

MY SHARED CLIMATE, sketching collaborative research on Energy, Health, Environment and Infrastructures

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Proposal for Workshop to explore Focused Research Collaboration for the coming 8 years between students, teachers, professors and professionals

Participants: TU Delft faculties, Delft Research Initiatives (Energy, Health, Environment, Infrastructures), European Institute of Technology's KIC's (ICT & Climate) and several social and business partners to be identified (KNMI, RIVM, Tom-Tom, e.o.)

Finance: NWO, EU 7th Framework, European Science Foundation, to be identified

Format Workshop:

Show and tell (demo's and concepts currently at TU Delft)

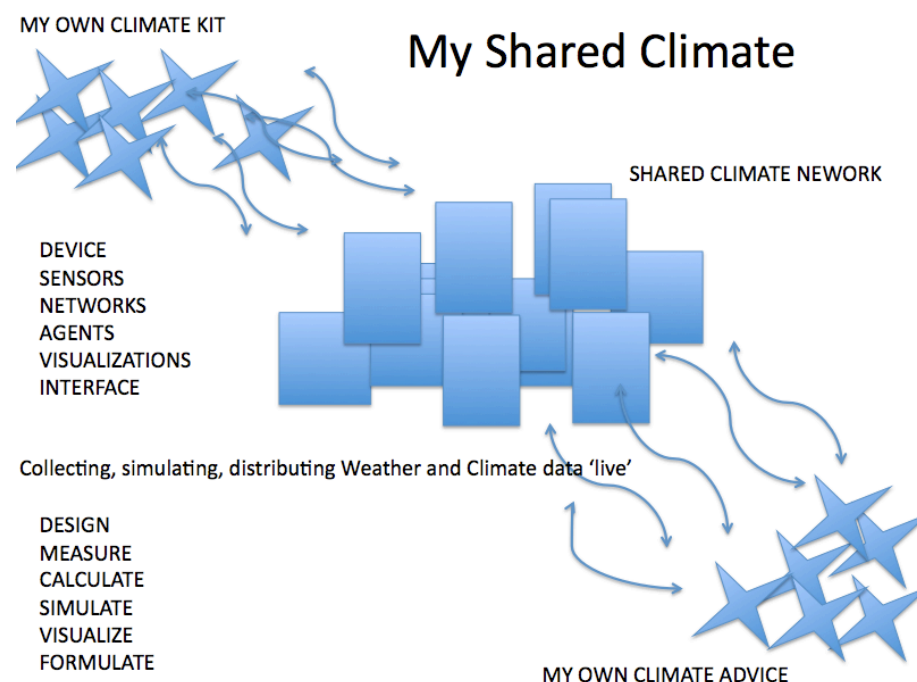
MyShared Climate and its research agenda

Formulating challenging concepts and questions for collaborative research

Presentation of research agenda, validation and intention of obtaining funding

MISSION: To develop agency for individual human beings to influence their spatiotemporal trajectories to improve health and sustainable environments

GOAL: To develop tools and networks for healthy ways of moving (trajectories and means of transportation).



RESULT: MyOwn Climate Kit & MyShared Climate Network

MyOwn Climate Kit (MOCK) gathers and transmits climate data. At the same time MOCK advises for example a specific route for bicycling (or advice to take the train) because of expected pollution and change of wind for example.

Individuals who use MyOwn Climate Kit gather climate data as they go and send these to MyShared Climate Network. At the same time My Shared Climate Network generates advice to contributing individuals about where to find the best climate and weather conditions close by.

MOCK's Personal Climate Data are gathered in social- sensor- and agent- networks and are subjected to dynamics of scientific climate and weather formation (wind, airstreams, humidity, heat, magnetic fields etc.) and social climate formation (traffic, industrial production of the day, crowds etc). 'Just in time' simulations of these dynamics show impact of certain ways of moving and generate advice for individual users to adapt their spatiotemporal trajectories to healthy ways.

My Shared Climate Network then advises, through the MOCK, the individual contributor of Personal Climate Data for where and how he/she can travel with as little pollution and/or bad weather as possible. My Shared Climate Network also advises traffic regulators, policymakers and industry.

APPLICATIONS

Any MOCK should have the possibility to choose specific indicators: one person is sensitive to sound, others to smell or wind. Feedback advice should be simple. More complex data can be found on the web, where also the elaborate visualizations of the Crowd Climate Data can be found. Hereunder we list possible applications of the Climate compass and Climate Navigator.

BODY FASHION: MOCK's integrated in coats, hats and purses

HOMES: easy mountable MOCK for balconies, windows and gardens

BICYCLE: easy mountable MOCK's, OV fietsen as trial

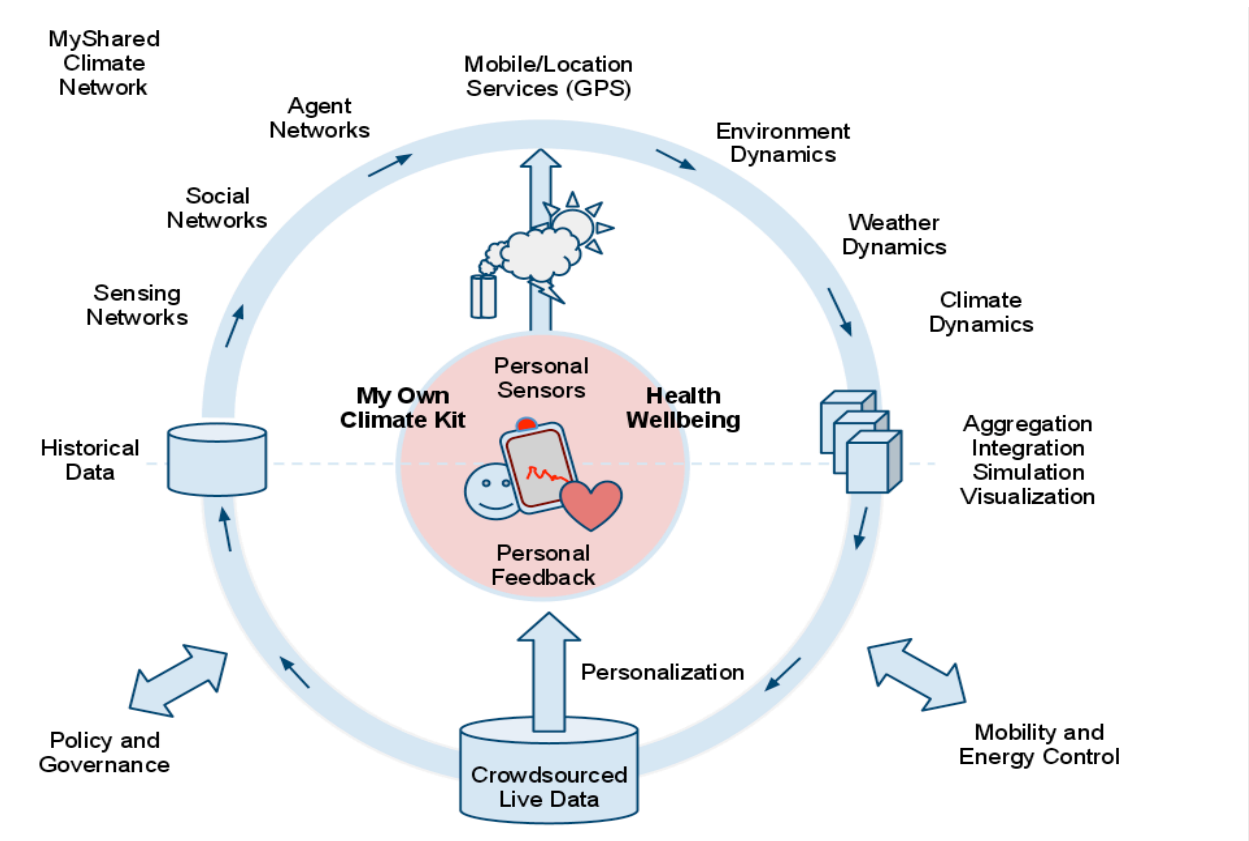
MOBILE PHONES: easy mountable MOCK add-ons

CAR: Tom-Tom not only gives up to date info about traffic jams, also advises about eco friendly routes or advises to keep our windows closed.

TRAFFIC REGULATORS: data about local weather and climate, crowd movement, speed (pollution) control

STREETS: billboards with weather and climate info on specific sensitive places

POLICY makers: crowd data for making more distinct climate policy, city planning



KIND OF DATA

Sensor, Measure and Network devices for air quality, wind, sound, smell, humidity, radiation in relation to each other

GPS personal preference data

Personal Climate Data are also presented as Crowd Climate Data which dynamics can be 'live' followed on the web

Crowd Climate data are derived from emergent communities, which generate data by themselves

Environmental Standards for healthy outdoor activity form the perspective of health (trade off of health)

Combining 'live' data with simulation model data to give 'live' advice. By combining Personal Climate Data, Crowd Climate Data, Weather data, Air streams, Humidity streams, Temperature data, Radiation data, Sound data and more in 'live' context

Integrating data from Social network, Agents and Sensor networks