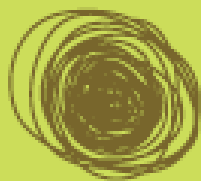


Why do people participate in Citizen Science?

Evan Groen

Dutch Research Institute for Transitions

drift
for transition



ACTION

WHAT

ACTION transforms citizen science (CS): it makes it even more participatory, inclusive, citizen-led and democratic, by supporting citizen science projects in Europe that focus on pollution.

HOW?



ACTION TOOLKIT

Co-designed methodologies and socio-technical tools simplifying the everyday life of CS projects and supporting their sustainability.



ACTION ACCELERATOR

A set of services, tailored to the needs of each CS project, including: training, mentoring, infrastructure to host projects and their data; promotion and networking.



ACTION MASTERCLASSES

Tailored events for local, national and EU policy makers and civil servants interested in maximizing the potentialities of CS in their territories.



ACTION OPEN CALL

Funds and support for 10 new and ongoing citizen science projects related to any form of pollution in Europe and worldwide.

Apply between August and October 2020

Why is it important

Democratization



Increase accessibility, transparency, relevance and accountability

Learning



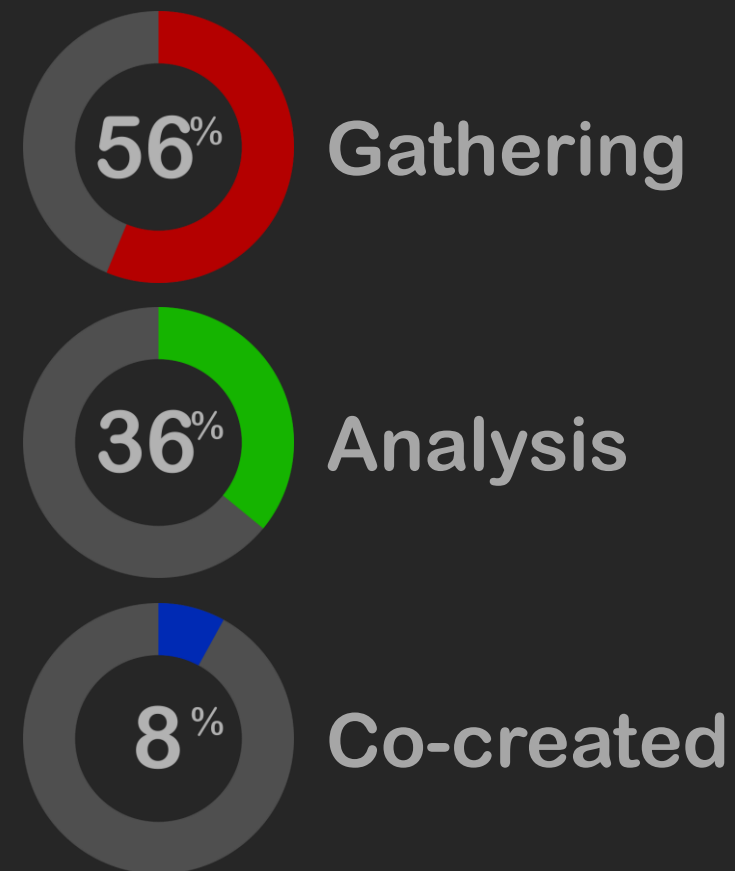
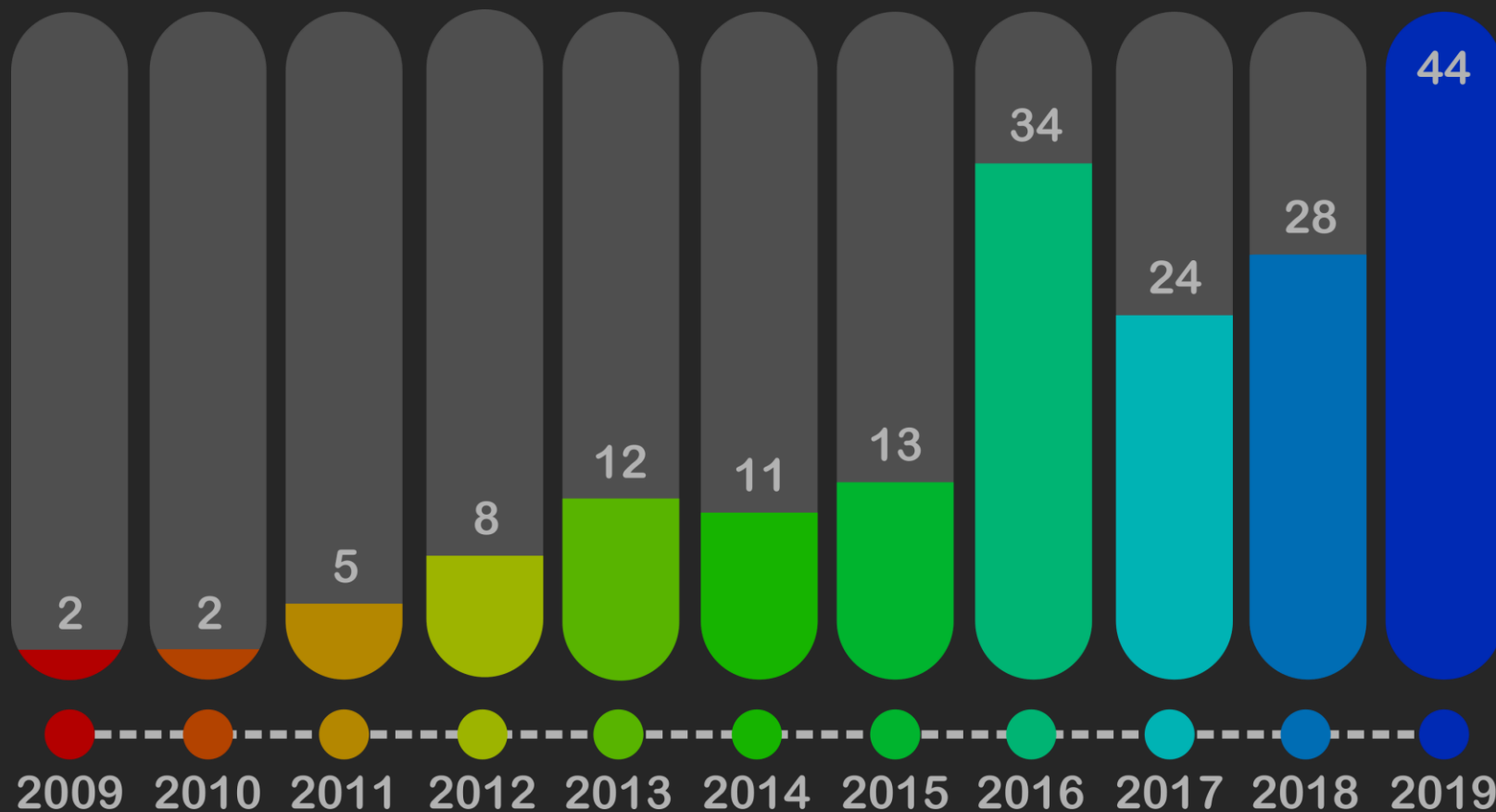
Increase scientific literacy, potential for transformative experiences and knowledge

Science



Increased capacity, increased diversity in approaches and perspectives

~200 articles



Community monitoring



Biodiversity



Astronomy

Participant
diversity



Research
diversity



Challenges

Project
diversity



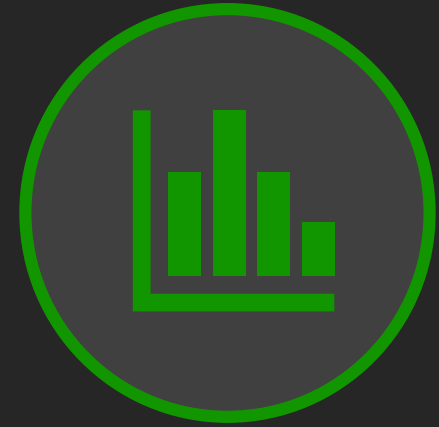
Contribution
diversity



Motivation based approach



- Several relevant theories
 - Volunteer functions inventory
 - Motivational arc
- Theories underutilized
- Survey, Likert scale



- Large diversity
- Project specific
- Common perceived motivations:
 - contribute
 - interest
 - learning
 - achieving goal
- Perceived motivation can be correlated to participation quantity



Gamification



Applying game like elements to non game projects and activities

Examples

- Leaderboards
- Competitions
- Stories
- Badges
- Teams

Results

Mixed results.

- 14 positive
- 14 mixed
- 1 neutral

Potential to motivate
but also to
discourage

Not the most
important reasons for
participation

Recommendations

Not effective to
recruit, but can assist
in retaining
participants

Recommend
collective, intrinsic
and progression
based elements

Self-efficacy theory

Influential factors

1

Performance

2

Seeing others

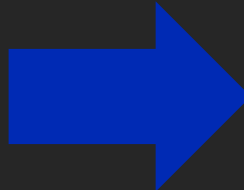
3

Persuasion

4

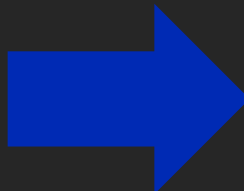
Emotions

Anxiety about
-being accurate
-being smart enough
-being capable



Fewer contributions
Stop participating

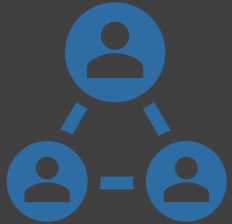
Expertise and prior
experience in subject



More contributions
Longer participation

Other findings

Social Comparison



Can lead to higher participation, but also lower participation

Social interaction



Mixed results
Important for some participants in some projects

Recruitment messages



Contribute and learning most successful
Community and social aspects least successful

Project success factors



- communication
- accessibility
- collaboration with organizations and institutions
- signifying social & cultural relevance

Recommendations

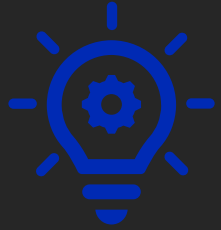
**Address self-
efficacy
concerns**

**Communicate
the
significance
of project &
contribution**

**Cautious
with applying
gamification
elements**

**Allow for a
diversity of
experiences**

Next steps



Increased use and testing of theories



Comparison between projects and participants



Thoughts?