

Democracy Lab

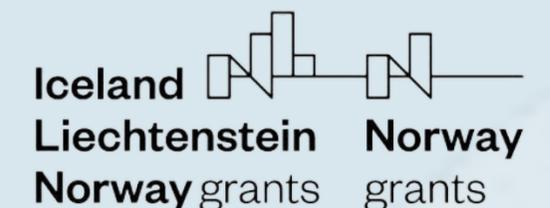
How to harness Smarter Crowdsourcing for stronger EU policies and democracy

19 September 2023, Brussels

With the support of:



dreamocracy



Dangerous times for democracy...

What can we do?

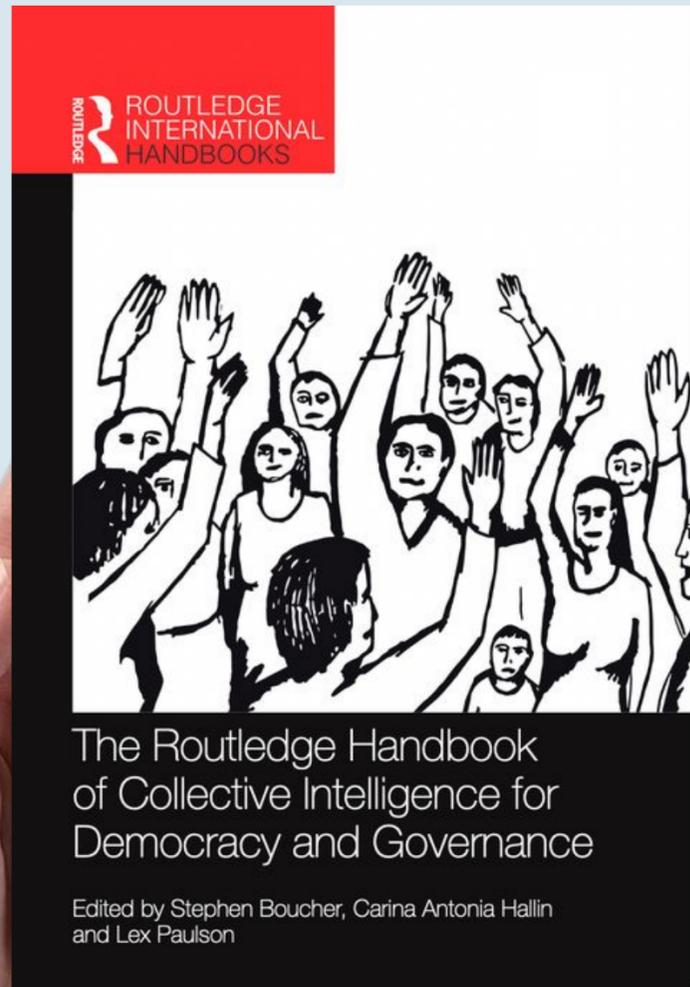


Democracy is in crisis because today's governments largely fail to capitalize on their **greatest untapped resource: the collective intelligence of their citizens.**

Prof. Hélène Landemore,
Yale University



The Routledge Handbook of Collective Intelligence for Democracy & Governance



3

- 70 High profile contributors
- 36 Case studies from around the world
- 1st Handbook with latest science at the intersection of politics and CI

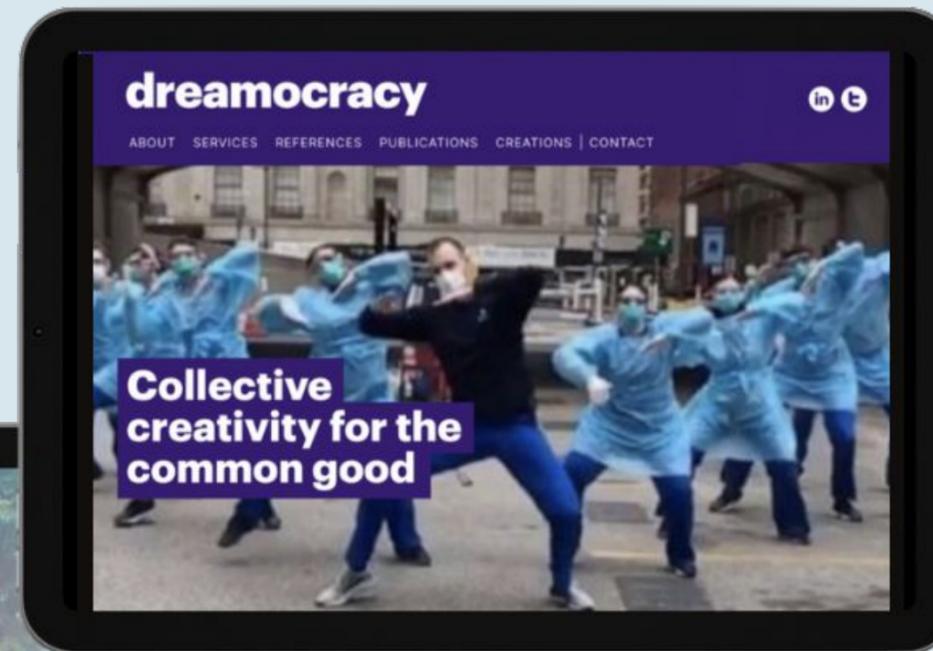
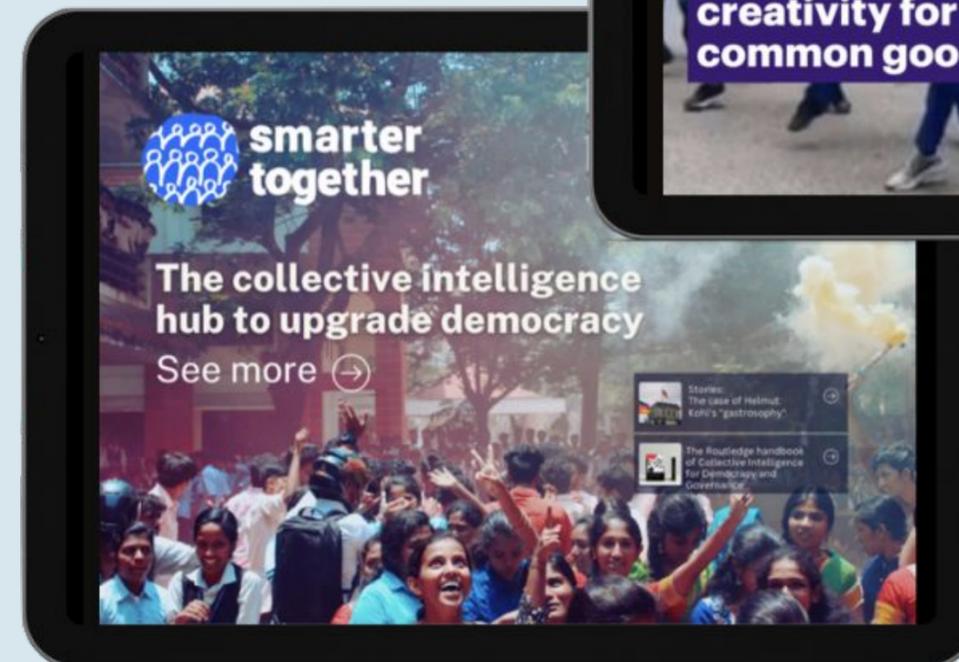


Our mission

Smarter Together

The Collective Intelligence Hub for Stronger Democracy

- NGO
- Research in action
- Capacity-building
- Mentorship
- Publications



Dreamocracy

Collective Creativity for the Common Good

- Consultancy
- Workshops
- Trainings

Intro

Why crowdsourcing and CI are key to public administration's future

[Stephen Boucher](#)

stephen.boucher@dreamocracy.eu



**smarter
together**

Our definition of CI



Collective intelligence (CI) is the capacity of groups to outperform individuals in problem-solving, innovation, prediction, creativity, and other cognitive tasks.

6

$$1 + 1 > 2$$

The science of getting smarter together

CI combines different perspectives to paint a fuller picture



Key drivers of CI done well

1 Include *more* people

Larger groups tend to be more intelligent, under the right conditions...

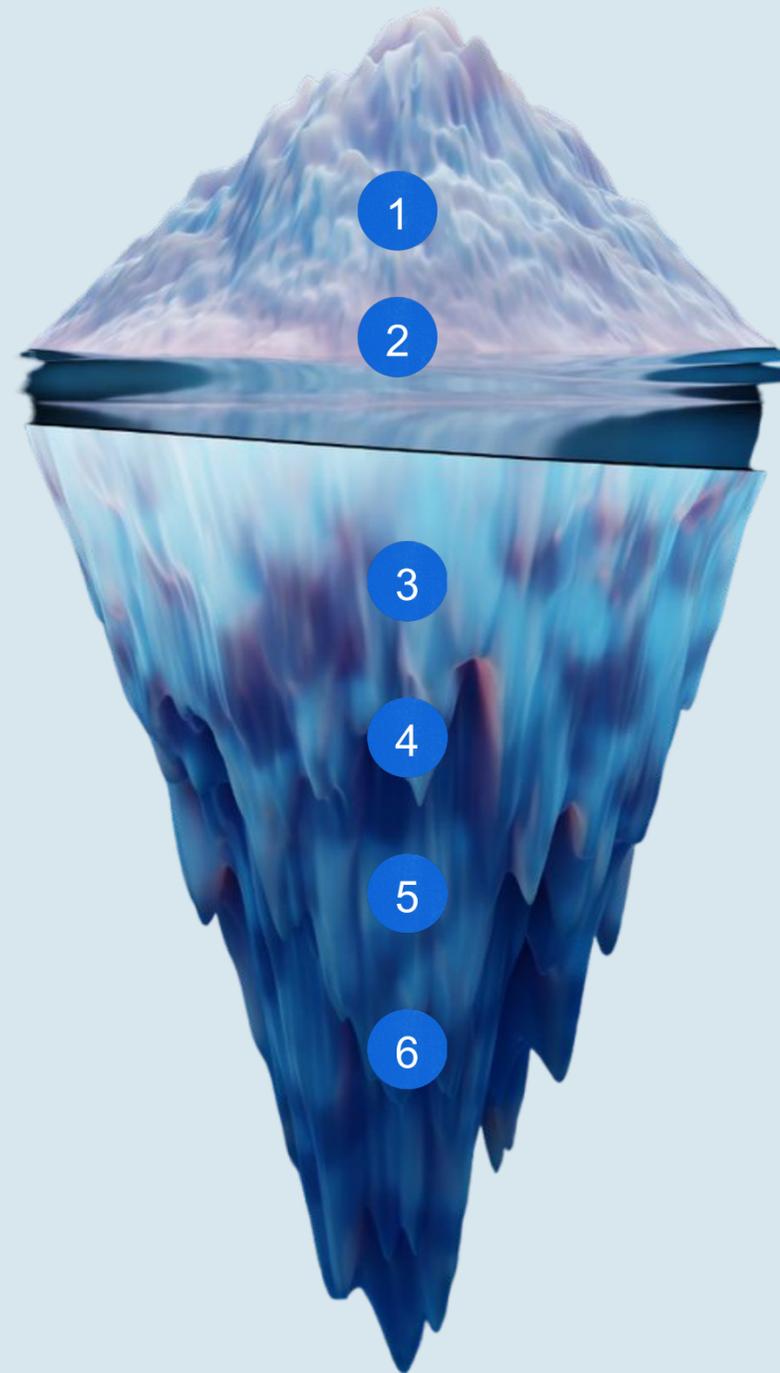
3 Deliberate well

Open, respectful, and informed dialogue thanks to:

- Accurate and balanced information
- Substantive balance of arguments
- Participants represent all major positions
- Equal consideration of arguments on their merits
- Conscientiousness

5 Aggregate smartly

Combine participants' opinions into a collective judgment or decision in fair and accurate ways



2 Include *different* people

Maximize cognitive diversity thanks to the individuals' different perspectives, experiences, abilities, values, and knowledge.

4 Motivate properly

Collective intelligence is fostered by a combination of intrinsic and extrinsic motivation, depending on the task at hand.

6 Extend

Collective thinking is enhanced through specially designed spaces and artifacts that extend the minds of the participants

Public governance: 4 types of legitimacy

Impact
* Adequacy of policy results with population's expectations

Process
🚀 Acceptance of preference aggregation and decision-making procedures

Input
🔌 Responsiveness to citizen concerns as a result of participation by the people

Emotions
❤️ Adherence to attachment to norms, values, deeper aspirations and fears



Agenda | Morning



10:15 Why better crowdsourcing for policy making?

Stephen Boucher, founder of Smarter Together and Dreamocracy



10:30 What can crowd forecasting do for policy makers?

Dr. Emile Servan-Schreiber, Managing Director at Hypermind, Affiliate Professor at UM6P School of Collective Intelligence



11:15 The case for crowdsourcing EU legislation with citizens

Assya Kavrakova, Executive Director of the European Citizen Action Service (ECAS)

Agenda | Morning



**12:00 Crowdsourcing also for legislative monitoring:
the case of environmental compliance**

Dr. Gitte Kragh, Researcher at Aarhus University, Senior Ecologist at the Nordic Agency for Development and Ecology (NORDECO)



**12:30 What next? How to make crowdsourcing and
policy makers (even) smarter**

Anirudh Dinesh, Board Advisor at Foundation for Community Consensus, Research Fellow at The Governance Lab and at The Burnes Center for Social Change

Agenda | Afternoon



14:15 **Crowdsourcing for social innovation and faster change**

Stephen Boucher, founder of Smarter Together and Dreamocracy



14:30 **People-led innovation**

Anirudh Dinesh, Board Advisor at Foundation for Community Consensus



15:00 **Inspiration from the social innovation experts**

Yannick Fischer, Ashoka Europe
Alain Boribon, Citizen Fund

Agenda | Afternoon

15:45

Co-coaching session

Policy makers, CSOs and social innovators imagine how they could better harness crowdsourcing, with all experts providing advice.

Facilitated by Stephen Boucher, Smarter Together and Dreamocracy



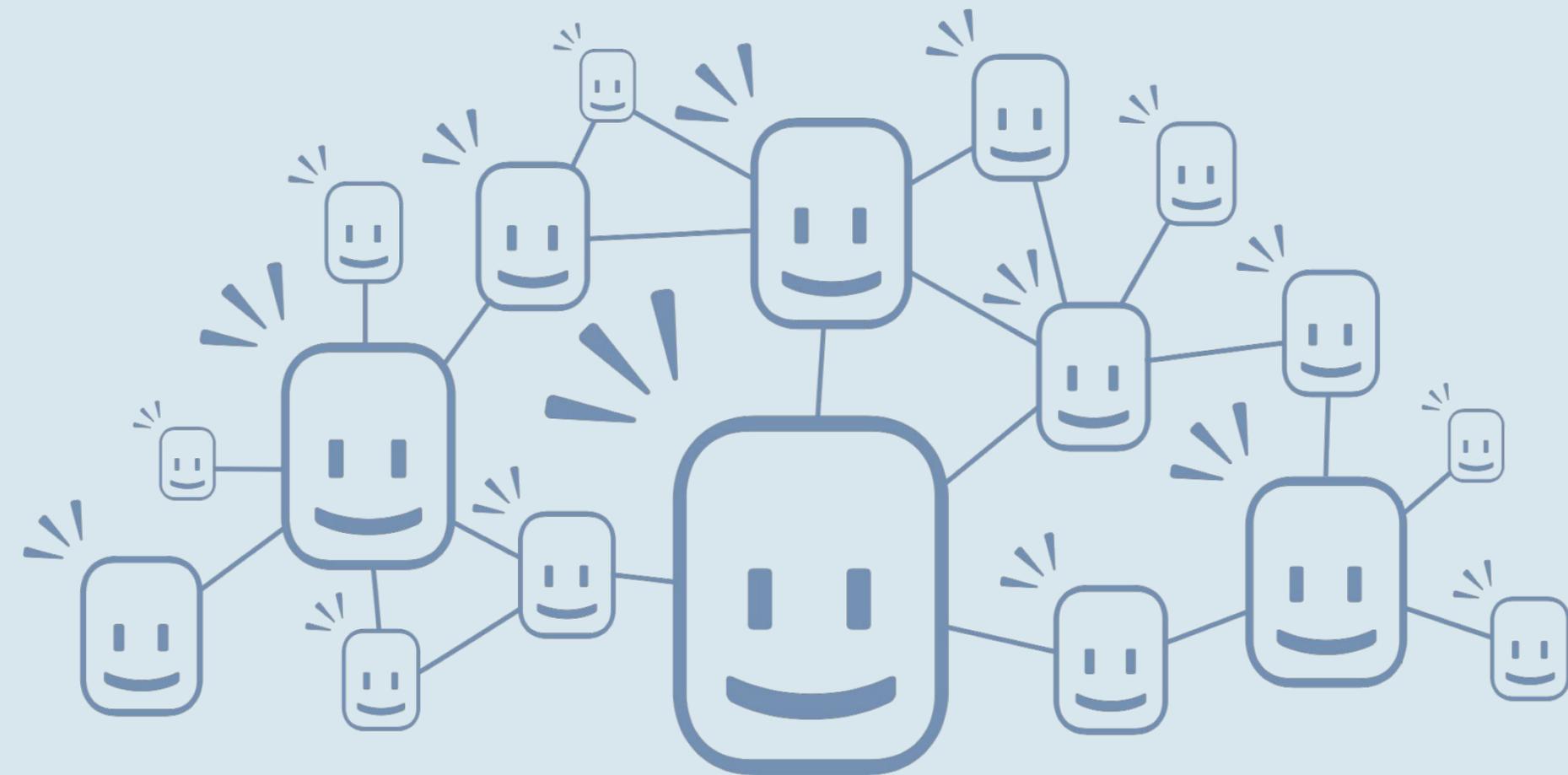
16:45

Conclusions

Keynote 1

Crowd forecasting superpower

Emile Servan-Schreiber



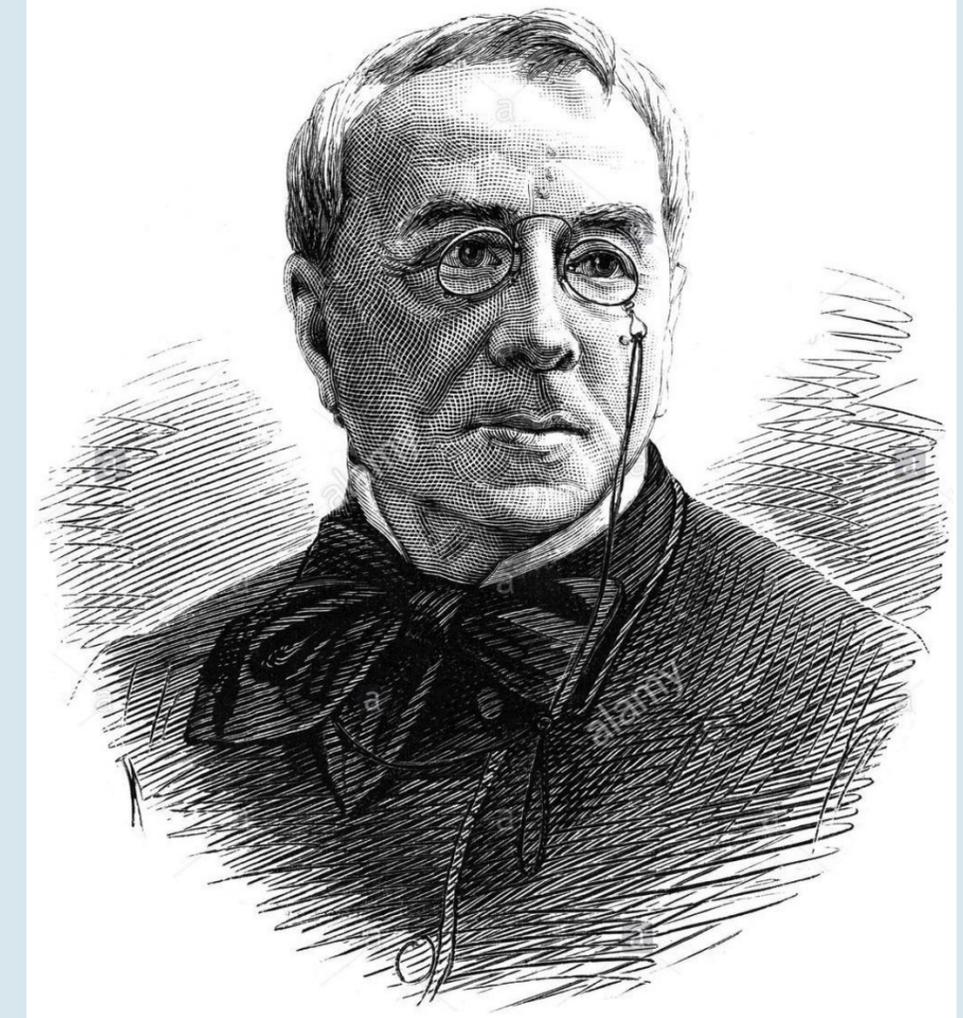


Gouverner, c'est prévoir.

Le calcul des probabilités, appliqué à la vie des nations est le fondement de toute haute politique.

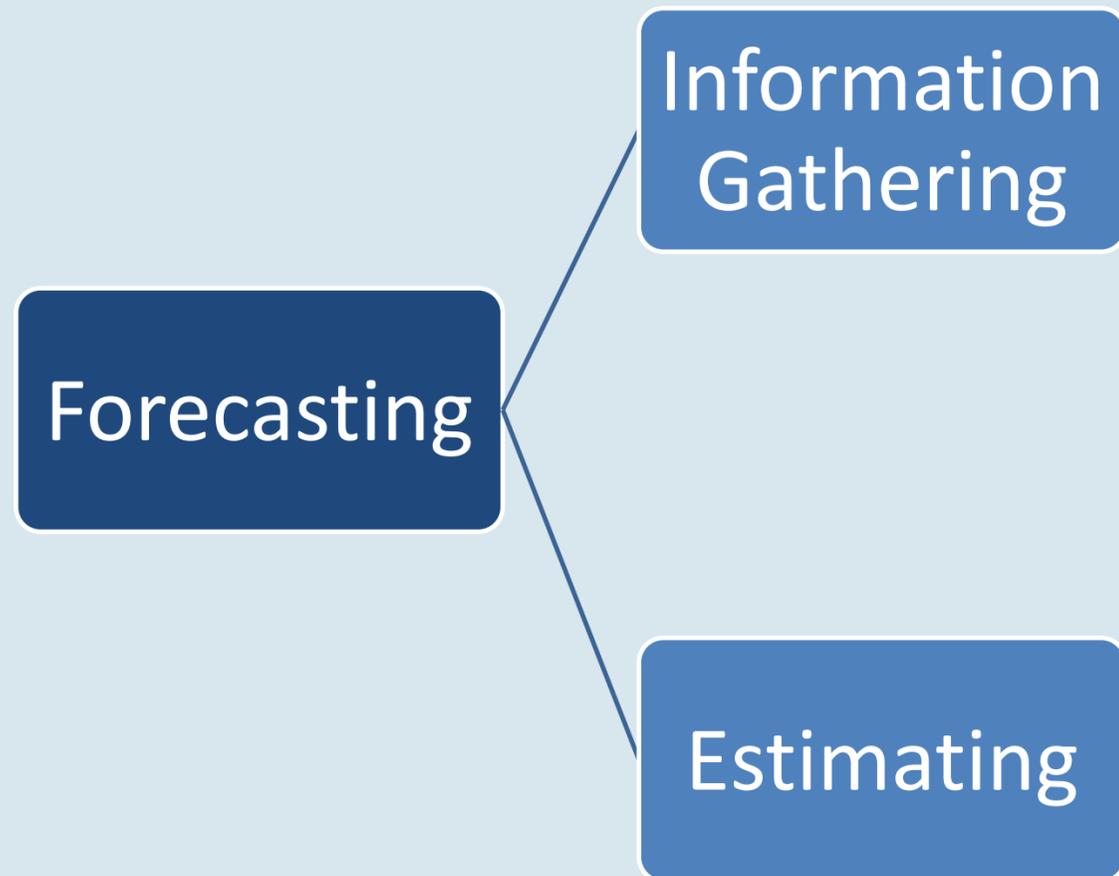
Selon que ce calcul est rigoureux ou faux, approfondi ou dédaigné, la politique est glorieuse ou funeste, grande ou petite...

- Emile de Girardin

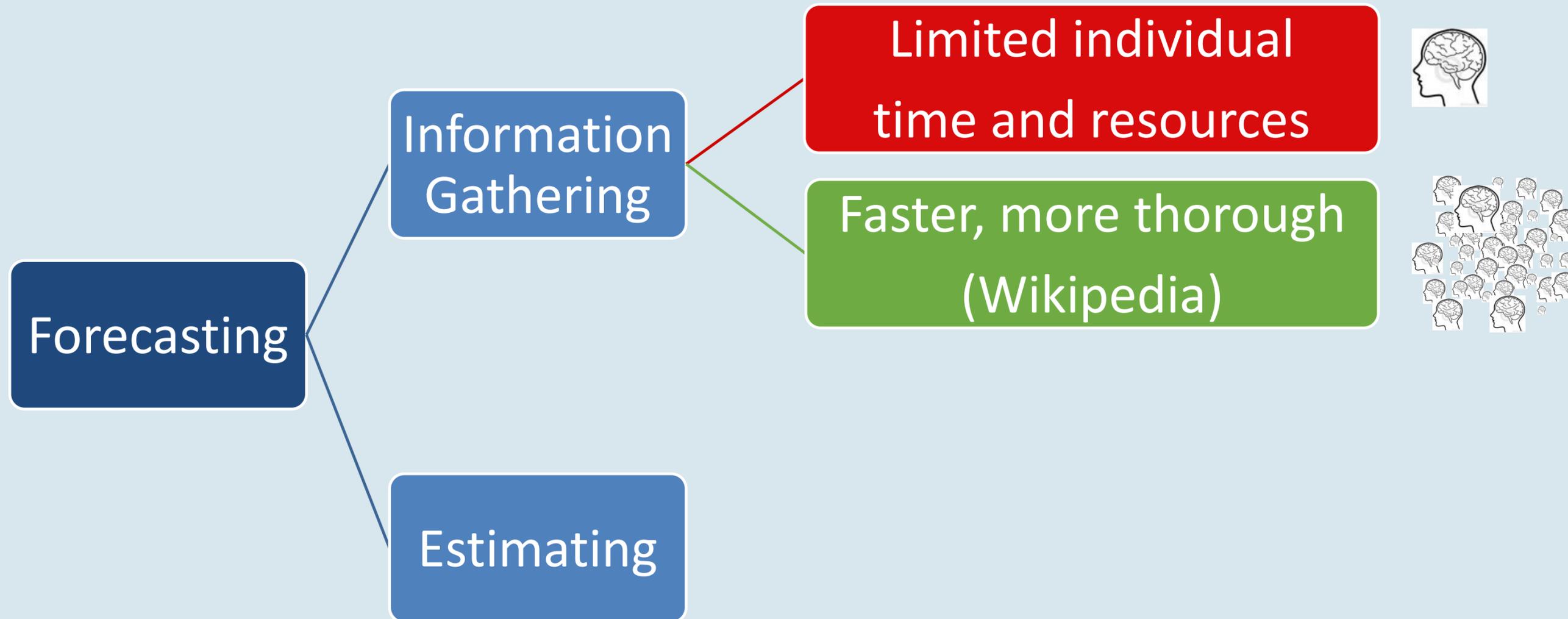


In English: Probability estimation, applied to the life of nations, is the foundation of all high politics. Depending on whether the estimations are rigorous or faulty, thorough or neglected, politics is glorious or disastrous, great or small.... Governing is predicting.

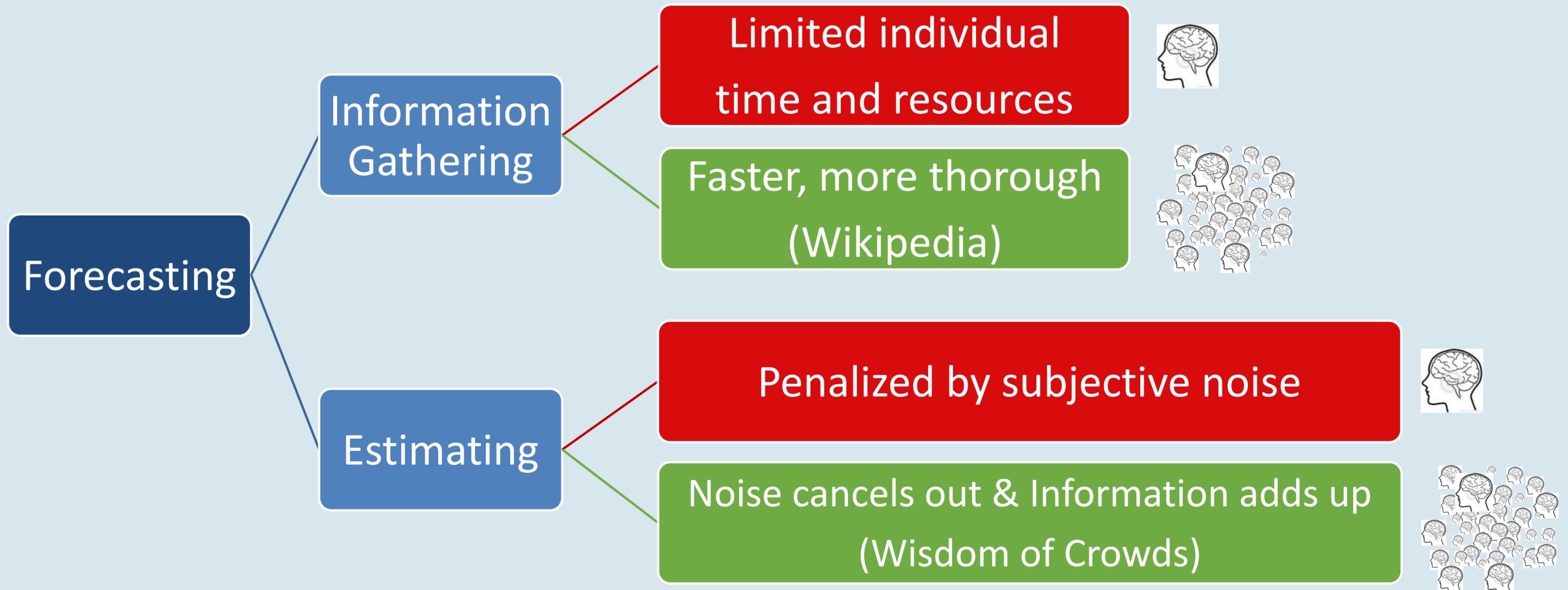
Forecasting is enhanced by crowdsourcing



Forecasting is enhanced by crowdsourcing



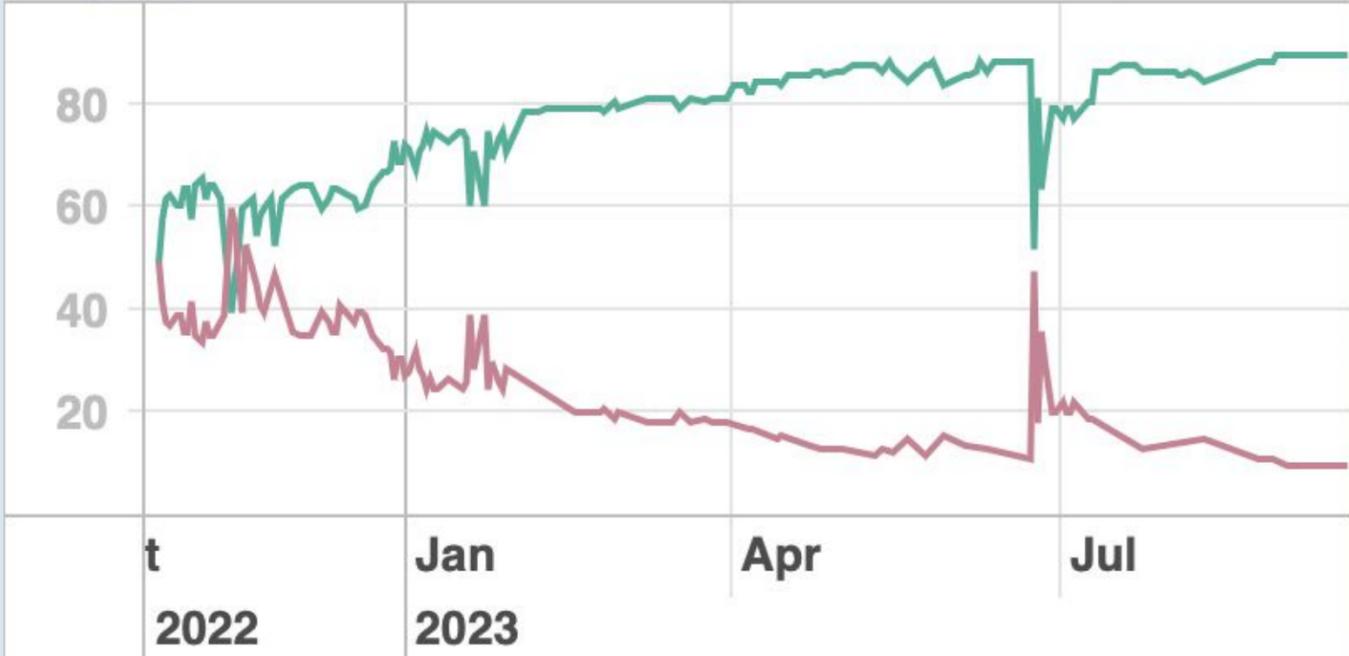
Forecasting is enhanced by crowdsourcing





Will Vladimir Putin remain President of Russia until December 31, 2023?

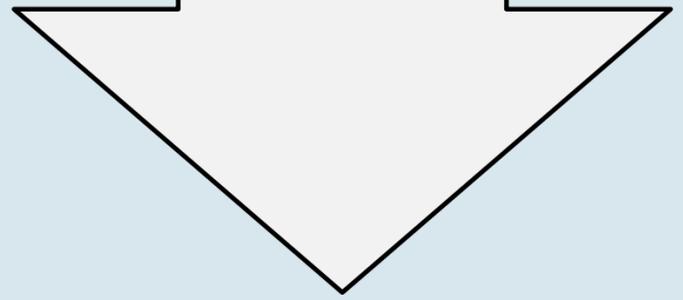
Yes	90.0%
No	10.0%



Winner-Take-All PREDICTION MARKET

Winning Option = 100

Losing Option = 0

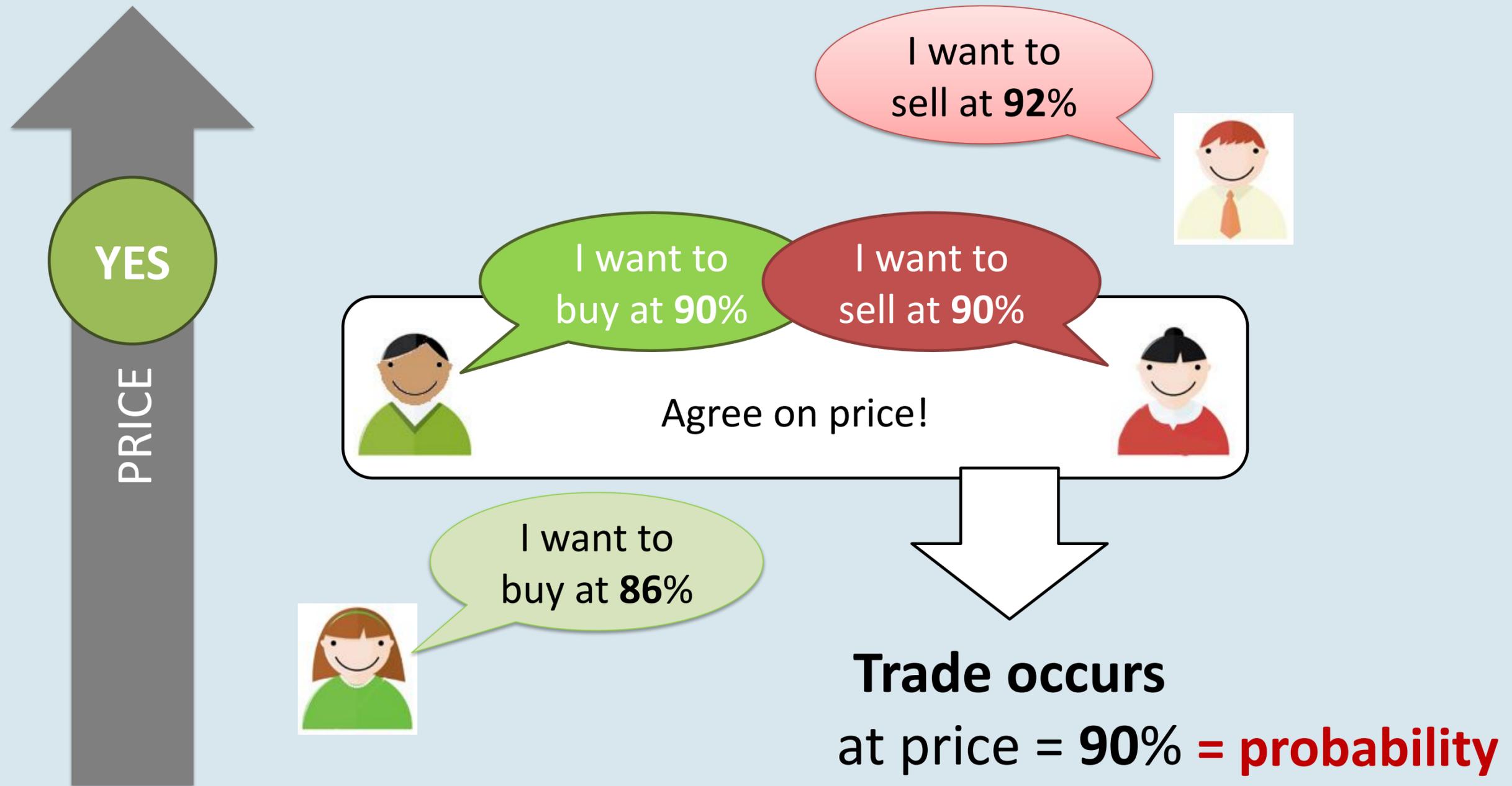


Yes = 90%

No = 10%

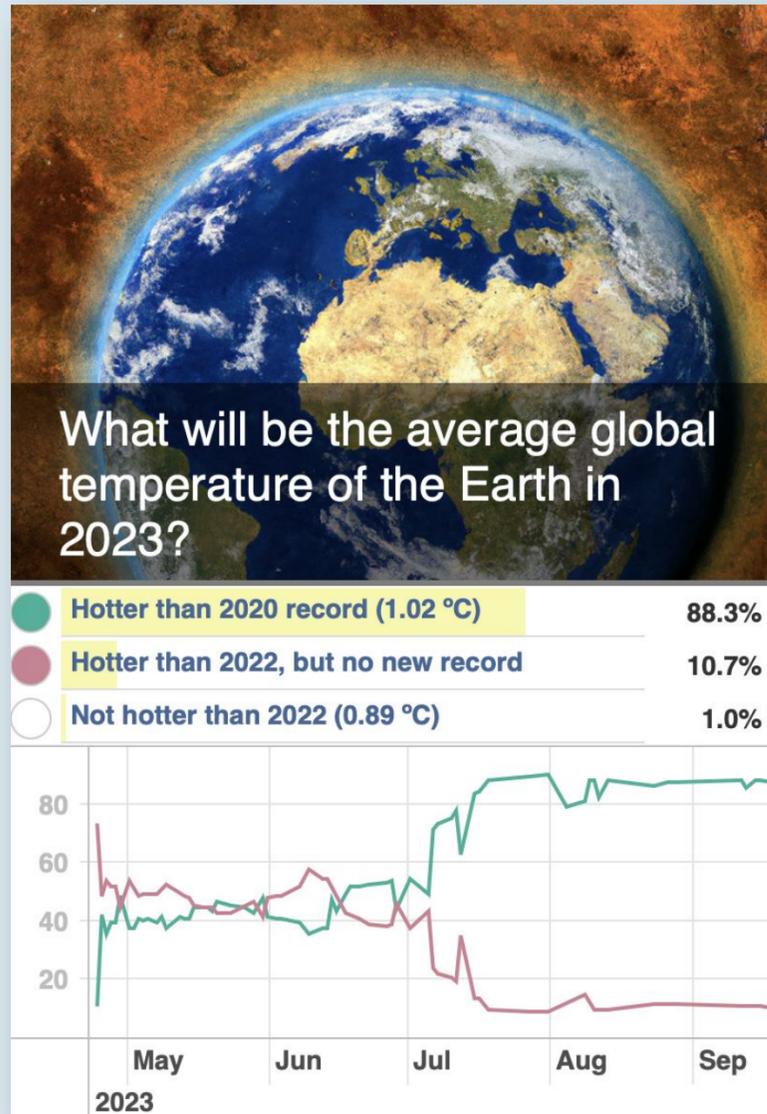
Trading Price = Probability

Basic market dynamics



Reliable probabilities on anything

Climate



Geopolitics



Economy



Politics



Reality is aligned with the trading prices

DATA SET

816 questions (political, geopolitical, economic)

2,535 possible outcomes

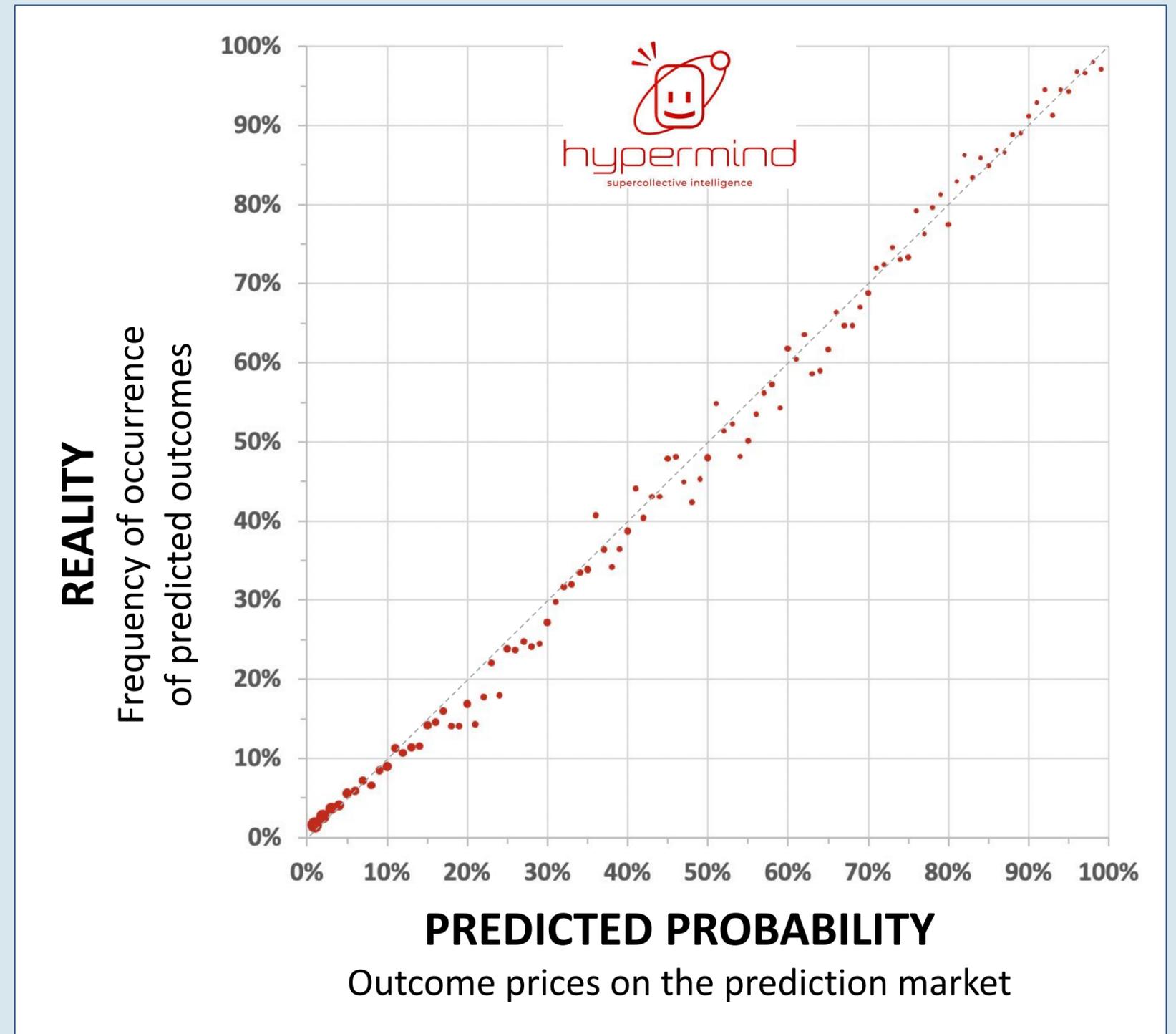
875,735 trades (predictions)

8.5 years (Jun 2014 - Dec 2022)

Linear Regression Fit

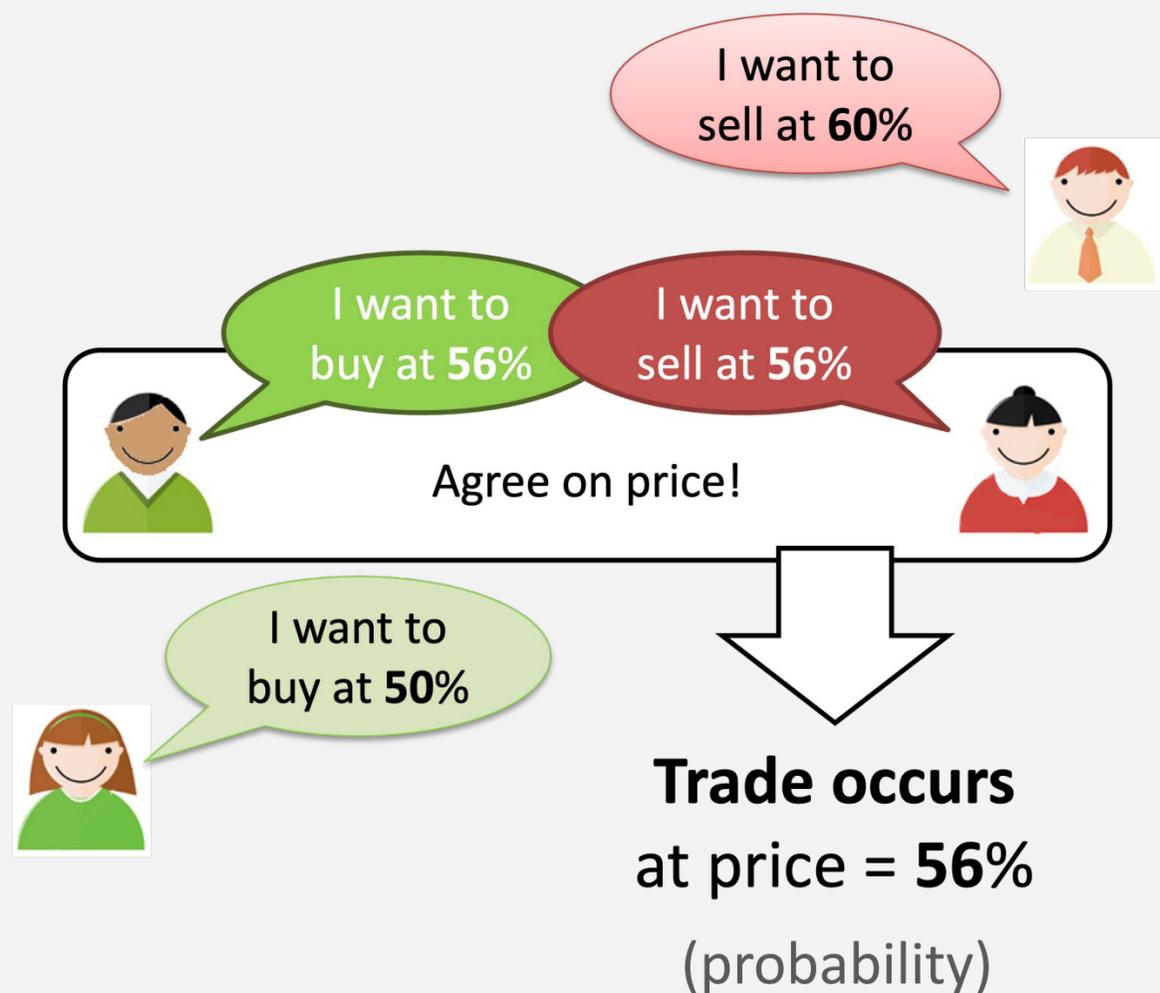
Reality = Predicted - 1%

$R^2 = 0.995$

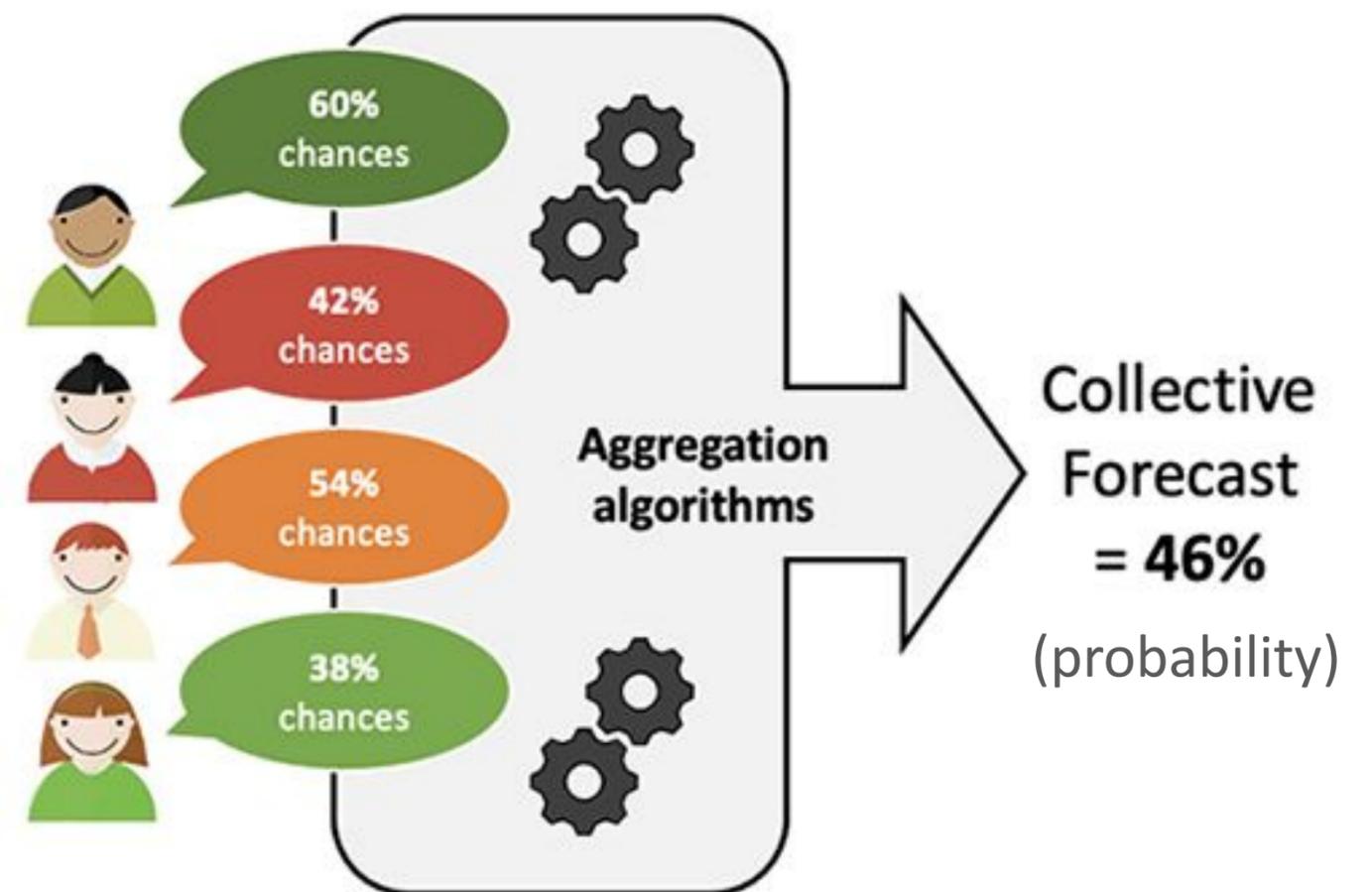


Another way to aggregate crowd forecasts

Prediction Market



Prediction Poll



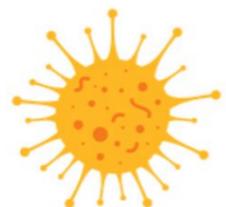
Forecasting the severity of virus outbreaks

- **15** months
- **61** questions
- **19** viruses

Ebola, Influenza, Dengue,
Cholera, Measles, ... Covid

How many WHO member states will report more than 1000 cases of COVID-19 on or before April 2, 2020?

- **15** states or less
- **16 to 30** states
- **31 to 45** states
- **46** states or more



**DISEASE
PREDICTION**



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BLOOMBERG SCHOOL
of PUBLIC HEALTH

Center for
Health Security

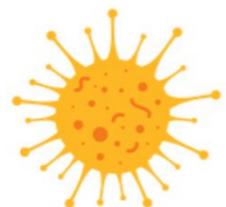
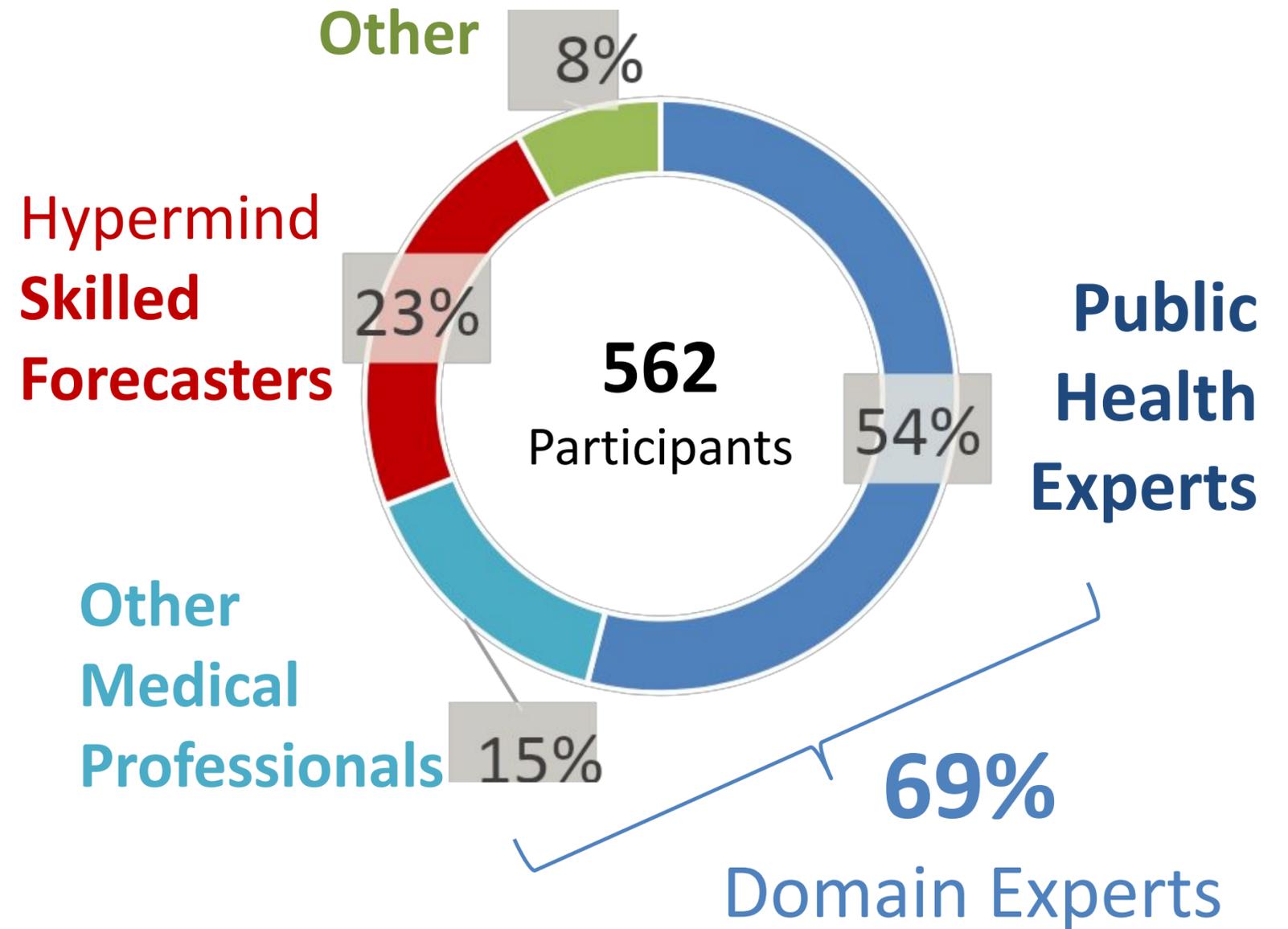
x

hypermind 

Forecasting the severity of virus outbreaks

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**DISEASE
PREDICTION**



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Center for
Health Security

x


hypermind

How many WHO member states will report more than 1000 confirmed cases of COVID-19 on or before April 2, 2020?

MY FORECAST

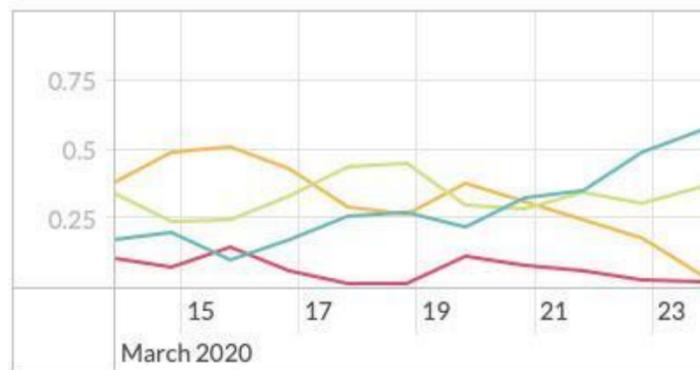
Save Reset ?

<input type="checkbox"/>	15 WHO member states or fewer	0 %
<input type="checkbox"/>	16-30 WHO member states	7 %
<input type="checkbox"/>	31-45 WHO member states	41 %
<input type="checkbox"/>	46 WHO member states or more	52 %

MY LOG

1%
1%
7%
92%

CROWD FORECAST



QUESTION DETAILS

MY ALARMS

FORUM

NEWS

Mar 23, 2020 04:31

linch:

New forecast:

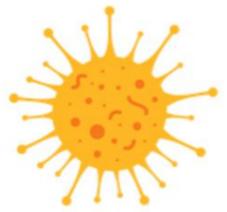
- 15 WHO member states or fewer: 0
- 16-30 WHO member states: 0
- 31-45 WHO member states: 2

Question

Forecast Input

Crowd Forecast

Discussion



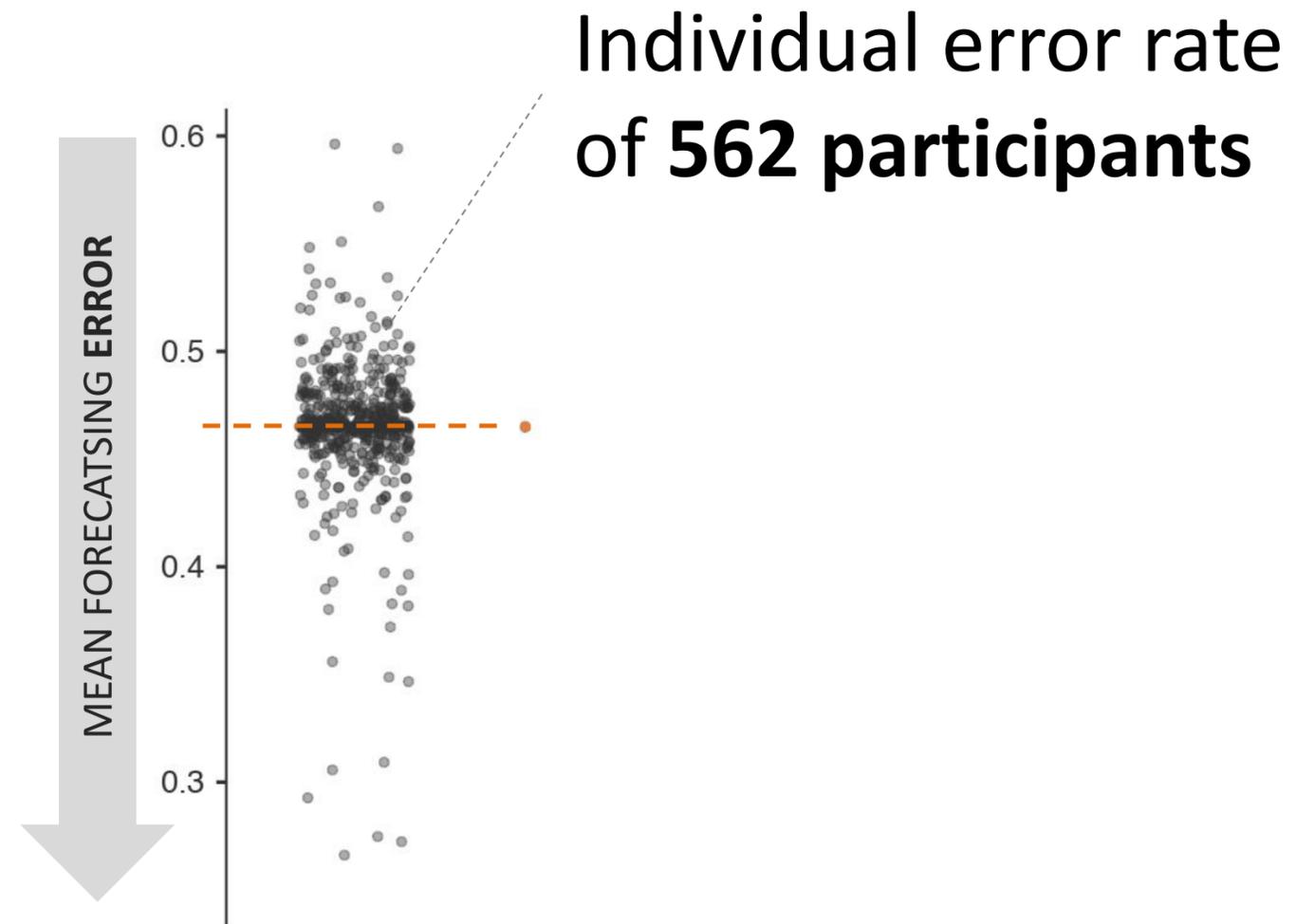
DISEASE PREDICTION

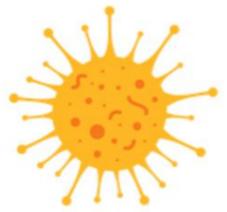


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Center for
Health Security

x





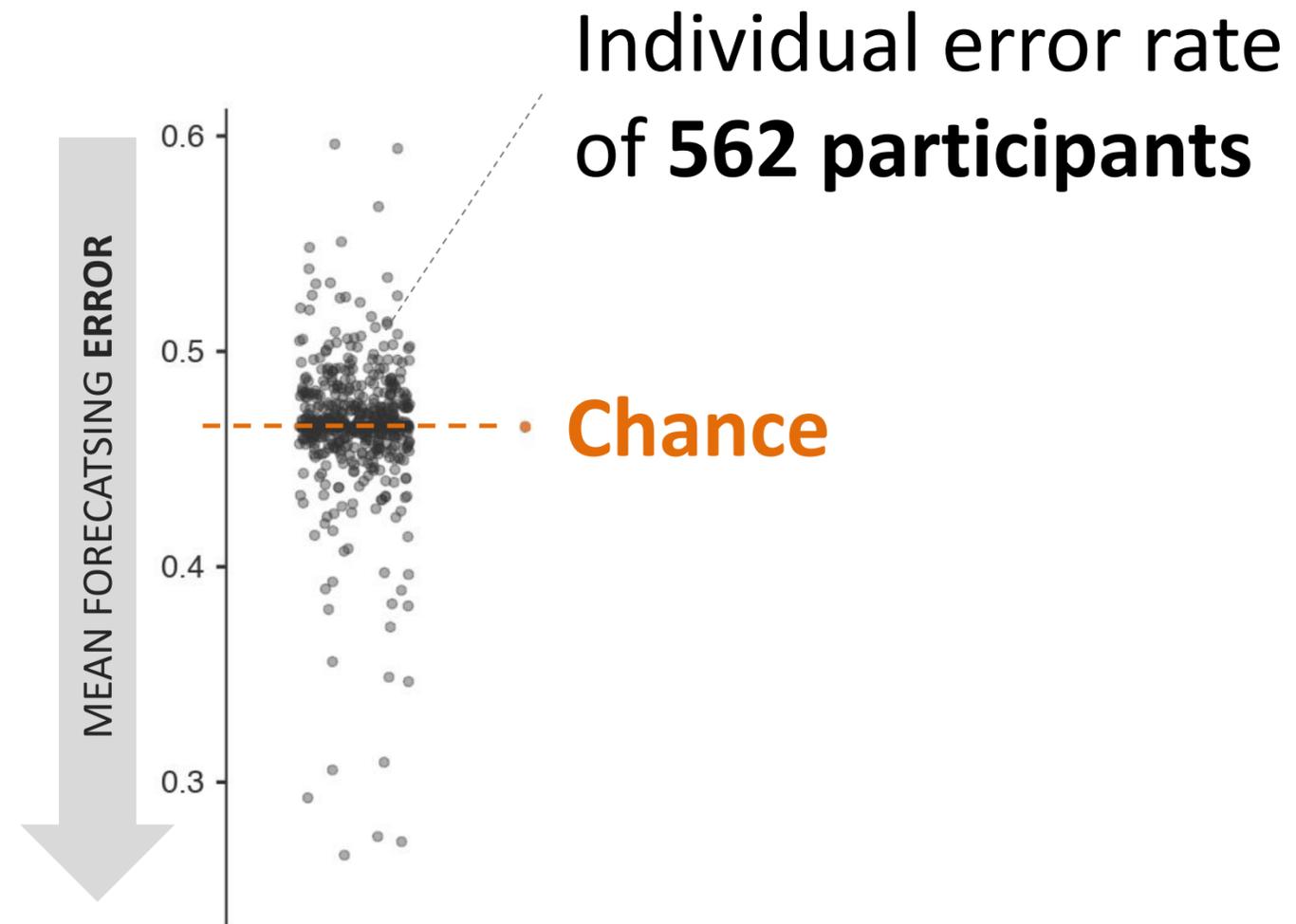
DISEASE PREDICTION

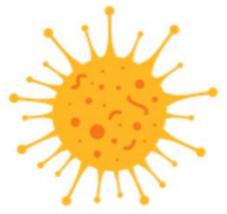


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DISEASE PREDICTION



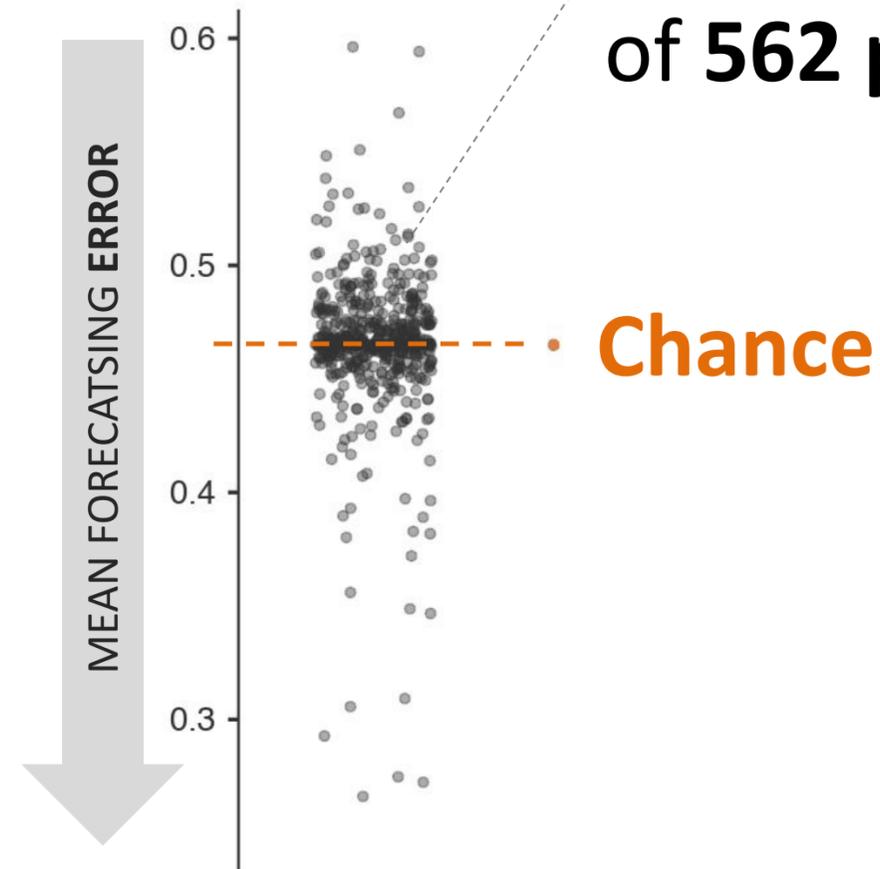
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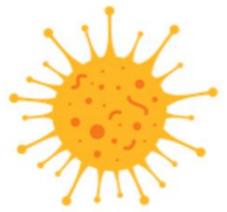
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x



Individual error rate
of **562** participants





DISEASE PREDICTION



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Health Security

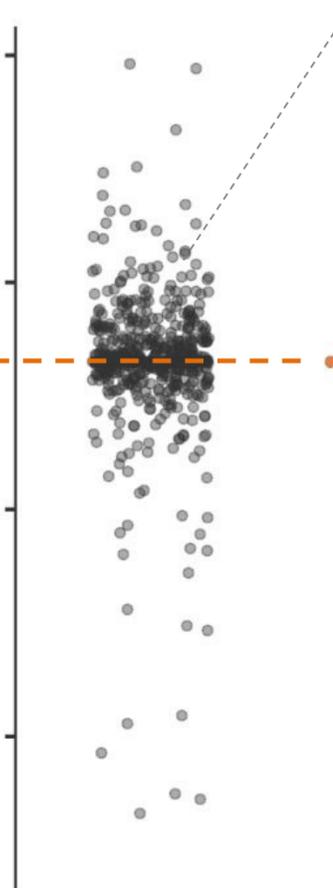
x



- Forecasting is **hard work**
- Data is **sparse and noisy**



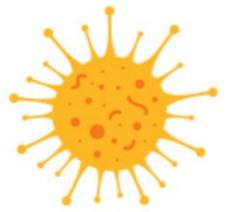
0.6
0.5
0.4
0.3



Individual error rate
of **562 participants**

Chance





DISEASE PREDICTION



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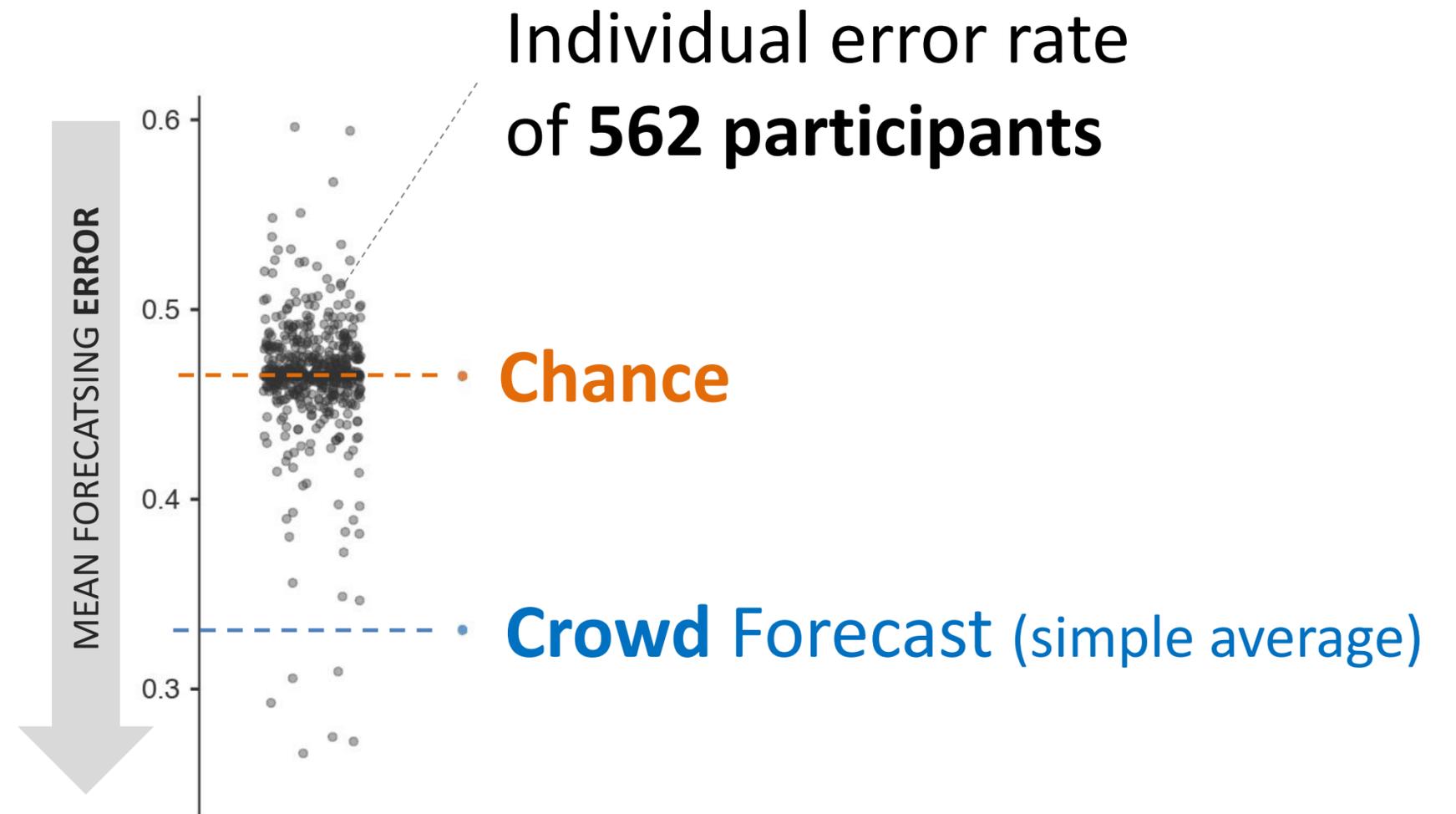
Center for
Health Security

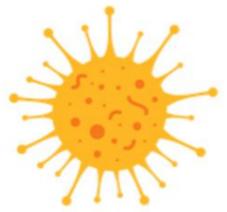
x



« Wisdom of Crowds »

Averaging combines
knowledge and cancels noise





DISEASE PREDICTION



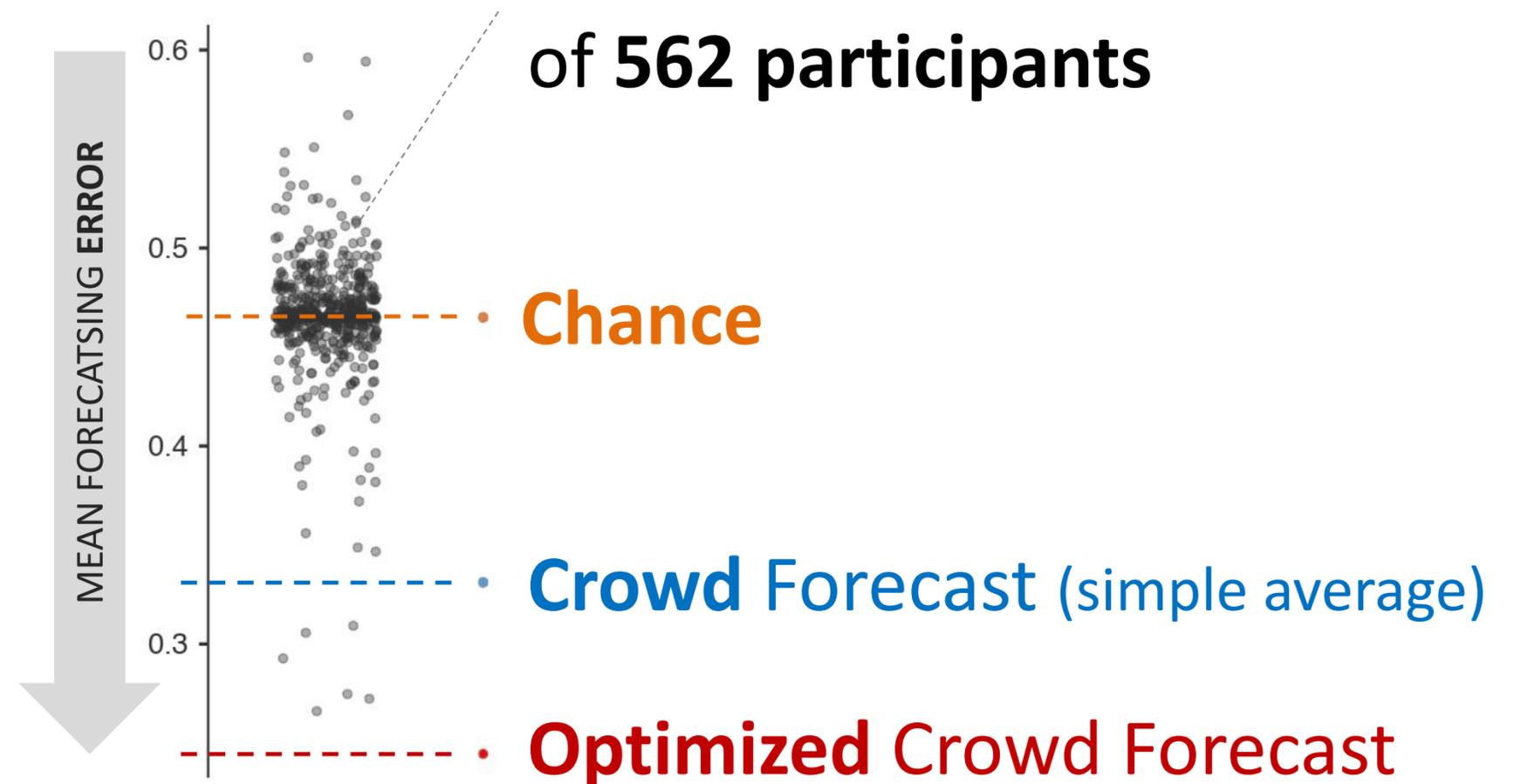
JOHNS HOPKINS
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of PUBLIC HEALTH

Center for
Health Security

x



Individual error rate
of **562 participants**



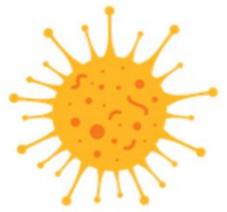
Chance

Crowd Forecast (simple average)

Optimized Crowd Forecast

- ✓ Timeliness
- ✓ Past Accuracy
- ✓ Updating Frequency

Algorithms help optimize collective intelligence



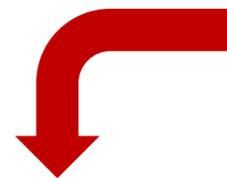
DISEASE PREDICTION



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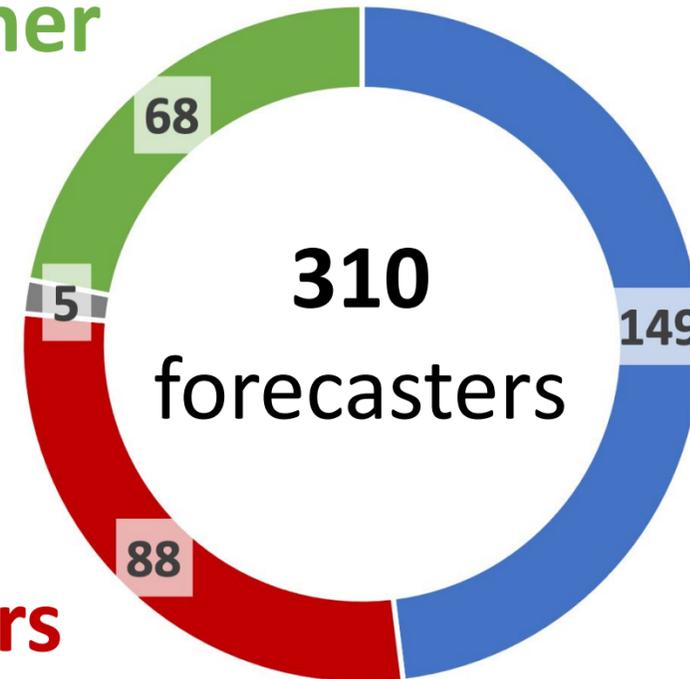
x



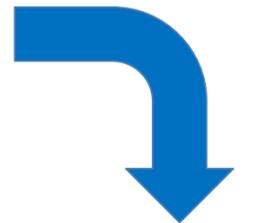
**Skilled
Forecasters
from Hypermind**

Neither

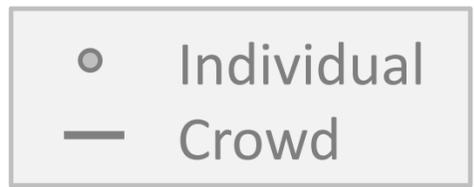
Both



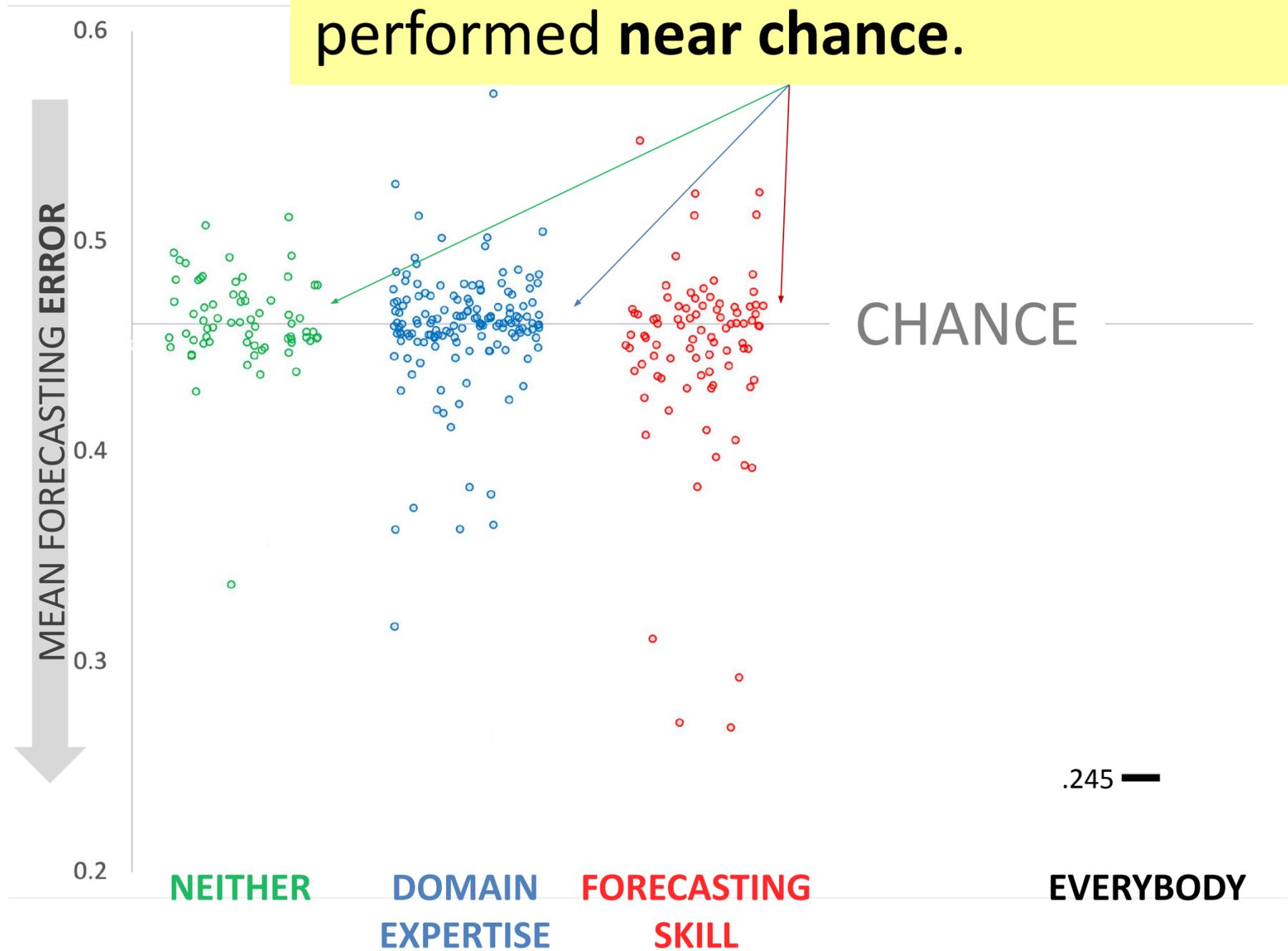
**Domain Experts
Public Health
Professionals**



Performance of individuals



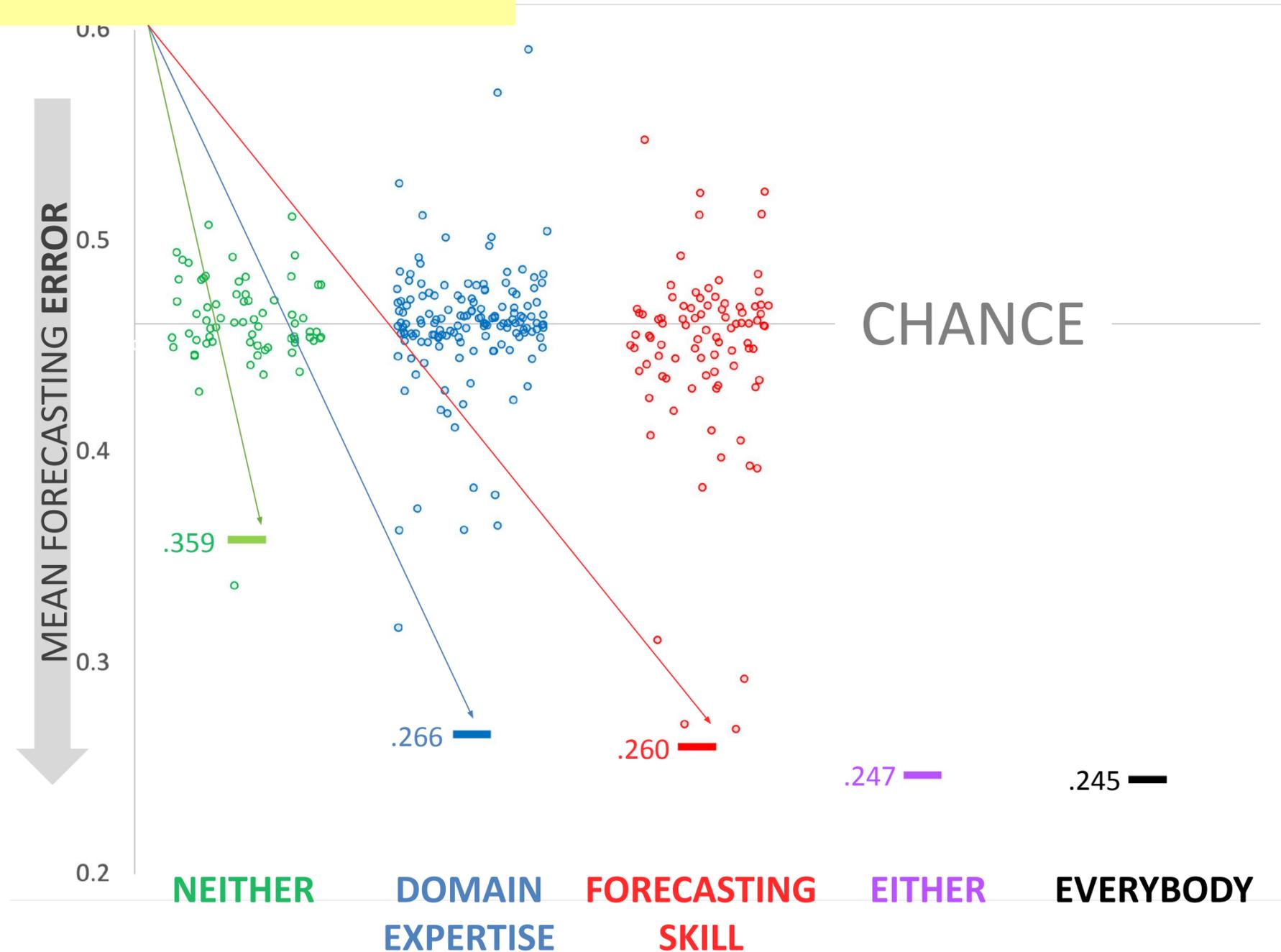
Median forecaster in every cohorts performed **near chance**.



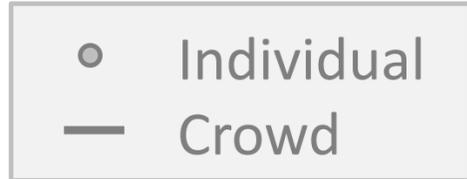
Performance of sub-crowds



Strong “wisdom of crowd” effect in all sub-crowds.

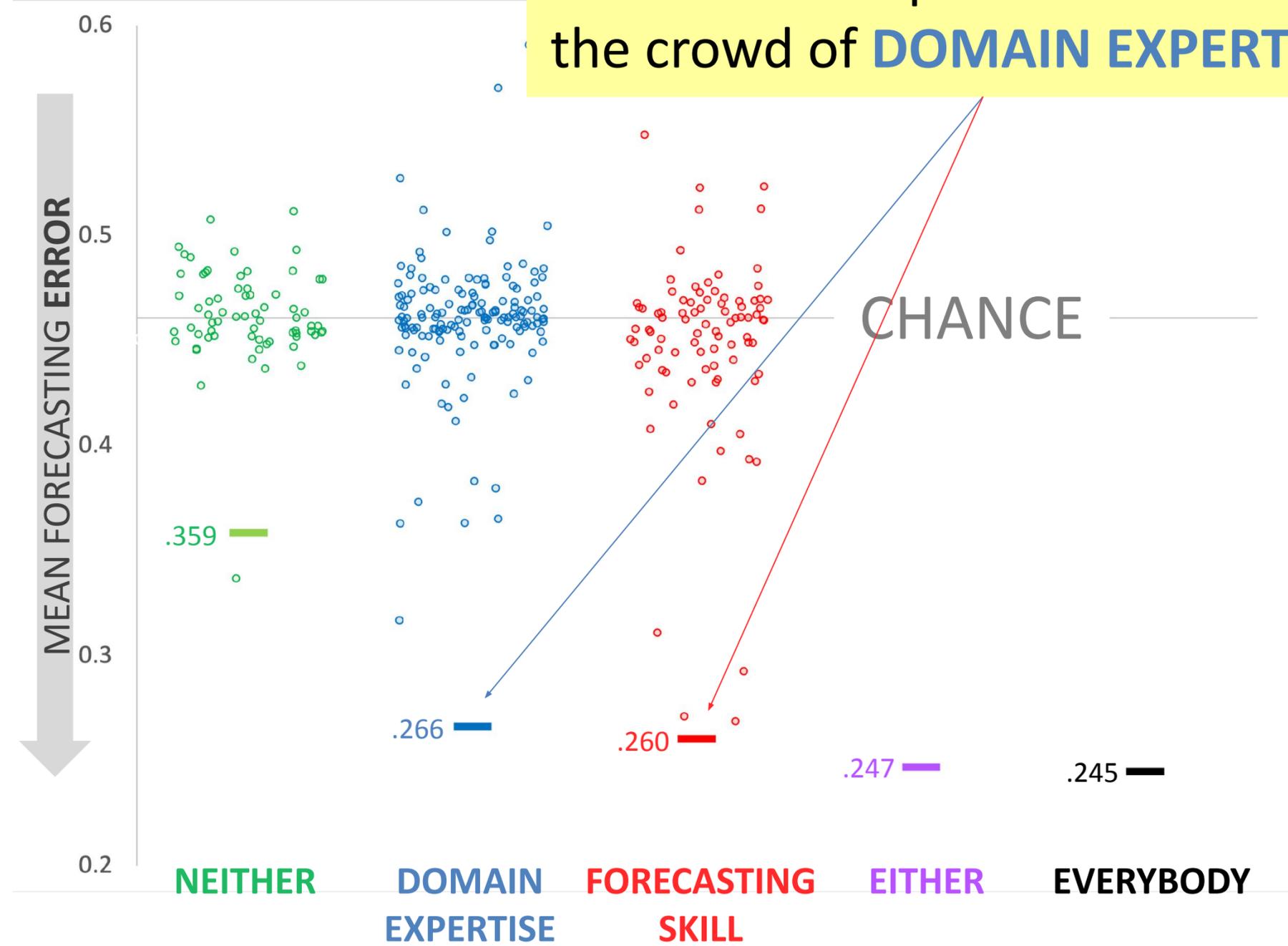


Performance of sub-crowds



Strong “wisdom of crowd” effect in all sub-crowds.

The crowd of **SKILLED FORECASTERS** performed as well as the crowd of **DOMAIN EXPERTS**.



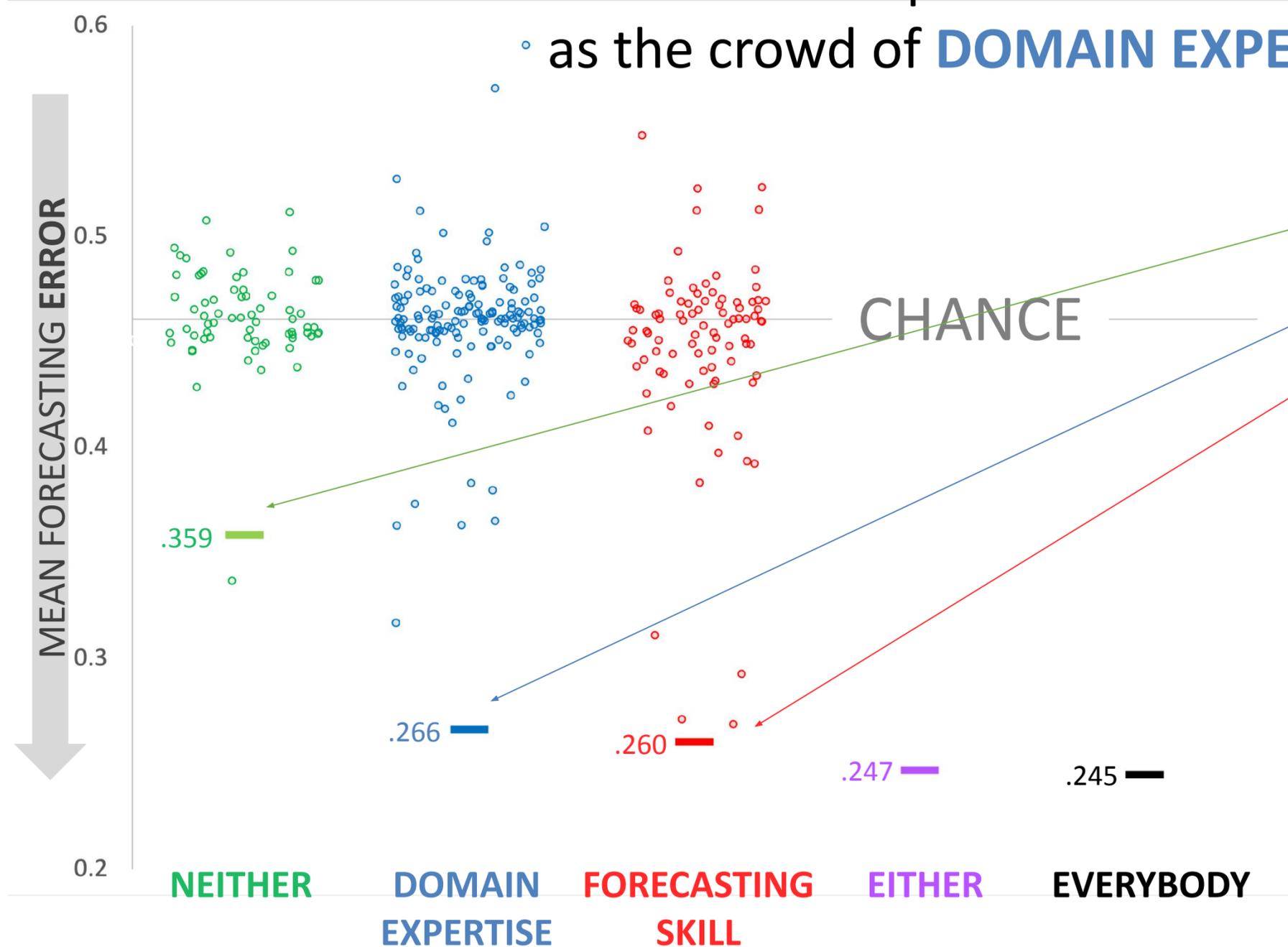
Performance of sub-crowds



Strong “wisdom of crowd” effect in all sub-crowds.

The crowd of **SKILLED FORECASTERS** performed as well as the crowd of **DOMAIN EXPERTS**.

Both outperformed the crowd with **NEITHER** skill nor expertise.



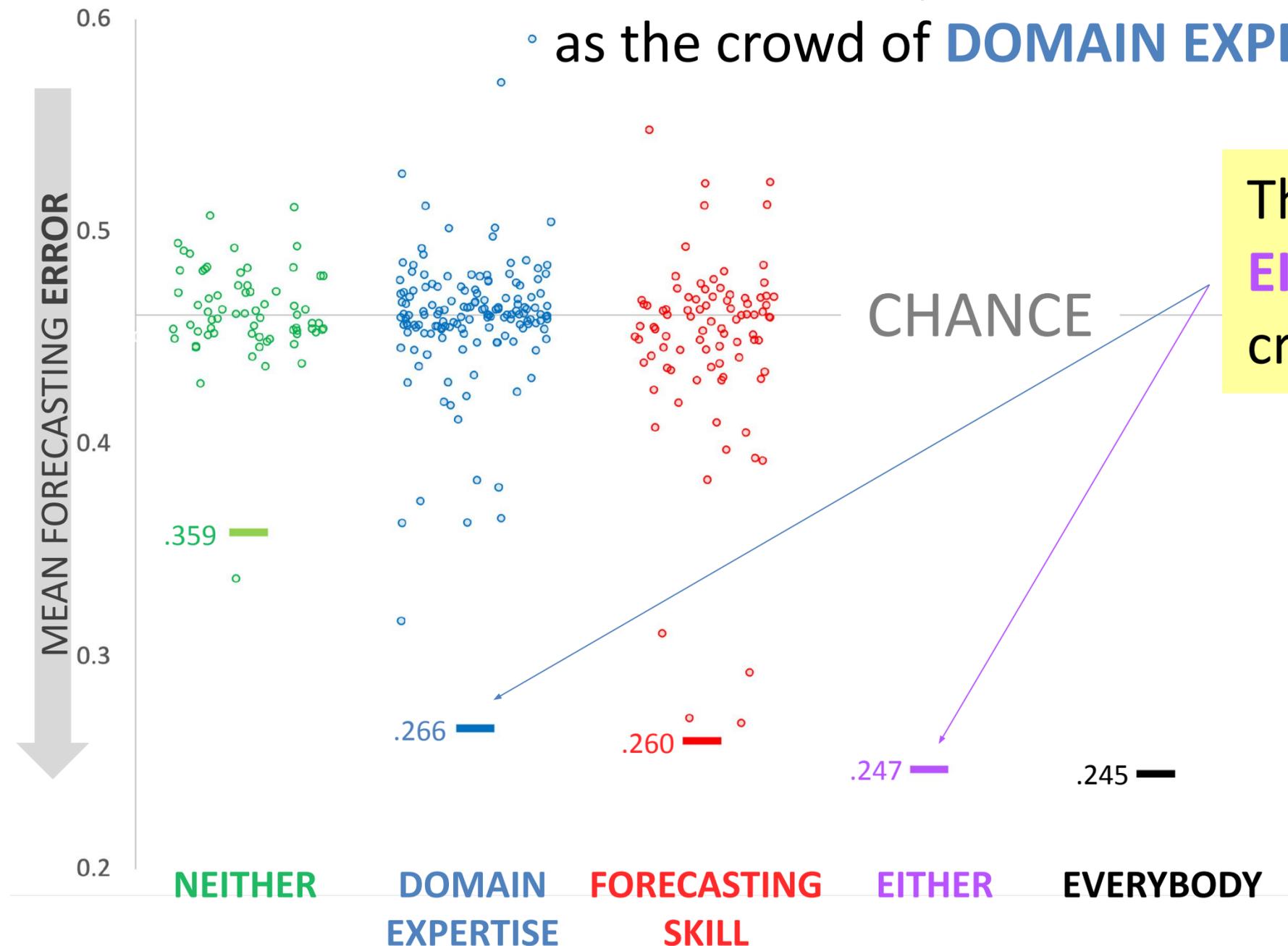
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The mixed crowd of **EXPERTS OF EITHER KIND** outperformed the crowd of **DOMAIN EXPERTS ONLY**.

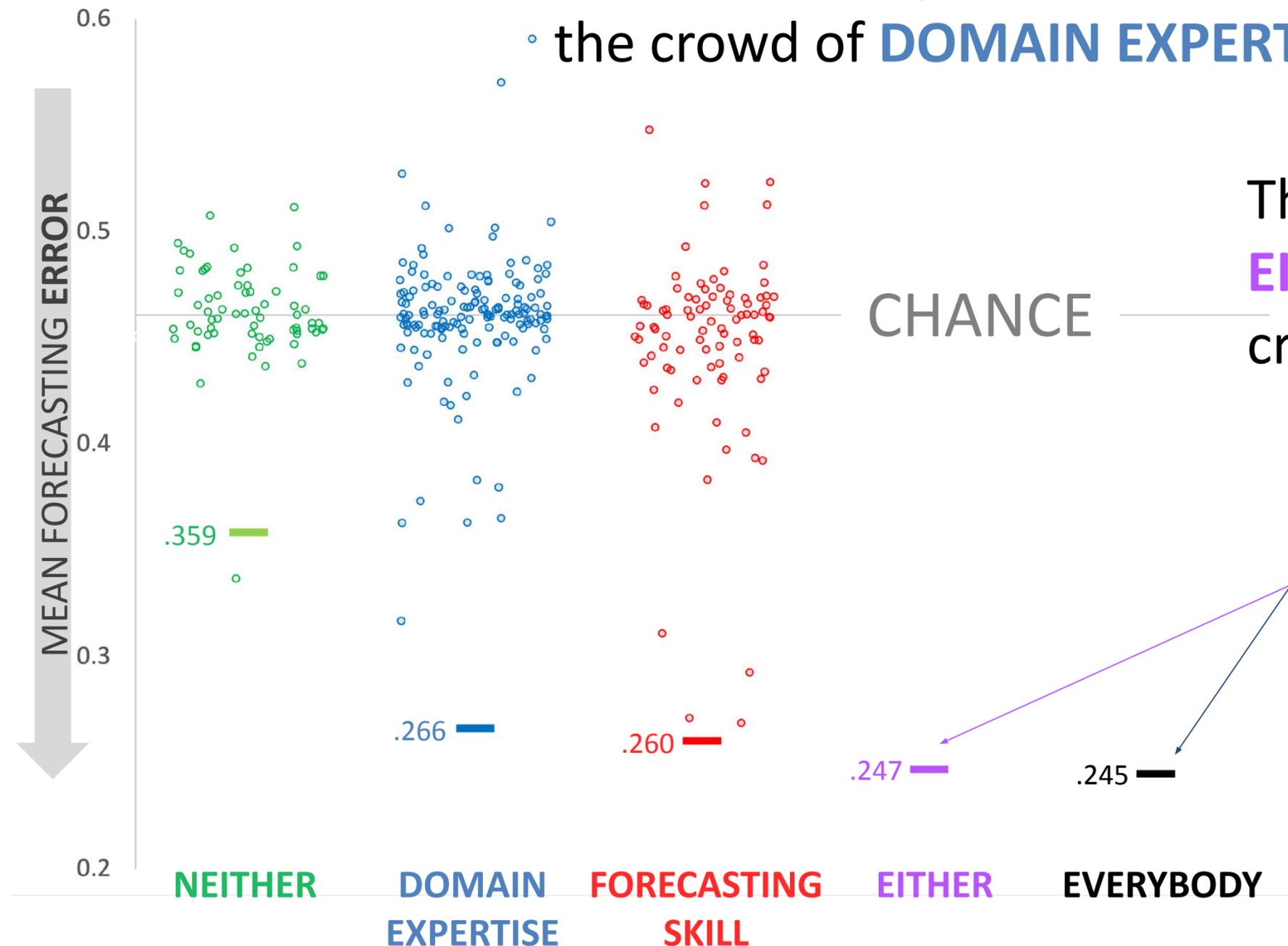
Performance of sub-crowds



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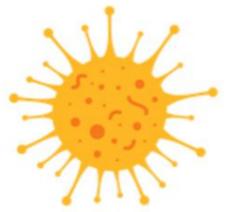
The crowd of **SKILLED FORECASTERS** performed as well as the crowd of **DOMAIN EXPERTS**.

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The mixed crowd of **EXPERTS OF EITHER KIND** outperformed the crowd of **DOMAIN EXPERTS ONLY**.

Participants with **NEITHER** forecasting skill nor domain expertise don't hurt the performance of **EVERYBODY**.



DISEASE PREDICTION



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x



Domain experts can't be trusted to forecast individually, **only collectively.**

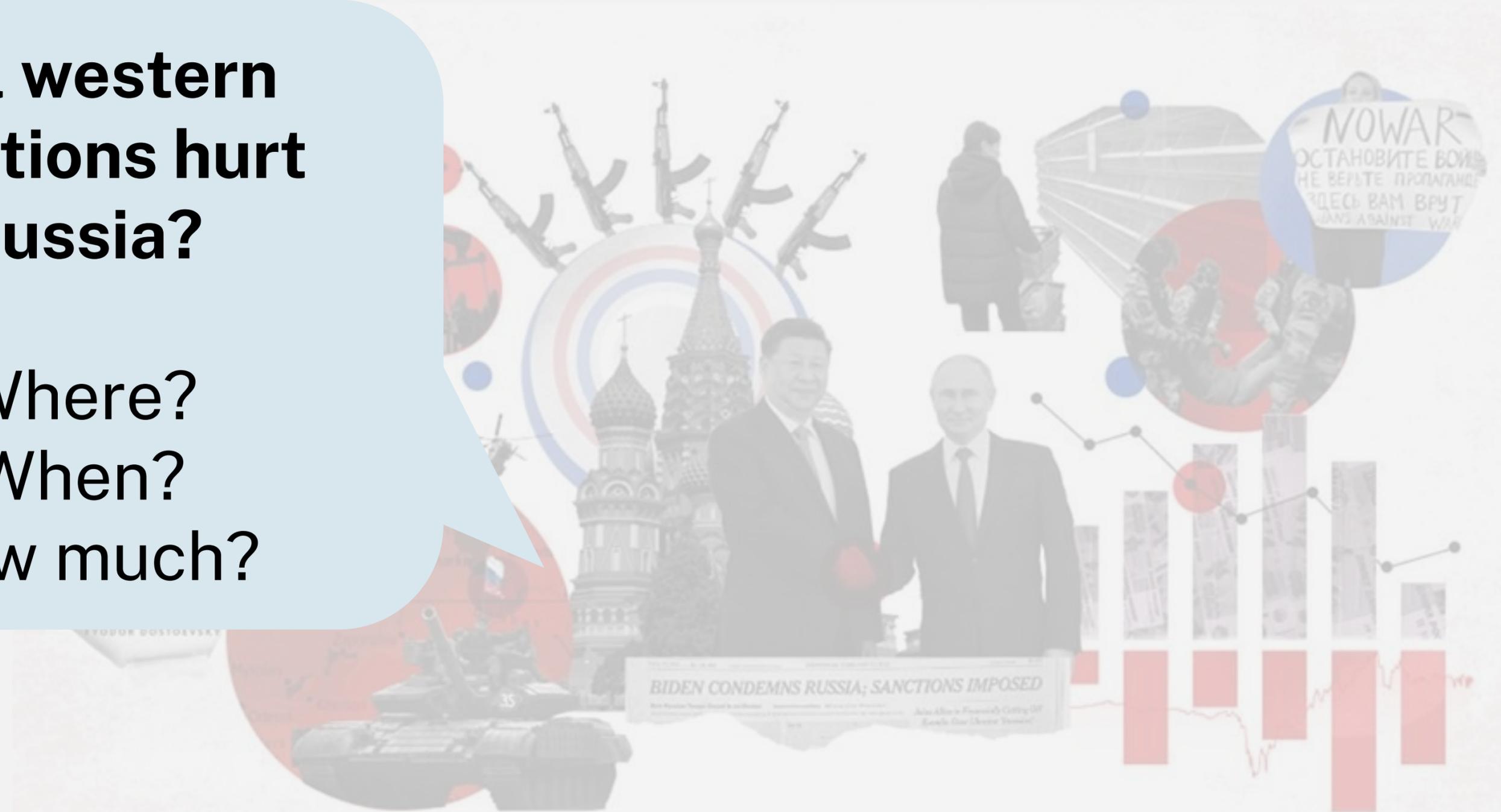


Crowds of skilled general-purpose forecasters can **augment or replace** crowds of domain experts.

Crowd forecasting Russian sanctions

**Will western
sanctions hurt
Russia?**

**Where?
When?
How much?**



Crowd forecasting Russian sanctions

1. CROWD STORM

Crowd proposes and prioritizes various impact indicators



Crowd forecasting Russian sanctions

1. CROWD STORM

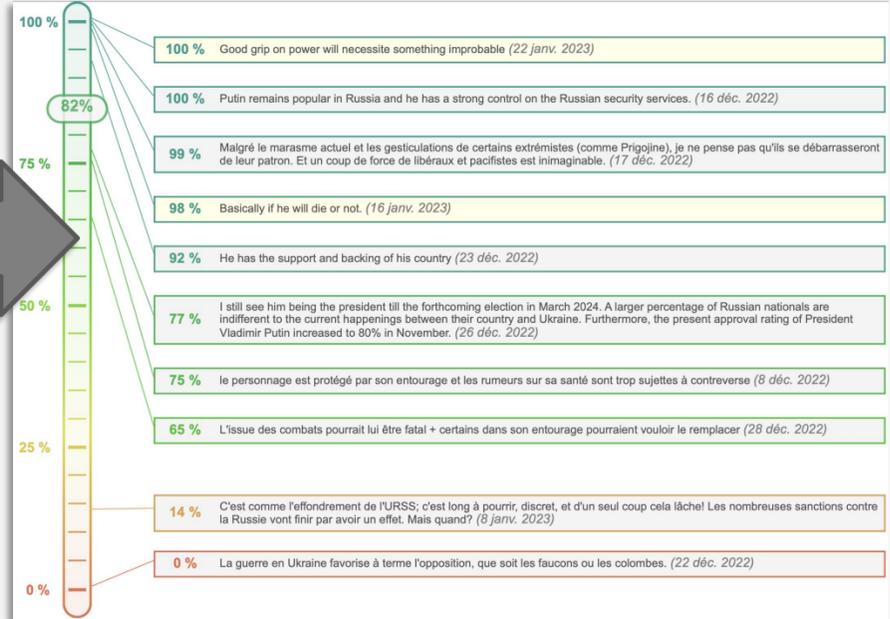
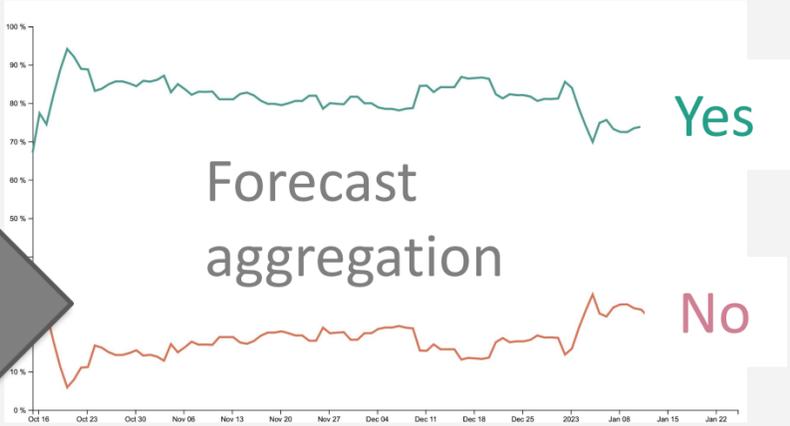
Crowd proposes and prioritizes various impact indicators

2. CROWD FORECAST

Crowd estimates probabilities and proposes rationales

The screenshot shows a forecasting interface with the following elements:

- Question:** Will Vladimir Putin remain President of Russia until December 31, 2023?
- Yes/No Progress:** A progress bar for 'Yes' is at 75% (green), and for 'No' is at 25% (red).
- MY FORECAST:** A section for user input.
- Form:** A text area for 'Tell us about the rationale for your forecast.' with a character count of 0/108/200. Below it are fields for 'What is your reasoning?' (0/108/200), 'URLs to your sources' (0/0/3), and 'What would change your mind?' (0/0/200).
- Buttons:** Cancel, CLEAR, SAVE.
- User List:** A sidebar on the right shows a list of users and their forecast percentages (e.g., rtancs: 5%, bastia: 22%, dolan: 15%, er263: 75%, atahu: 16%).



Collection + Curation of forecast rationales

Crowd forecasting Russian sanctions

1. CROWD STORM

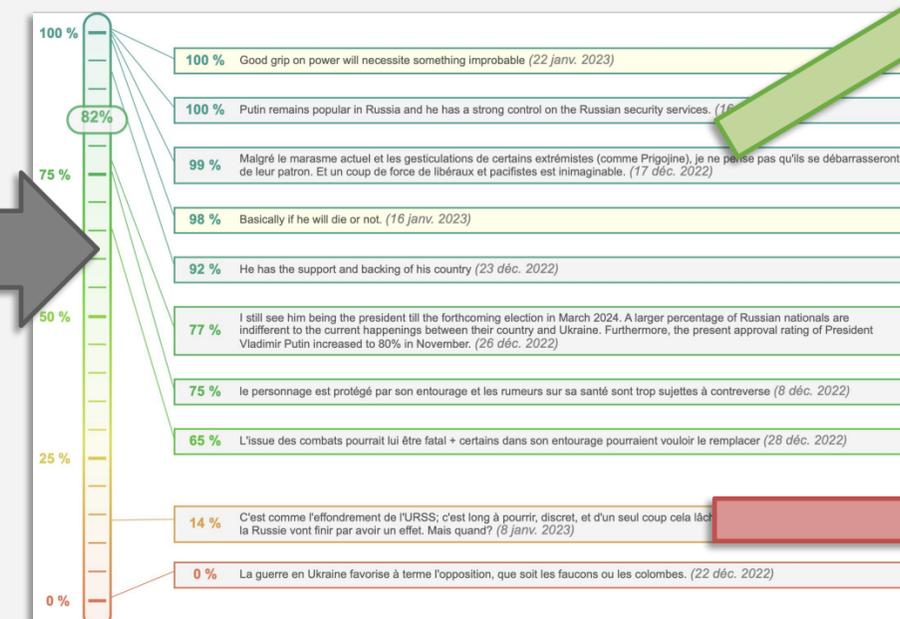
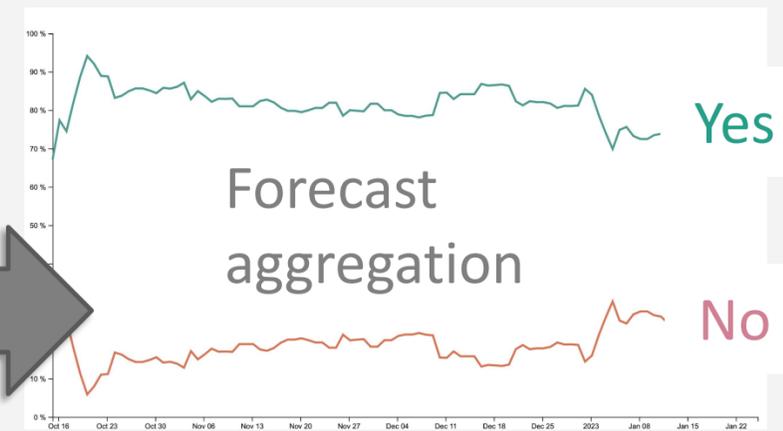
Crowd proposes and prioritizes various impact indicators

The screenshot shows a forecasting interface with a progress bar for 'Yes' at 75% and 'No' at 25%. It includes a 'MY FORECAST' section with buttons for 'More Info', 'My Notes', 'My Alarms', and 'My Forecasts'. A text box asks for the rationale for the forecast, with a sample response: 'It's like the collapse of the USSR; it takes a long time to rot, discreet, and all of a sudden it gives way!'. There are also fields for 'URLs to your sources' and 'What would change your mind?'. A list of other users' forecasts is visible on the right side.

Collection + Curation of forecast rationales

2. CROWD FORECAST

Crowd estimates probabilities and proposes rationales



3. EXPLAIN

Synthesize and report the story behind the probabilities

YES (82%)

Forecasters consider it very likely that Putin will stay in power throughout 2023:

- **No political opposition** poses a tangible threat.
- The incentives for a **coup** are minimal, the risk too great.
- Putin's **control** over the military and intelligence seems total. Even **defeat** in Ukraine does not imply loss of power.
- His **popularity** rating remains at 80% as Russians seem impervious to war as long as it does not affect their standard of living.

NO (18%)

But some factors could still cause his downfall:

- **Bad Health**: if nothing is certain about his physical state, some forecaster mention his state of health.
- **Long War**: if Russia gets bogged down in a long war, Putin could be rejected by both the "hawks" and the population.
- **Sanctions**: the cumulative effect of economic sanctions and internal malfunctions could eventually reach a tipping point.

Takeaways



**Governing
is
predicting**

Takeaways



**Governing
is
predicting**

Collective intelligence
improves forecasting

Takeaways



**Governing
is
predicting**

Collective intelligence
improves forecasting

Crowd forecasting sheds light
on noisy policy-relevant topics

Takeaways



Skilled citizen forecasters can augment domain experts

**Governing
is
predicting**

Collective intelligence improves forecasting

Crowd forecasting sheds light on noisy policy-relevant topics

Takeaways



Accurate and explainable

Skilled citizen forecasters can augment domain experts

**Governing
is
predicting**

Collective intelligence improves forecasting

Crowd forecasting sheds light on noisy policy-relevant topics

How could EU policy makers leverage crowdsourcing?



hypermind smarter together

How could EU policy makers leverage crowdsourcing?

Let's use our collective intelligence to imagine and prioritize how crowdsourcing could best contribute to EU policy making. The consultation will be conducted in two phases: ideation, then prioritization, from September 19 to October 15. The contributions and judgments are entirely anonymous, and the results will be shared with all the participants.

Your ideas for EU crowdsourcing

active

Propose

Propose your ideas and comment other people's.

Mon Sep. 18, 2023 → Sat Sep. 30, 2023

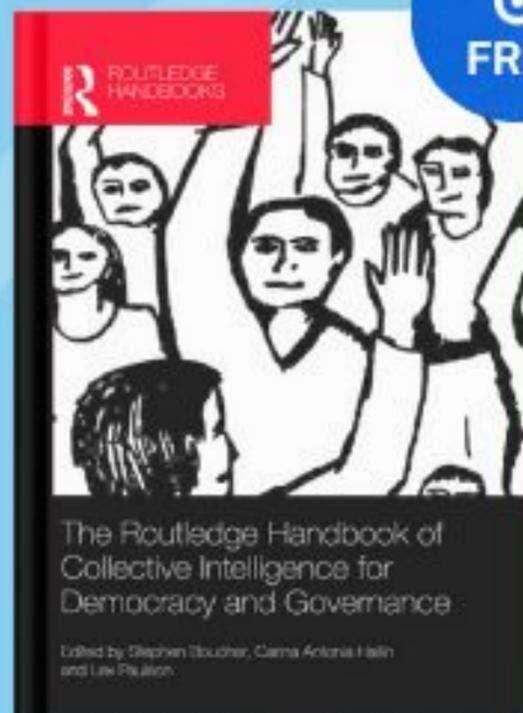
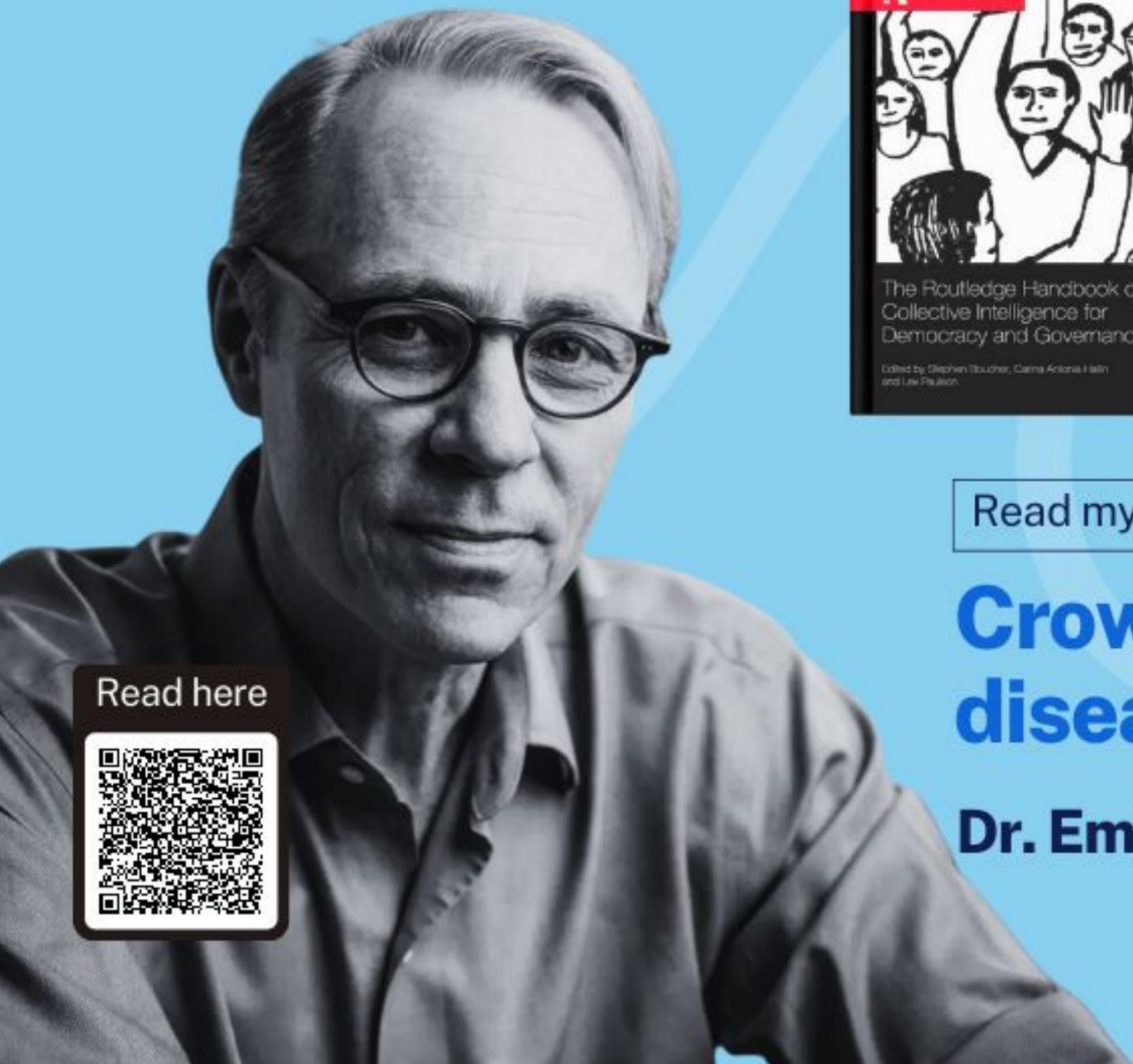
Prioritize the ideas

suspended

Prioritise

Select the highest and lowest priority ideas.

Mon Oct. 2, 2023 → Sun Oct. 15, 2023



The Routledge Handbook of Collective Intelligence for Democracy and Governance

- Collective Intelligence applied to public challenges
- Inspiration for policy-makers, civil society organizations and engaged citizens

More: smarter-together.org

Read my chapter

Crowd forecasting infectious disease outbreaks

Dr. Emile Servan-Schreiber

Read here



Keynote 2

The case for crowdsourcing EU legislation with citizens



Assya Kavrakova
Executive director



European Citizen Action Service

(ECAS)

International, Brussels-based non-profit organisation with a pan-European membership and more than 30 years of experience

Mission: to **empower citizens** in order to create a more inclusive and stronger European Union by:

- Promoting and defending citizens' rights
- Developing and supporting mechanisms to increase citizens and citizen organisations' democratic participation in, and engagement with, the EU.



ECAS's

Digital Democracy focus

In the framework of its European Democracy focus area, since 2015 ECAS has been:

- exploring the potential of ICT in reducing the gap between political representatives and citizens and
- contributing to the creation of an engaged citizenship through civic tech

Brabham D. C., 2008 definition: “an online, distributed, problem-solving and production model that leverages the collective intelligence of online communities to serve specific organisational goals”.

In simple terms: a way of connecting and solving problems online with people that you otherwise would not engage with.

What is Crowdsourcing?

A digital democracy method that mobilises the so-called ‘wisdom of the crowd’ on public policy issues.



ECAS's Studies and Projects on crowdsourcing legislation with citizens

01

Analysis of **27 case studies** of crowdsourcing from around the globe (2016)

02

Thorough analysis of the crowdsourcing of the **Constitutional reform** in Iceland in 2010/2011 and the **Off-Road Traffic Law** in Finland in 2012

03

EUCROWD project: areas, citizens wish to crowdsource at EU level (2017): **education, health and environment**

04

CODE Europe and **DigiDEM** projects: crowdsourcing citizens' opinions in 10 MS on "air quality" in 2022



The crowdsourcing of citizens' opinions on "air quality":

the first ever
transnational project
pilot on crowdsourcing
legislation in 10
European cities in 10 MS

Consortium of 15 partners: European NGOs, civic tech organisations, think-tanks and a university

Four separate phases

Problem Mapping: Citizens identify problems related to 'air quality' that they encounter in their daily life

Problem Solving: Citizens propose solutions to the 'air quality' problems they have mapped in Phase 1

Ideas Selection: Citizens evaluate the solutions proposed in Phase 2 to highlight the most popular ideas and priorities for European policy-makers

Policy Formulation: Based on the previous phases, citizens formulate and co-create policy proposals on 'air quality' with experts



The crowdsourcing of citizens' opinions on "air quality":

the first ever
transnational project
pilot on crowdsourcing
legislation in 10
European cities in 10 MS

Four **technological platforms** were designed for the four phases

Comprehensive **Communications and outreach** strategy:

- more than **4,100** contributions from citizens
- approximately **98 224** reached throughout Europe on its digital platforms

Development of a **universally applicable assessment framework for e-participation projects**, based on a clear set of assessment criteria and allowing objective comparison of the role and impact of e-participation projects across time and space

Main Conclusion

The engagement method of crowdsourcing with citizens has viable potential to reduce the gap between political elites and citizens through co-decision-making:

- the method portrays citizens' perspectives as experts of everyday life;
- their perspectives help align government resources with citizens' priorities;
- this increases both the legitimacy of the decisions taken and their ownership by citizens.

Crowdsourcing, used as a participatory democracy method in policy-making, has a **potential for creating**, according to Aitamurto & Chen (2017):

Epistemic value: policy-makers are provided with the crowd's experience and expert-based knowledge

Democratic value: crowdsourcing increases inclusiveness, transparency, accountability, deliberation and civic empowerment in policy-making

Economic value: crowdsourcing provides innovative solutions, a more efficient knowledge search and a committed public.



Designing Crowdsourcing at the EU level

Why?

The EU-level (e-)participation tools are limited in the extent to which citizens can influence policy-making

Legal basis:

Art. 10(3) TEU: Every citizen has the right to participate in the democratic life of the EU and decisions should be taken as openly and as closely as possible to the citizen

How?

Adding crowdsourcing to the EU (e-)participation democratic toolbox

- Designed to take place **prior to the EU public consultations**

- Best suited to the stages of **Agenda Setting and Policy Formulation** as these could reinforce the EU's legitimacy through:

participation (input legitimacy),
performance (output legitimacy) and
process (throughput legitimacy)

- Should take place on a **subject matter (policies) under the exclusive or shared competence of the EU**, rather than for regulatory legislation or international treaty frameworks

EU crowdsourcing blueprint:

Functionality, user-friendliness and accessibility of the crowdsourcing platform

01

Intuitive, visually appealing with a user-friendly design and offering as much interaction as possible platform

02

Analysis-based authentication process considering the objectives and the culture of participation in each country

03

Security of the online platform and citizens' data protection should be ensured, disclosing why the data is being collected and how it will be processed

04

Experts on inclusion should be consulted to ensure platform's accessibility to disadvantaged groups

05

Multilinguism must be ensured through manual or automated translations or a combination of both

EU crowdsourcing blueprint:

Participation

01

The **policy topic** should be a subject to which citizens can easily relate and feel confident in having a say on

02

A tailored strategy for **accessibility and inclusiveness** should also provide for contributions **offline, to bridge the digital divide**

03

A **universal communication** strategy with clear **KPIs**, implemented in a **decentralised** manner through **country-specific activities**

04

Visuals and branding should be **coherent and harmonised** across all stages of the process

05

Flexibility to accommodate the challenge of external circumstances or unexpected internal developments

EU crowdsourcing blueprint:

Feedback and Impact

01

Commitment of decision-makers to the process and its outcomes is a must. Better **policy-making links** between local and EU levels

02

Dissemination strategies should consider **major political events** to maximise the impact of citizens' contributions

03

Feedback to citizens: every process should envisage **clear communication on how citizens can verify the impact of their contributions**

04

Sufficient human and financial resources should be allocated for **analysing the contributions from citizens**

05

Assessment Framework for E-Participation to evaluate the process and ensure a learning curve



Assya Kavrakova

assya.kavrakova@ecacs.org

Executive Director
European Citizen Action Service
(ECAS)

**Thank You for Your
Attention!**



Keynote 3

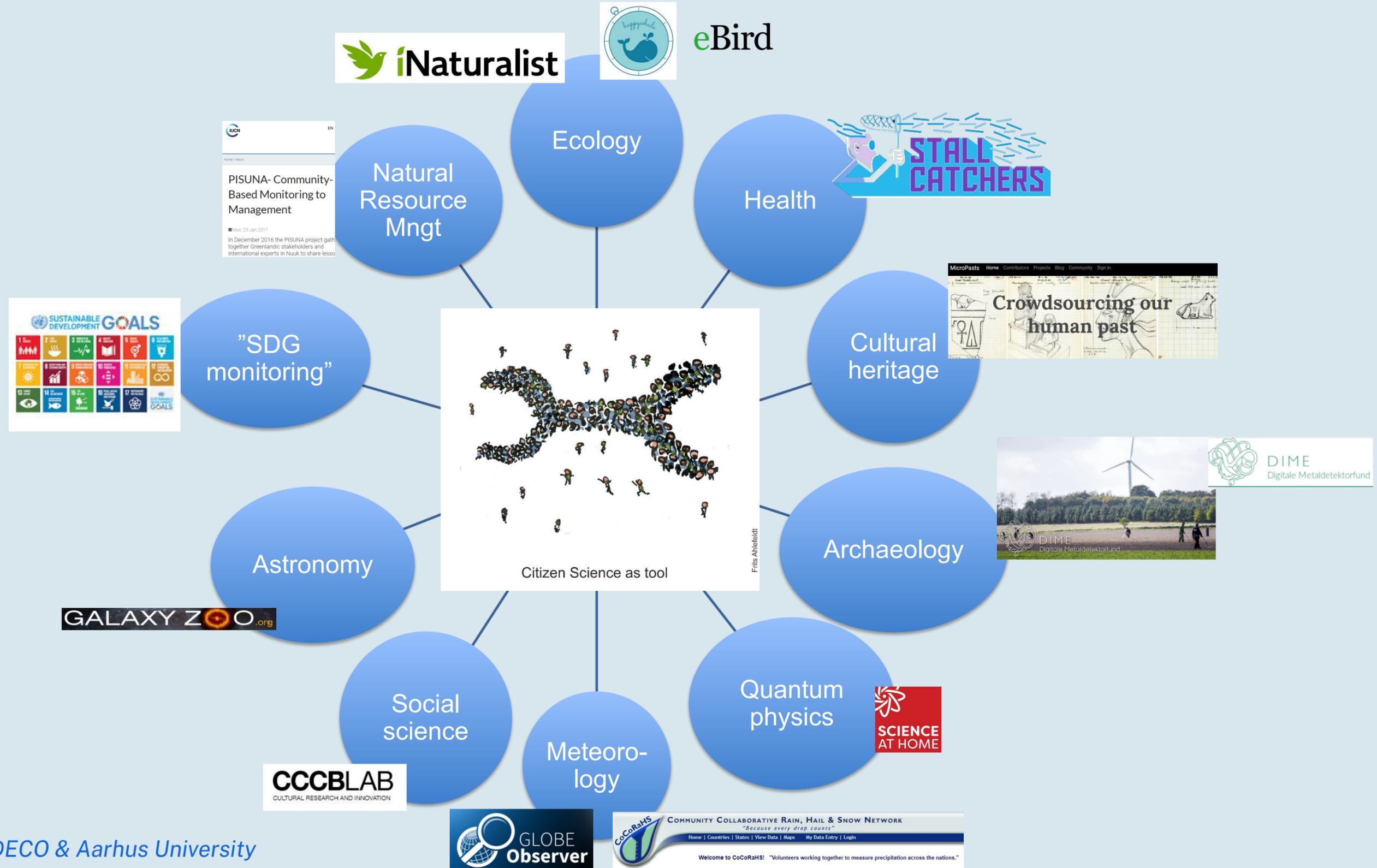
Crowdsourcing for legislative monitoring: the case of environmental compliance

Gitte Kragh, PhD

gitte@citizenscience.dk



Citizen science – wide range of fields



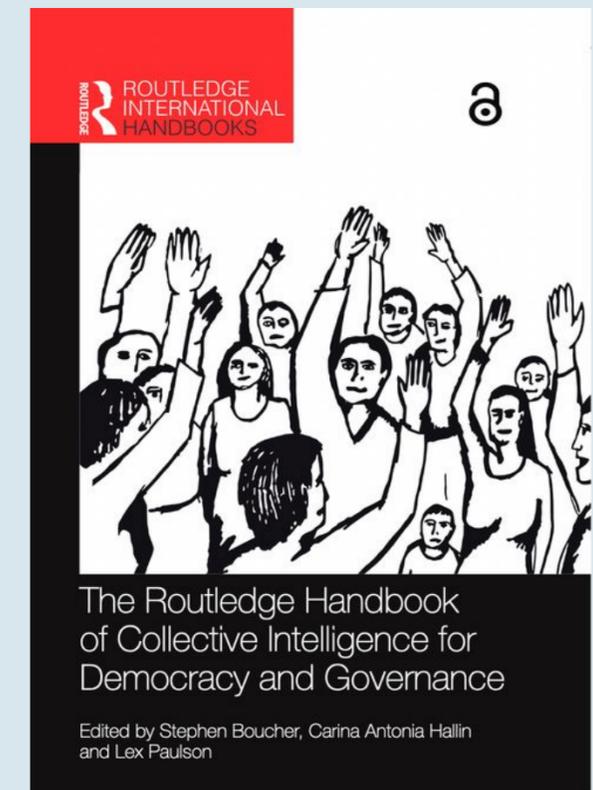
Mobilizing collective intelligence for adapting to climate change in the Arctic:

The case of monitoring Svalbard's and Greenland's environment by expedition cruises

Kragh, G., Poulsen, M., Iversen, L., Cheeseman, T. & Danielsen, F. (2023)
The Routledge Handbook of Collective Intelligence for Democracy and Governance
(chapter 38)



**smarter
together**



The Arctic

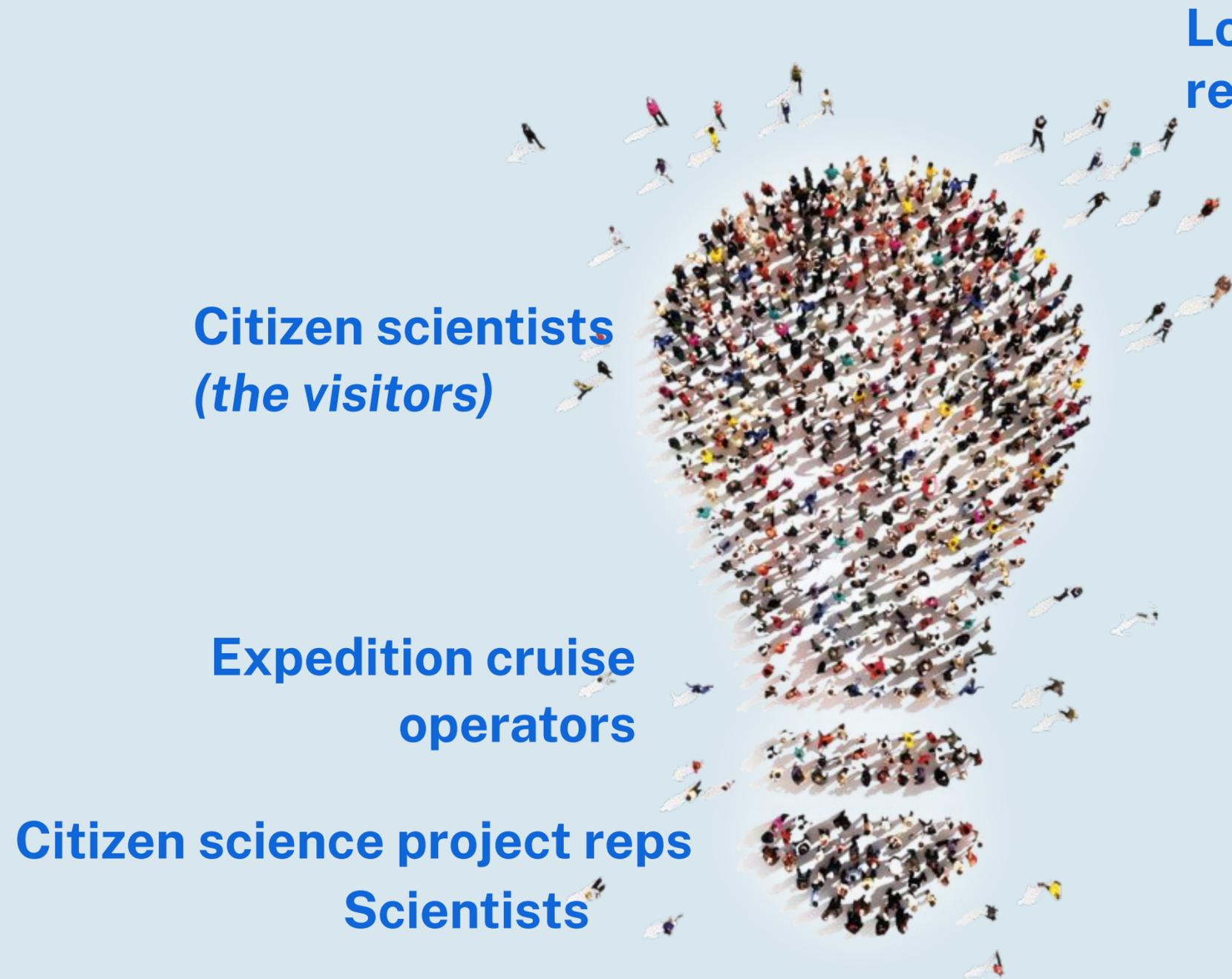


Svalbard

- 1143 species of plants
- 203 species of birds
- 11 species of whales
- Polar bears, walruses
- Seals



Collective Intelligence



**Local government
representatives**

Pilot citizen science programmes
on expedition cruises

eBird



Secchi
Disk



Data Collection



PHOTO: HENRIK KISBYE

eBird
705 checklists



Information Photos Scientific Timeline

SEEN Humpback Whale
ID: HW-MNQ102565

CONTRIBUTORS

SIGHTERS

DATE Monday, August 23rd, 2021

REGION Svalbard and Jan Mayen

SEA Barentsz Sea

OCEAN North Atlantic

SEEN ON VOYAGE Cape Race
Aug 18th - 23rd, 2021
VESSEL: MV Cape Race

LOCATION South of Nordaustlandet, Norway

DESCRIPTION There were at least 5 humpback whales in the area



141 obs



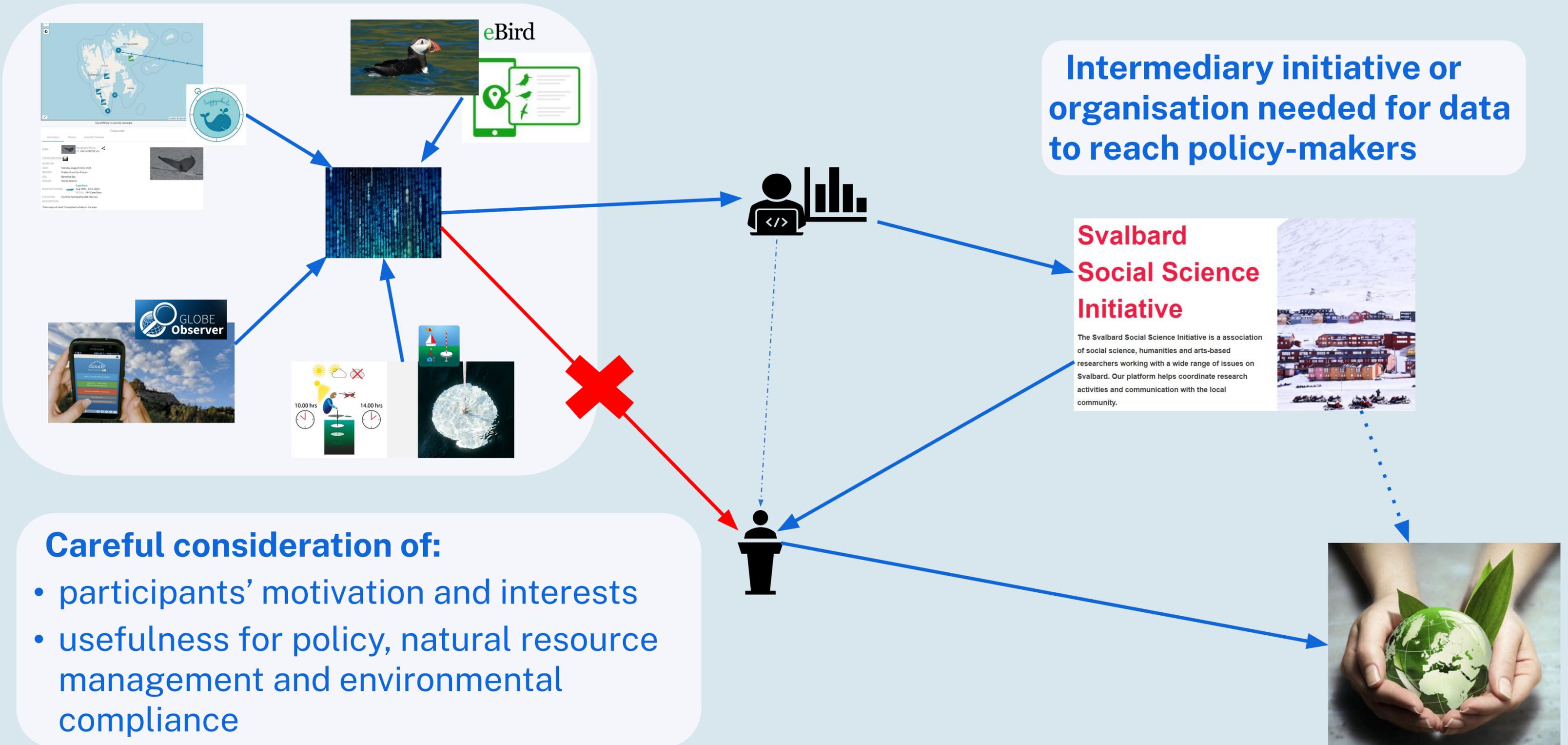
11 obs



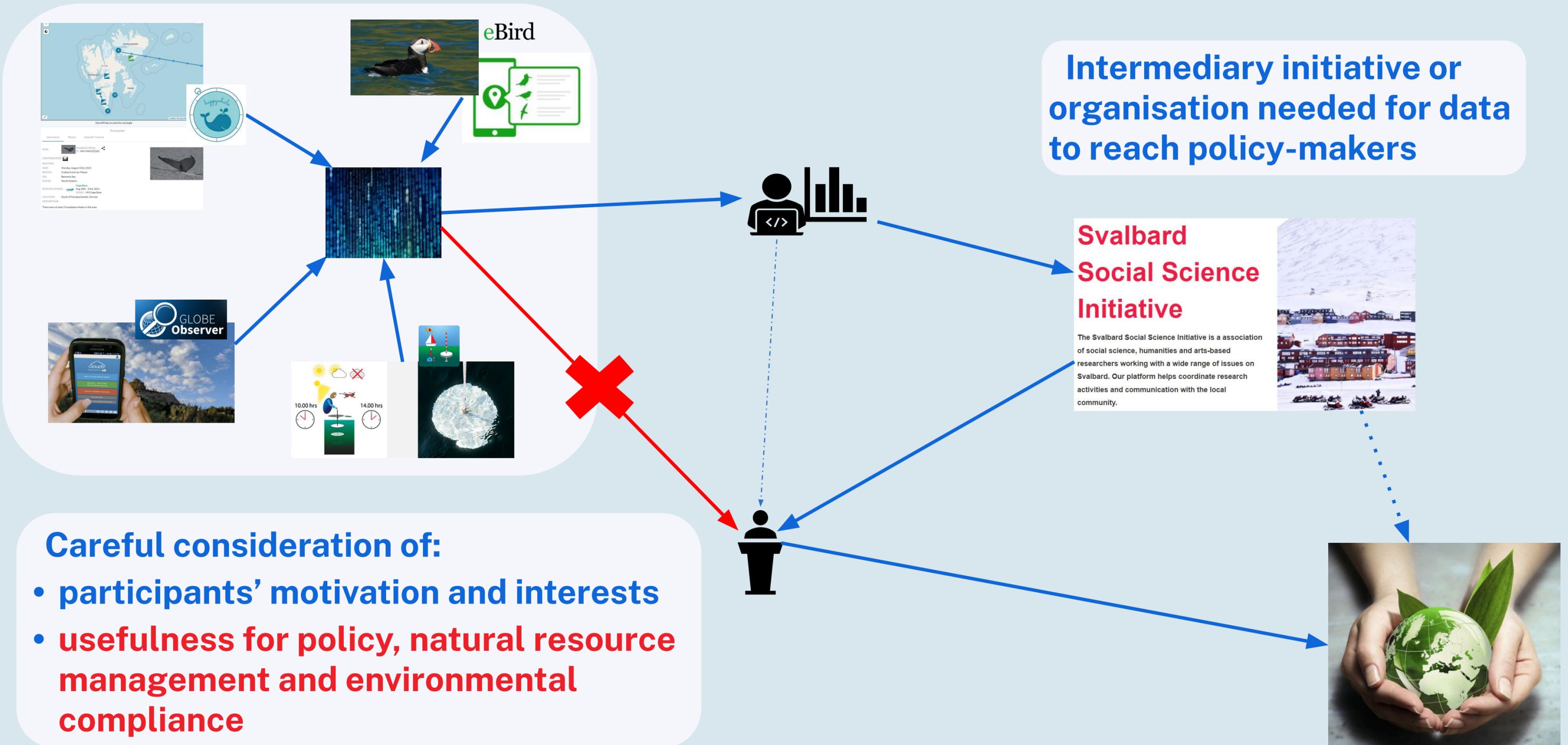
1 obs



From data to governance



From data to governance

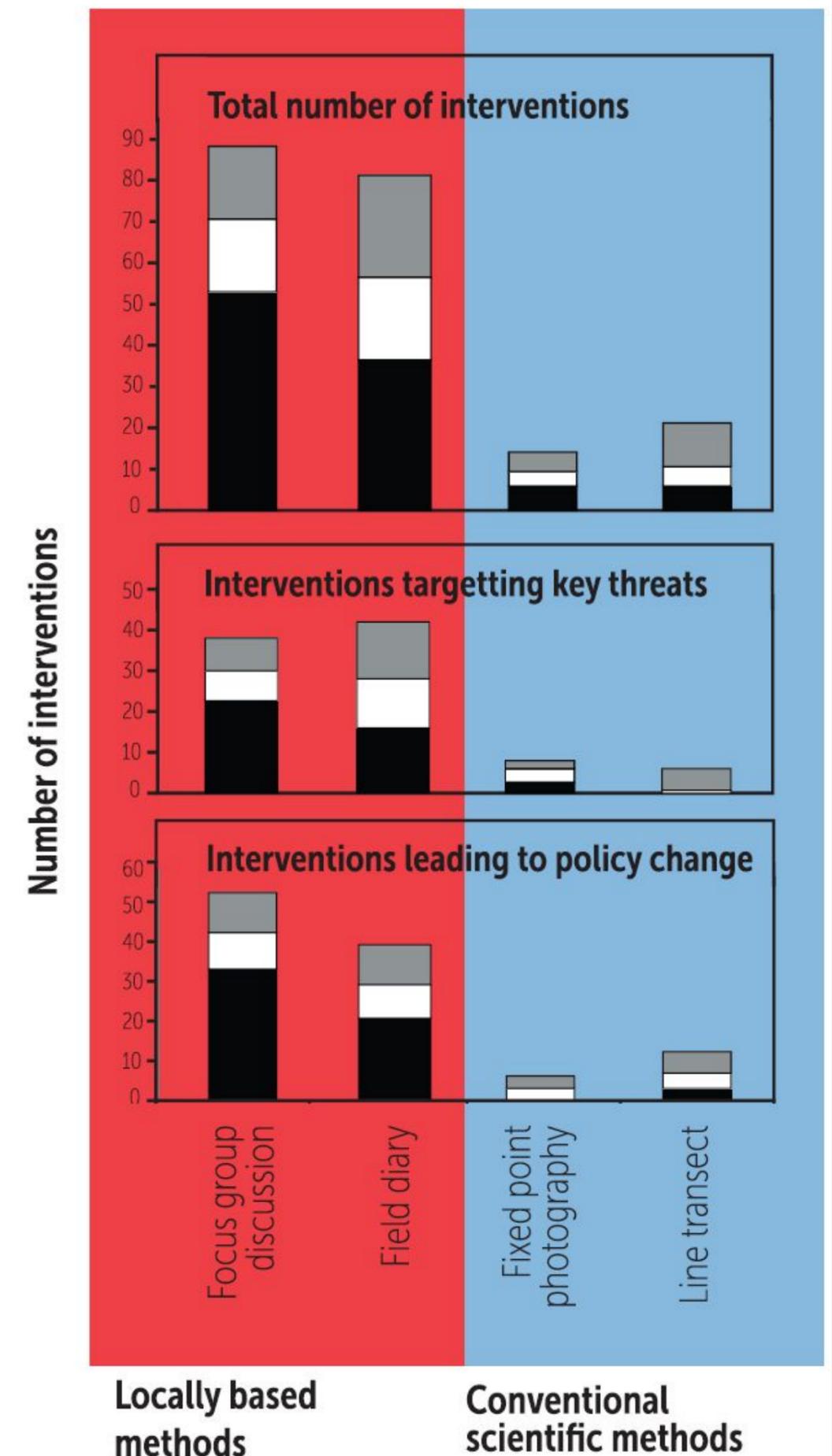


Effectiveness in generating management interventions

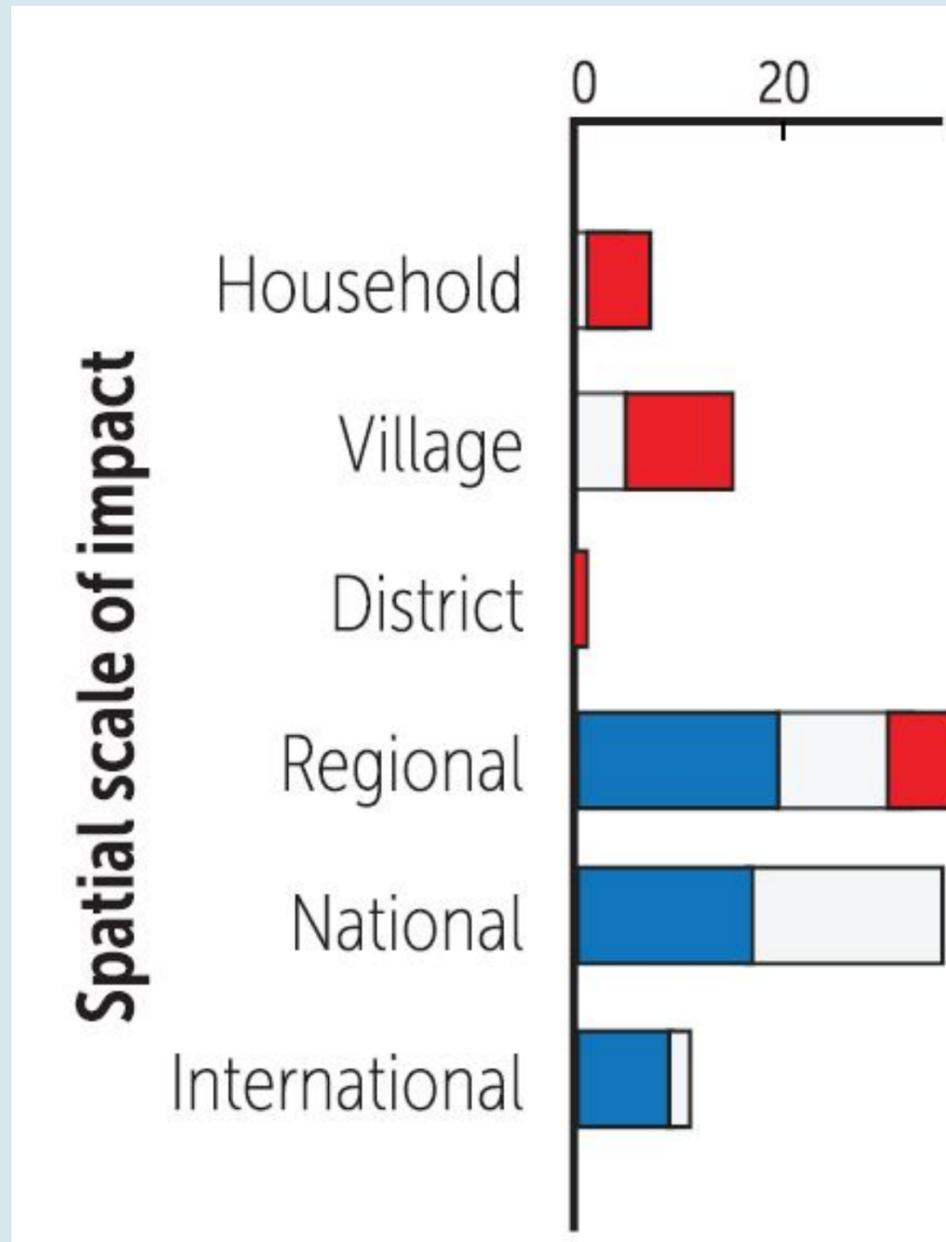
Philippines protected-area resources

Local participation boosts action

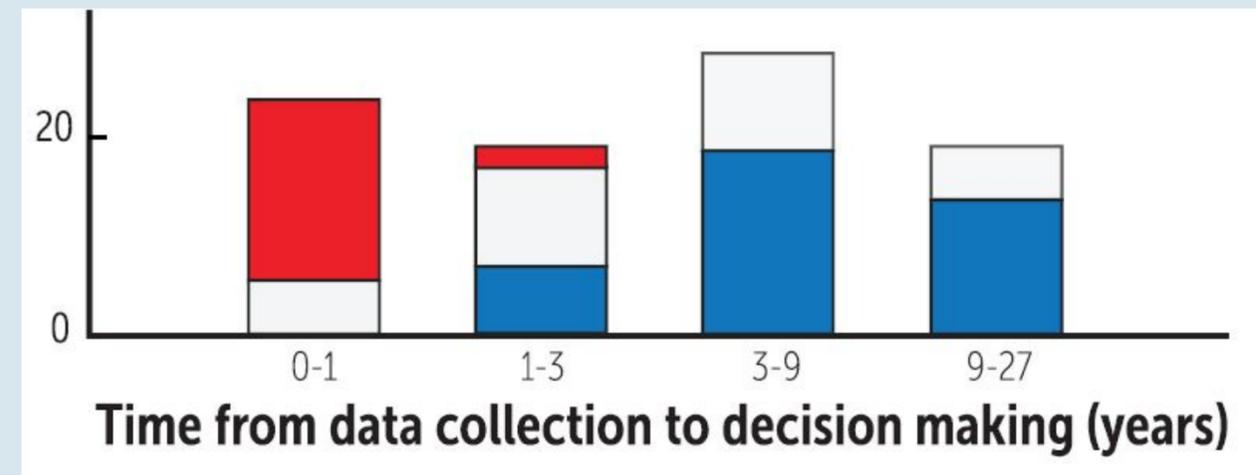
Interventions addressing locals
 Interventions addressing outsiders
 Interventions addressing both
n = 156 management interventions



Decision-making from published monitoring systems



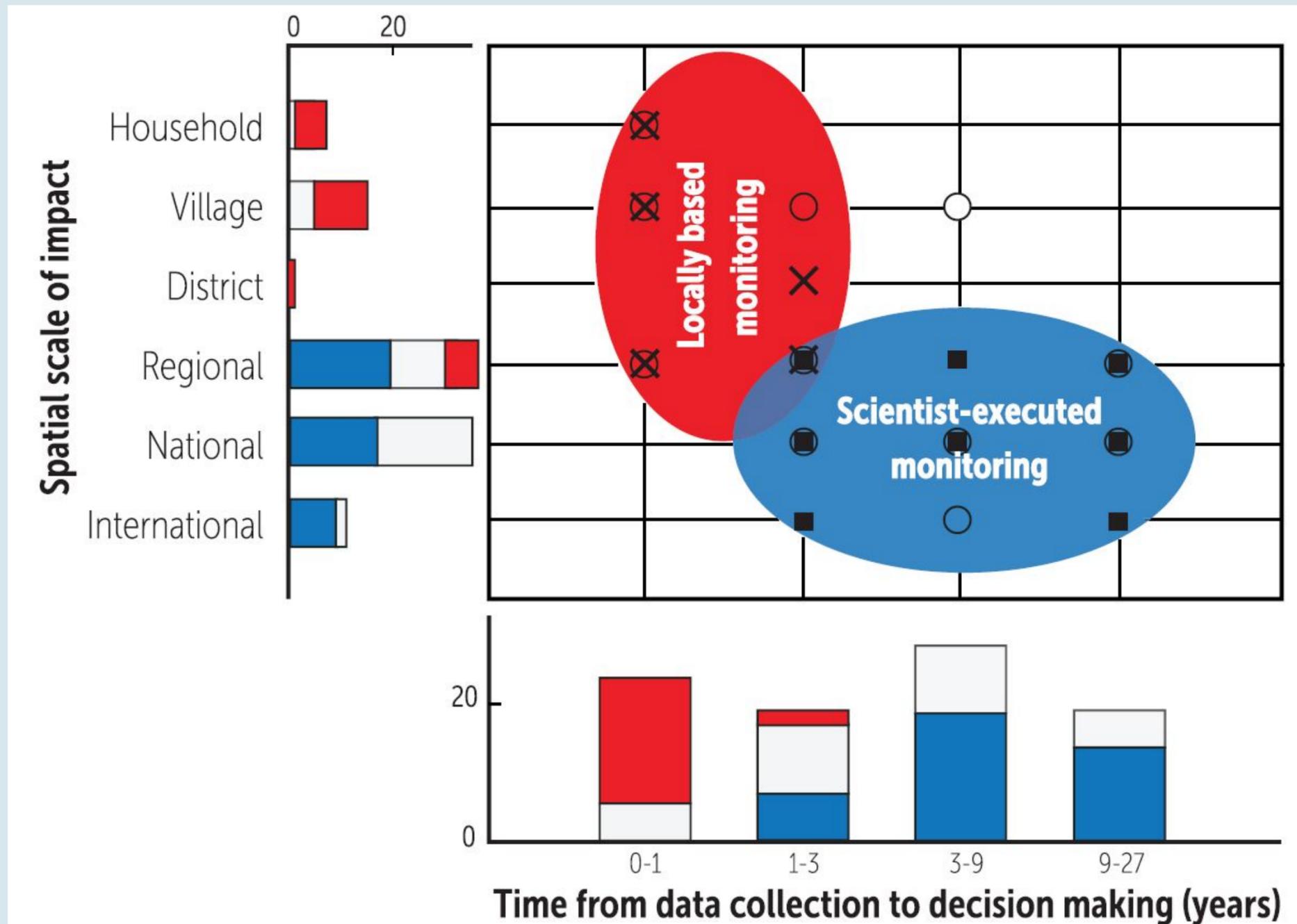
- Locally-based monitoring
- Limited local involvement in monitoring
- Scientist-executed monitoring



Journal of Applied Ecology
Journal of Applied Ecology 2010, 47, 1166–1168 doi: 10.1111/j.1365-2664.2010.01874.x

FORUM
Environmental monitoring: the scale and speed of implementation varies according to the degree of people's involvement
 Finn Danielsen^{1*}, Neil D. Burgess^{2,3}, Per M. Jensen⁴ and Karin Pirhofer-Walzl^{1,5}

Decision-making from published monitoring systems



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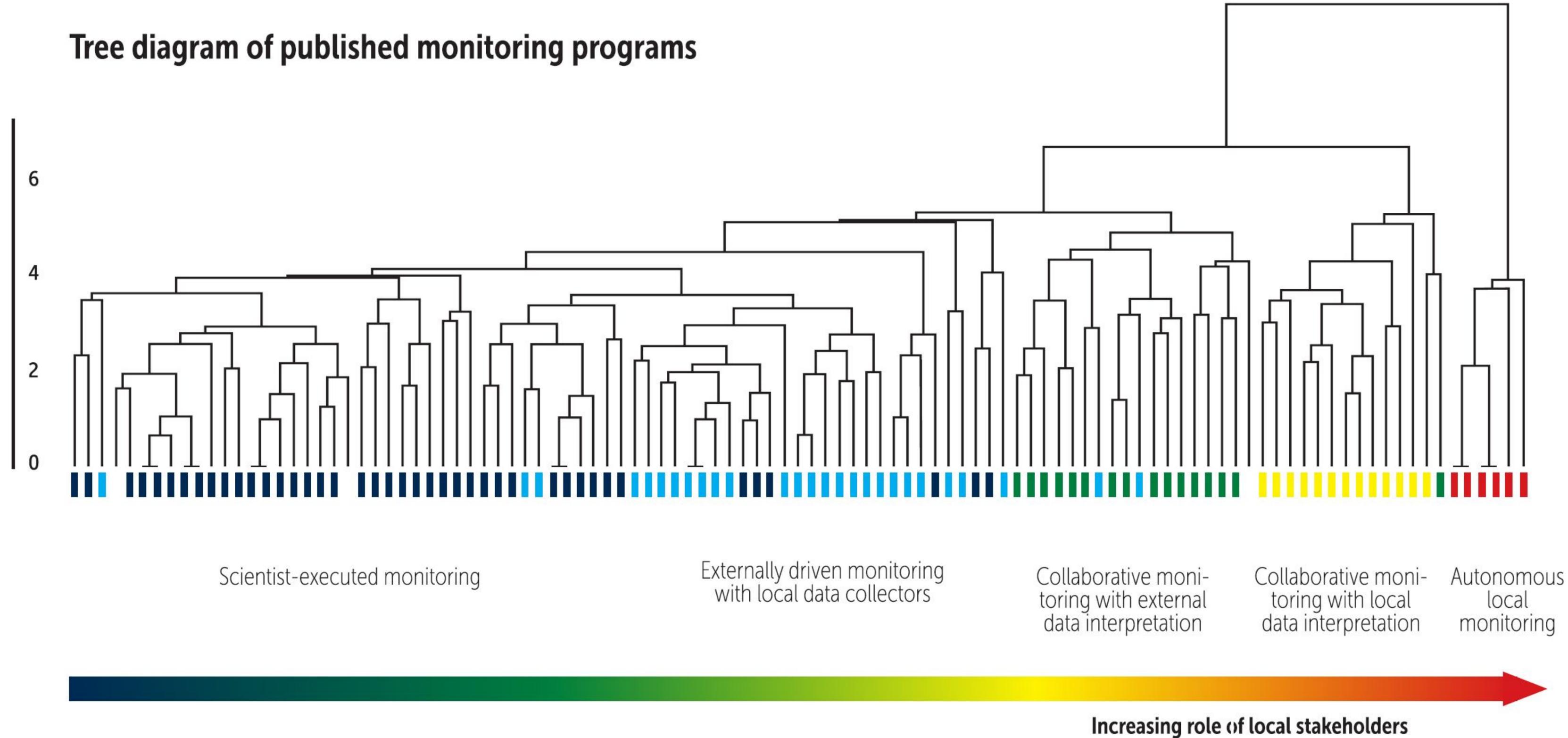
- Scientist-executed monitoring (n = 45)
- Monitoring with local data collectors (n = 37)
- × Locally based monitoring (n = 22)

Journal of Applied Ecology
Journal of Applied Ecology 2010, **47**, 1166–1168
 doi: 10.1111/j.1365-2664.2010.01874.x

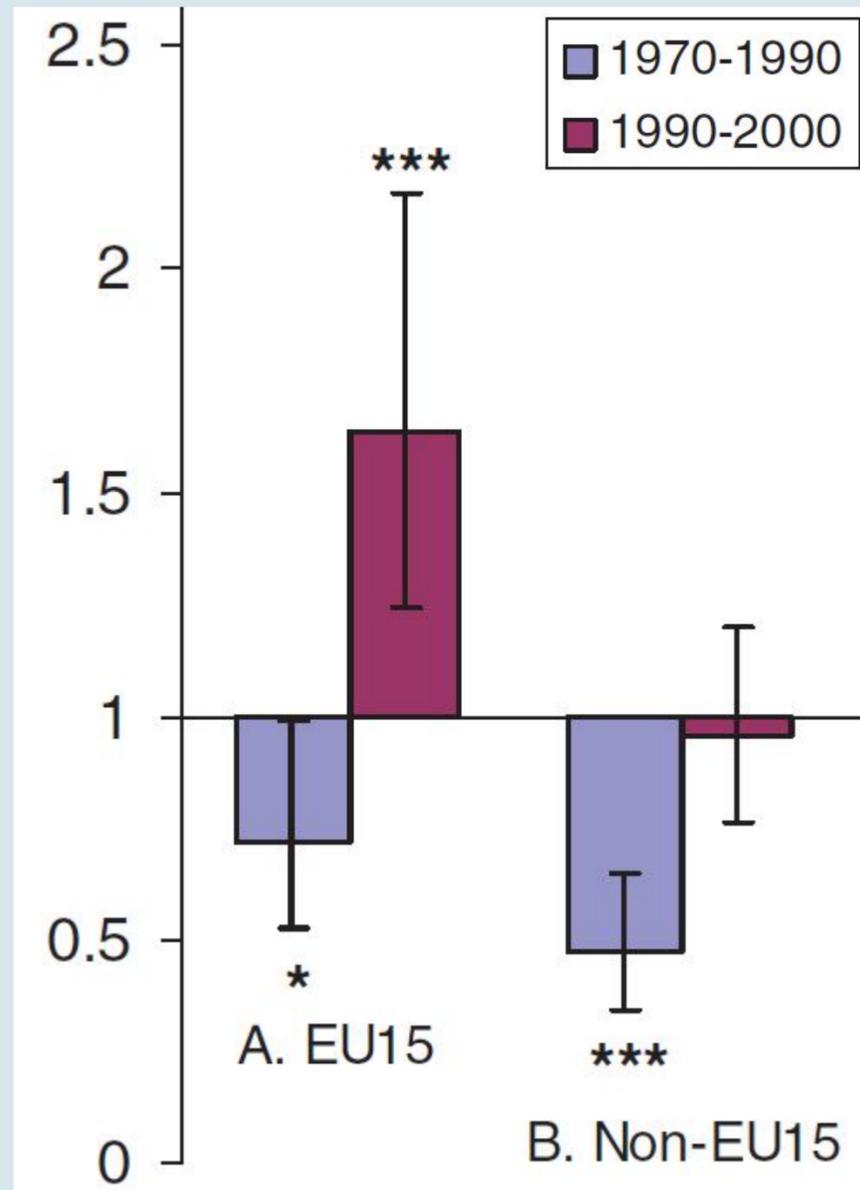
FORUM
Environmental monitoring: the scale and speed of implementation varies according to the degree of people's involvement
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Danielsen et al. 2010

Tree diagram of published monitoring programs



International conservation policy delivers benefits for birds in Europe



with higher deployment of SPAs. The data are therefore consistent with the hypothesis that the Birds Directive has brought demonstrable benefits to bird populations in the EU and that in-

How do we know?

Mainly thanks to volunteer Collective Intelligence efforts (monitoring by birders)!

The 'Birds' Directive (1979)



International conservation policy delivers benefits for birds in Europe



...relatively simple yet robust population monitoring can play an important role in assessing the success of supragovernmental conservation policies...



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together**

International conservation policy delivers benefits for birds in Europe



If such policies were to provide support for monitoring... their success could be evaluated.



International Conservation Policy Delivers Benefits for Birds in Europe

The Birds Directive (1979)



...setting targets that are both
quantitative and measurable
would increase the resolution of
subsequent assessments.



International Conservation Policy Delivers Benefits for Birds in Europe

The Birds Directive (1979)



Until policy and monitoring become more integrated, the success of international conservation policies in protecting the planet's biodiversity... will be difficult or impossible to quantify.



International Conservation Policy Delivers Benefits for Birds in Europe

The Birds Directive (1979)



The prognosis for biodiversity is grim because this lack of feedback can only serve to weaken international policy intervention at a time of unprecedented loss.

Donald et al. 2007 (*in Science*)



Post-2020 Global Biodiversity Framework (-> Kunming-Montreal Global Biodiversity Framework)

Agreement Dec. 2022
EU + 195 countries signed

6. Invites Parties and relevant organizations to support **community-based monitoring** and information systems and **citizen science** and their contributions to the implementation of the monitoring framework for the Kunming-Montreal global biodiversity framework.




CBD



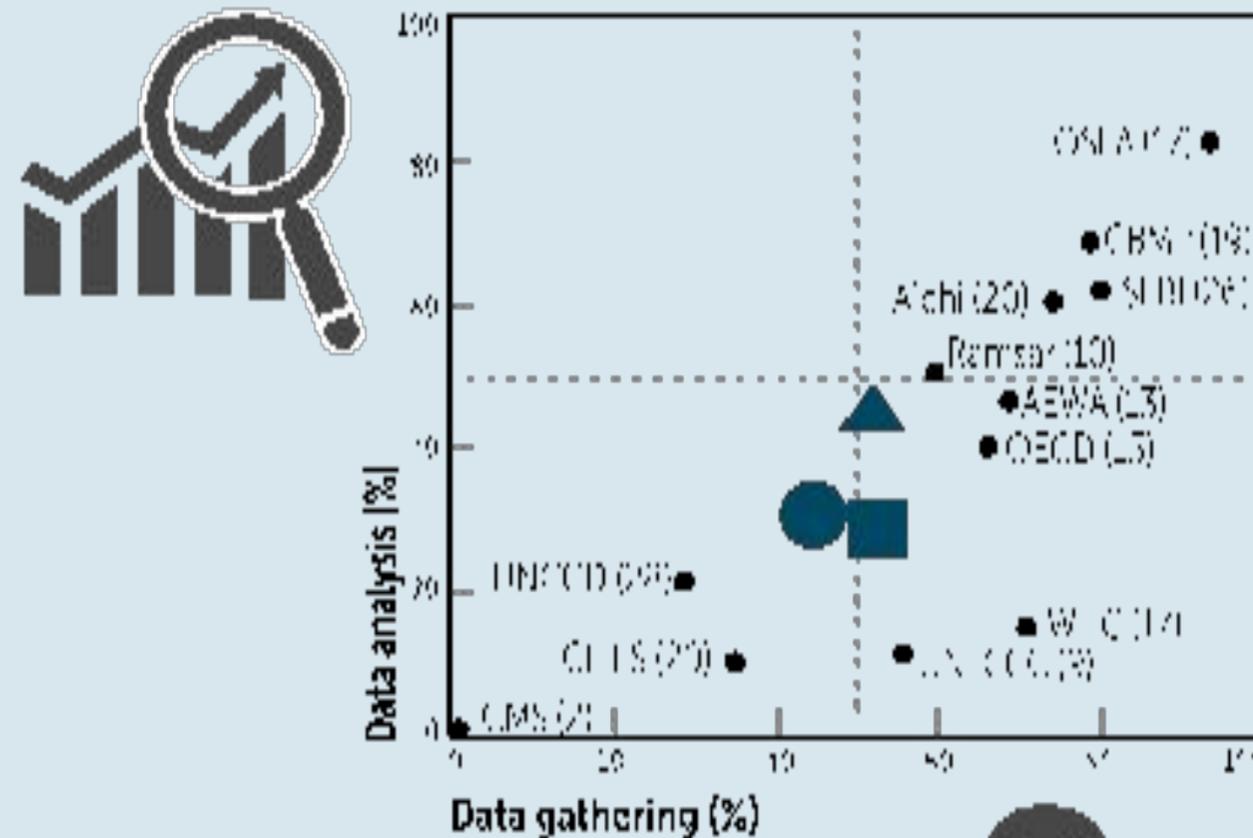
Distr.
LIMITED

CBD/COP/15/L.26
18 December 2022

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE
CONVENTION ON BIOLOGICAL DIVERSITY
Fifteenth meeting – Part II
Montreal, Canada, 7-19 December 2022
Agenda item 9B

Monitoring framework for the Kunming-Montreal global biodiversity framework



- ▲ Headline indicators (130)
- Component indicators (116)
- Complementarity indicators (209)



K-M Global Biodiversity Framework (291 indicators)

Scientist monitoring

+

Local community monitoring

=

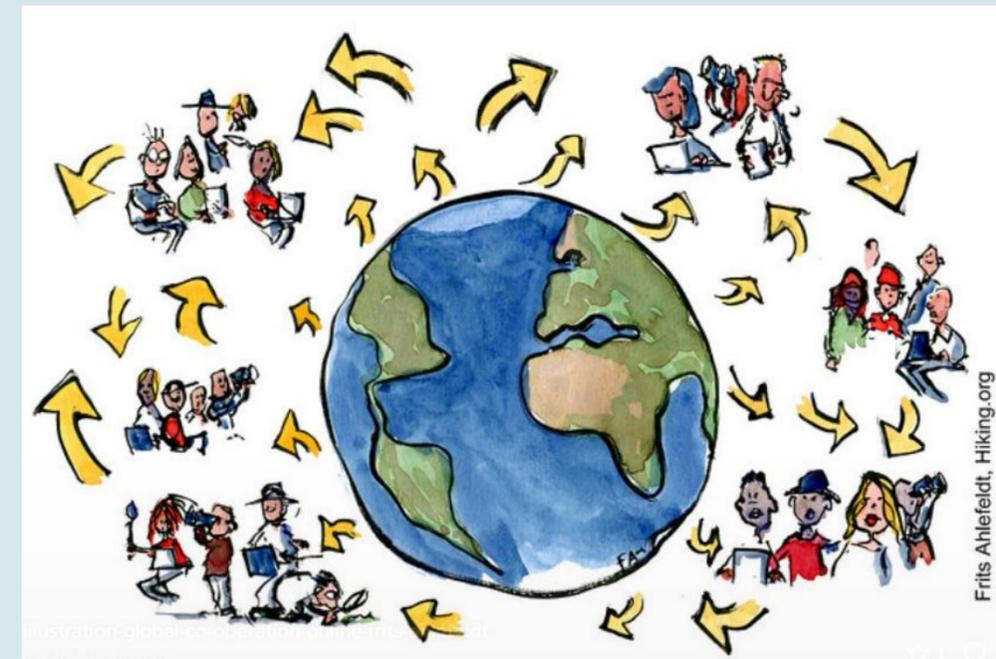
Indicators monitored

K-M Biodiversity Framework Agreement Compliance Monitoring

55%

45%

100%



International Community of Practice



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❖ Citizen Science Global Partnership



❖ Regional associations

- ❑ European Citizen Science Association (2013)
- ❑ Citizen Science Association (2012/2014)
- ❑ Australian Citizen Science Association (2014)
- ❑ African Citizen Science Association (2017/2021)
- ❑ South African Citizen Science Association (2023)
- ❑ Asian Citizen Science Association (2018)
- ❑ Red Iberoamericana de Ciencia Participativa (2019)



❖ National networks, e.g. at least 17 in Europe alone, including Citizen Science Netværket



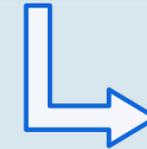
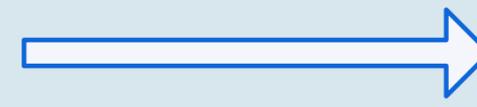
❖ EU-citizen.science



UNESCO Recommendation on Open Science



UNESCO Recommendation on Open Science



Citizen Science & Open Science CoP



Report for the UNESCO Open Science Toolkit

Guidance for the implementation of the UNESCO Open Science Recommendation re. "Opening science to society"



Benefits of citizen science

1

Enhancing our understanding through new knowledge collaborations

E.g., through indigenous or local knowledge

2

Shortening distance between the public and policy-makers

3

More public engagement in democracy & democratic processes

Incl. empowering local communities and individuals to act

4

Better local/regional management

E.g., management of natural resources or urban issues such as air pollution

5

Better and potentially faster compliance implementation and monitoring





Policy-makers



Scientist monitoring



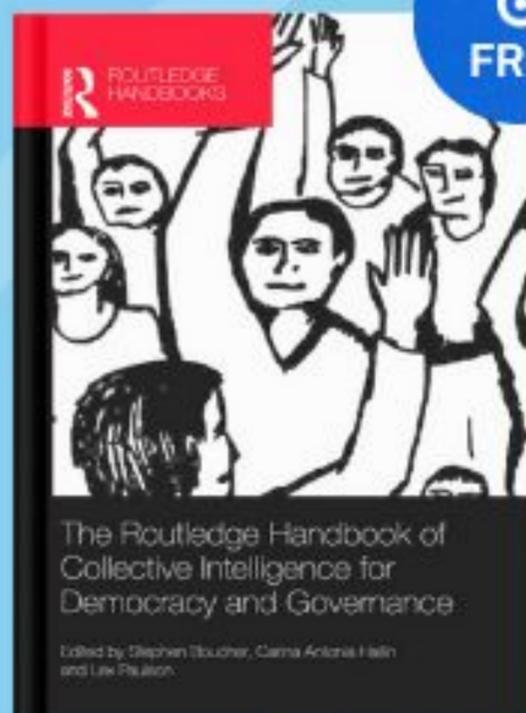
Local community monitoring



Compliance



Read here



The Routledge Handbook of Collective Intelligence for Democracy and Governance

- Collective Intelligence applied to public challenges
- Inspiration for policy-makers, civil society organizations and engaged citizens

More: smarter-together.org

Read my chapter

Mobilizing collective intelligence for adapting to climate change in the Arctic

Gitte Kragh

Keynote 4

People-Led Innovation



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Anirudh Dinesh

anirudh@thegovlab.org

Research Fellow, The Governance Lab and The
Burnes Center for Social Change

19 September 2023, Brussels



Finding Practical Solutions to Hard Challenges



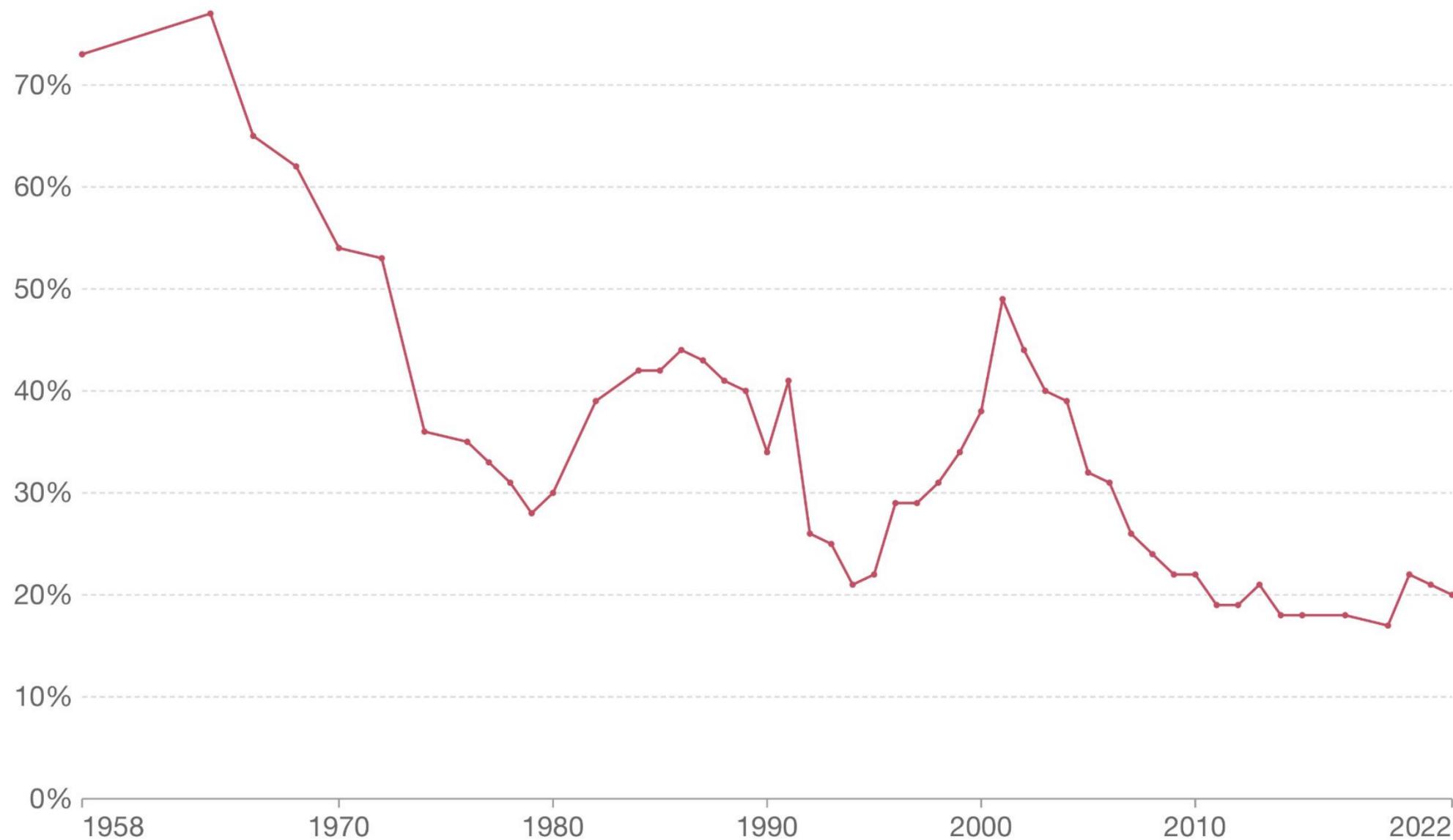
- We're often dealing with “wicked problems”
- Finding solutions is hard
- Identifying the root causes is hard!

Declining Trust in Government

Our World in Data

Trust in government in the United States

Share of respondents who say they trust the United States government 'always' or 'most of the time'.



Source: Pew Research Center (2023)

OurWorldInData.org/trust • CC BY

Designing alternate ways of working



To deal with these challenges, public institutions need to be more:

- Data-driven
- Agile, and
- Capable of tapping expertise from a variety of sources

People-led Innovation



Too often, we're not fully using our greatest asset - ***our communities*** - to identify and tackle these challenges

Our greatest assets

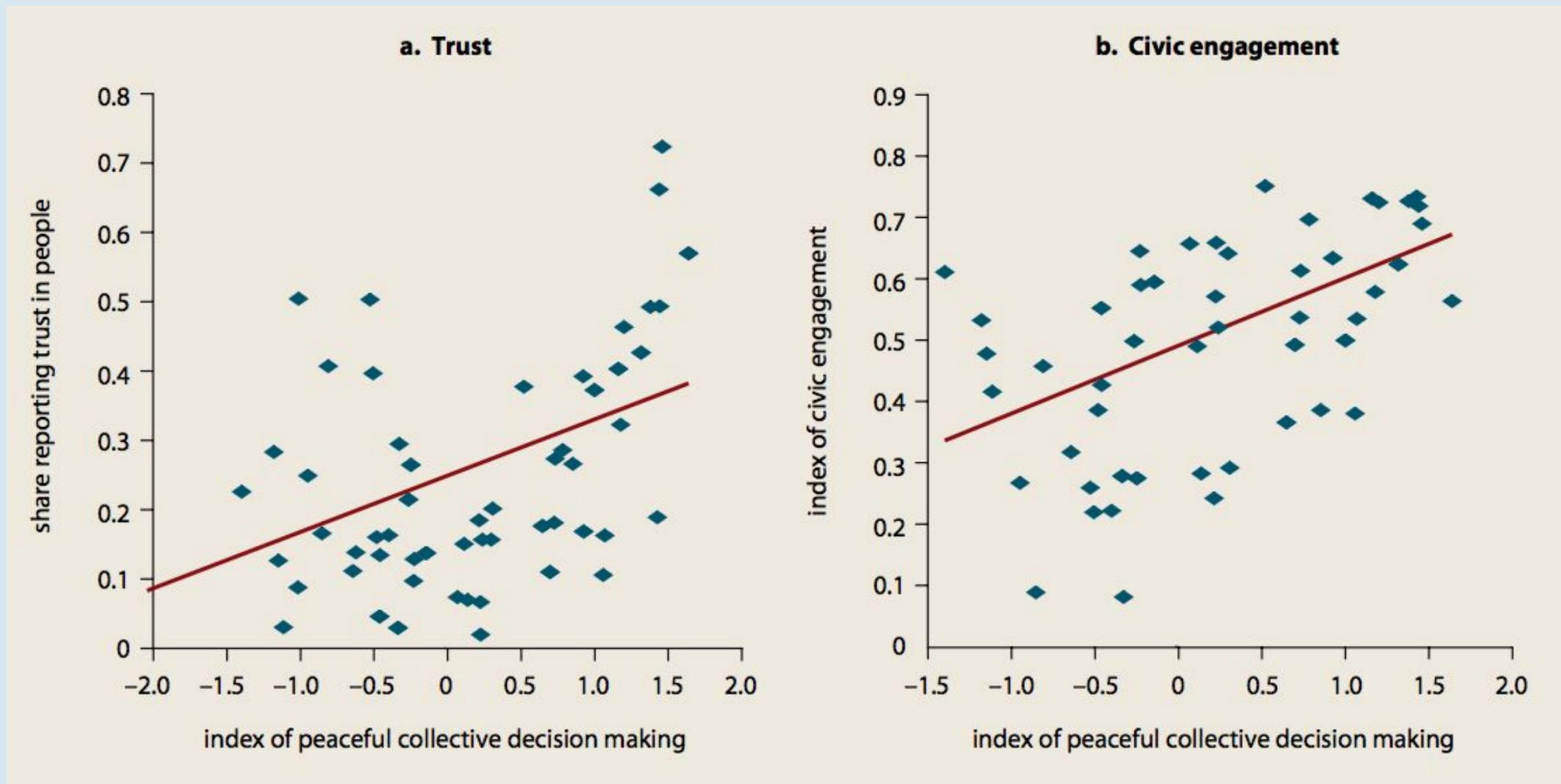
Our communities include those with a wide variety of traditional expertise across subject matters.

But equally, if not more importantly, they have the **lived experience** of the problems we are confronted with.



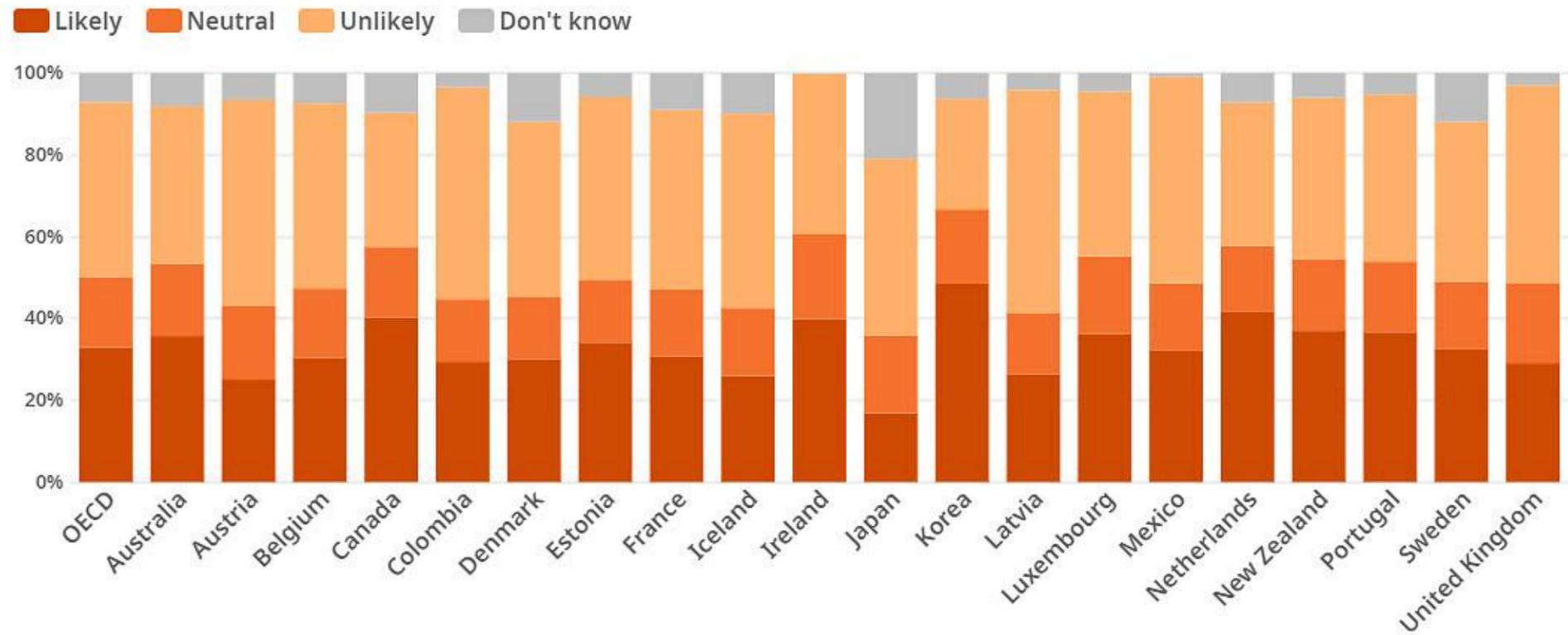
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Civic Engagement increases trust



Citizens don't feel heard

Citizens' expectations that public consultation would influence policies, 2021
 Perceived likelihood that governments would adopt opinions expressed in a public consultation



OECD: unweighted average across countries.
 Source: OECD (2023), [OECD Government at a Glance 2023](#).

Only 33%
 expect governments to
 adopt opinions expressed
 in a public consultation

Looking beyond Citizen Assemblies



Representative, random samples of a population brought together to debate and vote on issues on behalf of the larger group

Technology-enabled Crowdsourcing



These newer forms of “crowdsourcing” are not only more democratic, they’re also more legitimate, diverse and most importantly, more effective.

Not just an open text box on the internet



We're not looking for people's opinions.

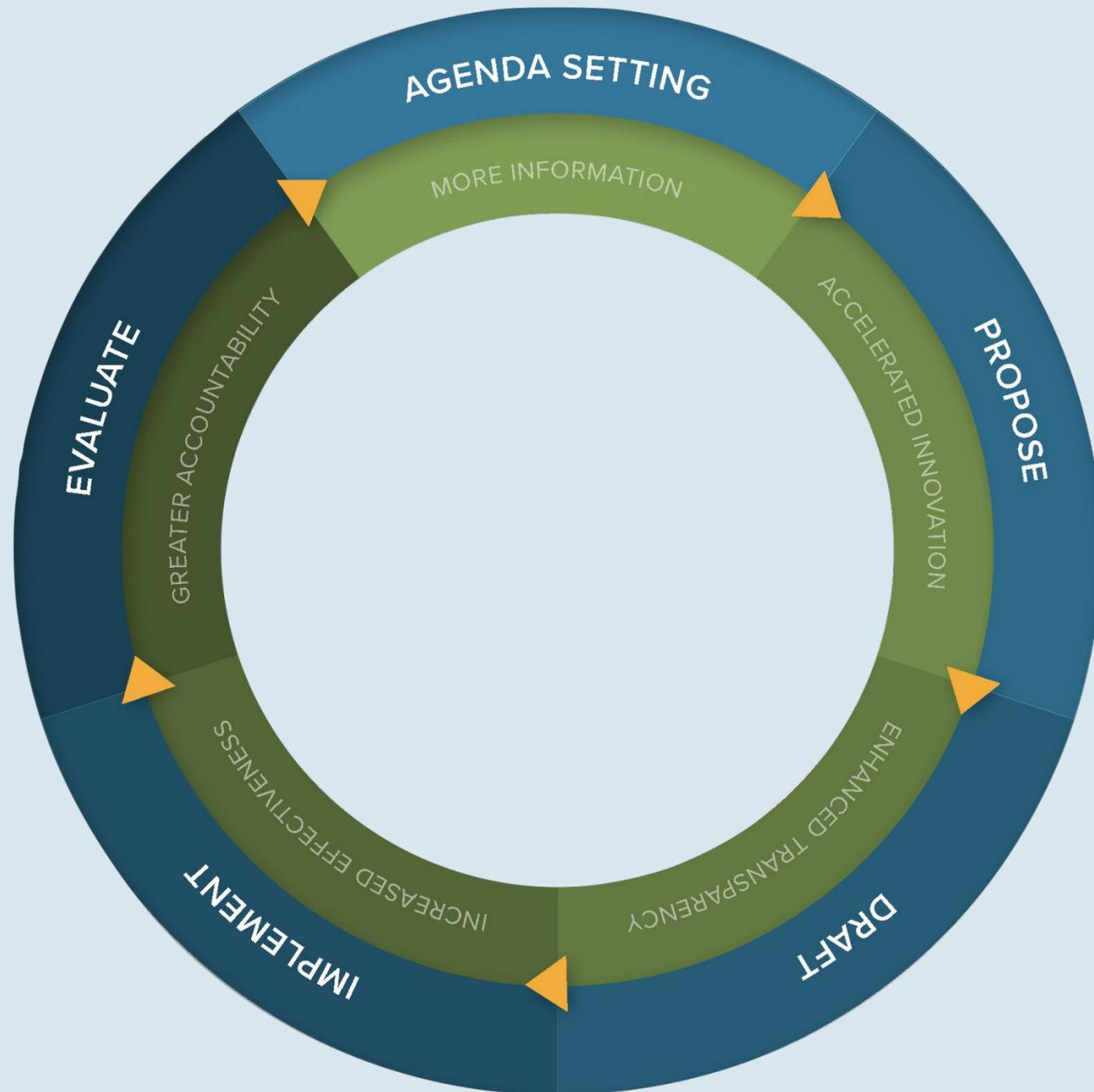
We're asking for their expertise and lived experience.

And we want to make it easy for people to share that expertise.

Caters to the needs of the public AND the policymaker



Well designed crowdsourcing makes it easy for the public to participate but equally, we want to make the inputs actionable for the decision makers who will receive it!



Addressing different needs at each stage of the policymaking cycle



YOUR FUTURE OF WORK

EN ESPANYÖL

WHAT IS THE FUTURE OF WORK IN

Changes in technology and in the economy will affect the way we work, our workplaces, the jobs we work in, and the skills we will need to succeed. We want to know how workers are experiencing these changes already, how they believe technology will affect their ability to

What is your greater concern about the impact of technology on lifelong learning and skill building?

Independent contractors will find it more difficult to access training opportunities because their client won't provide or pay for them.

Workers that face the greatest threat of losing their job due to automation are often the least educated.

I can't decide

41 votes on 51 ideas

Add your own concern here (Character limit 140 characters)...

Heard from over 4,000 workers in New Jersey

Lifelong Learning and Upskilling (48 Statements Total)

1. Understanding demand for better and new forms of worker training

- 1.1. There are not enough training programs that teach in-demand skills.
- 1.2. There are not enough training programs that teach skills in green jobs.
- 1.3. There are not enough training programs that teach the skills I am interested in learning.
- 1.4. There are not enough training programs that meet employer demands.
- 1.5. Skills-based credentials are not standardized, making it harder for employers to identify qualified employees.
- 1.6. Employers do not understand the benefits of worker training.
- 1.7. Employers do not provide their workers with training that will be in-demand in the future.
- 1.8. My employer does not provide on-the-job training.
- 1.9. Employers are less likely to pay for workers' training.
- 1.10. I am unclear on how likely it is that technology will impact my current job.
- 1.11. I am unclear on how technology will impact the job market.
- 1.12. I do not understand the value in learning new skills for the future workforce.
- 1.13. Private, for-profit certificate programs typically provide better training than community colleges.
- 1.14. Workers are not provided with enough advance notice of training opportunities, thus do not have adequate lead time to pursue training.
- 1.15. Career counseling services, which could help workers explore alternative and future career paths, are not readily available.
- 1.16. Workers that face the greatest threat of losing their jobs are often the least educated.
- 1.17. Universities do not provide enough training in

- 2.7. It is difficult for me and other workers to access data that can help us decide which training programs to pursue.
- 2.8. It is difficult for me and other workers to access data that can help us decide which training providers will provide the best value.
- 2.9. I do not know how to interpret data that can help me understand which training programs are best.
- 2.10. Employers themselves do not know which skills are needed for tomorrow's jobs.
- 2.11. Unnecessary degree requirements for jobs have a disproportionate impact on low-income and less advantaged populations.
- 2.12. Educational institutions need to more proactively match their offerings to workforce demands.

3. Facilitating access to worker training + upskilling

- 3.1. I cannot afford to pursue training opportunities because they cost too much.
- 3.2. I cannot pursue training because I am too busy working.
- 3.3. I cannot afford to pursue training because I have a family to take care of and do not have the time.
- 3.4. I am not going to pursue training because I do not think it's worth the time or money. I can learn on the job.
- 3.5. Employees will not hire individuals with criminal records, which makes reentry more difficult for the formerly incarcerated.
- 3.6. Incarcerated people lack access to secondary education in prison that could help them find employment when released.
- 3.7. Some workers are unable to pursue training because they move jobs too frequently to take advantage of employer-sponsored training.
- 3.8. Independent contractors will find it more difficult to access training opportunities because their client won't provide or pay for them.
- 3.9. Fewer employers are offering on-the-job training opportunities than in previous decades.
- 3.10. The cost of non-profit, undergraduate education programs is rising.

Heard from over 4,000 workers in New Jersey



All Our Ideas

allourideas.org



**smarter
together**

For identifying and prioritizing problems

Free and Open Source tool

Needs 1-2 FTE to develop problem statements, outreach and comms plan and analysis



Integrating the informal economy

Share ideas on 1) how municipalities can provide informal sector workers and companies access to adequate locations, 2) how to access capital and financial services, 3) data sharing strategies to get more information about the situation on the ground, 4) successful solutions from around the world.

48 316 330



Añadir nueva idea

FILTRAR IDEAS

Buscar...

MOBILE MARKET
Description of your idea Our solution is selling everywhere with the concept of uniformitarianism. Uniformitarian...

0 0

Mobile Phone Based Low Cost Borrowing
Description of your idea A mobile phone based low cost borrowing is an idea for low income earners who find it ha...

1 1

Promoting Women & Youth Entrepreneurship Through Hay Baling
Description of your idea Partnership involving City of Mutare, CIVAGRIEC Private Limited, Women and Youth coop...

239 231

Ubuntu Sytem
Description of your idea Ubuntu is a term which means oneness togetherness in our culture. Hence here my system t...

1 1

Smart Kiosks For Urban Youth
Description of your idea Urban youth in low income areas will be supported to lease to own branded standardised '...

2 2

SMART GRID (Community Owned Utility Infrastructure)
Description of your idea The Smart Grid will be a community owned solar/wind microgrids utility infrastructure wi...

5 5

Trahub

Aquanonic Production Intergrated with

Share and-Connecting Landowners to

ONLINE MARKETPLACE
Online Market Place for Micro and SMEs

ArqSave

Entreneurial pyramid

Received 400 ideas and over 5,000 participants



City Challenge

africa.multicitychallenge.org



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An Ugandan startup converting waste plastic into building materials was awarded a **US\$40,000** grant from the UNDP Uganda ‘Youth for Business Innovation and Entrepreneurship Facility’



Your Priorities

yrpri.org



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We're looking for implementable and effective solutions - not just "innovative" ones.

Free and Open source tool

Needs 1-2 FTE

**Not just crowdsourcing widely.
But crowdsourcing wisely.**

- Beth Simone Noveck
Director, The Governance Lab



Not just crowdsourcing widely. But crowdsourcing wisely.

smartercrowdsourcing.org



**smarter
together**

Of course in many situations we want to reach out to as many people as possible.

But in some situations, we want to add a layer of curation to this process to crowdsource “wisely”



SMARTER CROWDSOURCING ZIKA

Imagine if those creative individuals could speak directly to the institutions with the power and responsibility for delivering new policies and services.

DOWNLOAD THE FINAL REPORT



VIEW THE PLAYBOOK

PROJECT DESCRIPTION

Combining problem definition, crowdsourcing and curation to develop actionable recommendations for policymakers based on input from interdisciplinary experts.

Technology helps us make this process more efficient and effective



For the public

When we put out large documents that we expect people to provide feedback on, new tools enable us to very quickly create a tool where people can ask any questions they have about the policy document and get answers that are easy to understand.

This enables the citizen to provide informed feedback

E.g: Civis, Jugalbandi

Technology helps us make this process more efficient and effective



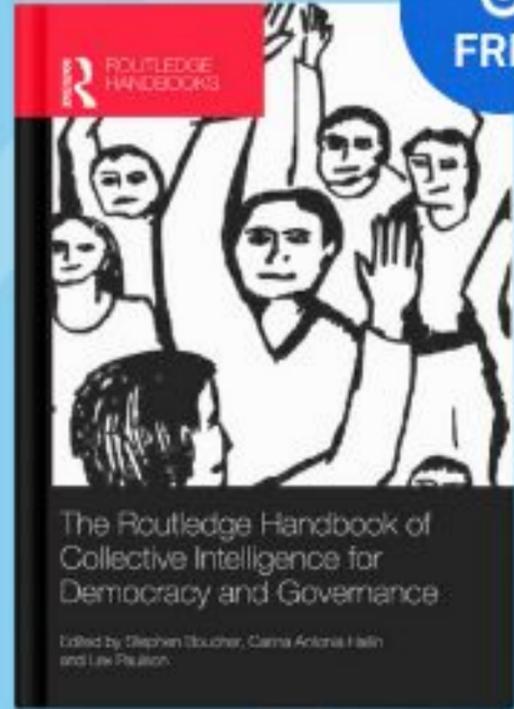
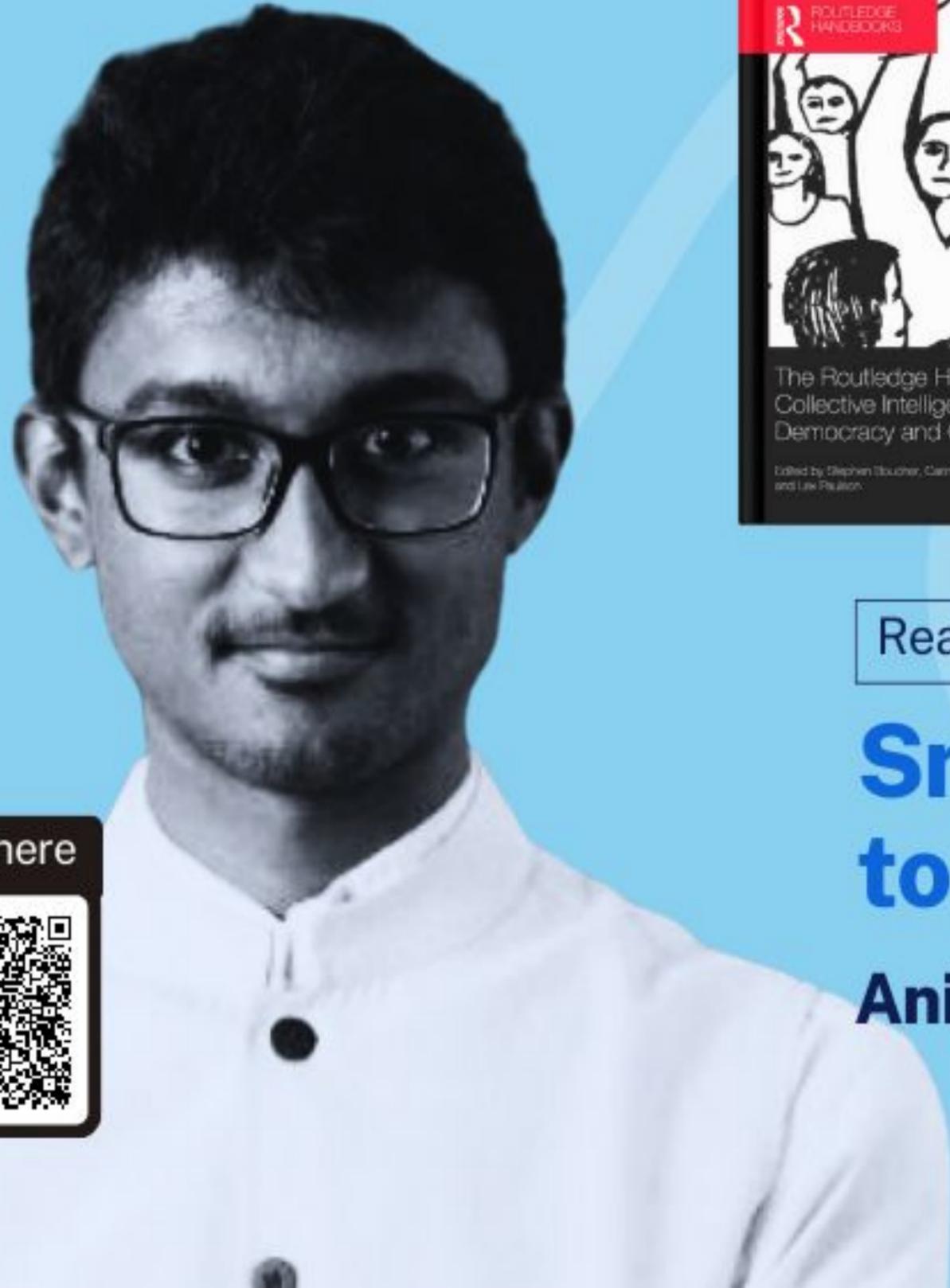
For the decision-makers

Helps us save time in preparing first drafts of the statements for the All Our Ideas tool.

Many new tools will even segregate responses from public consultations into buckets of topic area or based on similarity and provide summaries.



Solving problems **with**, not for, people



The Routledge Handbook of Collective Intelligence for Democracy and Governance

- Collective Intelligence applied to public challenges
- Inspiration for policy-makers, civil society organizations and engaged citizens

More: smarter-together.org

Read my chapter

Smarter crowdsourcing to tackle COVID-19

Anirudh Dinesh

Read here



Keynote 5

Crowdsourcing for social innovation

Ashoka & Citizen Fund

[Yannick Fischer, Ashoka Belgium](#)

[Alain Boribond, Citizenfund](#)



Changemakers
unite for the
new reality

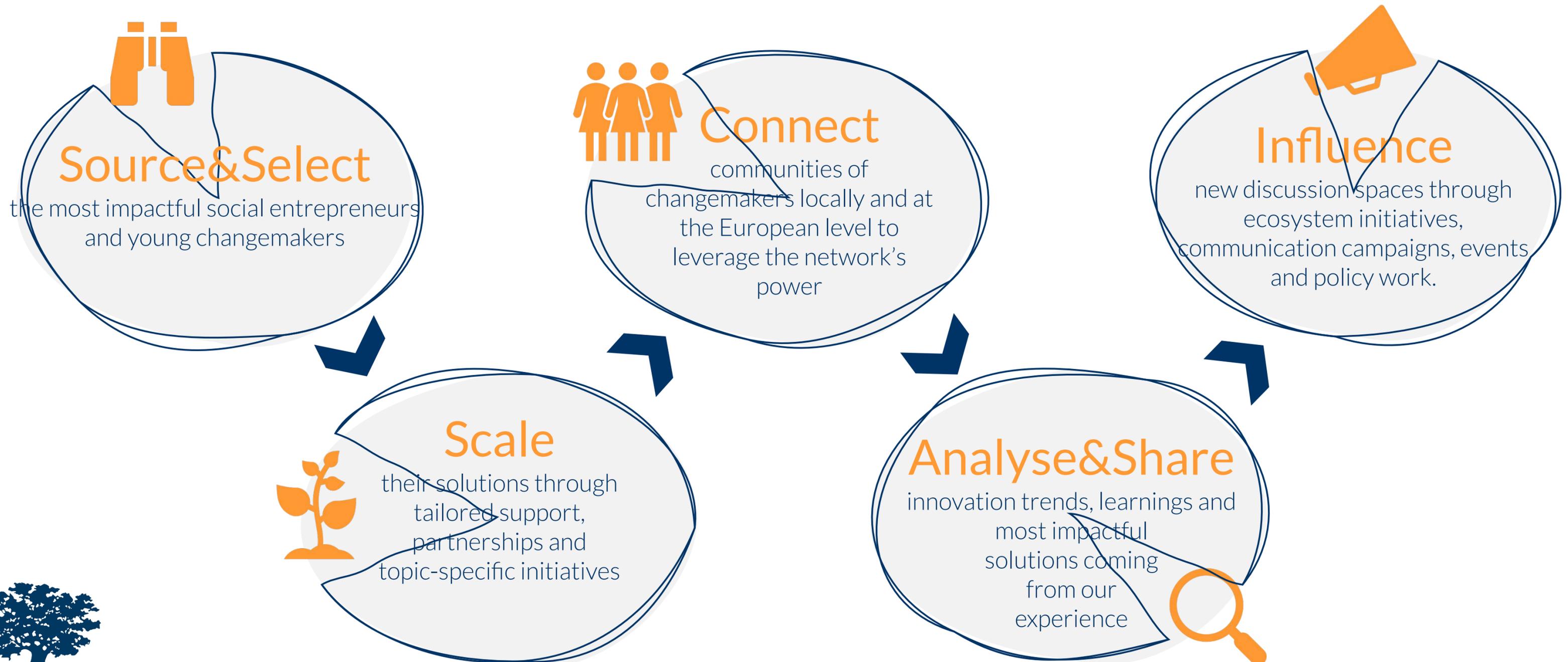


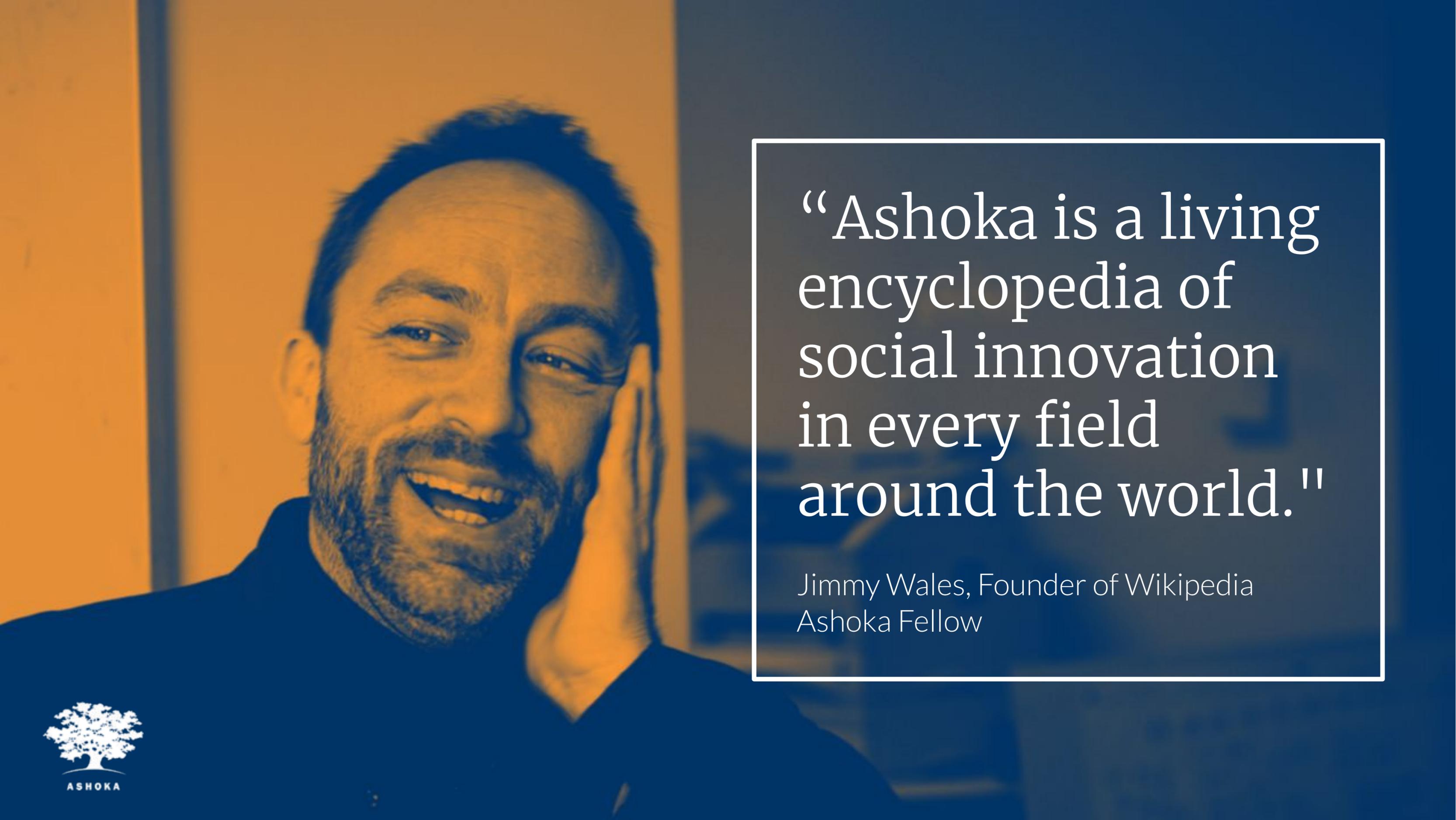
ASHOKA

Ashoka is working for social impact globally



How we accelerate impact





“Ashoka is a living encyclopedia of social innovation in every field around the world.”

Jimmy Wales, Founder of Wikipedia
Ashoka Fellow



Solutions are out there

We know where to find them!

650+
Ashoka
Fellows in
Europe



Oren Yakobovich turns citizens in communities affected by human rights violations into journalists that film and expose violations and advocate for solutions, instead of depending on top-down interventions.

Alberto Alemanno matches civil society organisations with expert citizens to work together on lobbying for social causes.



Katarzyna Szymielewicz established a platform to enable civil society to monitor surveillance mechanisms and legal interventions that affect privacy rights.

Christian Vanizette, connects social enterprises that want to solve certain problems with citizens willing to collaborate by organising a network that can interact



Elena Calistru is making civic engagement mainstream and desirable for citizens.

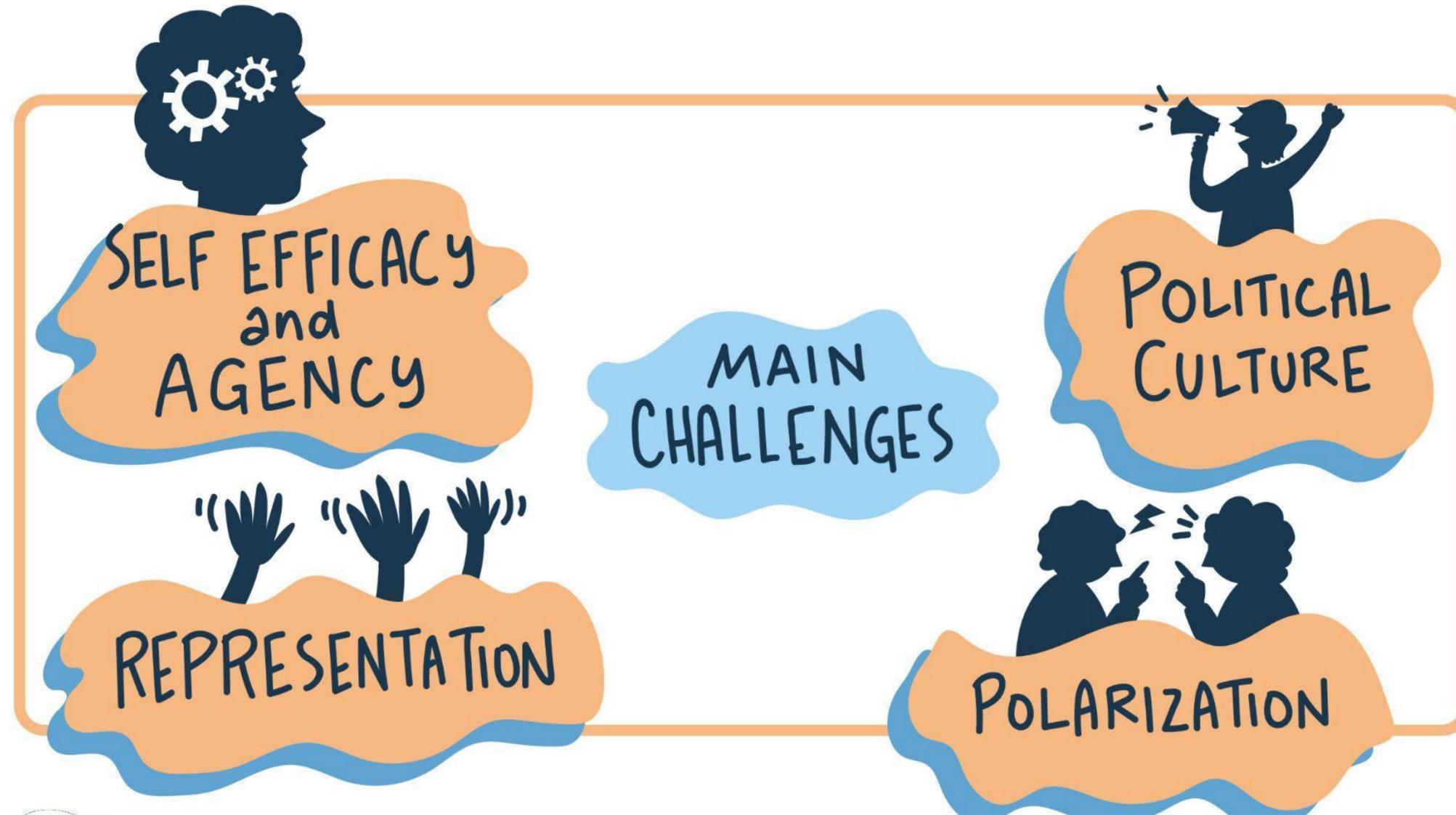


Paul Radu fights international organised crime by connecting a new generation of global investigative journalists with a diverse group of programmers, officers, data scientists, and even librarians, to develop and feed data to the technological infrastructure to expose crime



Clara Jimenez Cruz is promoting the creation of a conscious community that tackles misinformation and fake news.

Collective Impact Initiatives



The Cohort



PAULO ROSA

Policy Analyst
Joint Research Center



MAX OEHL

Co-Initiator &
Executive Director
Brand New Bundestag



JANA DEGROTT

Co-Founder
We Belong



HELFRIED CARL

Co-Founder
Innovation in Politics
Institute/European Capital of
Democracy



IRENE TOUCIDO ALONSO

Project Manager
FIDE



KALYPSO NICOLAIDIS

Chair in International Affairs,
School of Transnational
Governance, EUI



CAMILLE DOBLER

Head of Research
Missions Publiques



NABILA ABBAS

Post-Doctoral Researcher
CNRS



SARAH DURIEUX

Co-Director
Multitudes Foundation



ERIKA STAEL VON HOLSTEIN

Chief Executive
Re-Imagine Europe



REBEKKA DOBER

Founder
YEP-Stimme der Jugend



CLAIRE MC EVOY

Policy Analyst
OECD



ANA VITORIA ADZERSEN

Facilitator, Process Designer
and Documenter
Agora Brussels



SASCHA HASELMAYER

Partner & Fellow
Ashoka



ROSA-MARIA MÄKELÄ

Specialist
The Finnish Innovation Fund



DOMINIK HIERLEMANN

Senior Advisor
Bertelsmann Foundation



CONSTANTIN SCHÄFER

Consultant | Project Lead
European Citizens' Panels
iFok



GREGOR HACKMACK

Co-Founder
Innn.it



FATEMEH JAILANI

COO
SINGA & Founder
Accidental European



FINN HEINRICH

Lead Digital Transformation,
Just Climate Transition and
Democratic Renewal
Open Society Foundations



JULIANE BARUCK

Project Lead
Es geht LOS

SOLUTION

TOPIC
Lack of SELF-EFFICACY and AGENCY of citizens

TURN AROUND SCHOOLS



Democracy experts

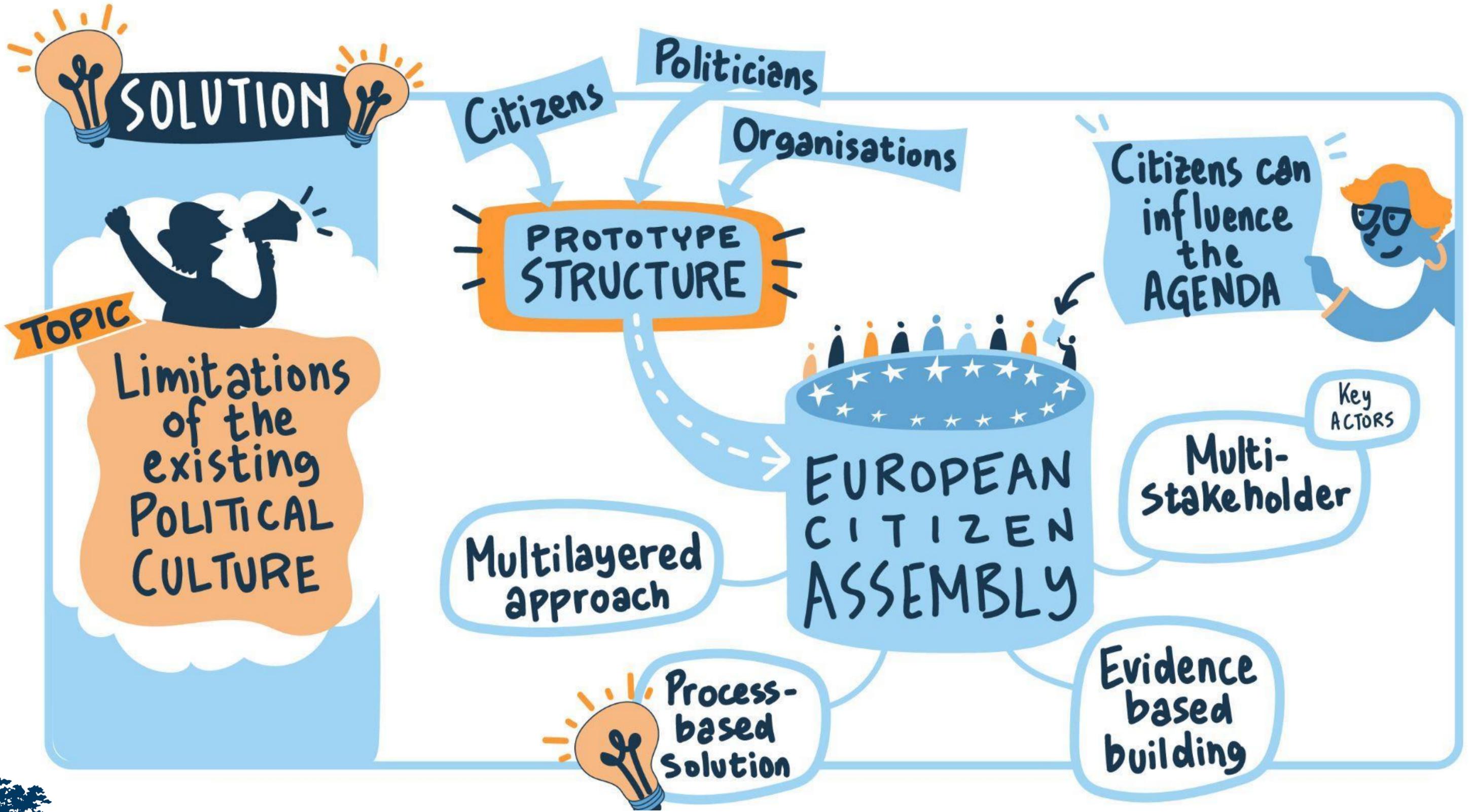
Experience CHANGE

To be COURAGEOUS to promote CHANGE in my Community

INVOLVE YOUTH

INVOLVE COMMUNITY
Intergenerational Families







SOLUTION

TOPIC
POLITICAL POLARIZATION

Addressing FEAR

- CODE OF CONDUCT**
- ★ Transparency
 - ★ Tolerance
 - ★ Safe Space
 - ★ Humility
 - ★ Diversity
 - ★ Inclusive



TV SHOW
2hr MONTHLY discussions
SUNDAY EVENINGS

EXPLORE **TOPICS** that trigger **fear**

Informative — AND — CONSTRUCTIVE Conversations

PANEL of Stakeholders

HEAR DIFFERENT Perspectives

Setting the EXAMPLE



Join for the Report Launch on October 12th

Registration - Report Launch -
Ashoka Changemaker Europe

