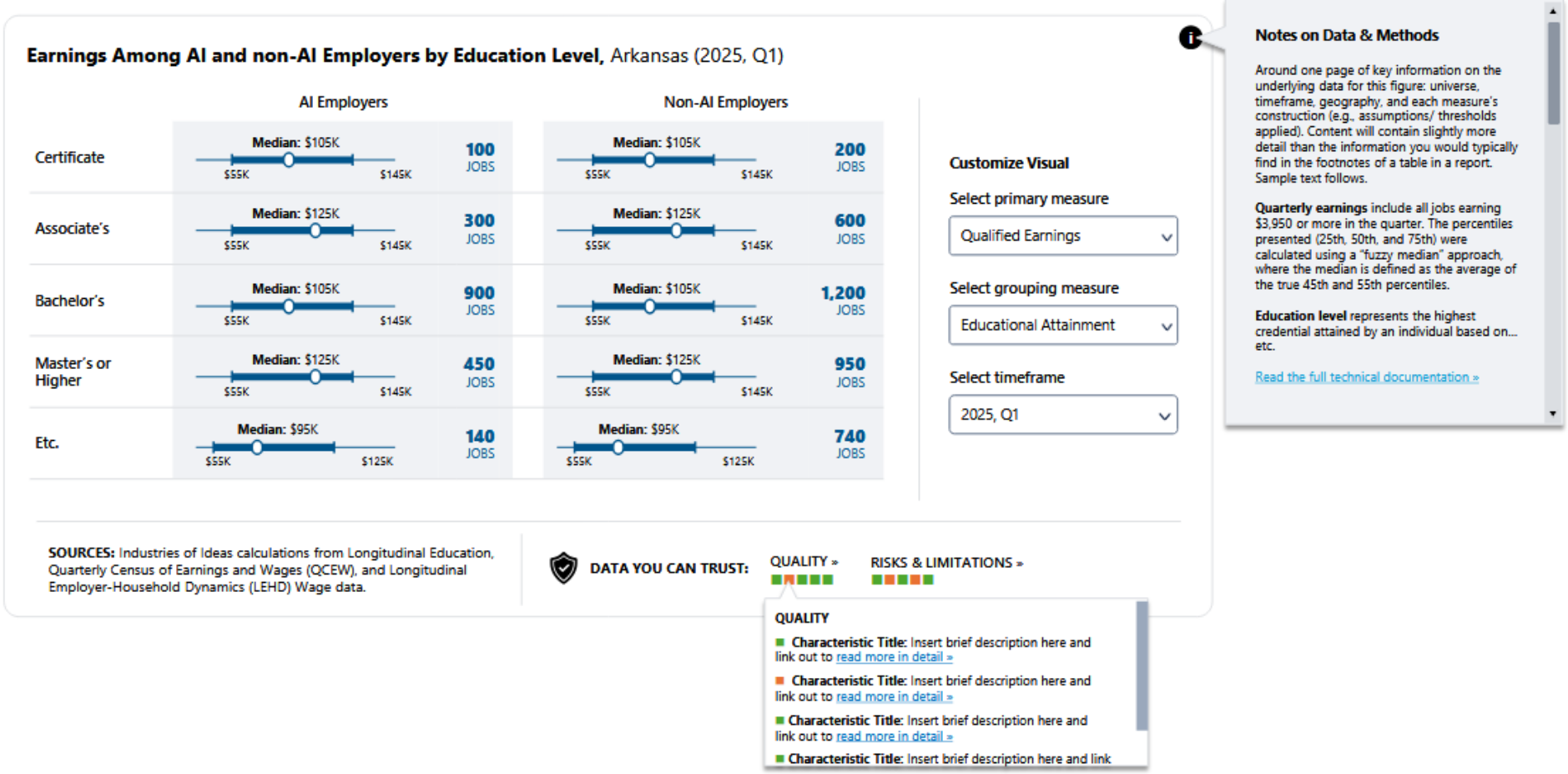


NEW DATA OFFER MASSIVE OPPORTUNITIES

Key Question
What are the earnings of workers at AI-active employers at each **education level**?

Underlying Iofl Data	
Source	**Data Element**
QCEW	Industry
QCEW	Region
QCEW	Timeframe
UI	Employment & Earnings
SLDS	Education
IRIS	AI Activity

For information on the data and methods behind each exhibit, readers can click on "information" icons, and "data trust" ratings to trigger pop-up windows containing key information and links to more detailed resources.



NEW DATA NEED UNDERSTANDING AND MANAGEMENT

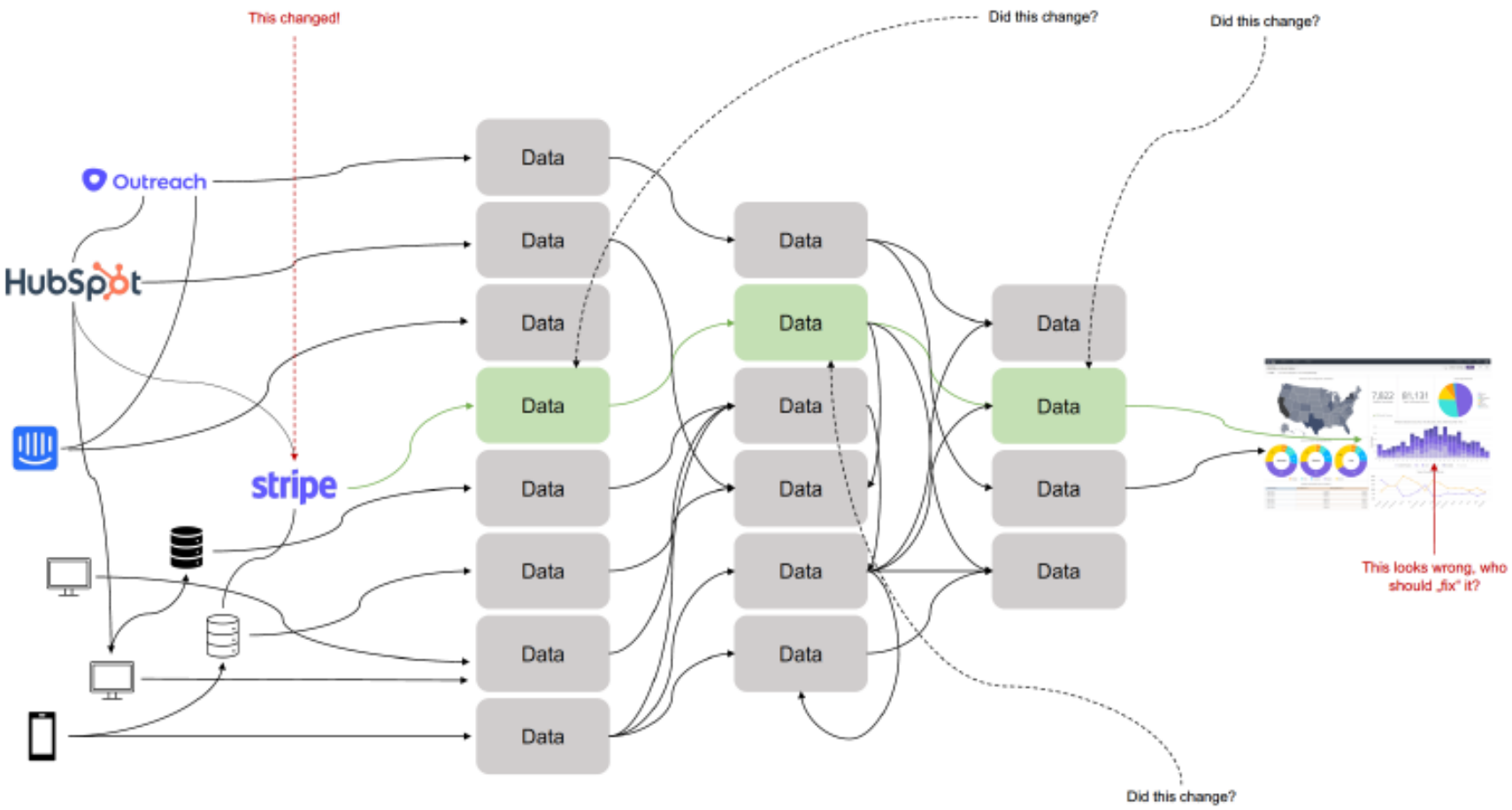
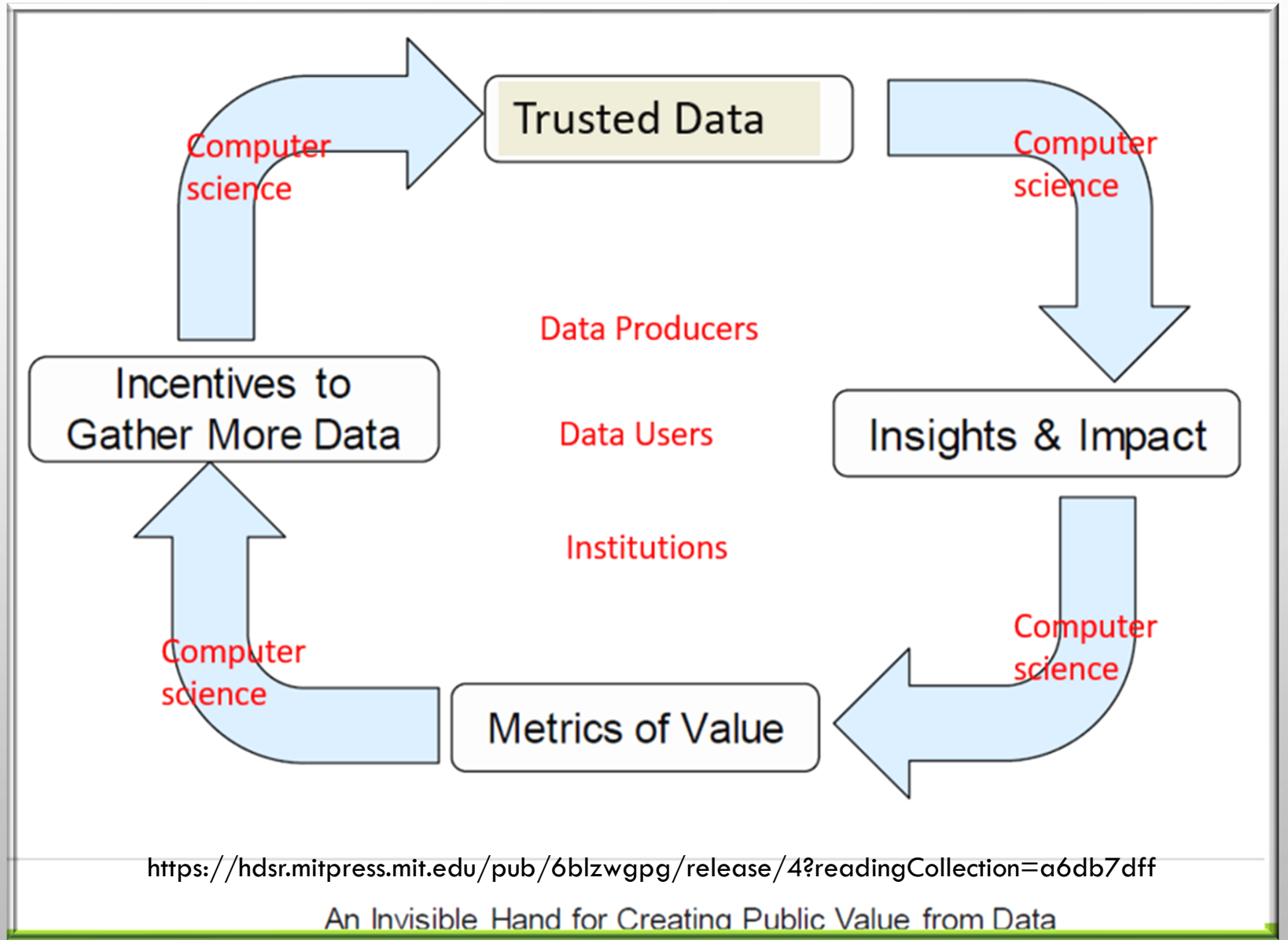


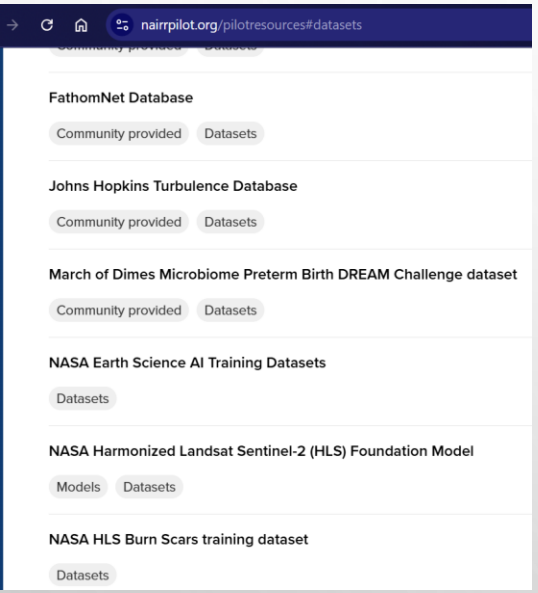
Figure 7. Splitting example

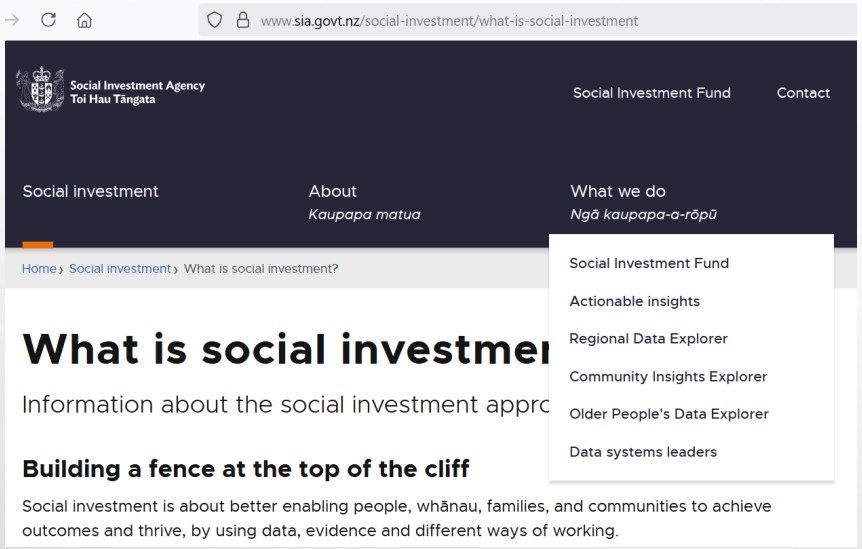
NEED NEW DATA COMMUNITY



NEED NEW DATA SOURCES, SERVICES, AND PLATFORMS

Data Sources





Services

ML Commons

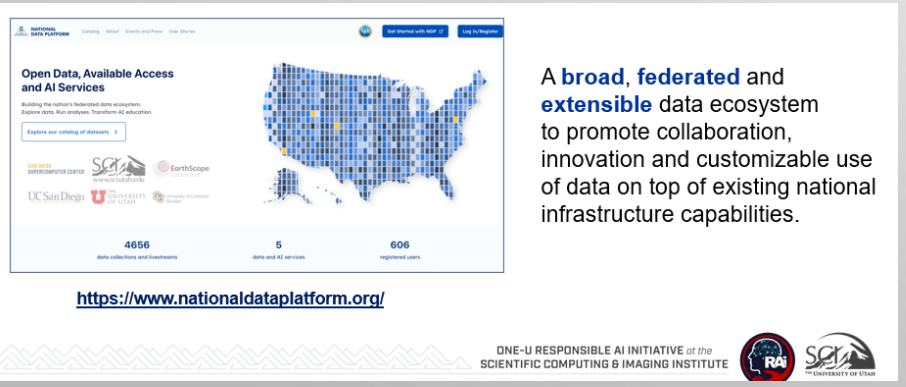
Schema.org

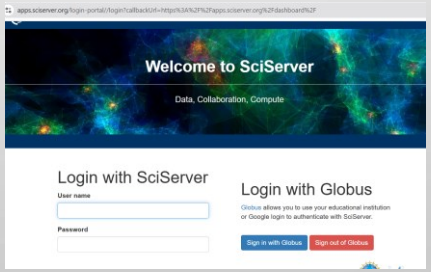
Dataset Search

Croissant

GitHub,
PyPI
Hugging Face,
DockerHub

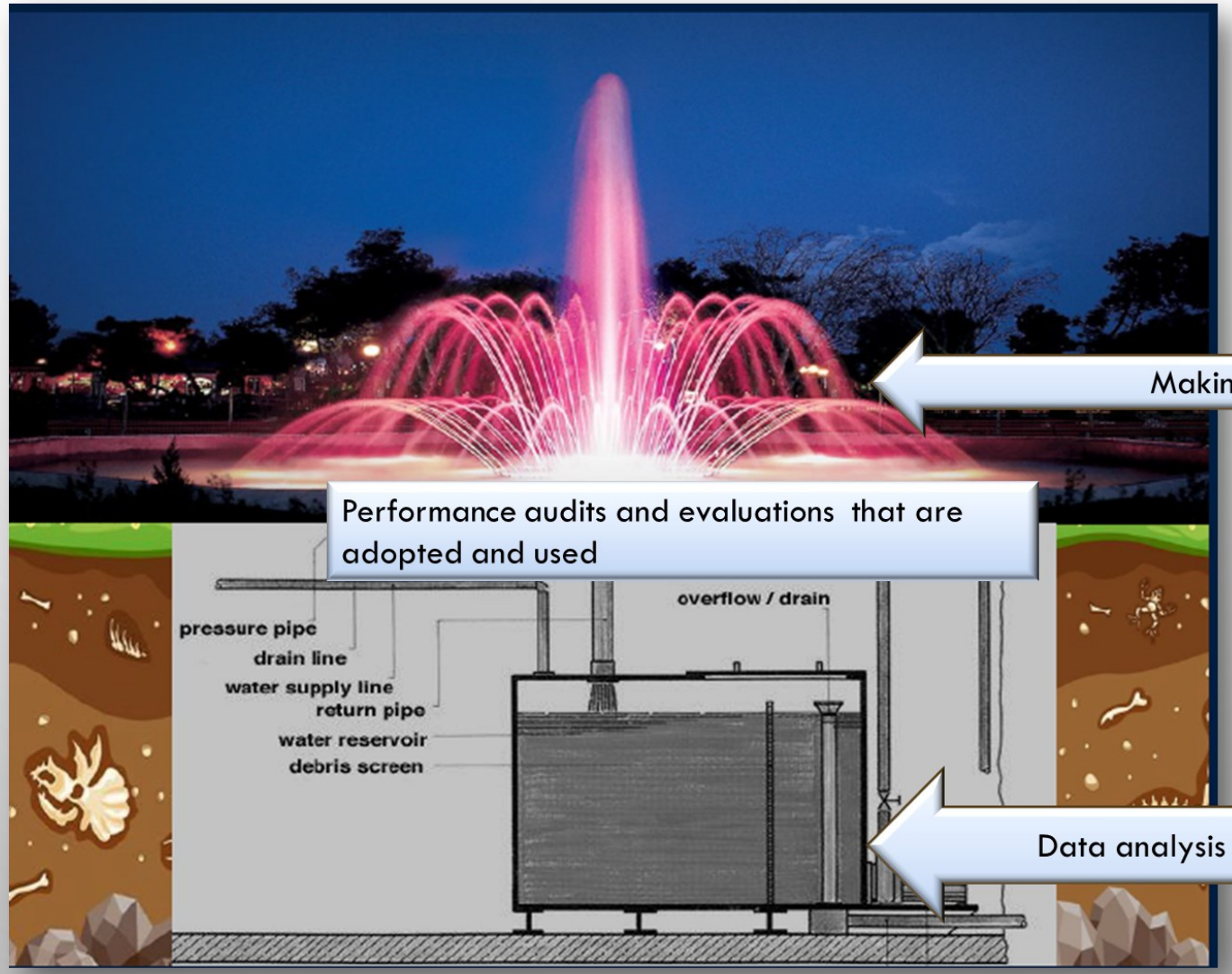
Platforms





ASSOCIATION OF RESEARCH LIBRARIES

SPARKLY FOUNTAIN – EVALUATION THAT IS ADOPTED



Making a difference

Performance audits and evaluations that are adopted and used

Data analysis embedded into practice

Terry McConnell, UNESCO

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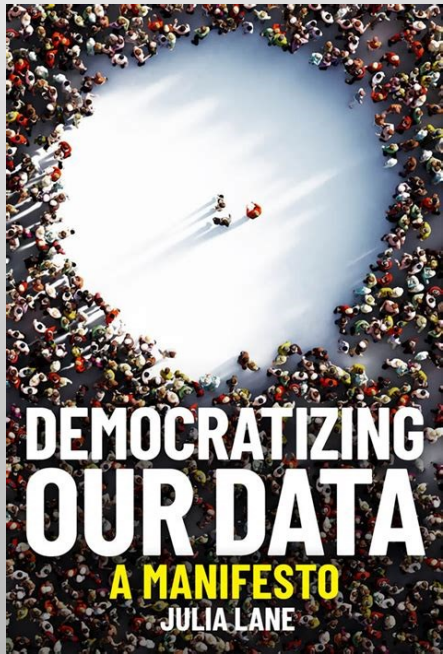


DEMOCRATIZE DATA ACCESS AND USE
E.G. NATIONAL DATA PLATFORM

Data Registration

- Leverage LLMs to characterize the dataset using keywords
- Approve dataset keywords

Data Collection

- Leverage publication corpora (e.g., OpenAlex, Dimensions) to generate context metadata about who, what, and how data have been used
- Validate generated metadata for accuracy

Data Discovery

- Search query returns context metadata for matching datasets; which is summarized for the user
- The user has the option to launch the DD portal for a more in-depth exploration.

Data Use

- The user provides feedback on datasets/context metadata and fit for use
- Context metadata is periodically updated

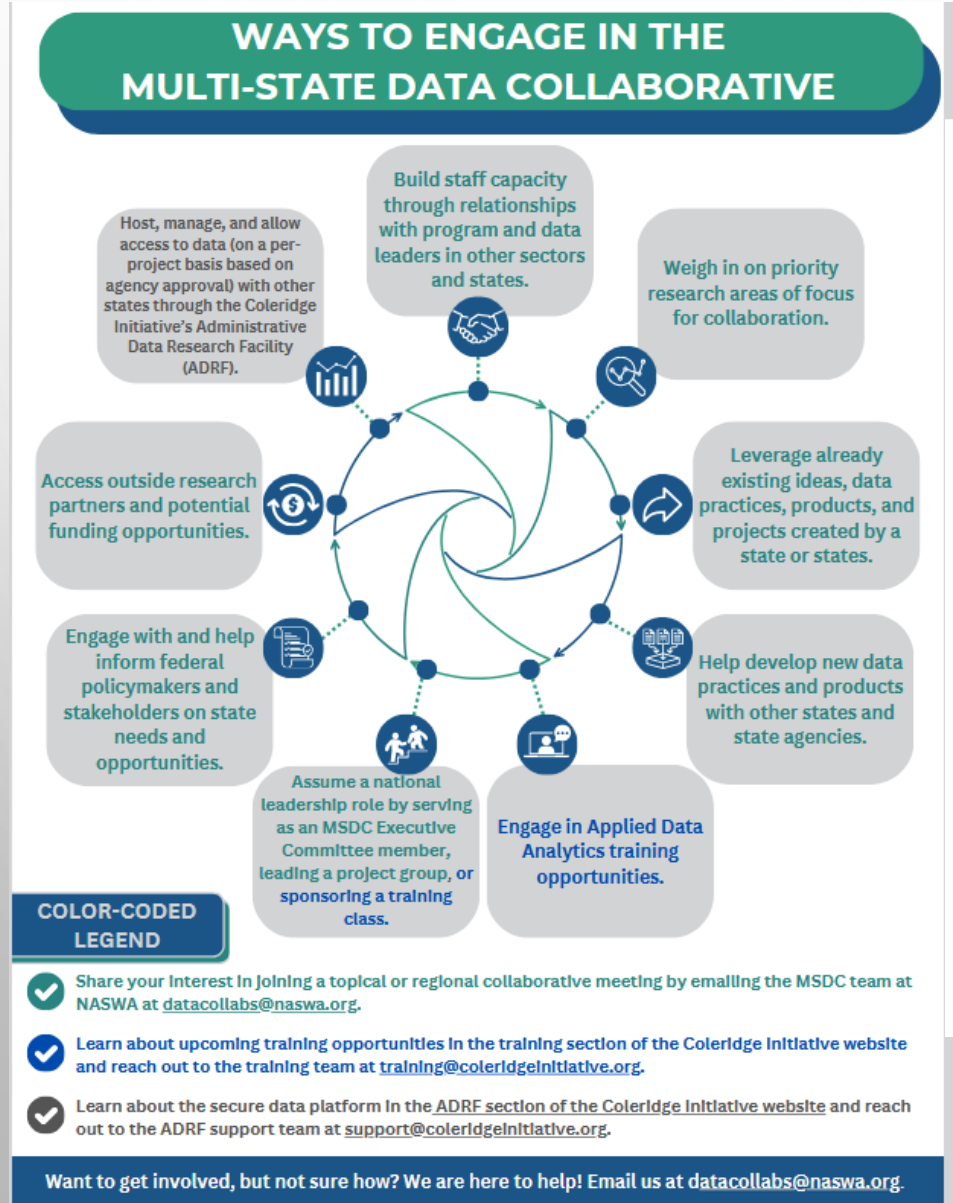
DEMOCRATIZE PROBLEM DEFINITION

CURRENT MULTI-STATE DATA COLLABORATIVE PROJECTS AND PRODUCTS

In development as of January 2025.

- K-12 Data Model
- Multi-State Post-Secondary Report
- Unemployment to Reemployment Portal
- Enrollment to Employment
- Industries of Ideas: A prototype system for measuring the effects of NSF investments on firms and jobs
- Multi-State Teacher Workforce Report
- Indiana Credential Outcome Transparency
- Expanding the Multi-State Post-Secondary Report Dashboard: Workforce Credentials and Students without Degrees
- Equity in Unemployment Insurance Benefit Access and Experience
- UI Equity Federal Grant - Multi-State Data Collaborative
- Education and Training as a Gateway to Reemployment of the Unemployed: Through the Lens of Equity
- Prosperity for Ohio: Mapping Credentials to Success
- Increasing College Completion in High-Value Career and Technical Fields by Unpacking the Relationships between Workforce Participation and Enrollment in Community College Re/Upskilling Course Sequences
- Early Childhood Workforce Analysis and Modeling
- Education Design Lab: Methodology for Documenting Micro-Pathway Participants

DEMOCRATIZE MEASUREMENT



industries of ideas

Measures and Stakeholders

Typical IofI stakeholder measures	Why it matters/Who can act on the information
Jobs: Information about the state and local labor pool	
1. How many jobs with AI active employers are in the area?	**Use:** Businesses who need to staff up to meet needs; Economic Development Agencies and chambers of commerce who need information for local and potential businesses
How many jobs at each education and skill level? In which industries?	
Earnings: Information about state and local job quality	
2. What are the earnings for jobs with AI active employers in the area?	**Use:** Education and training providers that are developing curricula; students looking for jobs and choosing majors; job seekers choosing credential qualifications
What are the earnings of workers at each education and skill level? In each industry?	
Skills: Information about employer demand and regional workforce supply of skills	

DEMOCRATIZE ANALYSIS

EVIDENC

y Of Maryland | KYStats | C

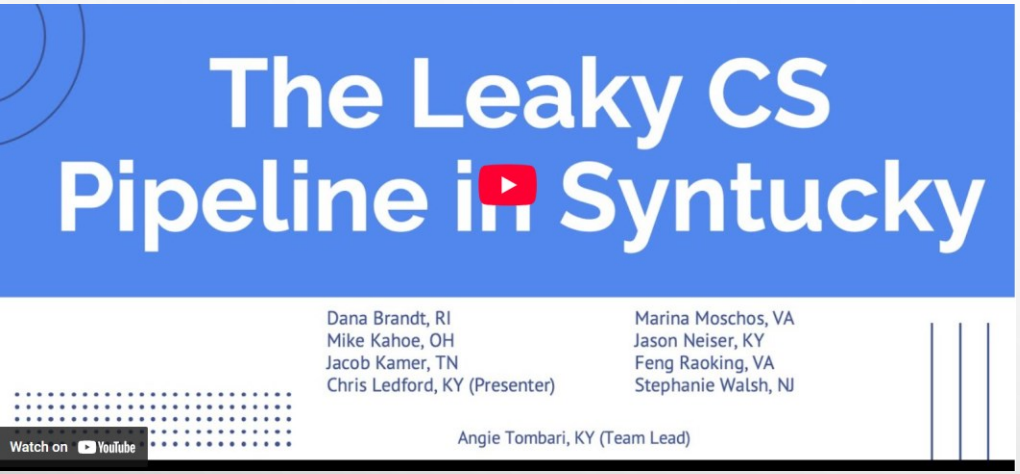
APPLY HERE **CLASS**

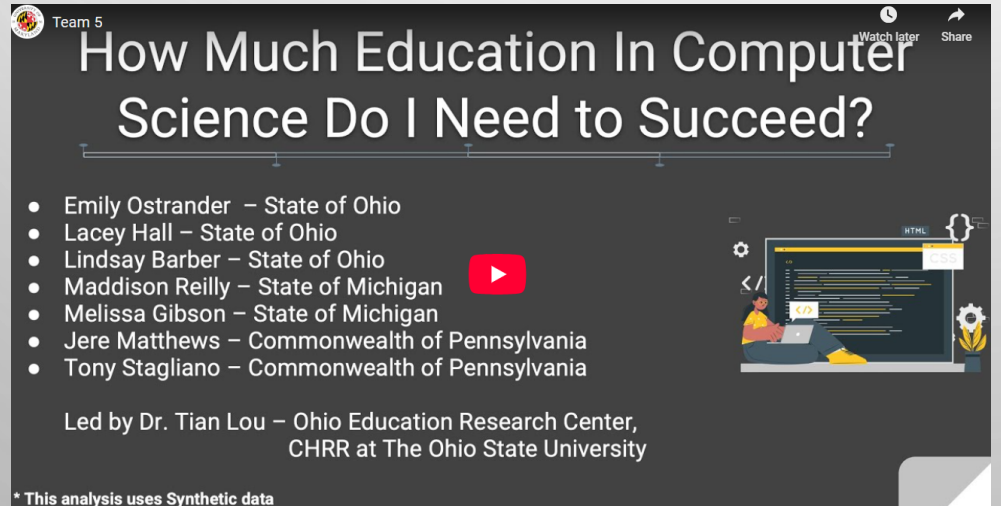
WEEK 3 **WEEK**
EASUREMENT **VISUALIZ**

DATA LITERACY AND EVIDENCE BUILDING

Anna-Carolina Haensch, Ben Feder, Julia Lane, Angela Tombari, Frauke Kreuter

PRODUCE COMMUNITY-DRIVEN RESULTS





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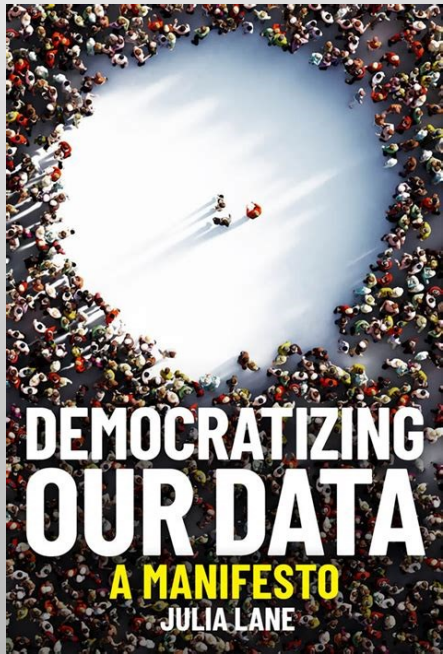

EVALUATION CRITICAL, BUT NOT ALWAYS APPRECIATED

PRESIDENT DONALD J. TRUMP

The WHITE HOUSE

Fact Sheet: President D… the Reduction of th…

The White H…

ELIMINATING WASTE AND REDUCING G…

Donald J. Trump signed an Executive Orde… Bureaucracy.

- This Executive Order eliminates non… functions of unnecessary governme…
  - Affected entities include the Fe… States Agency for Global Media…

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DOGE comes for the data wonks

America may soon be unable to measure itself properly

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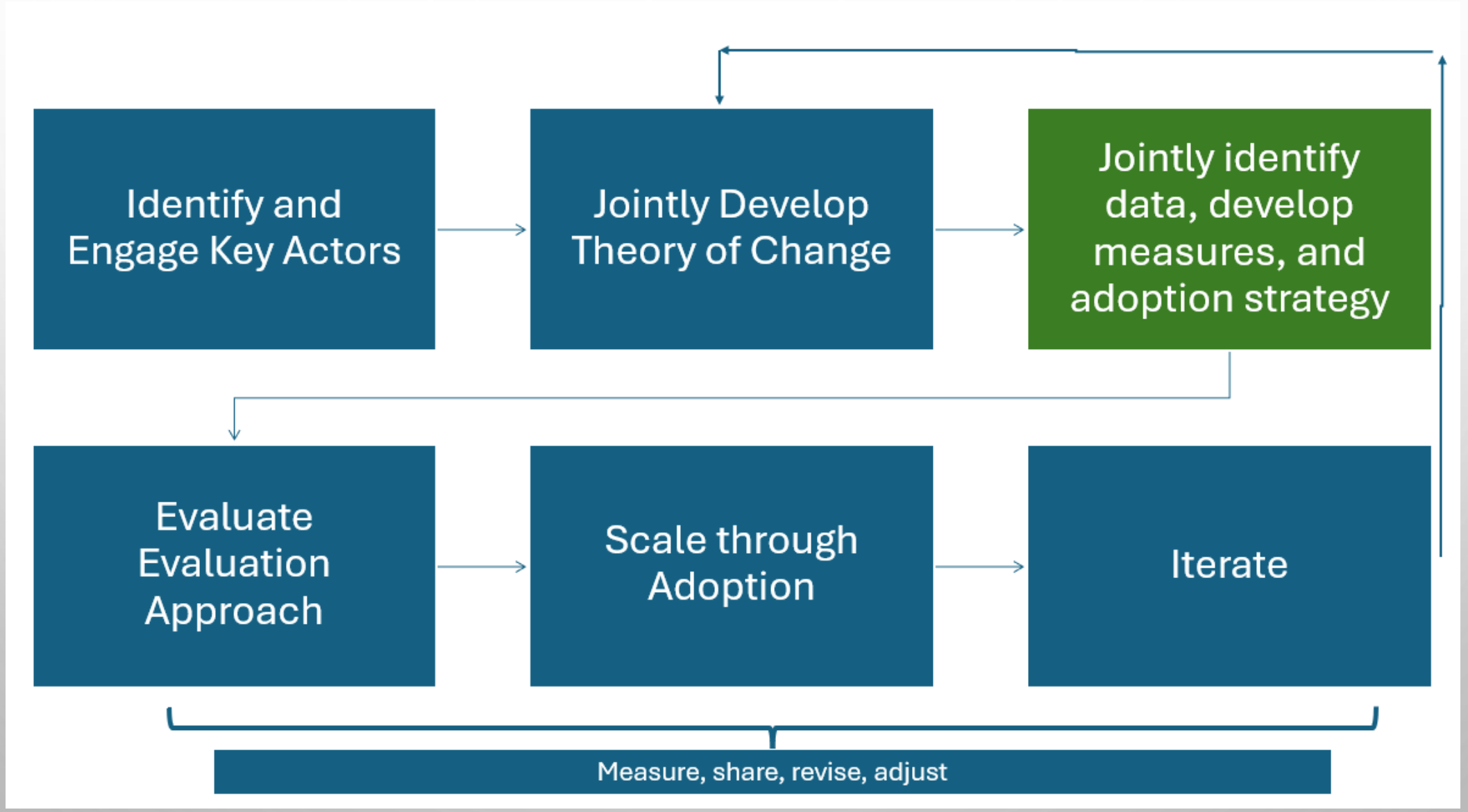
ILLUSTRATION: RICARDO REY

DEMOCRATIZATION KEY TO MAKING A DIFFERENCE



DEMOCRATIZATION IN ACTION

www.naswa.org/partnerships/multi-state-data-collaboratives/multi-state-data-collaboratives 80%

MEMBERSHIP

Multi-State Data Collaboratives

MSDC Learning Agenda

The MSDC is a network for developing data projects and products that answer questions critical to state and local needs that will impact policy or practice. The MSDC is developing a shared learning agenda to systematically identify and address priority questions that are relevant to member states and agencies.

Current priority topics include:

- Credentials of Value
- High-Wage, High-Skill, High-Demand Jobs/Quality Jobs
- Multi-State Post-Secondary Report
- K-12 Education
- Recidivism/Reentry
- Migrants/Refugees
- Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP)
- Emerging Technologies/Industries/Occupations
- UI Access/Unemployment to Reemployment
- Subgroup Access and Outcomes

Current technical and methodological topics of interest are:

- Qualitative research methods and applications
- State funding strategies for evidence building
- Streamlining data sharing (procurement processes; legal aspects)
- Data linkages
- Generative Artificial Intelligence use cases

- Access to revenue streams
- Better, more effective engagement with federal agencies and policymakers

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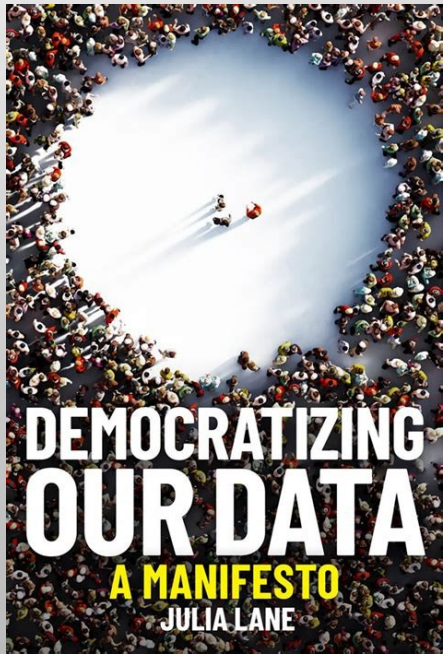


Advancin ence

NAIRR Evaluation (Phases 1–4)

The NAIRR system should be designed to achieve its objective and goals in a deliberate manner. A "theory of change" for the NAIRR—that is, a causal model or map of how the goals of a program are intended to be achieved—can inform this process and provide a framework for its planning and evaluation. This includes articulating the inputs (i.e., available resources to leverage), activities (i.e., actions or work conducted to advance the program), outputs (i.e., the immediate, practical benefits of the program), outcomes (i.e., medium-term results), and longer-term impacts of the overall NAIRR effort, and how each successively feeds into the next (see Figure 6 for illustrative examples). The NAIRR is envisioned as a complex system with numerous entities responsible for creating, operating, and overseeing its components, integration, services, and policies.

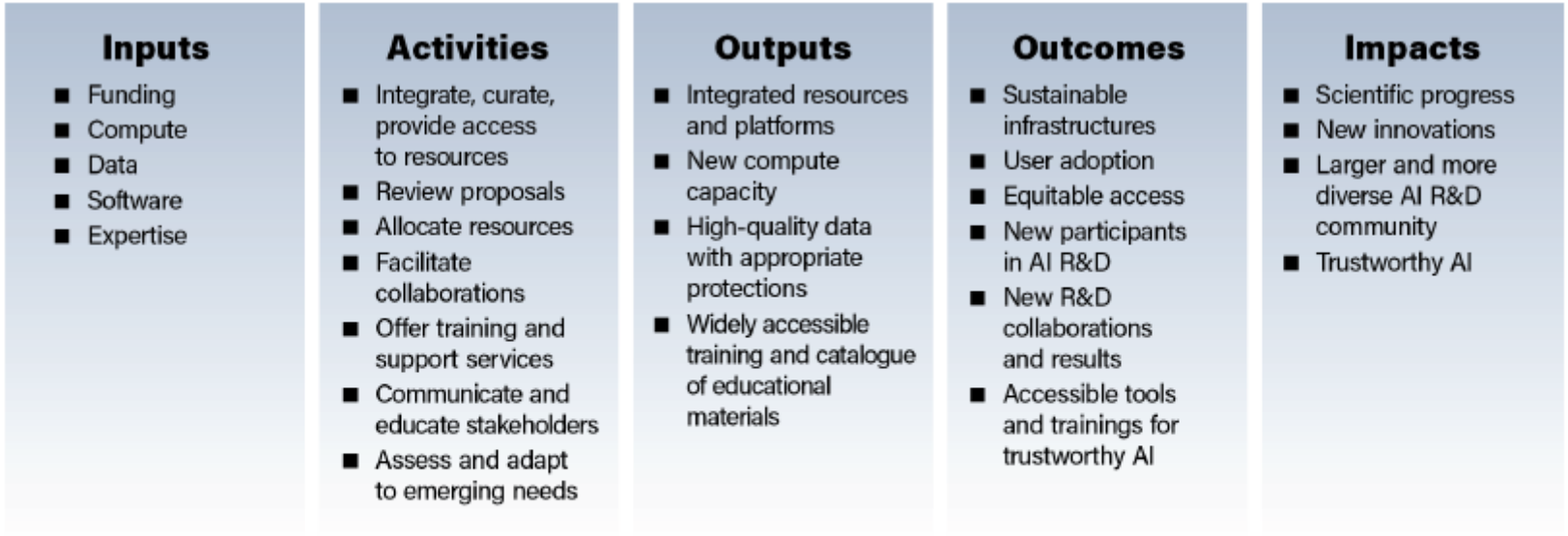


Figure 6. Example Elements of a Theory of Change for the NAIRR

NAIRR governance entities should adopt a standard evaluation framework predicated on a

- other innovative ways to inform, excite, and foster communities relevant to the NAIRR.

II.A.iv. Metrics and Outcomes for Operational Success

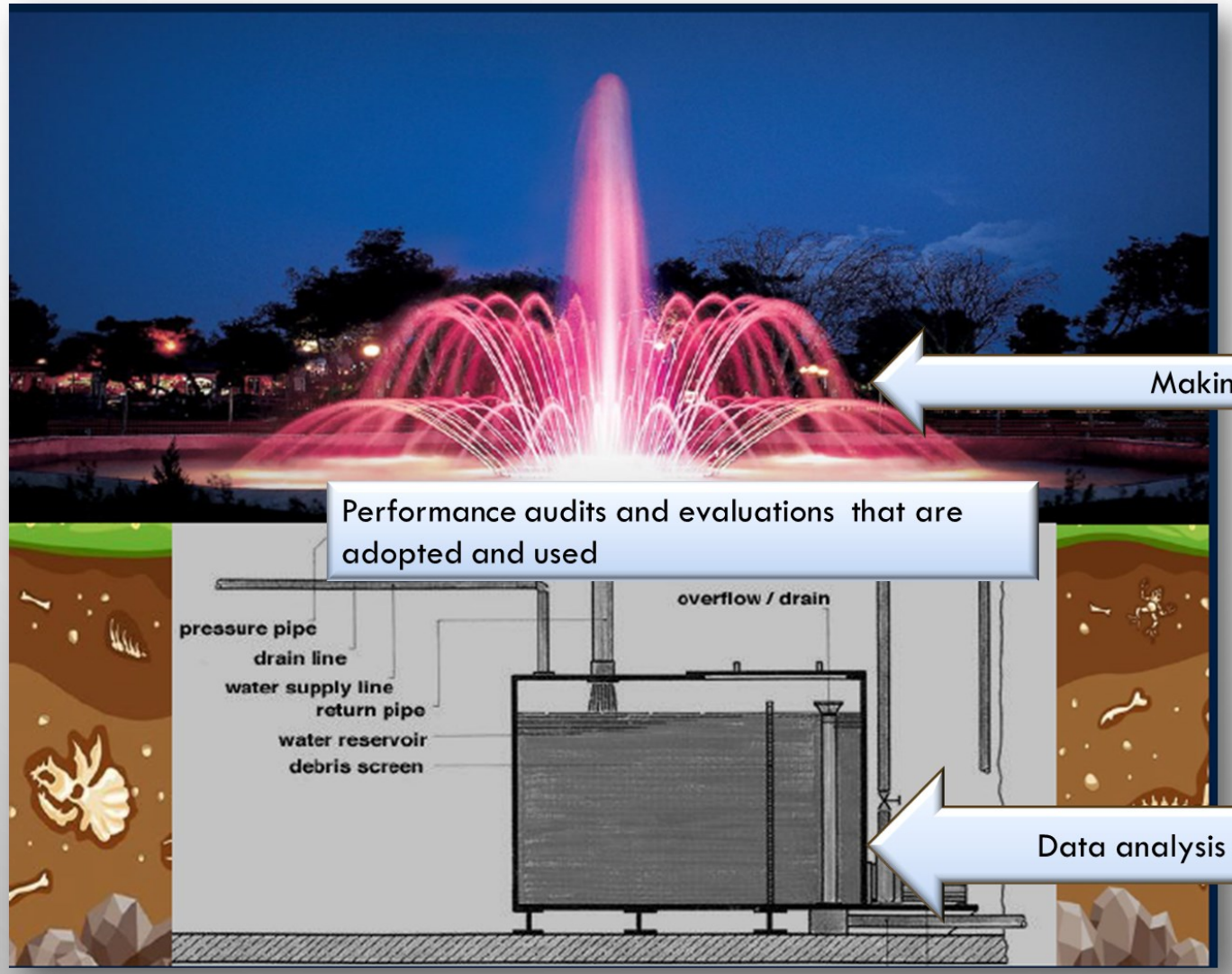
The awardee shall develop and maintain a set of operational metrics and outcomes of the NAIRR-OC strategically tied to the four key goals of the NAIRR enumerated in Section I. Introduction. NSF expects the development of operational success metrics and tracking of outcomes over time to be a significant activity for the NAIRR-OC. Such data should inform decisions on NAIRR-OC activities, future NAIRR offerings, and evaluation of the NAIRR investments as a whole. The operational metrics and collected outcomes will be refined in collaboration with the NAIRR PMO and will inform the performance of the NAIRR-OC.

Proposed metrics may include (but are not limited to): activity metrics for NAIRR users and Resource Providers, students and researchers served, and US geographic reach. Longer term outcome and impact metrics may include (but are not limited to): key innovations, patents or discoveries from researchers using the NAIRR, startups launched based on research supported by the NAIRR, regional innovation activity and job impacts, and the increase in percentage of publications at top AI conferences acknowledging NAIRR resources amongst others.

In addition, NSF may separately support an evaluation entity, form an advisory board, or establish other mechanisms to examine and advise on the entire NAIRR program. The NAIRR-OC will be expected to collaborate with these entities, including by sharing information with them as appropriate.

II.B. Building NAIRR Capabilities and Community

SPARKLY FOUNTAIN – EVALUATION THAT IS ADOPTED



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Data analysis embedded into practice

Terry McConnell, UNESCO

www.sia.govt.nz/social-investment/what-is-social-investment

Social Investment Agency
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Social investment | About *Kaupapa matua* | What we do *Ngā kaupapa-a-rōpū*

- Social Investment Fund
- Actionable insights
- Regional Data Explorer
- Community Insights Explorer
- Older People's Data Explorer
- Data systems leaders

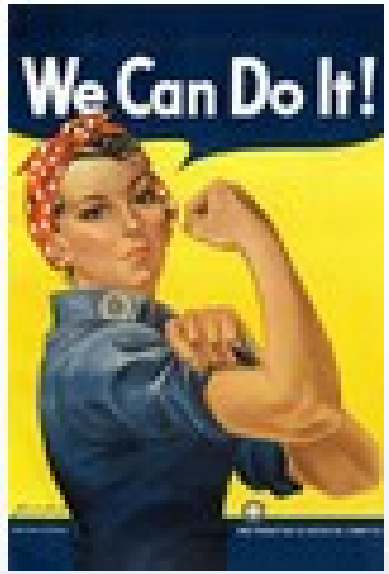
Home › Social investment › What is social investment?

What is social investmer

Information about the social investment appro

Building a fence at the top of the cliff

Social investment is about better enabling people, whānau, families, and communities to achieve outcomes and thrive, by using data, evidence and different ways of working.



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Sectors | Events | Resources | About | Get involved

Tracing public investment in AI research, workforce, education, and skills

Learn about how public research investments in artificial intelligence (AI) are affecting your community's workforce with timely, local, and actionable information.

Get involved | Explore the data

IRIS Institute for Research on Innovation & Science | The Ohio State University | Ohio Department of Job & Family Services | NSF | University of Michigan | DOL

COMMENTS AND QUESTIONS

- JULIA LANE
- JULIA.LANE@NYU.EDU
- HTTPS://JULIALANE.ORG/
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