Popular Science Monthly, 1902

"The era of the amateur scientist is passing; science must now be advanced by the professional expert"

https://sciencetechnologystudies.journal.fi/article/download/60425/37504/

Jillian Campbell, UNEP, 2019

"Data generated by citizens (citizen science) has tremendous potential for helping us monitor the goals. Engaging citizens in the data collection process improves community awareness and action"

 $\underline{\text{https://www.unenvironment.org/news-and-stories/story/untapped-potential-citizen-science-track-progress-sustainable-development}$

Citizen Science Intro

Sampsa Fabritius

Community of the society- and planet-positive ventures

Who are we?

We are, first and foremost, a home for entrepreneurial changemakers - a community of like minded individuals operating both online and in real life through the open, safe space where everyone has the freedom to collaborate and support even on difficult topics.

About us

Facebook Group



Watch more videos (>)



FORERUNNERS

Sampsa Fabritius

data ownership reform, education of heart, systems thinking is new literacy, global SDGs resolved, pro-society entrepreneurship, regenerative economy, 100% clean energy.

Sari Stenfors

green data, new economic structures, accessibility and equality in the digital worlds. earth as society centric AI, transparent wellbeing systems, time and brain expansion. Forbes 50 female futurist in 2020.















KIEKU RECEIVES 0.7M EUROS TO BRING AUDIO BACK TO EVERYDAY MEDIA CONTENT



Citizen science is scientific research conducted, in whole or in part, by amateur (or nonprofessional) scientists.^[1]

Citizen science is sometimes described as

"public participation in scientific research,"

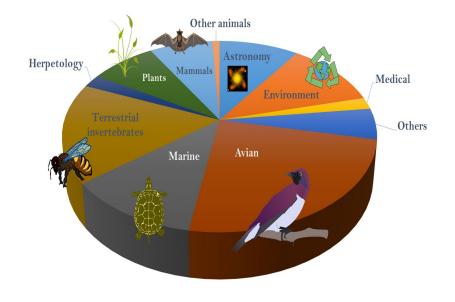
participatory monitoring, and participatory action research

whose outcomes are often advancements in scientific research,

as well as an increase in the public's understanding of science.

(CS; also known as community science, crowd science, crowd-sourced science, civic science, volunteer monitoring, or online citizen science)

Sensing (e.g. eBird)	Human observations or objective measurements	"Citizen science offers to turn anyone into a scientist, promising to produce new knowledge, educating the public and above all reconfiguring science from a closed to an open activity—in short, "democratizing" science."
Computing (e.g. SETI)	Volunteer computing to contribute free processing capacity	
Analysing (e.g. Stardust)	Crowdsourcing of classification or other analytical tasks	
Self-Reporting (e.g. 23andMe)	Data contributions on qualitative or objective quantitative information	
Making (e.g. hacker labs)	Coordinated action of voluntary research such as open biohacking labs	



Epistemic classification

Strasser, B., Baudry, J., Mahr, D., Sanchez, G., & Tancoigne, E. (2019). "Citizen Science"? Rethinking Science and Public Participation. *Science & Technology Studies*, 32(ARTICLE), 52-76.

https://sciencetechnologystudies.journal.fi/article/download/60425/37504/

Thematic distribution

Credit:: Egle Marija Ramanauskaite (CC BY 2.0)

Based on data from Follett R, Strezov V (2015) An Analysis of Citizen Science Based Research: Usage and Publication Patterns. PLoS

ONE 10(11): e0143687. doi:10.1371/journal.pone.0143687

https://www.flickr.com/photos/128817076@N03/23109738150





- A Connected mesh of instruments by citizens
- Range from simple to complex parameters
- Various platforms and initiatives exists
- Objective data can be validated by anyone

E.g.

https://citizensense.net/urban-sensing/



Contributions shared by citizen

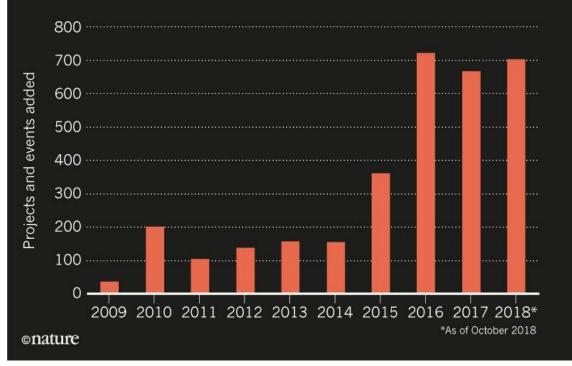
- Observations and sentiments shared by citizens
- Range from simple to complex phenomena
- Various platforms and initiatives exists
- Subjective data can be validated by anyone

E.g.

https://blog.scistarter.com/2019/08/human-impact-climate-change-citizen-science/

CROWD POWER

The SciStarter repository has been documenting the rise of citizen-science projects and events. The field is largely decentralized, which makes such efforts hard to track. Dates on this chart reflect the year in which the initiatives were added to SciStarter's records.



STREET SCIENCE

In May, a collaboration that included the Flanders Environment Agency in Belgium ran a month-long citizen-science campaign to help test a computer model of air quality in the region.

Participants installed nitrogen dioxide samplers on first-floor, street-facing windows inside V-shaped signs to create a standard measurement set-up



All told, some 20,000 people participated in the project across the Flanders region. Each paid €10 (US\$11.5) to join the experiment.





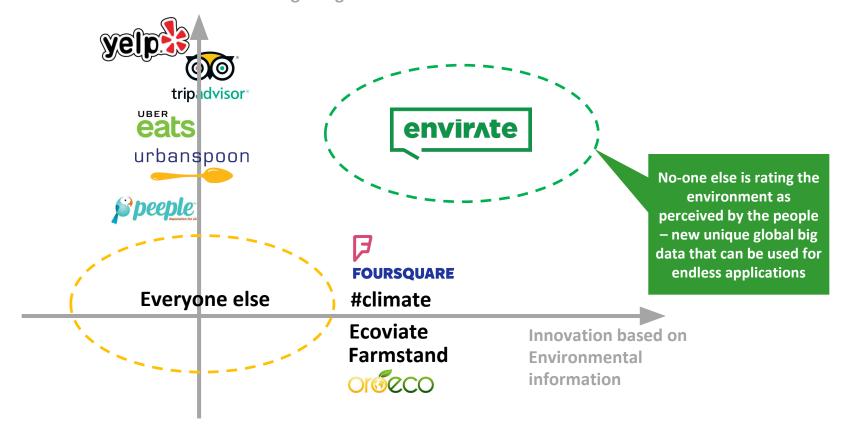
The results are still being formally assessed. But early analysis has revealed — among other things — that the ability of some building arrangements to concentrate traffic exhaust in "street canyons" had been underestimated.

NO, concentration High O • • • • Low

Competitive landscape on citizen data collection



Innovation based on rating things

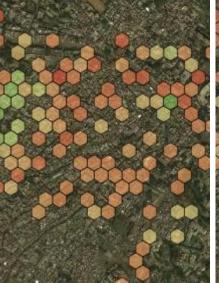


Budapest, Hungary

Dehradun, India













Amsterdam, the Netherlands Bratislava, Slovakia Brno, Chech rep Brussels, Belgium **Budapest, Hungary** Cairo, Egypt Copenhagen, Denmark Dehradun, India Fatehgarh, India **Gdansk**, Poland Helsinki, Finland Joensuu, Finland Kyoto, Japan Malmo, Sweden Pals, Spain Rovaniemi, Finland Sofia, Bulgaria Taichung, Taiwan Tallinn, Estonia Tampere, Finland Thiruvananthapuram, India Turku, Finland **Zell, Germany**

After spotting ugly places... Action time!

envirate

People can create local environmental activities. Join others' activities, feel the fun and social empowerment!

