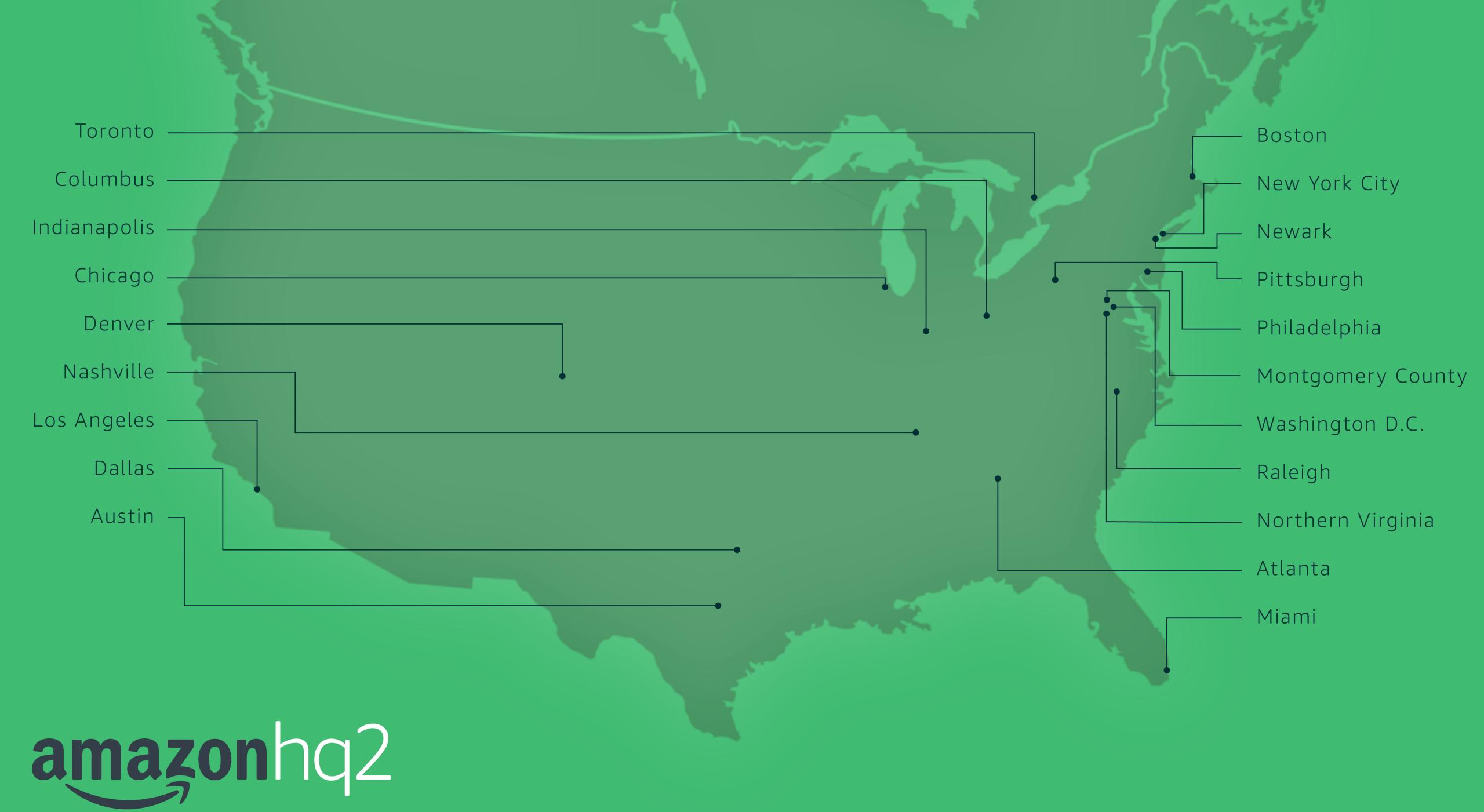
ARTIFICIAL INTELLIGENCE

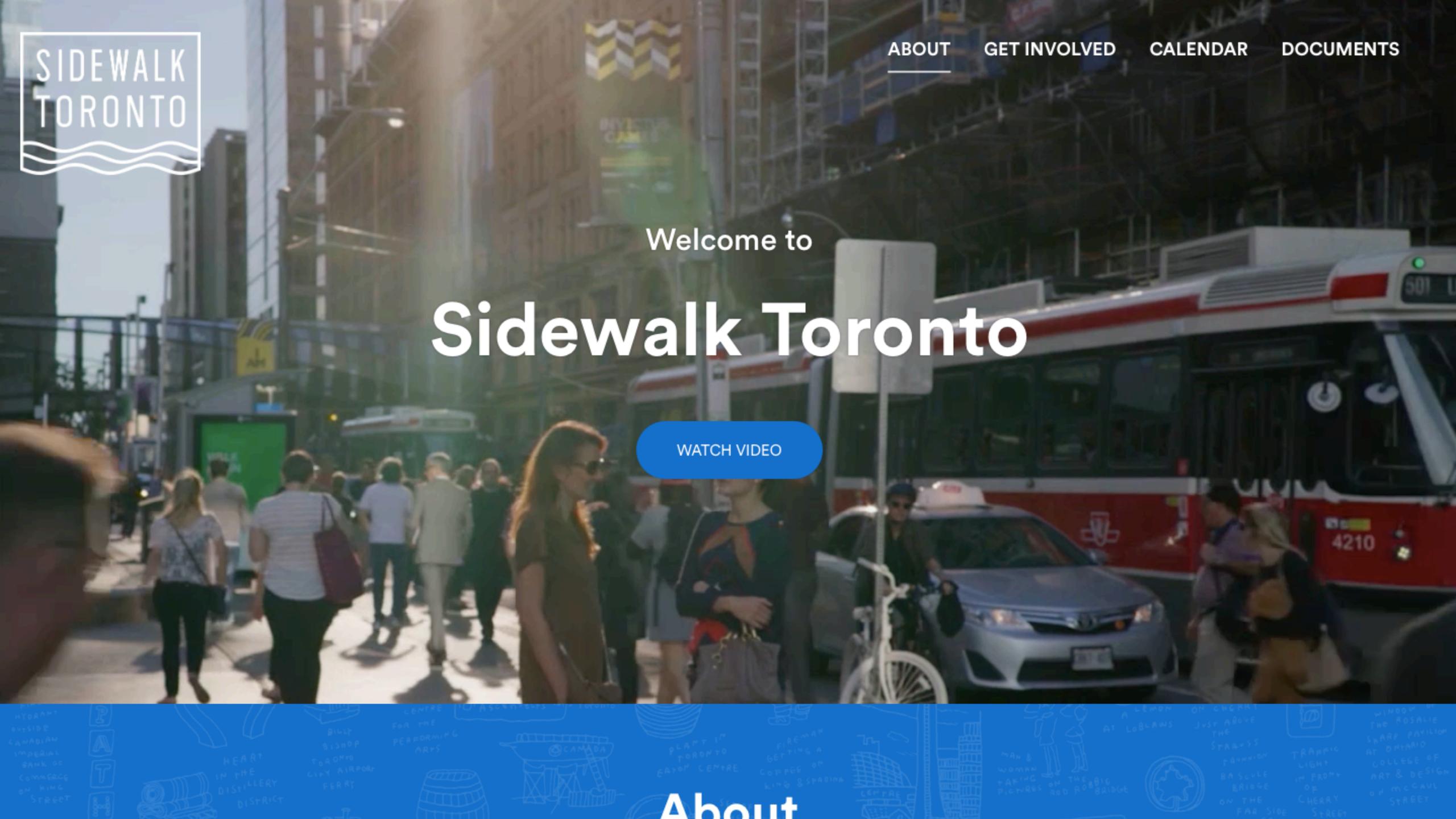
MEETS

COLLECTIVE INTELLIGENCE











### ANTICIPATORY REGULATION

- \* PROACTIVE
- \* FORWARD-FACING
- \* FLEXIBLE
- \* ITERATIVE
- \* INCLUSIVE



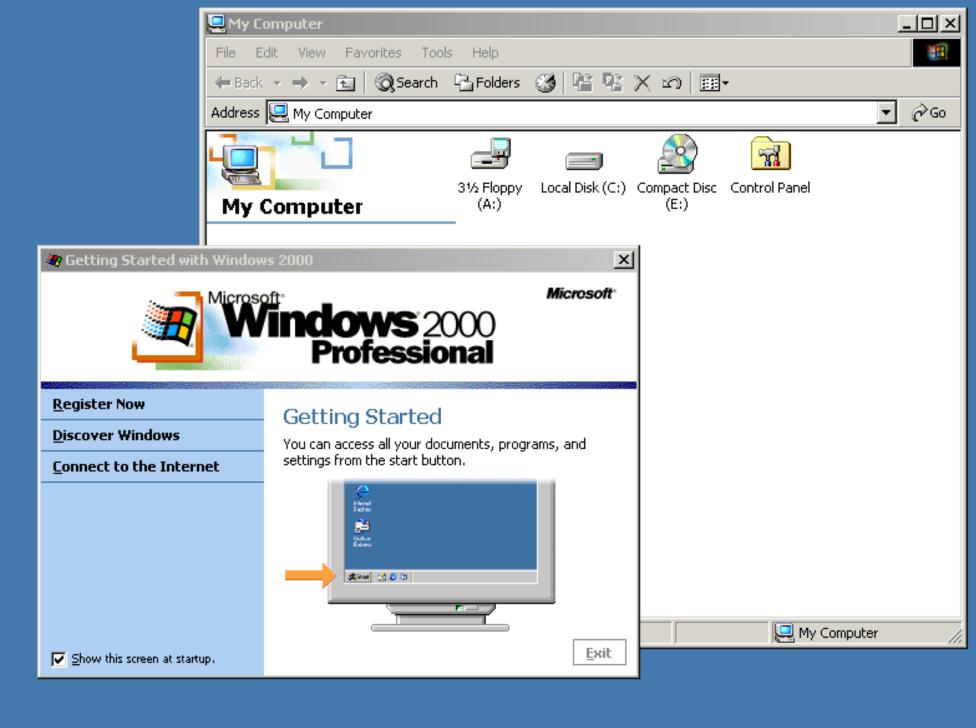






Recycle Bin

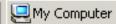




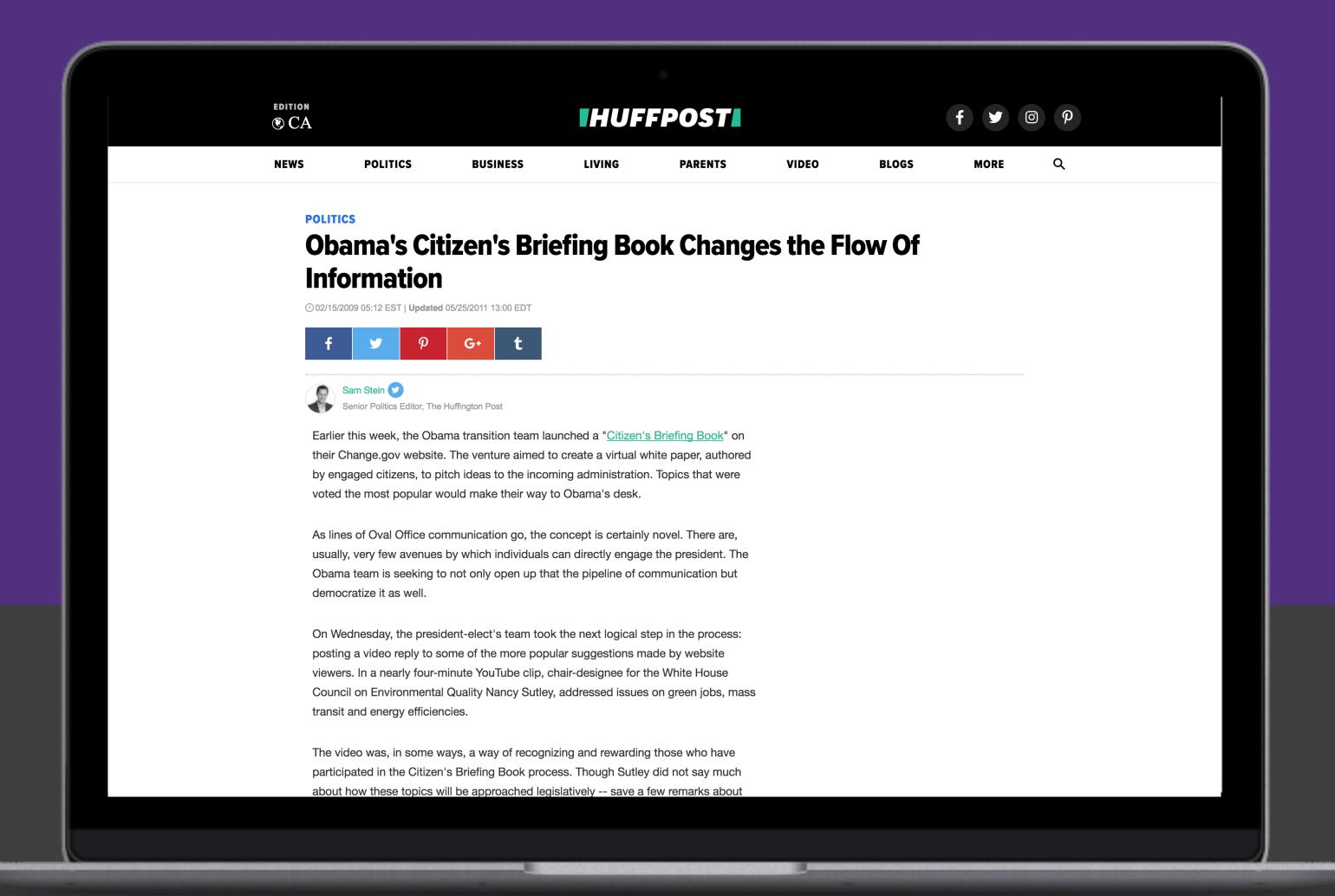




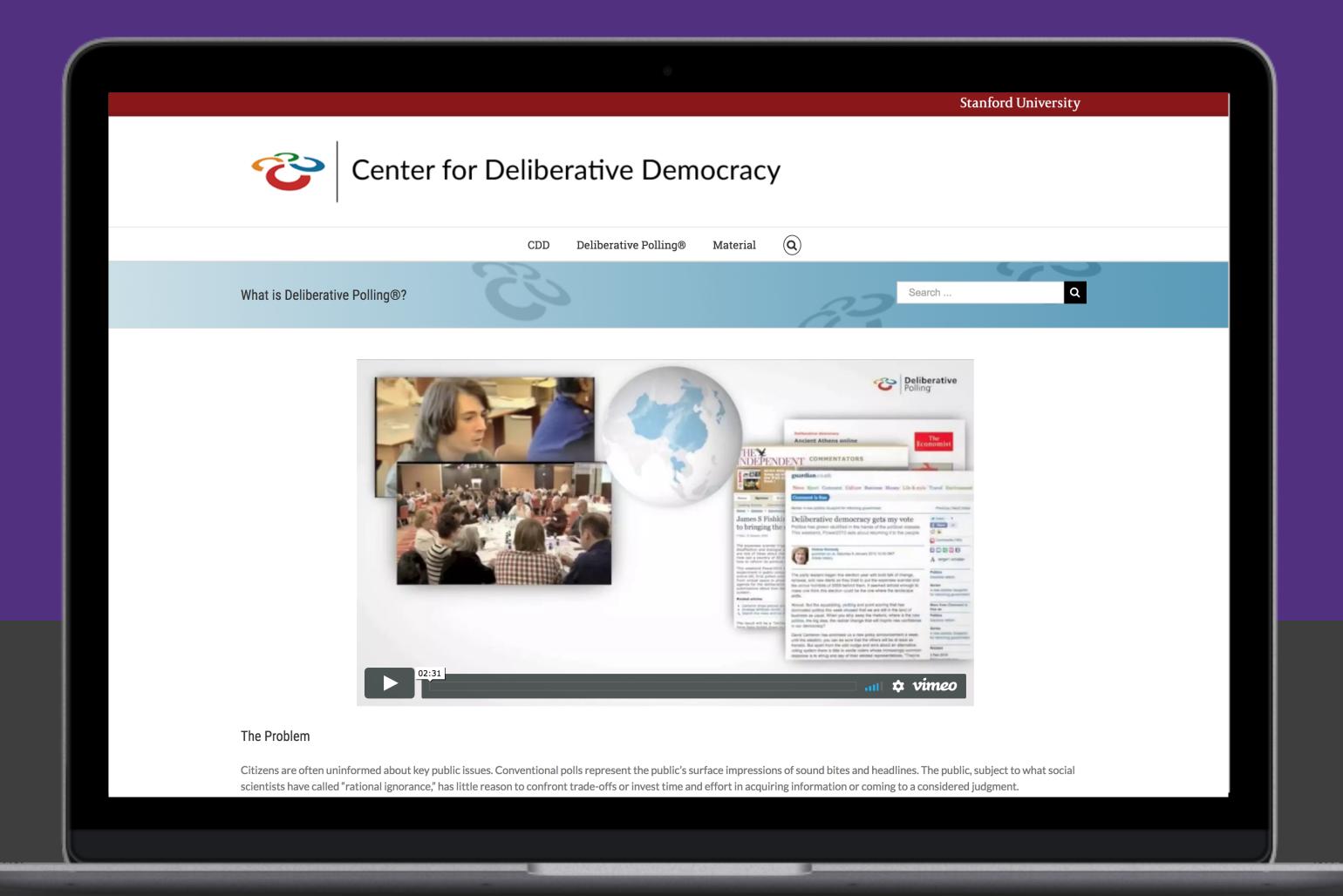




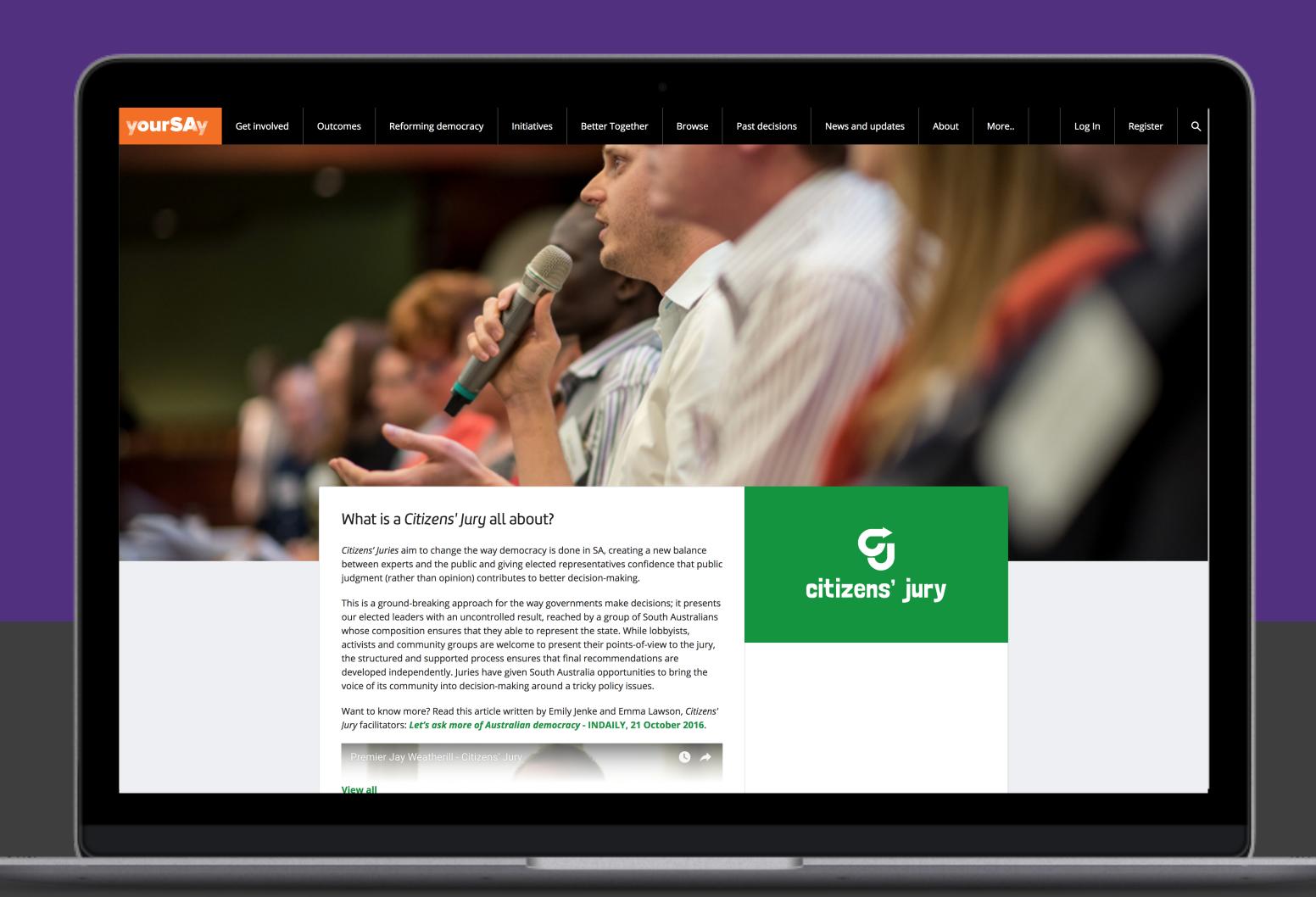
### CIVIC ENGAGEMENT IS HARD



## DELIBERATIVE POLLING



## CITIZEN JURIES







About V News V Discover V Science V Journal V Applications V Engage V

lome News

Revisiting EFSA@EXPO: crowdsourcing, cryst...

21 January 2016

Corporate









#### Revisiting EFSA@EXPO: crowdsourcing, crystals and communities



Openness in science is not new, but society is demanding that science opens up more. Public bodies, consumers and other stakeholders want a voice in risk governance as a whole, from the beginning onwards, not just at the end. Escalating volumes of data require new ways of approaching assessment and analysis. Innovative companies and online communities, among others, can help to develop tools to meet these challenges. The session brought together some of the latest open assessment models and tools that are emerging.

Science and society: an evolving partnership

#### Related News

EFSA appoints senior communications manager

⊕ Corporate

i published: 26 Jan 2016

Japan's food safety commission visits EFSA

Corporate

i published: 21 Jan 2016

Reporting on open plenary meetings: guidelines for observers revised

Corporate, Stakeholders

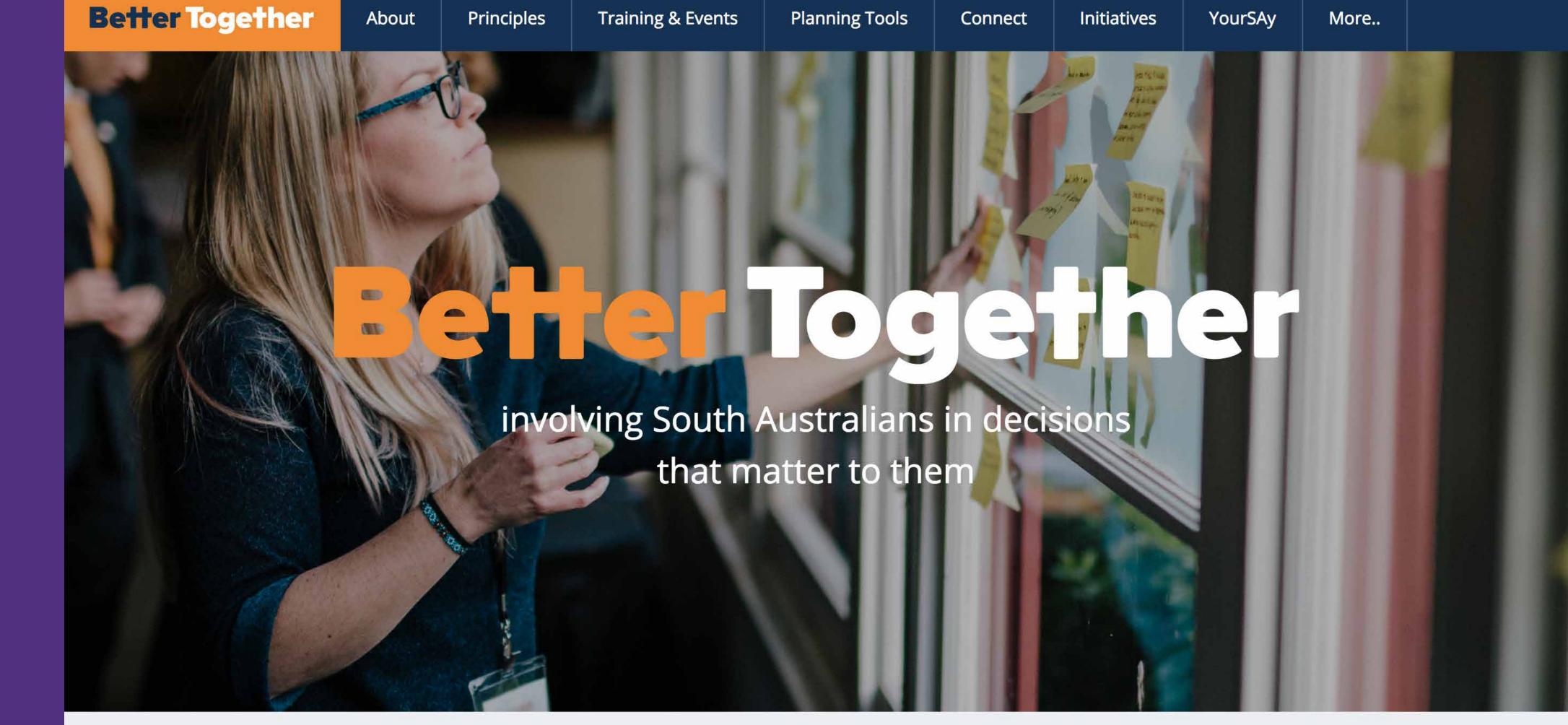
i published: 20 Jan 2016





CO-CREATED

BY PEOPLE

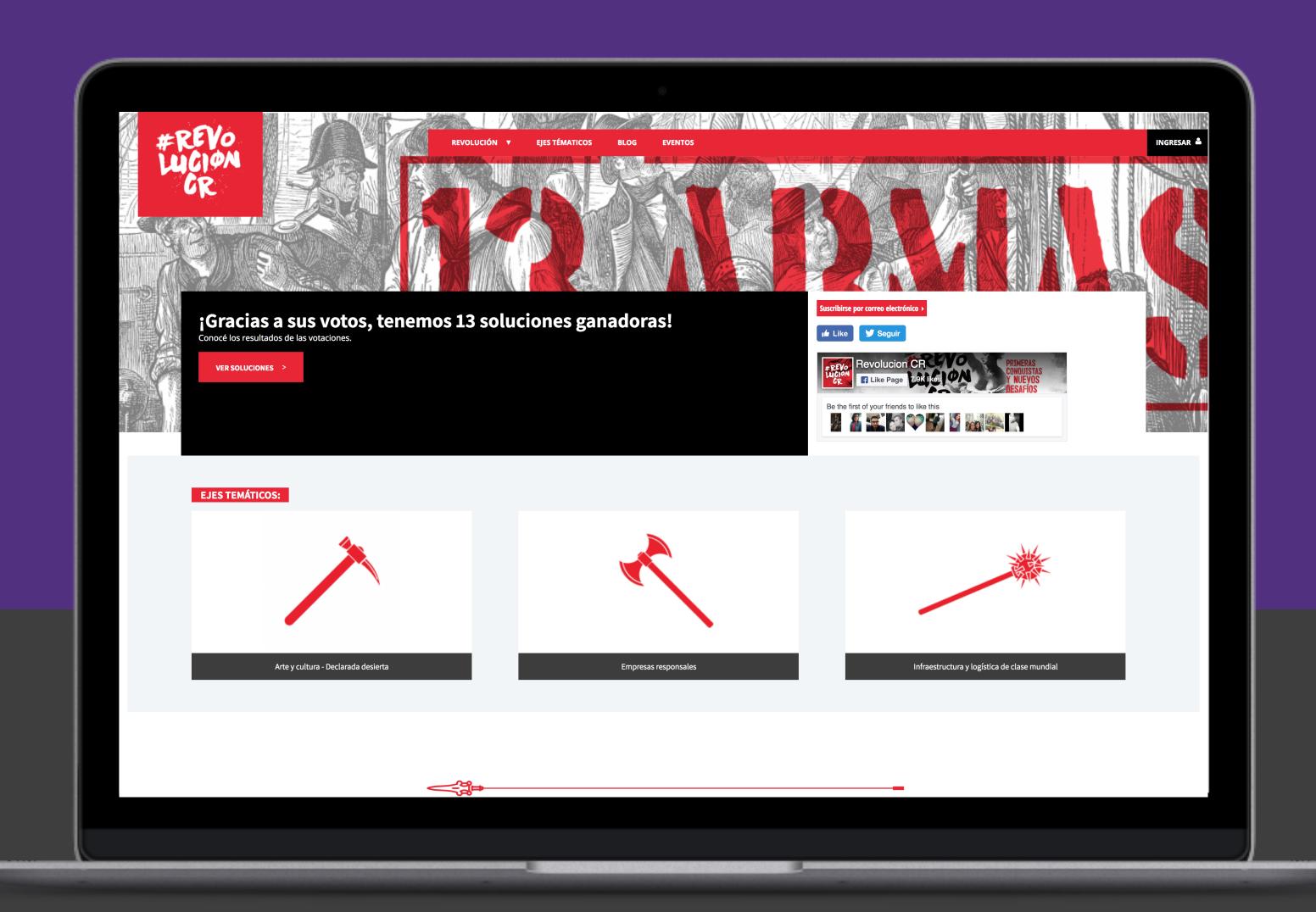


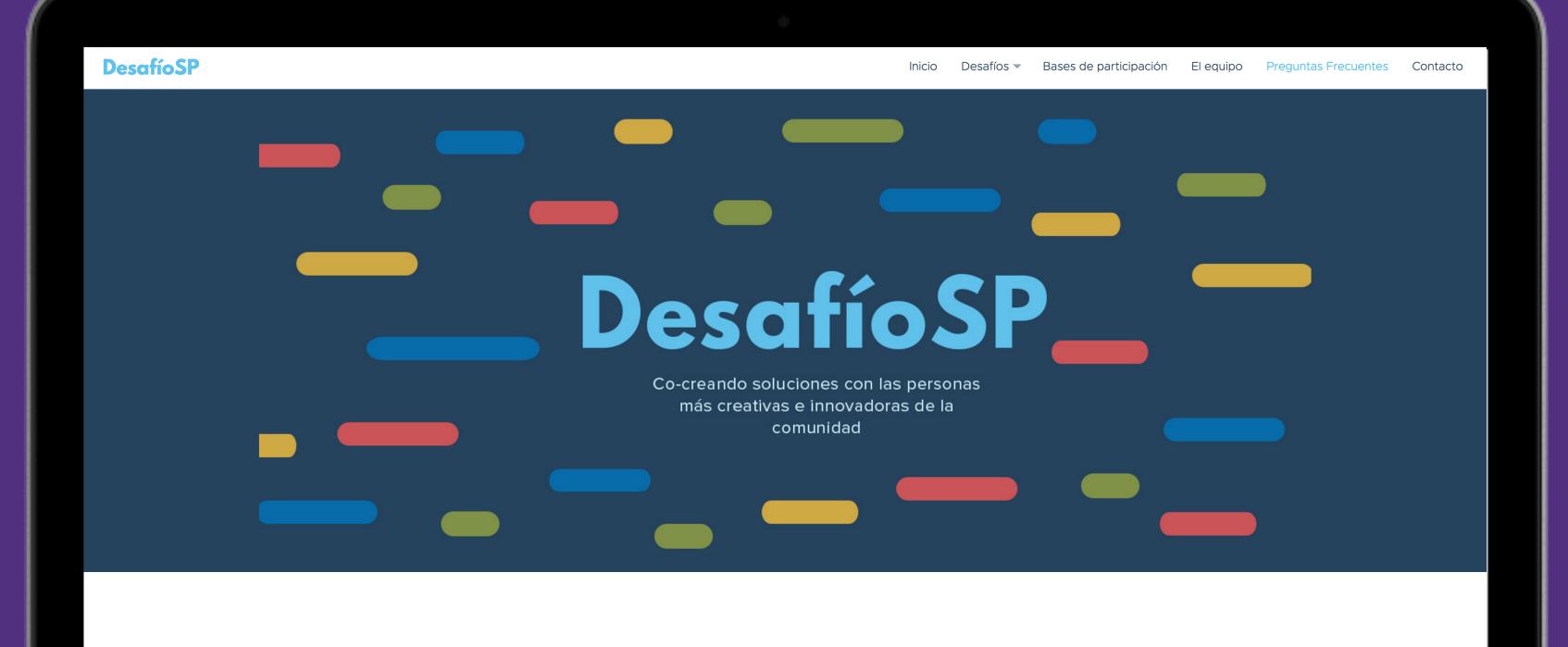






## CIVIC CHALLENGES AND CO-CREATION









#### Una nueva manera de resolver problemas públicos

Buscamos crear un modelo de gobierno más descentralizado, colaborativo, y que sepa aprovechar la inteligencia y talentos dispersos en su comunidad en la resolución de problemas públicos.



#### Un nuevo paradigma de Participación Ciudadana

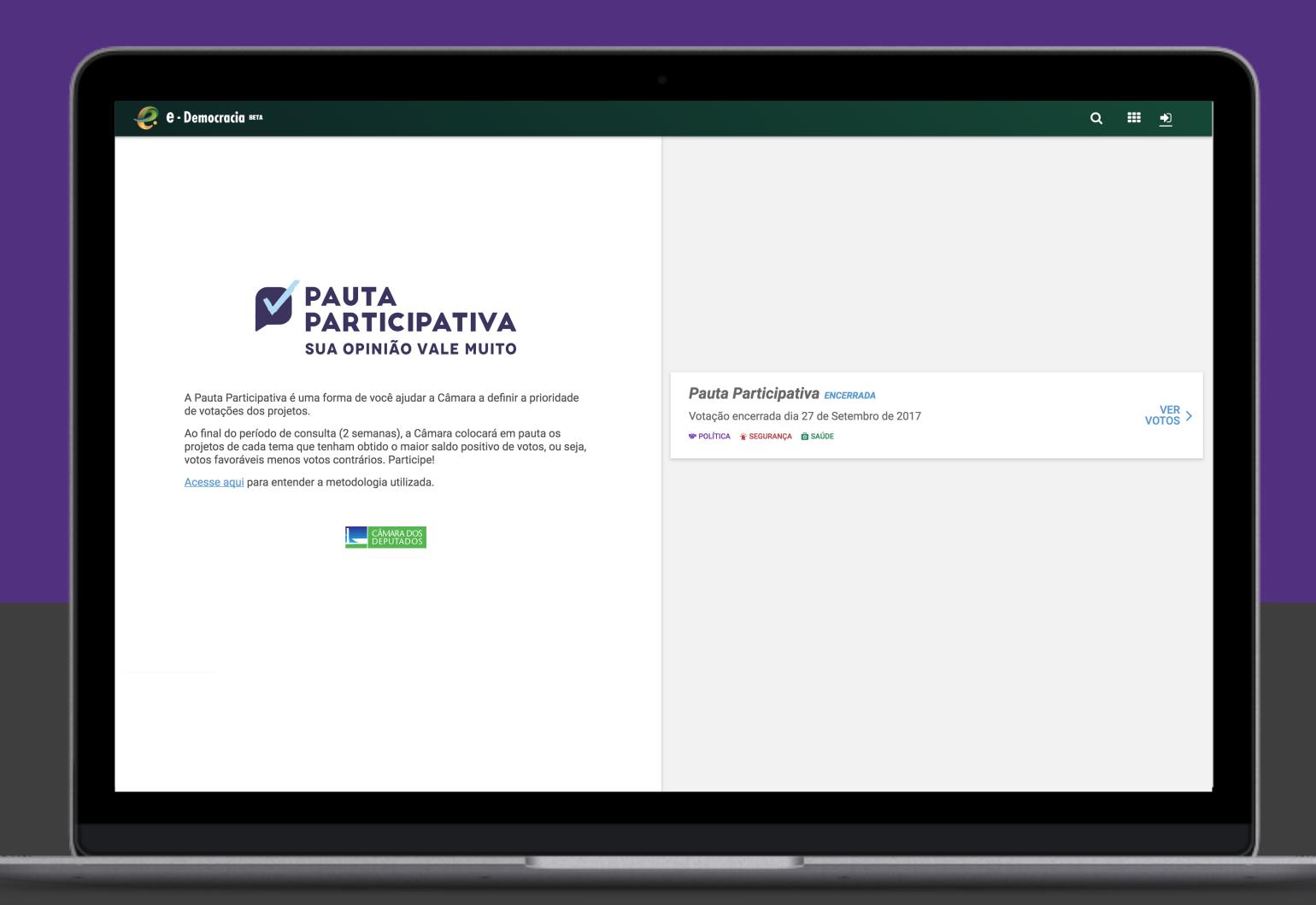
Queremos transformar la manera de interactuar contigo y nuestra comunidad creando un nuevo espacio para una participación ciudadana activa y con impacto.



CROWDLAW
CIVIC ENGAGEMENT
IN LAWMAKING



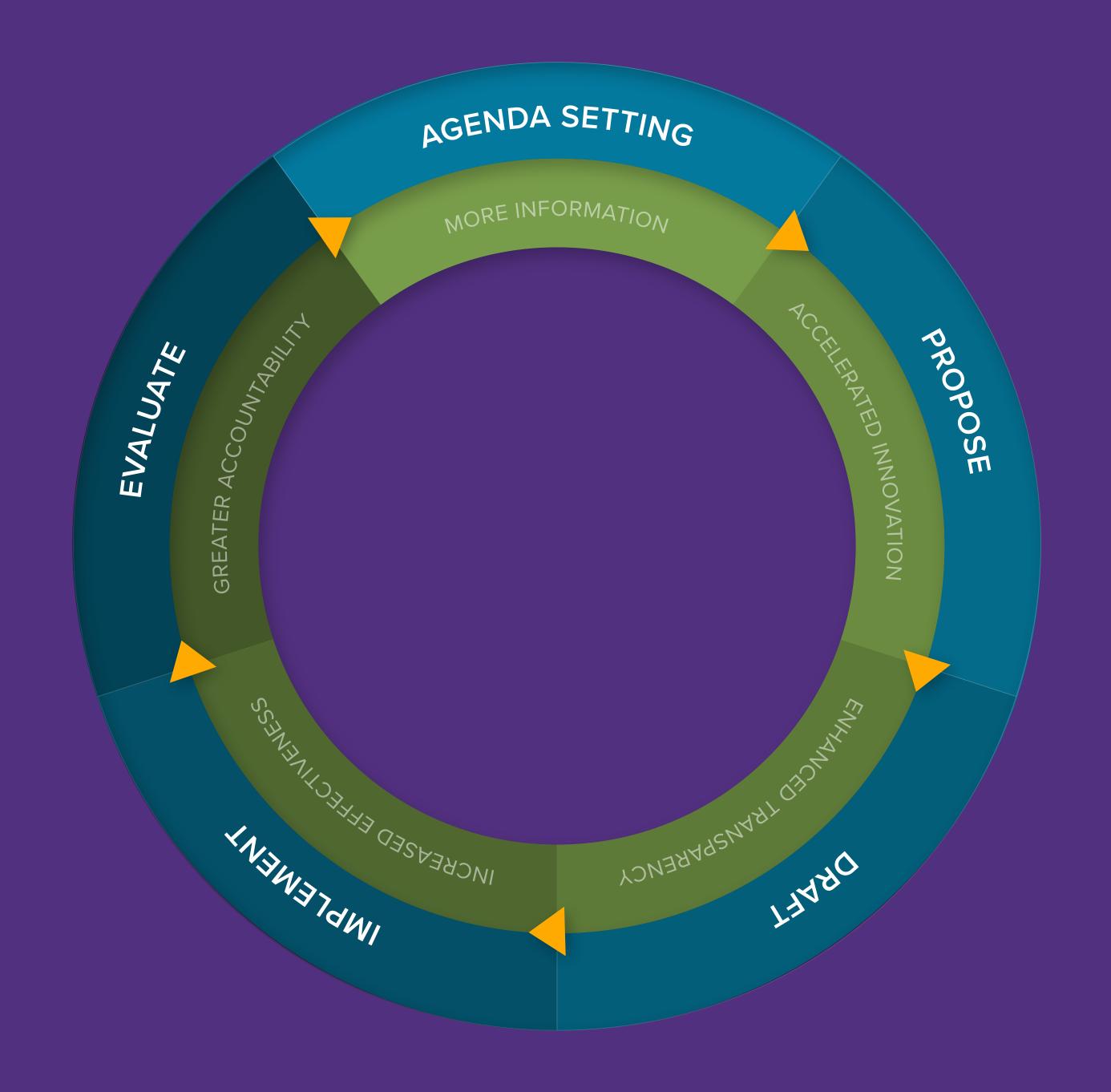
## CROWDLAW IS ALREADY HAPPENING

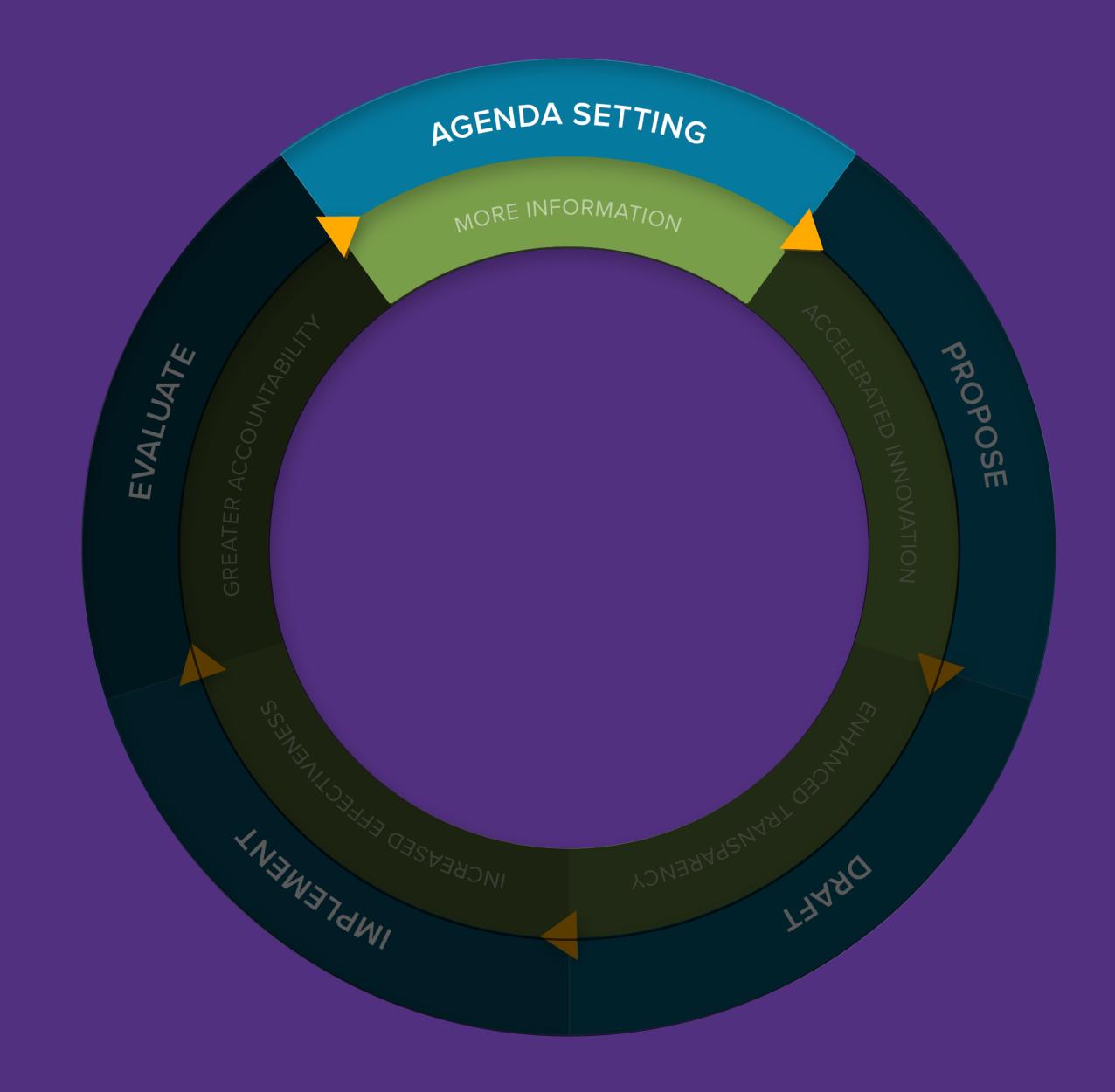


#### **HYPOTHESIS**

## PUBLIC INSTITUTIONS WILL BECOME MORE EFFECTIVE AND MORE LEGITIMATE IF THEY ENGAGE MORE DIVERSE AUDIENCES MORE FREQUENTLY

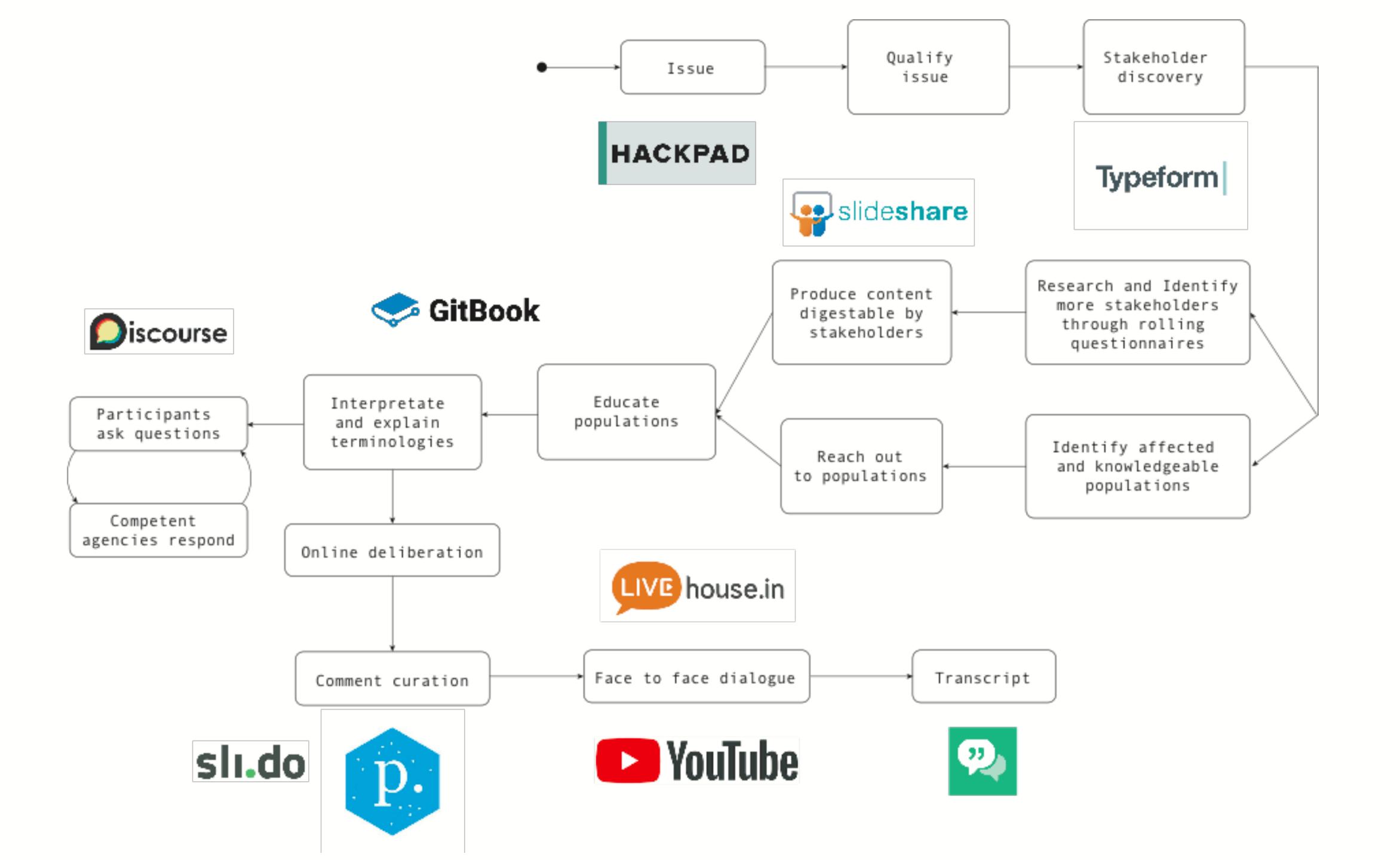
















#### Live AI filtered social media

Most used words (past 7 days)

Language statistics

Information



#### Experimental AI filtered social media listening

Subject: Youth mobility and Erasmus

1,500 voices translated from 29 languages

English: 621 Spanish: 401 French: 138 Italian: 86 Turkish: 59 Dutch: 45 Portuguese: 39 Catalanan: 32 German: 22 Greek: 12 Galician: 6 Indonesian: 5 Czech: 4 Polish: 3 Danish: 3 Shona: 3 Finnish: 2 Croatian: 2 Slovene: 2 Bosnian: 2 Arabic: 2 Afrikaans: 2 Japanese: 2 Maltese: 1 Norwegian: 1 undefined: 1 Romanian: 1 Tagalog: 1 Vietnamese: 1 Slovak: 1

Refresh every 10 minutes Search...

Q



### Erasmus is an RPG actually

automatically translated

05.Dec 2017 - \_kamastaw - French



I have just learned of the death of Manuel Marín, one of the people who have imagined the Erasmus scholarships, entroutras things. Let the Earth be light.

automatically translated

05.Dec 2017 - nosoyesemariano - Galician



@DomhnallP @\_yunghick \_yu @DomhnallP ah okay thank you! I'm working 33 hours in a bar & amp; my schedule changes weekly and it's late hours so I just wanted to see if I was being lame for thinking I should quit, I think the fact I'm on Erasmus and away from home makes it a bit less manageable

05.Dec 2017 - ja\_wytches - English

I still do not know about those. E. U. And Erasmus plus. When my card is coming? When Can I get out of these? Stressed out.

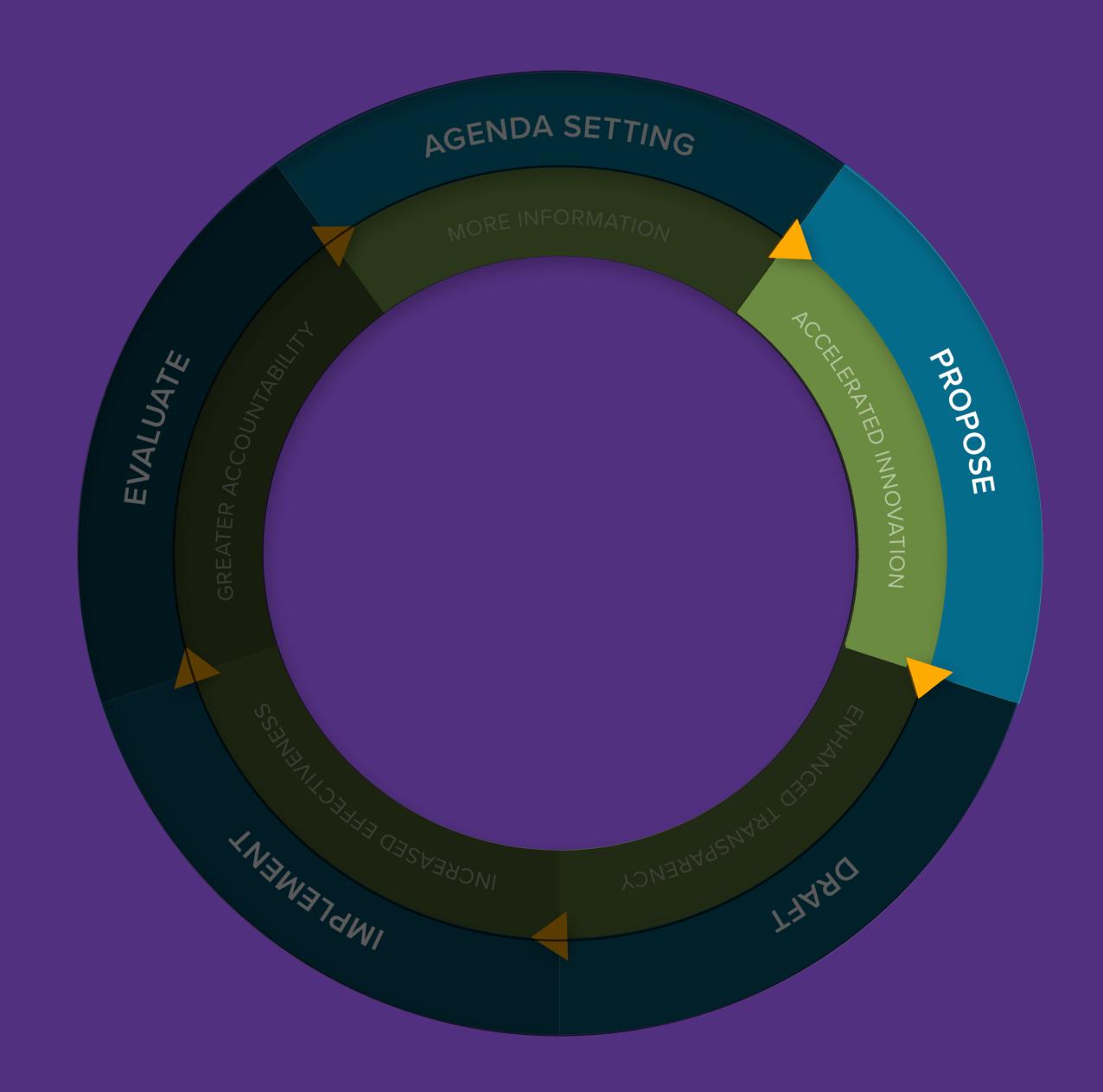
05.Dec 2017 - SunJeo - English



will not have a little envy of my uni that is of Erasmus in Aber. <a href="https://t.co/pll6FA0y0E">https://t.co/pll6FA0y0E</a>



@TheRealOxcar @ GonzaloAtm6 @JJesus\_Official JAJAJAJAJAJAJA Totti is very Joaquín but without going away for 10 years





## **Betri Reykjavik**

Betri Reykjavík er samráðsverkefni Reykjavíkurborgar, Íbúa ses og Reykvíkinga.#betrireykjavik

Q 7,723 ☐ 17,417 **⊕** 12 **⊙** 22,768

#### SVÆÐI (11)





Óskað er eftir hugmyndum að verkefnum sem kosið verður um í hverfakosningunni Hverfið mitt í október 2018. Hugmyndirnar





Hér er að finna ýmis verkefni sem unnin hafa verið á Betri Reykjavík. Í Þín rödd í ráðum borgarinnar verða efstu hugmyn...

Q 2,854 **≛** 4 **⊙** 12,218



#### Gufunesbær

Frístundamiðstöðin Gufunesbær var stofnuð haustið 1998 og er rekin af Skólaog frístundasviði Reykjavíkur. Eitt mik...

Ω 16 🚜 1 💍 43



#### Hverfið mitt 2017

Opið var fyrir hugmyndir að nýframkvæmdum og viðhaldsverkefnum í Reykjavík til 24. mars, kosið var um verkefnin og hér e...

Ω 1,081 
 ∴ 10 
 ⊙ 5,470



#### Hverfið mitt 2016

Opið var fyrir hugmyndir að nýframkvæmdum og viðhaldsverkefnum í Reykjavík, til 15. júní 2016. Hér eru niðurstöður úr ko...

Q 911 **≛** 10 **♠** 3,899

















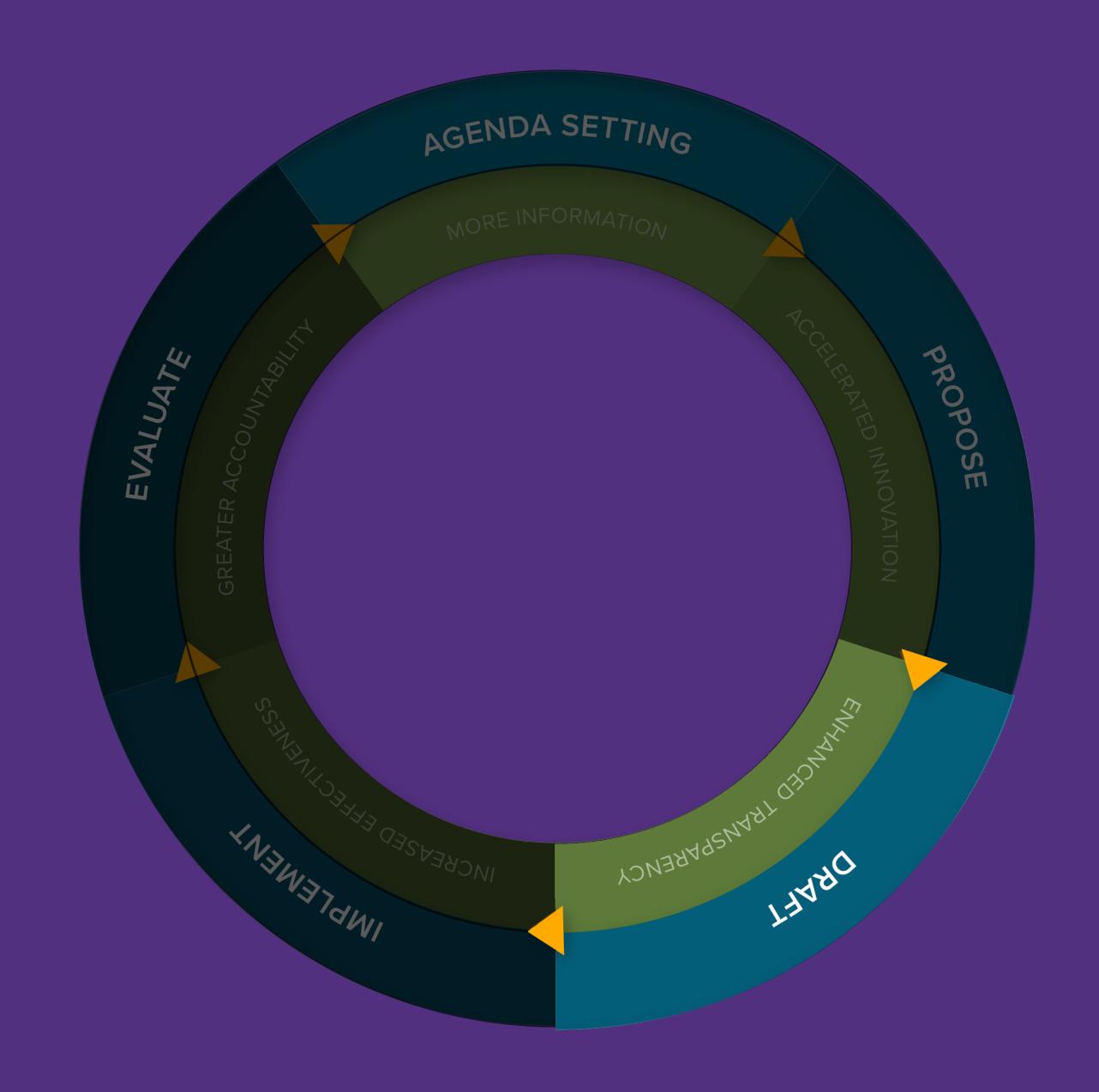
### Rahvakogu – People's Assembly in Estonia

After political scandals in Estonia in 2012, president Toomas Hendrik Ilves asked grassroots organisations to come up with ideas to improve the democratic framework in the country. They decided to crowd-source this reflection process using Your Visit

Click here

Project

januar 2013 Date



FLAT-RATE, UNLIMITED GRAPHIC DESIGN.

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#### **ARGUMENT**

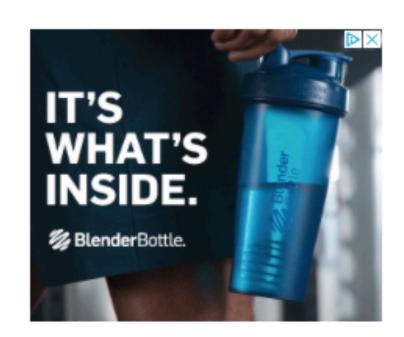
### How Brazil Crowdsourced a Landmark Law

When the time came to draft an important new "Internet bill of rights," Brazilians took matters into their own hands.

BY DANIEL O'MALEY | JANUARY 19, 2016, 4:11 PM



razil is in a state of political turmoil. An investigation into a decades-old kickback scheme at the state-owned oil company, Petrobras, has entangled prominent politicians and leading business figures alike. President Dilma Rousseff is facing



#### latest

China Has Decided Russia Is Too Risky an Investment

MAY 16, 2018, 3:50 PM

On China's New Silk Road, Democracy Pays A Toll

MAY 16, 2018, 10:10 AM

How Europe Can Block Trump

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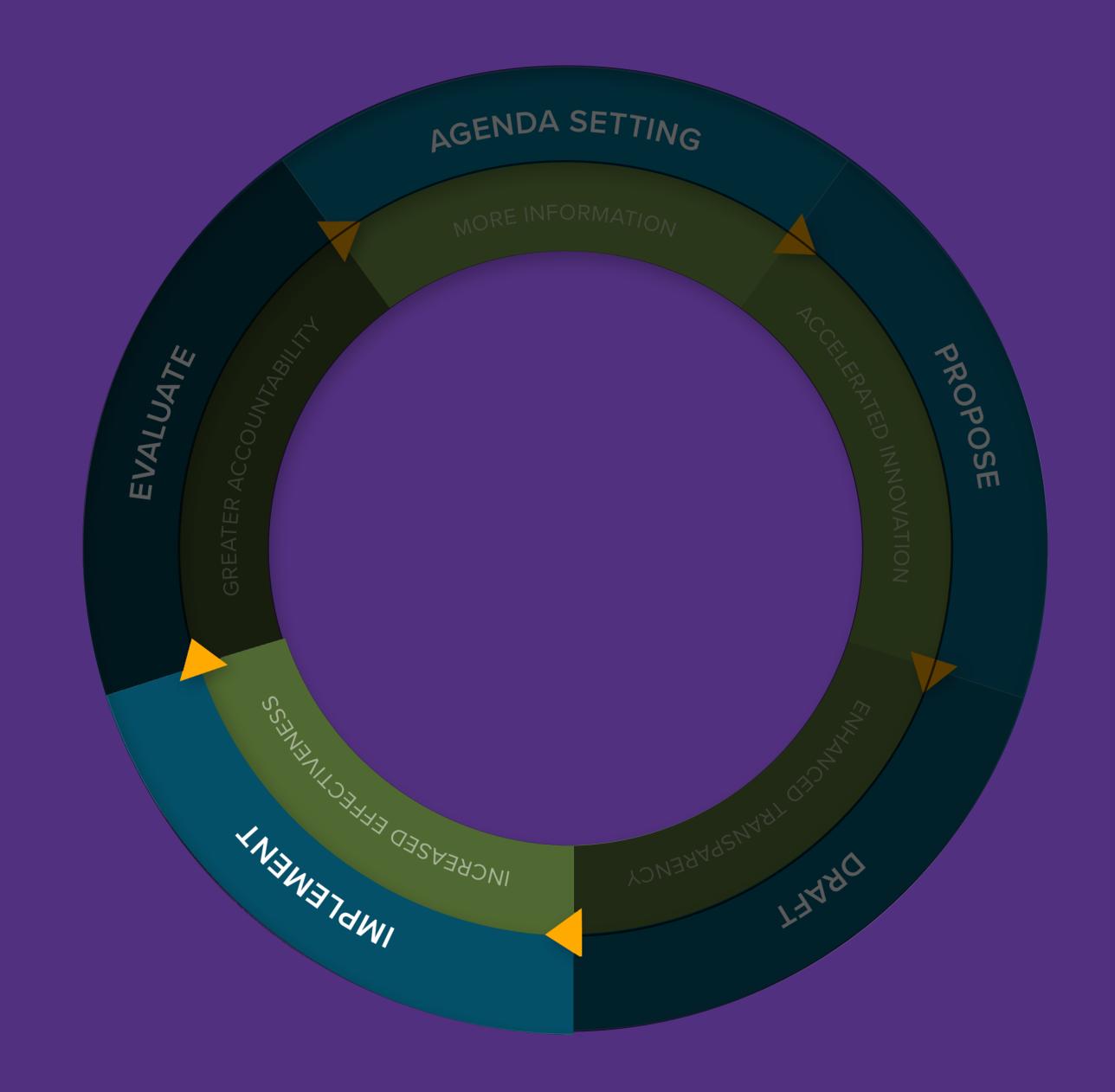
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MAY 16, 2018, 3:38 AM

Iraq's Top 10 Potential Prime Ministers

MAY 15, 2018, 5:58 PM

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MINDLAB Platforms Mindset Methods Latest About us Da / En

#### **PLATFORMS**

Platforms are a series of culture-changing initiatives

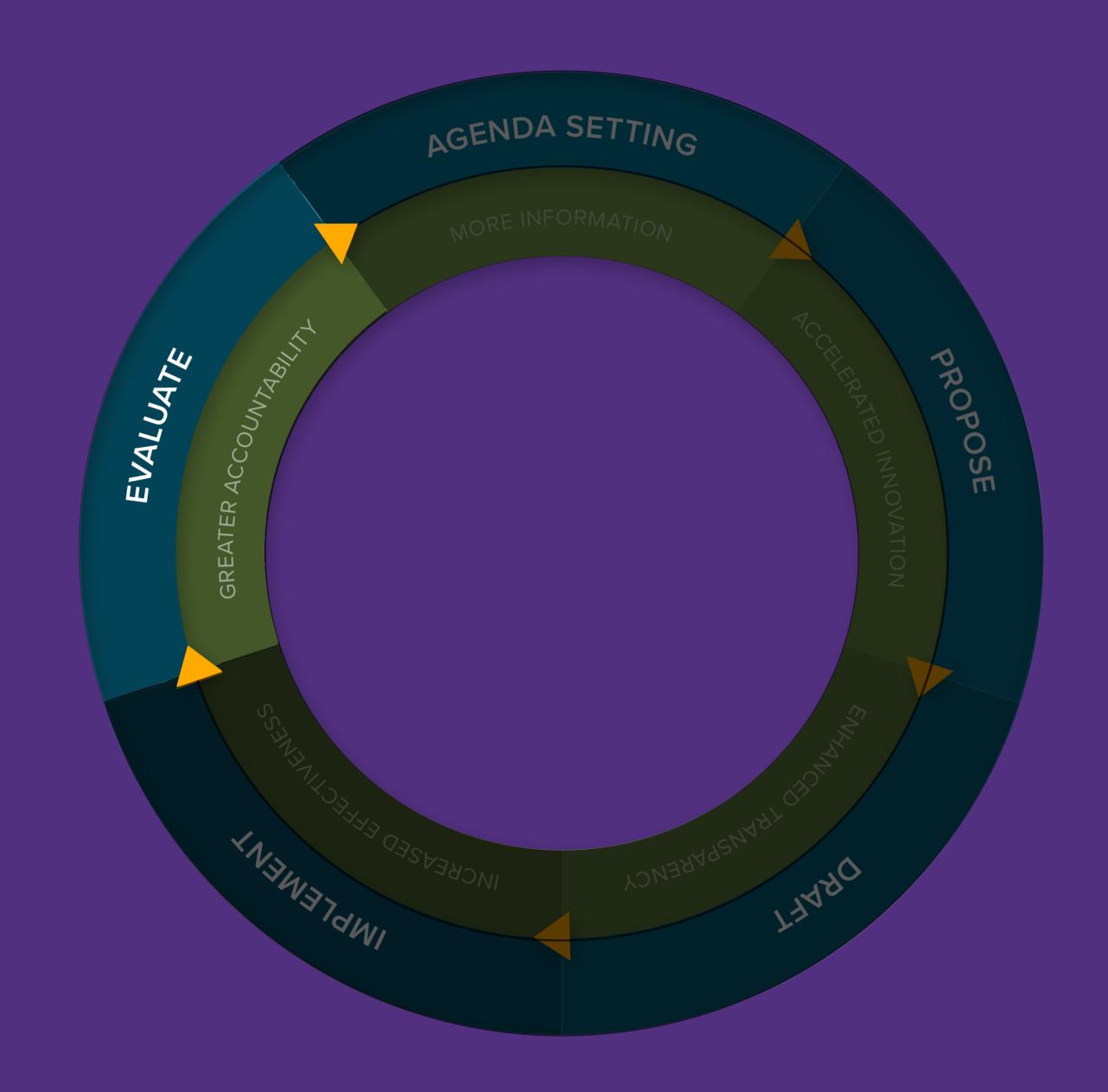
## PROJECTS MINDLABMORGEN PROJECT X

An umbrella for culture-changing experiments and interventions

READ MORE

## LABRATS MINDLAB EXECUTIVE INTERNATIONAL





NEWS



#### LIST OF PROJECTS

These are projects from the various sub metros in the Accra metropolis.



#### CONTINUATION AND COMPL...

287,500.00

🖰 April 3, 2012

*E* 60 %

The project, when completed is expected to h...



#### 2 STOREY 6-UNIT CLASSR...

🖰 Feb. 3, 2011

This project involved the construction of a ...



#### 6-UNIT CLASSROOM WITH ...

@ ¢198,524.00

🖰 Feb. 6, 2012

This school project is supposed to have 6 cl...





CÓMO EVALUAMOS CONVENIO OCDE CONTACTO QUIENES SOMOS

> Bienvenidos al sitio Evaluación Ciudadana de la Ley de la Cámara de Diputados de Chile. En este espacio queremos recoger la opinión de la ciudadanía respecto a la aplicación de la las leyes que ya están funcionando en nuestro país.



Ley N°20.418 que Fija Normas sobre Información, Orientación y Prestaciones en Materia de Regulación de la Fertilidad

INGRESA



Ley en evaluación



Artículo 69 de la Ley N°18.681 sobre Donaciones a Universidades e Institutos Profesionales

INGRESA





Leyes N°20.090 y 20.596 que sancionan y fiscalizan el delito de Abigeato

**INGRESA** 



Informe Disponible

VER TODAS LAS EVALUACIONES

#### **Noticias Destacadas**







#### LAW AND POLICYMAKING CYCLE

PROBLEM ALTERNATIVES DRAFTING DECISION IMPLEMENTATION ASSESSMENT

#### **CROWDLAW TAXONOMY**



LAW/POLICY

TYPE OF PROCESS
SPONSOR
TOPIC



**PEOPLE** 

AUDIENCE INCENTIVES



**INSTITUTION** 

OWNER
TRAINING
MARKETING
INTERNAL ORGANIZATION
RELEVANCE



**PARTICIPATORY PROCESS** 

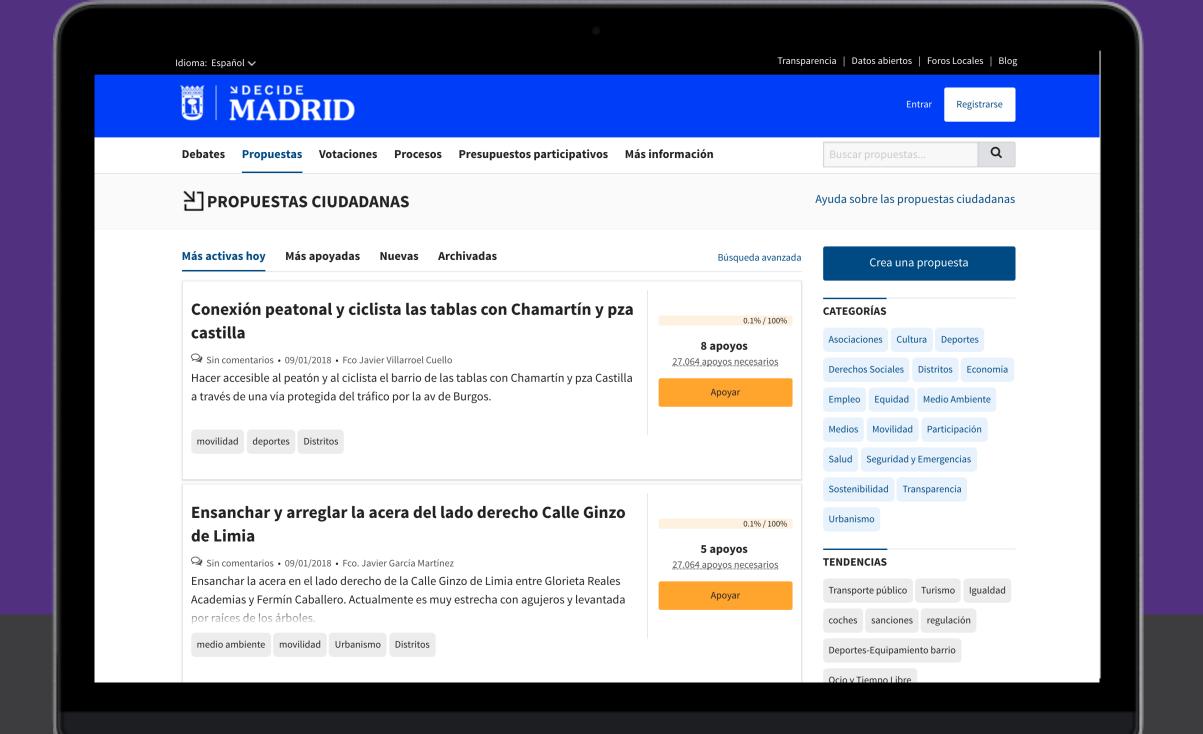
PARTICIPATORY TASK

METHOD

TIMING

PLATFORM/TECHNOLOGY

AUTHENTICATION





**DECIDE:** ENABLING DIRECT DEMOCRACY IN MADRID



### WHY DO PROPOSALS GET SO FEW SIGNATURES?



text go in heere go in heere until its time for



DESCRIPTION Three lines of text DESCRIPTION Three lines of text go in heere go in heere until its time for p.xxx

go in heere go in heere until its time for para



Tackling Zika virus: Colombia's government used digital dialogues to decide how to address the disease outbreak.

#### Five hacks for digital democracy

Beth Simone Noveck urges researchers to work out how technology can improve public institutions.

he election of a politically inexperito foster innovation and digital democracy, water breeding more infected mosquitoes. enced president in the United States, ■ Britain's vote to leave the European Union and the initial rejection of a peace deal in a Colombian referendum to end an armed conflict all signal dissatisfaction with the political status quo. Yet citizens have few and the national governments of Argentina, opportunities to influence government decisions beyond the ballot box.

"This is a time when almost every aspect of government can be improved," Geoff Mulgan, chief of Nesta, a UK charity that aims

has said. It is time to work out how, together. Last year, my students at the Governance Lab at New York University designed a process to help four governments — the city government of Rio de Janeiro in Brazil Colombia and Panama — to obtain expert advice about the global Zika pandemic. Our 'smarter crowdsourcing' project broke down the outbreak into actionable problems, such as the accumulation of standing

Then we organized 6 online dialogues with 100 experts from 6 continents to gather knowledge, experiences and advice.Three months on, these governments are beginning to implement what they learned. For example, Rio and Argentina have started social media 'listening' initiatives to learn how the public perceives the disease.

Listening and crowdsourcing approaches can make governments more agile in responding to problems. Whether the

20 APRIL 2017 | VOL 544 | NATURE | 287

Data-driven decision-making. Computable of feet bary ford information can improve governance. So it is the dat fown and imperative to do more systematic research to increases do not goode investment in new data-rich platforms

Through data analysis, policymakers can understand past performance of policies and services — their efficiency and their ardeans Cours disparate impact on different populations. war sing bg data to for example, in the United Kingdom, studles of a unique birth cohort of 70,000 people indencibes Espert since the Second World War have generated ins-otherinctores 6,000 academic papers and led to an overhaul of medical support during pregnancy hallsmarsvnohave and childbirth2.

and film showd And better data help to predict policy outcomes. Chicago's city government, for example, created an algorithm to predict sustance relacedure. food-safety violations. This increased the a hospedes of promise effectiveness of its inspections by 25%. But it is the exception not the rule in the in letters skathof public sector to use advanced analytics. Even

where algorithmic approaches are adopted, bemajis acotsable such as to measure the risk of reoffending, outcomes are rarely evaluated. Few people in its doubtions that working for government have the datanik hitagements have science skills needed arranged on Novem to conduct such "Public

individerionispidio research. expectation Open government of what

ministrigit operate dif-

data. Many nations government delimprata/toceate collect and publish should deliver pulse qual disterven government informa have risen." swindrig, corparisons tion in freely reusable high health free angle forms. The impact of these data on solving

abouting the effect of public problems needs study. In the United MONEYING on lepidaire States, data from universities and transport chilat unicient with authorities have been transformed into apps sale fir shortiment. to help the public make more informed deciserblen in elitle inter-sions about their university education and openints: on poses their commutes to work. And open data in early blases can promote civil rights. For example, civil-50 year pattern of racial discrimination in water-service provision? But more research on governing and problem solving.

After the possibilities 
For example, many governments assume that, by helping consumers to make more at a principality with cise effective choices, the collection and disclosure of information on energy efficiency or mobile-phone tariffs lets them regulate mustry with little administrative burden. AlthorGuertance But under what circumstances are disand control regulations? This is a testable

research question. nies giving consumers access to the data they each generate also needs researching. The Small Data Lab at Cornell University's

investigating what happens when online supermarkets open up purchase data to individuals, and to researchers on their behalf. The team is testing tools that use such data to 'nudge' people towards healthier eating, with personalized coaching derived from their data.

Responsible data use. To move towards evidence-based decision-making, citizens must probe how to make use of administrative data collected about them by the government. The London-based non-profit organization New Philanthropy Capital is testing a model for using data from the UK Ministry of Justice about criminals who reoffend to measure the effectiveness of socialservice programmes. It is also starting work with an arm of Britain's National Health Service on evaluating health and social-care programmes while safeguarding privacy.

Research is urgently needed on the impact of algorithms on governance - of the kind being done by Lee Rainie at Pew Research Center, who is studying both the ways in which algorithms might be used to solve societal problems and their potential for misuse. Questions about the impact of data-driven decision-making on civil liberties go beyond the usual questions about surveillance or privacy. There are ethical implications for the 'digital invisibles' those whom data are not collected. Justin Longo, a open-government researcher at the University of Regina in Canada has found that people outside the 'big data' world may be subject to misguided interventions and biased policy.

Citizen engagement. Whether obtaining diverse public input through the Internet improves the legitimacy and efficacy of governing processes is another hypothesis in need of testing. Crowdsourcing and open innovation have been used in the public secin isoty baselendence rights lawyers in Zanesville, Ohio, used data tor but the practices are not well institutionin michalog togorem released by utility companies to uncover a alized. There is a dearth of research on how public organizations engage with civil servants and the public online, and thus a lack of and trafeg research is needed on the impact of open data impact insight in how to design successful online engagement processes and institutions.

What are the best ways to devise participatory opportunities at each stage of public decision-making, from problem-solving to policy evaluation? At Arizona State University, the Center for Policy Informatics is partnering with the city of Phoenix to test dosares more effective than commandexperience and priorities of citizens in urban planning. Approaches range from sophisti-The potential public good of compapaper scaled to the sizes of budget proposals. cated computer models to coloured pieces of

Crowdsourcing environmental data holds great promise, as citizen scientists worldwide technology campus in New York City, is and Safecast online communities. There are

nips. The Social and Behavioral Sci nter-agency team, part of former US ent Barack Obama's administration, ely collaborated with and brought in academic experts to complete rigoraluations of more than 30 trials of new

where academics cannot be brought government, agencies should push ions out. The United States, has legal rity under the America Competes Act ard prizes to members of the public for ng hard problems. US federal agencies onducted such prize-based challenges than 750 times on Challenge.gov, invithe public to reduce casualties from runy vehicles at military checkpoints or to npose a catchy public service announcent to increase handwashing and prevent spread of flu.

Finally, for the ethical and efficient adminration of research in government settings ed to be updated. Regulations on humanbjects research, which currently exempt valuations of the procedures for obtaining overnment benefits or services, as well as y benign behavioural intervention, should e clarified to include the study of governnce innovations. The United States should treamline its Paperwork Reduction Act statute, which requires that agencies wishng to ask questions of the public submit to a ngthy approval process by the OMB.

In the face of increasingly complex chalenges, rapid social change and technological innovation, governments must find new ways to do more with less. Despite declining ax revenues and deteriorating fiscal condiions, public expectations of what government should deliver have risen. In every domain, governments need to innovate in how we respond to challenges.

It is not enough to experiment with new policies in the laboratory of democracy if we use the same beakers. We need to change the processes by which we make policy and deliver services for the public good. Empirical yet agile research in the wild is the route to knowing how.

Beth Simone Noveck is professor of engineering and director of the Governance Lab at New York University, New York City, New York, USA. She is the author of Smart Citizens, Smarter State: The Technologies of Expertise and the Future of Governing. e-mail: noveck@thegovlab.org

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   Pearson, H. The Life Project (Allen Lane, 2016).
   Rogawski, C., Verhulst, S. & Young, A. Open data's impact: Ohio, USA: Kennedy v. City of Zanesville (GovLab, Omidyar Network, 2016).

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Science

Vol 350, Issue 6264 27 November 2015

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Predicting poverty and wealth from mobile phone metadata



Joshua Blumenstock<sup>1,\*</sup>, Gabriel Cadamuro<sup>2</sup>, Robert On<sup>3</sup> + See all authors and affiliations



Science 27 Nov 2015: Vol. 350, Issue 6264, pp. 1073-1076 DOI: 10.1126/science.aac4420

Article

of the population.

You are currently viewing the abstract.

Figures & Data

Predicting unmeasurable wealth

Info & Metrics

In developing countries, collecting data on basic economic quantities, such as wealth and

phones in Rwanda, Blumenstock et al. mapped mobile phone metadata inputs to individual

phone subscriber wealth. They applied the model to predict wealth throughout Rwanda and show that the predictions matched well with those from detailed boots-on-the-ground surveys

income, is costly, time-consuming, and unreliable. Taking advantage of the ubiquity of mobile

eLetters

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#### MIX-METHOD DESIGN

#### COMBINE QUANTITATIVE AND QUALITATIVE TECHNIQUES



Natural experiments

Controlled social and behavioral experiments (including RCTs) In-depth interviews

Questionnaires and surveys

Document, discourse and sentiment analysis

Impact evaluation and big data







### MIXED-METHODS USING NEW TECHNOLOGY Combining Old and New Approaches to Enable In the Wild Research

RUNNING EXPERIMENTS	Platform-based A/B Testing.
SURVEYS AND INTERVIEWS	Micro-surveys, wiki surveys, combining big data and surveys.
OBSERVATION	New data sources, large quantities of data.
DATA ANALYSIS	Far greater scale from mass collaboration, crowdsourcing, crowd-coding, crowd-labeling, citizen science.
CHALLENGES	Not always easy to create controls Small sample sizes Confounding Limited generalizability Open calls don't always work well

#### RESEARCH THAT MATTERS

Quest for fundamental understanding?



Pure basic research **BOHR QUADRANT** 

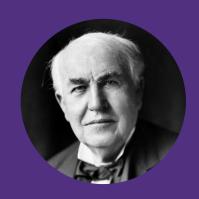
High



Use-inspired basic research

PASTEUR QUADRANT

High



Applied Research

EDISON QUADRANT

Low

Consideration of use?



#### FUTURE POLITICS?

- \* DIRECT DEMOCRACY
- \* DELIBERATIVE DEMOCRACY
- \* COLLABORATIVE DEMOCRACY
- \* AI DEMOCRACY

## TEN RECOMMENDATIONS

# OPTIMIZE FOR INSTITUTIONAL AS WELL AS PUBLIC ENGAGEMENT

#### DESIGN TO ACHIEVE THE DESIRED GOAL

#### IDENTIFY WHO WILL MANAGE THE PROCESS

### PLAN FOR USE, NOT ONLY SOLICITATION

#### FOCUS ON INCENTIVES

Ask: "why should a member of the public participate?"

and get the answer by talking to and surveying potential users

### EXPLAIN CLEARLY HOW TO PARTICIPATE

# RESPECT PRIVACY AND AUTHENTICATE USERS WHEN NEEDED

# COMMUNICATE THE OUTCOME OF FINAL DECISIONS

## DIVERSIFY ENGAGEMENT OPPORTUNITIES AND DIVERSIFY WHO PARTICIPATES

### TEST WHAT WORKS AND ITERATE



#### THANK YOU

@bethnoveck

thegovlab.org | smarterstate.org