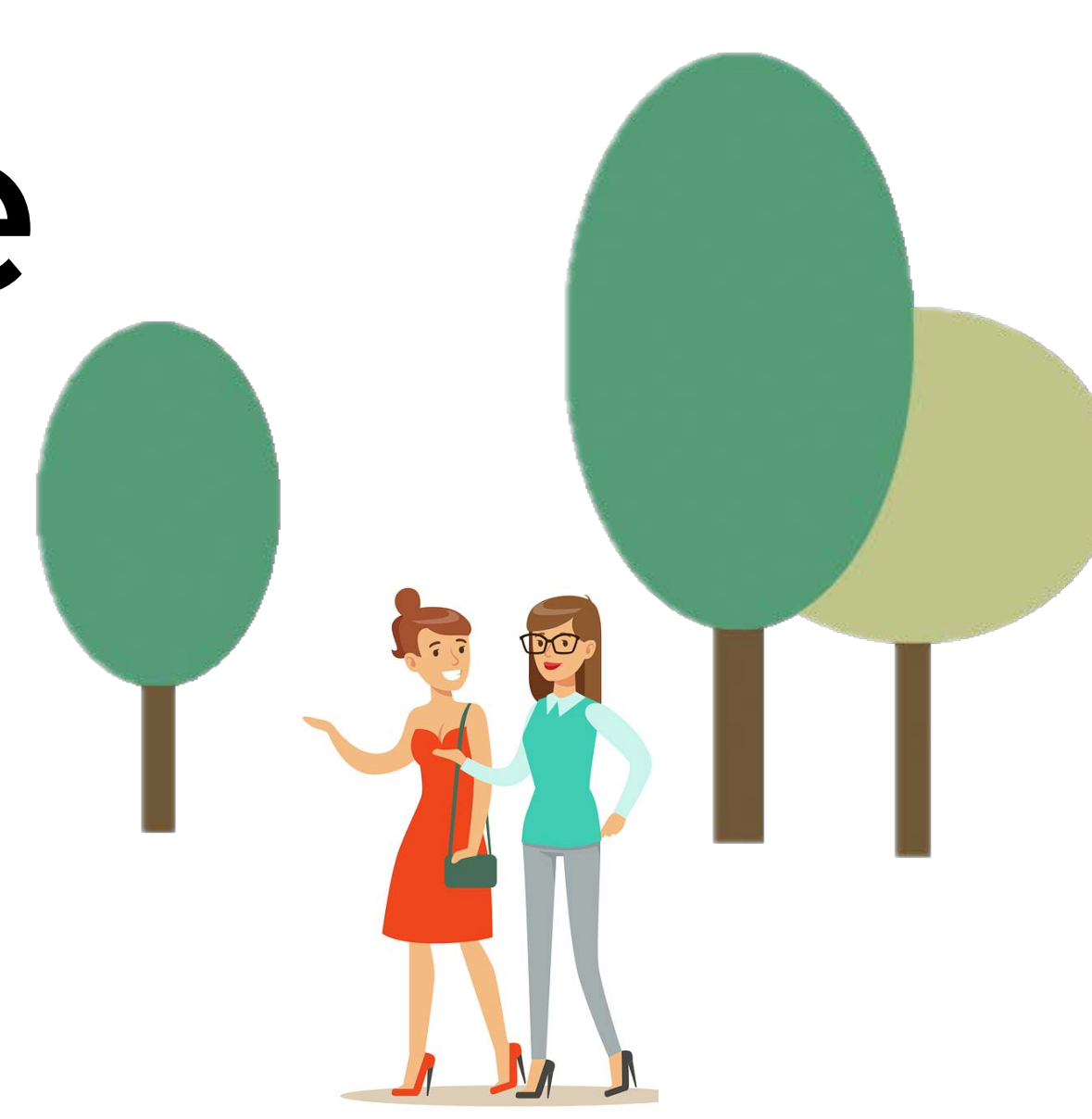# Improving efficiency of citizen science projects by targeted activation of selected stakeholder groups

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Sharing is encouraged

The CityCLIM project
- Our Citizen Science Activities -

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Collecting In-situ Climate Data
Equipping citizens with mobile and stationary weather sensors to gather data on local climate from their city and raise awareness for climate action. Data will be used by CityCLIM and city administrations.

Crowdsourcing Historical Data
Building a Historical Climate Platform that citizens can submit weather data to. The platform will show visualisations and historical trends, as well as provide simple analysis tools for citizens.

Citizen Weather Sensation Map
Creating a high resolution map from the UltraHD 100m city weather model that citizens can use to indicate subjective temperature feeling. The map can be used to plan activities and routes on very hot days.

Climate Adaptation Co-design
Work together with Pilot cities (citizens and administration) to use collected and modelled data to learn about vulnerabilities and generate adaptation strategies that address them in advance.
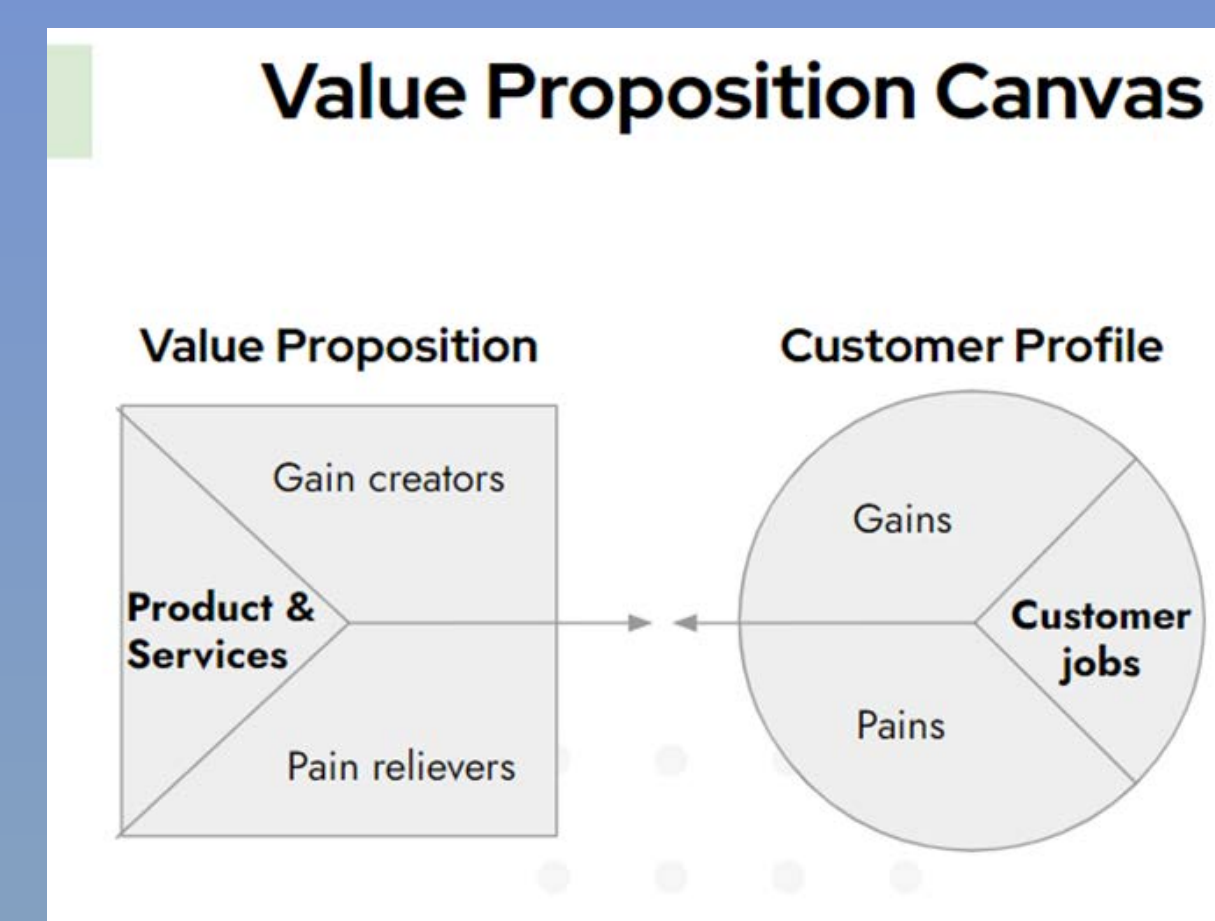
How can we tailor citizen science projects to community needs?

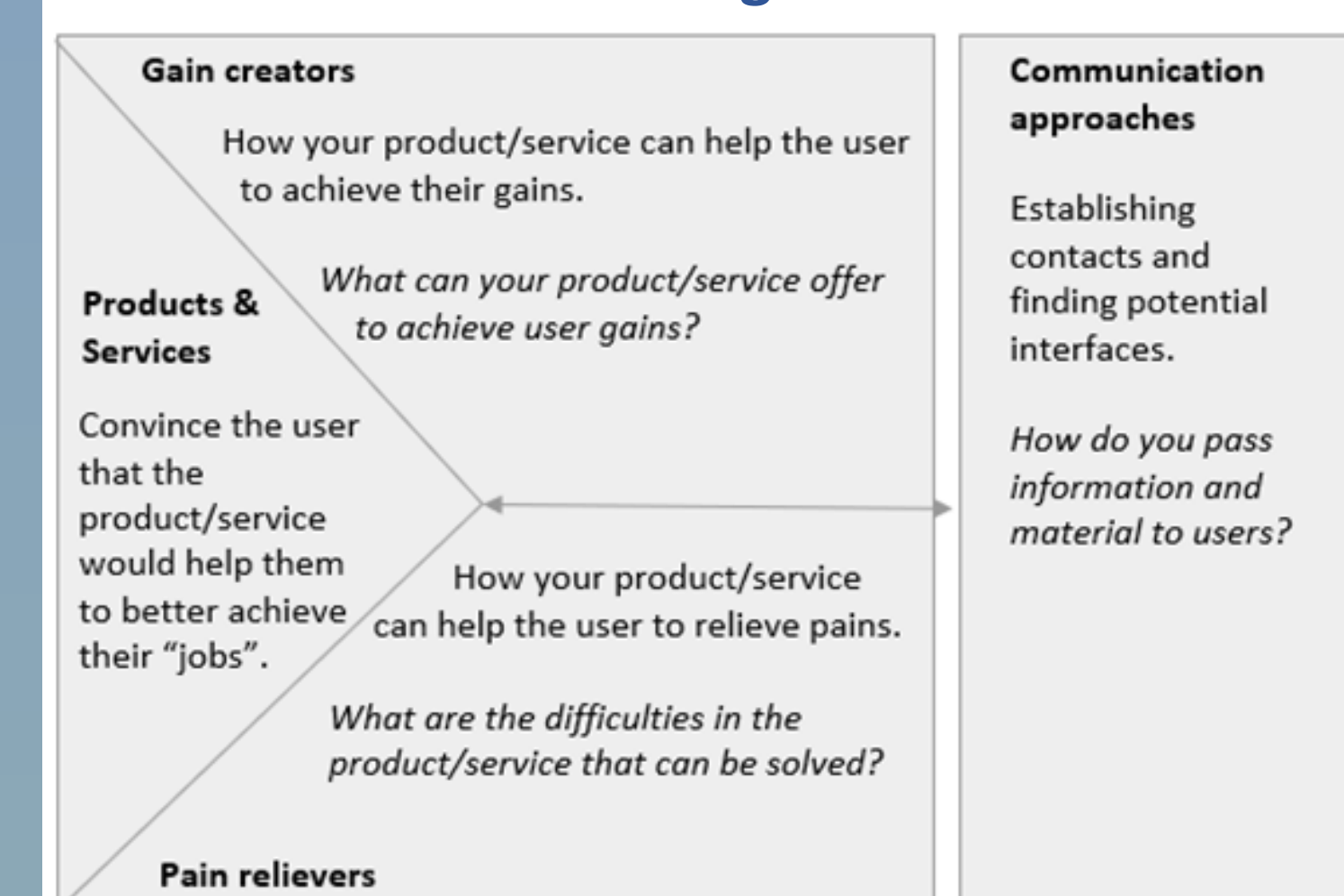Extending the Value Proposition Canvas marketing tool to CS, with 2 key modifications:

1 Addition of a communication channel

2 Two-way values exchange between citizen science and institutional science (citizen science organiser)
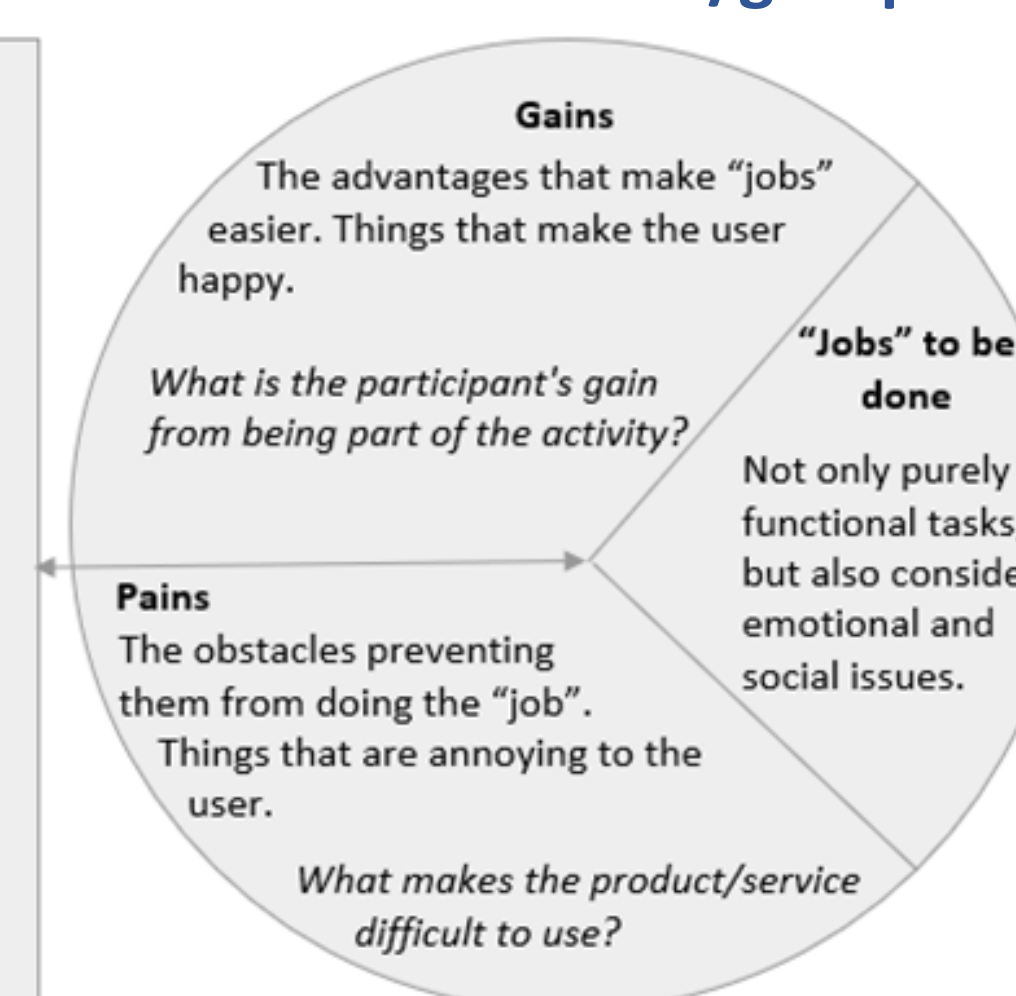

Value Proposition Canvas

Source: Initially developed by Dr. Alexander Osterwalder and published in Value Proposition Design (2014) and Business Model Generation (2010).

VPC 1: Citizen science organiser — Citizen scientist/group
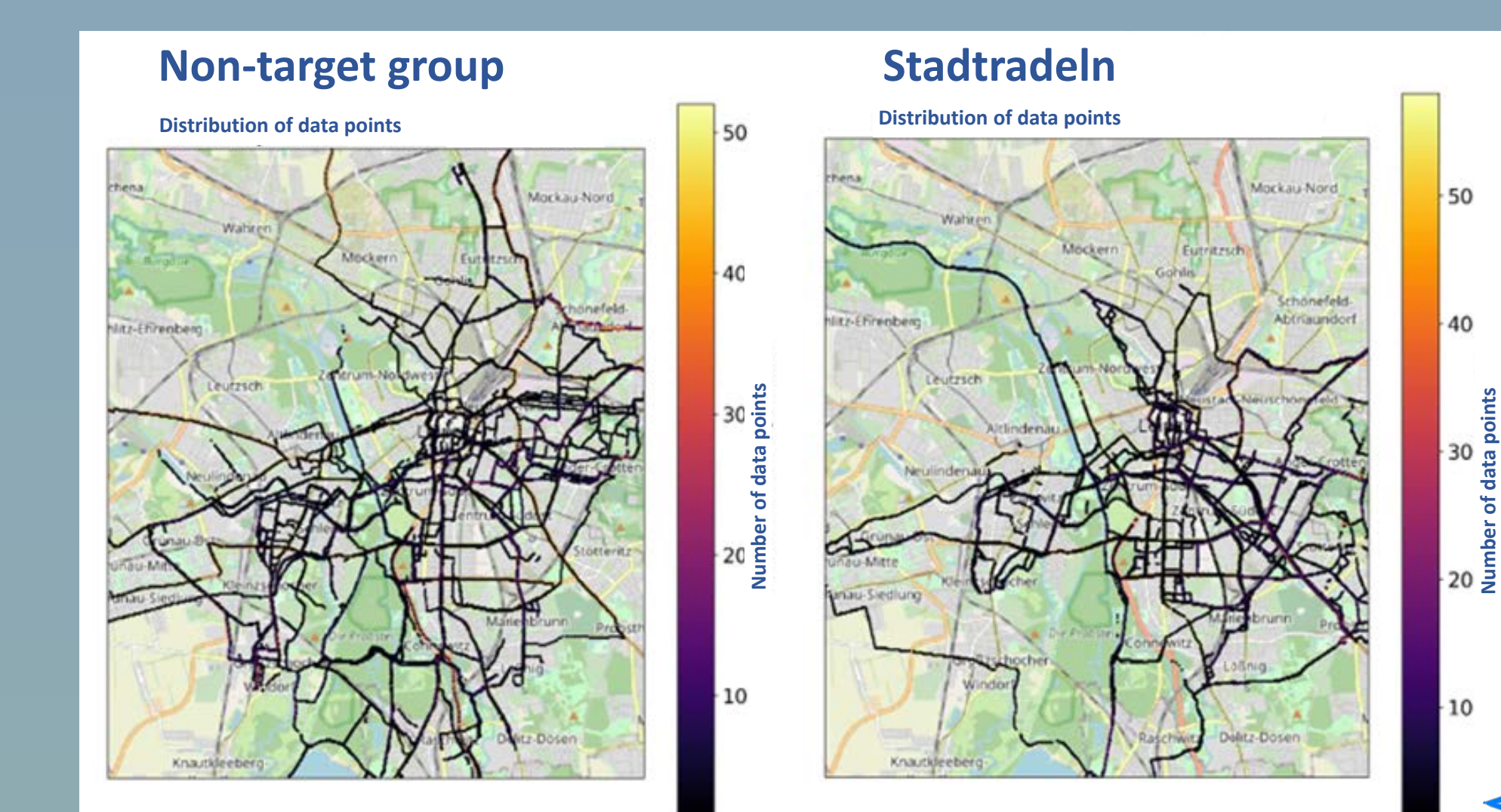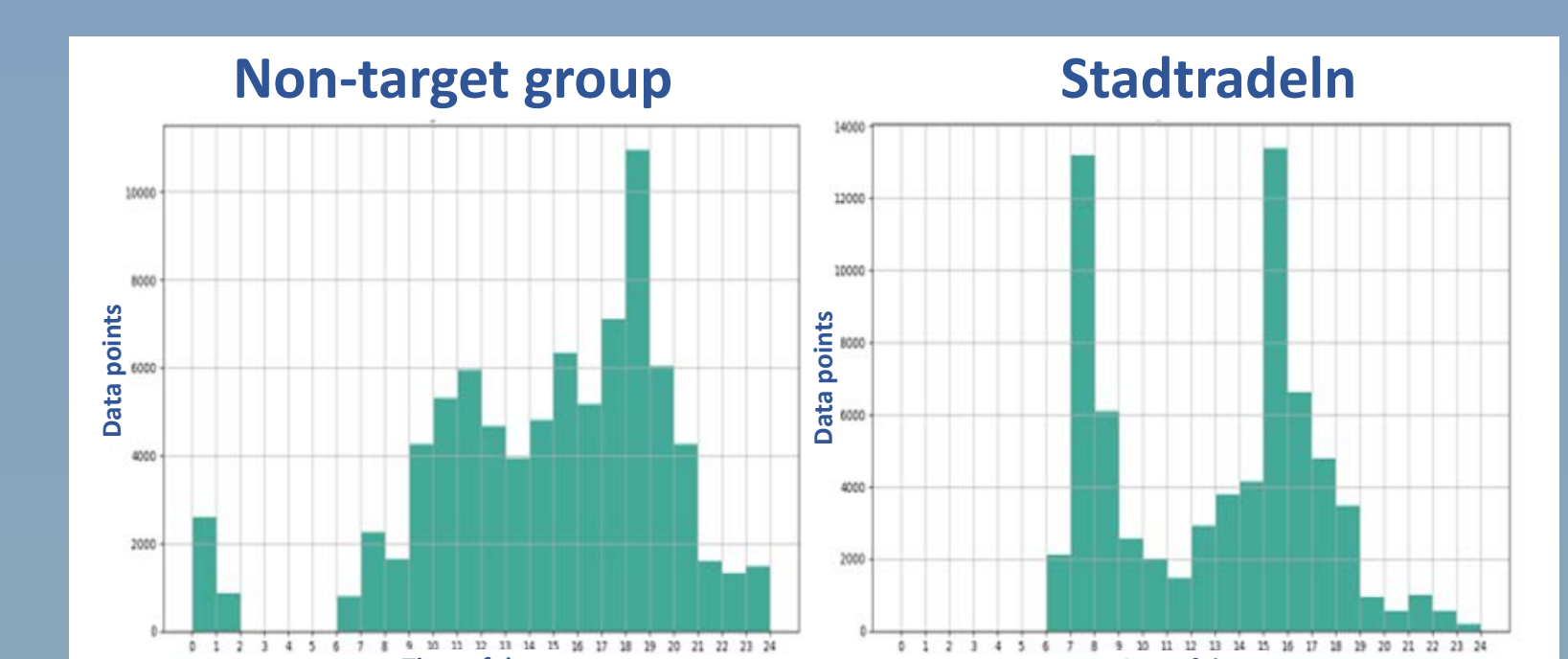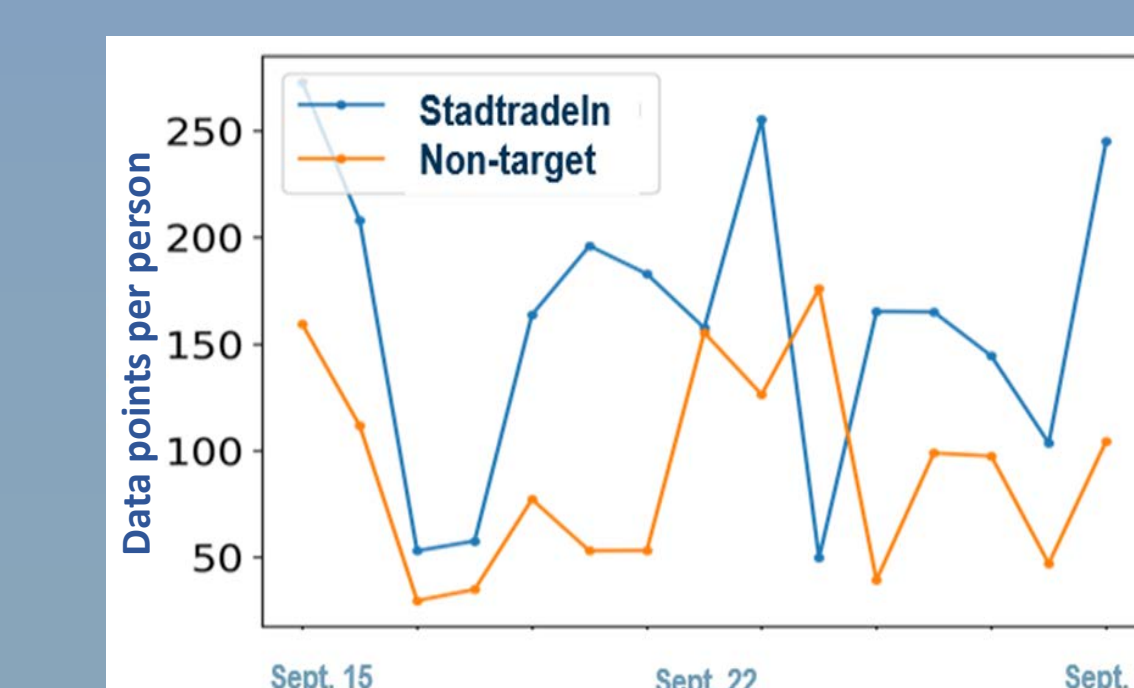VPC 2: Citizen scientist/group — Citizen science organiser

Two VPCs should always be conducted
We also need to understand what "jobs" the citizen science organiser needs to be done and how the citizen scientists can address these (i.e. switch canvas sides)

Important

What happens when we target citizen stakeholders for a bike weather sensor campaign? 🚴

Group	Recruitment method	Result	Recruitment effort
Non-target	Press release, online, face-to-face presentation	More variability in sensor use time and area	High
"Stadtradeln" cycling group	Organiser contacted	More data points per person	Low

Know your aims
Depending on what kind or distribution of data you need, target different groups to fit that need

Source: Data points collected using the MeteoTracker through citizen science projects Meteorologie hautnah and CityCLIM in Leipzig, Germany.