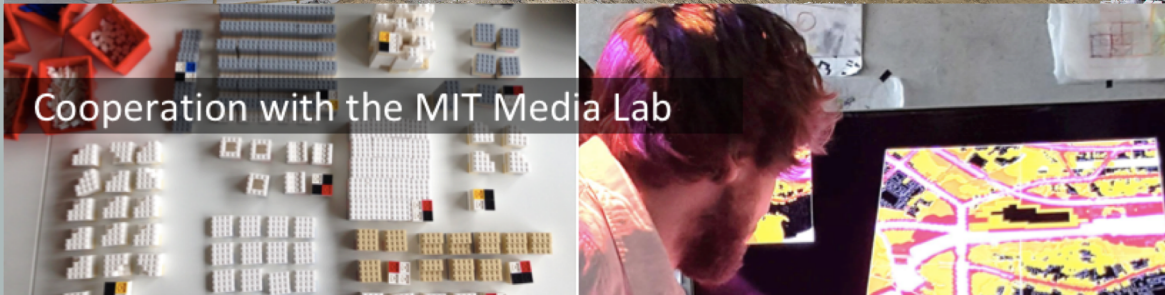




HCU | HafenCity Universität
Hamburg

City Science Lab
A Cooperation with the
MIT Media Lab



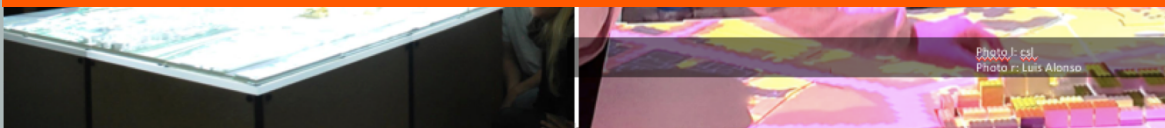
Cooperation with the MIT Media Lab

Comments:

HafenCity University: Urban Planning / Metropolitan Studies

CityScienceLab co-founded with the City of Hamburg

Cooperation with the MIT Media Lab

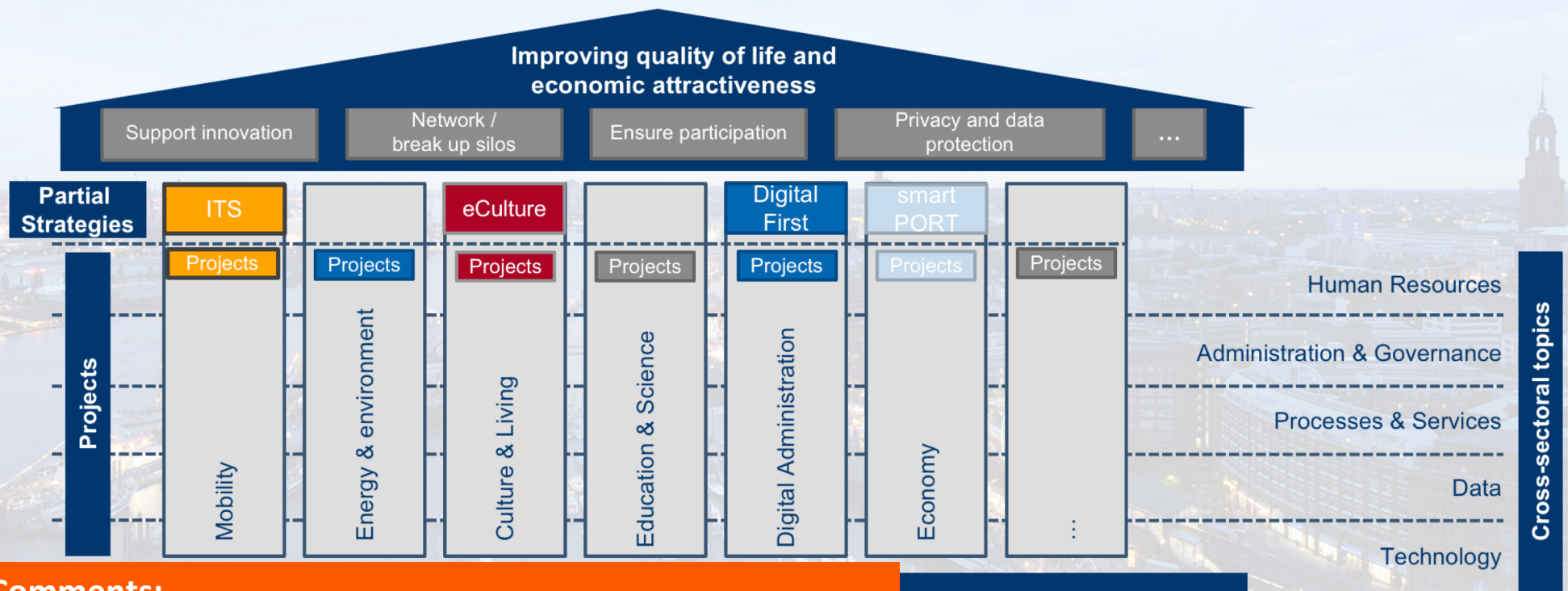


Background

Prof. Jens Bley:

- **CityScienceLab@HCU**
Initiator SmartSquare
Co-Founder eCultureLab@HCU
Urban Testbeds
- **Hamburg Chamber of Commerce**
15+ years Digital Economy
- **Digital Economy Cluster Hamburg**
Management Board
- **Entrepreneur**
20+ years Digital Transition
- **Europeana Impact Task Force**
- **World Cities: Hamburg-Melbourne**

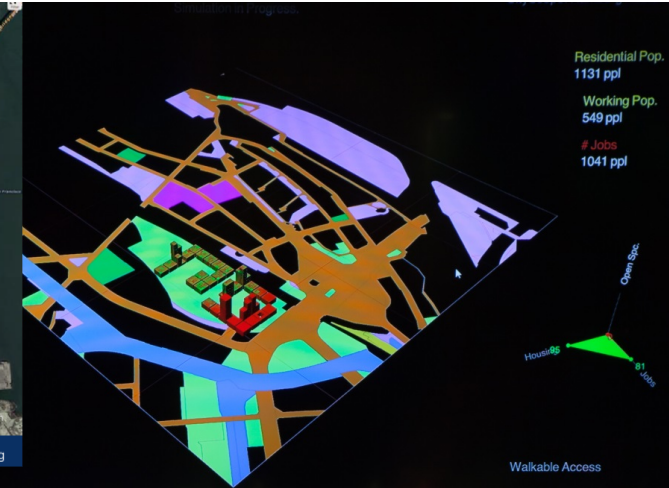
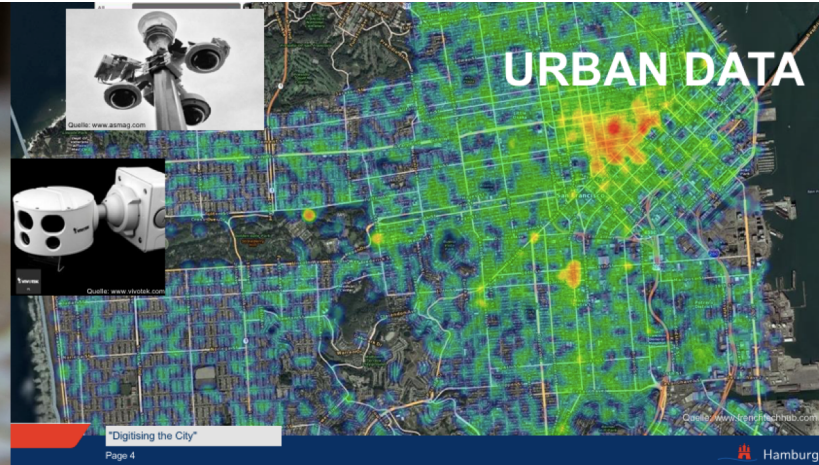
Context: Digital City Hamburg Strategy



Comments:

CityScienceLab is part of the digital strategy of Hamburg
 Partial digital strategies are the context for specific actions

CityScopes



Modeling and developing future scenarios

Photo l: Ariel Noyman
Photo r: Benno Tobler

Context

Smart Cities - more **tangible** and increase **transferability**

Smart Cities - **smaller urban entities**: squares / quarters / precincts

Smart Cities - **Vertical Perspectives / Value Lenses**:

Culture

Retail

Tourism

Mobility

...

Comments:

Smaller urban entities makes „Smart Cities“ more tangible

Vertical perspectives increase focus and measurability

Both „filters“ enhance relevant stakeholders inclusion



Context: Multiple Stakeholders

Smart Cities - **Quadruple Helix Innovation**

Smart Cities - **Multiple Stakeholders Engagement**

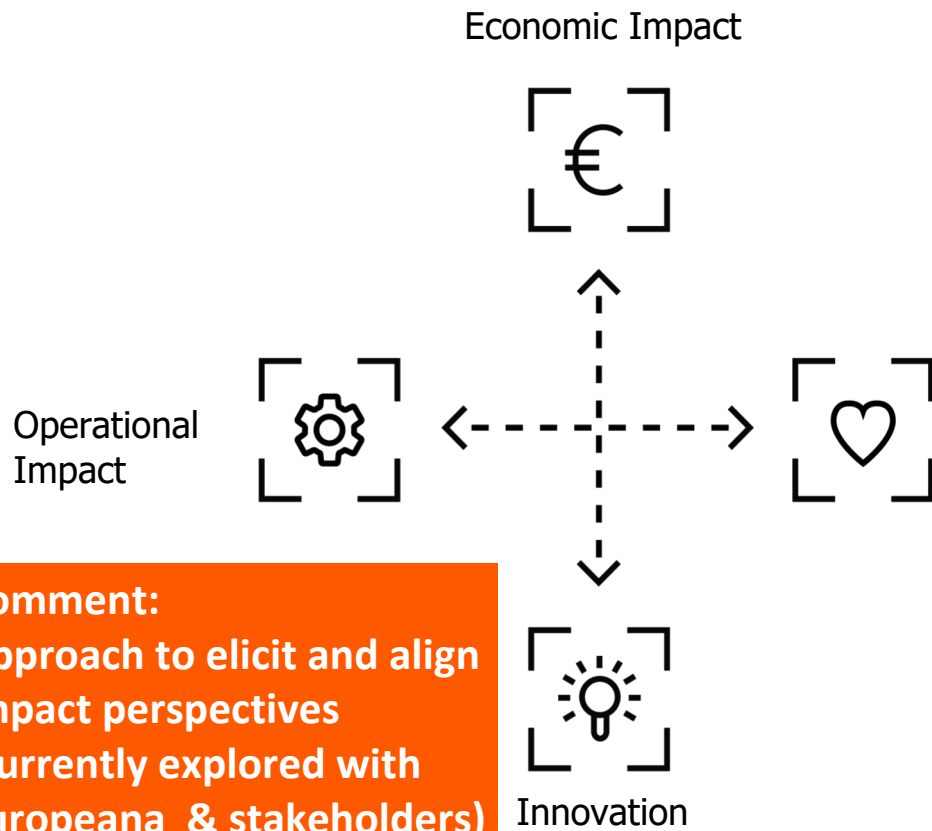
Smart Cities - **Co-Creation of Innovations / Services**



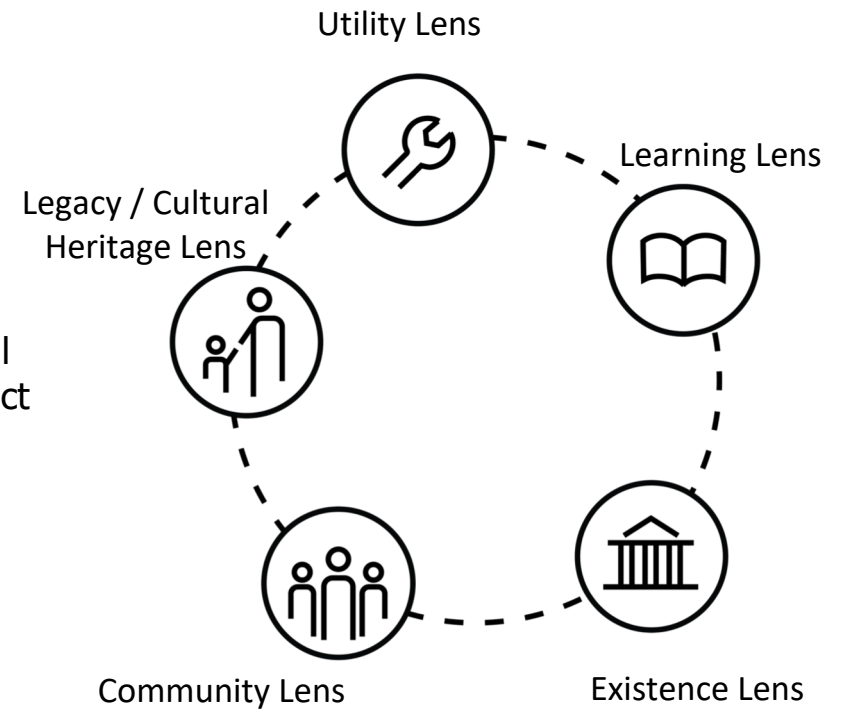
<https://www.slideshare.net/DCSF/open-innovation-20-charlie-sheridan-vinny-cahill-plenary-4-final>

Impact Perspectives STAKEHOLDERS Value Lenses

SMART CITIES



Comment:
Approach to elicit and align
impact perspectives
(currently explored with
Europeana & stakeholders)

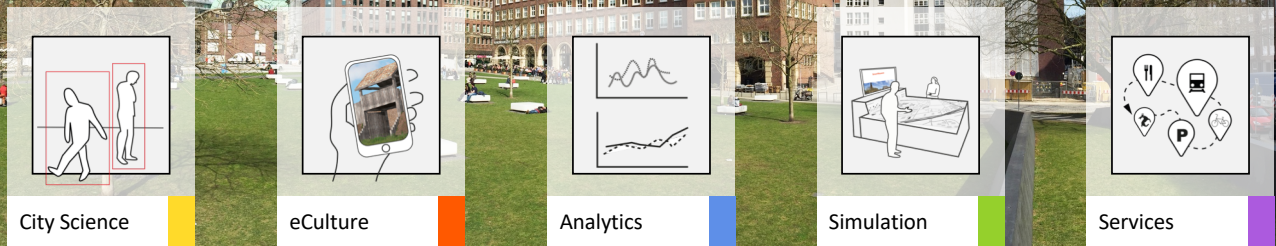


Revitalization of an Inner City Urban Square in Hamburg

SMART
SQUARE

by means of digital cultural storytelling, data analytics,
simulation and service scenarios

Comment: Deep Dive into
Hamburg Urban Testbed project
Multiple city to city cooperations



SMART SQUARE

SMART CULTURE IN SMART CITIES



Comments:
Urban Testbed with interdisciplinary approach:
City Science, eCulture, Analytics, Simulation, Service Scenarios

Revitalization of an Inner City Urban Square in Hamburg by Means of Digital Cultural Storytelling, Data Analytics, Simulation and Service Scenarios

Analogue and Digital Urban Studies

City Science

Digital Cultural Services in an Urban Living Lab

eCulture

Services

Service-Perspectives for SmartSquare: Culture, Tourism, Retail, Mobility

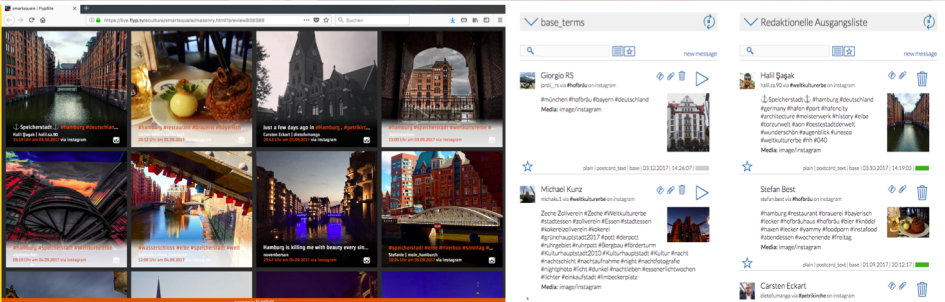
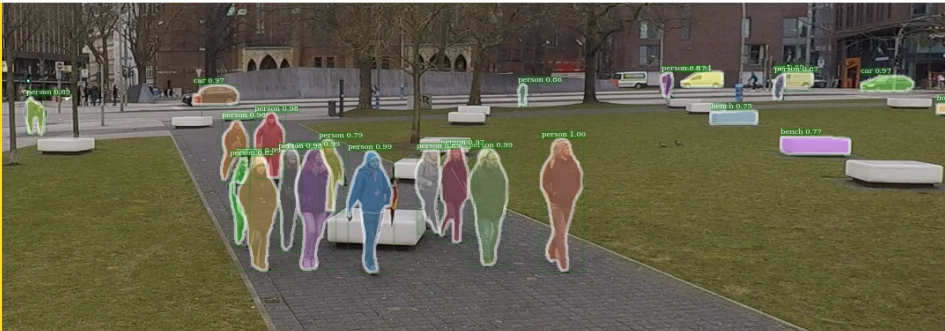
Analytics

Building a Data-Analytics-Platform and Monitoring-Dashboards

Prototypical Implementation of Interactive Elements to Simulate fictive Spatial Scenarios

Simulation

SMART SQUARE



CITY SCIENCE

Analogue and Digital Observation

Participant Observation

User-/Resident-/Passer-by-Interviews

Photo Analytics

Camera Detection

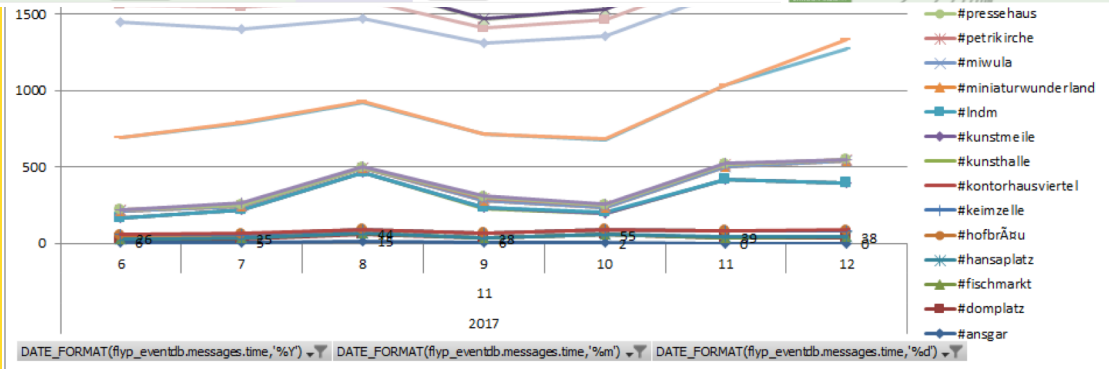
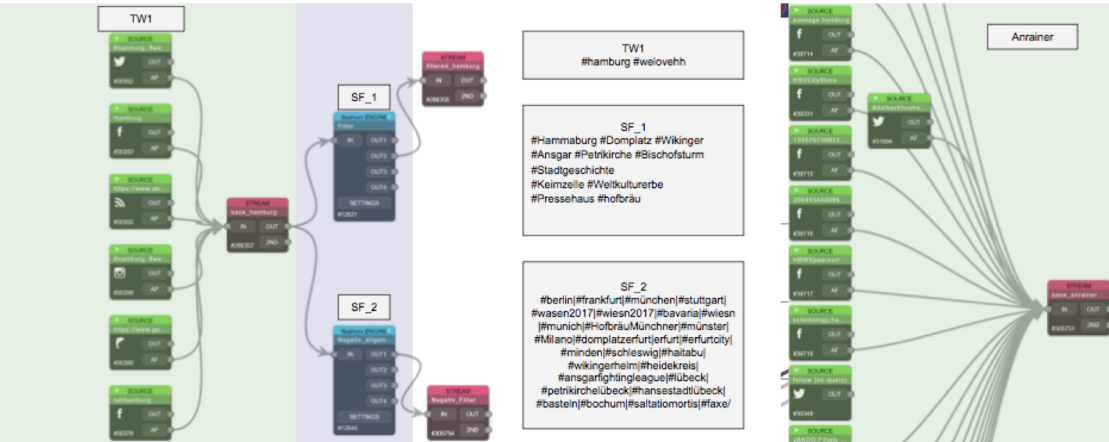
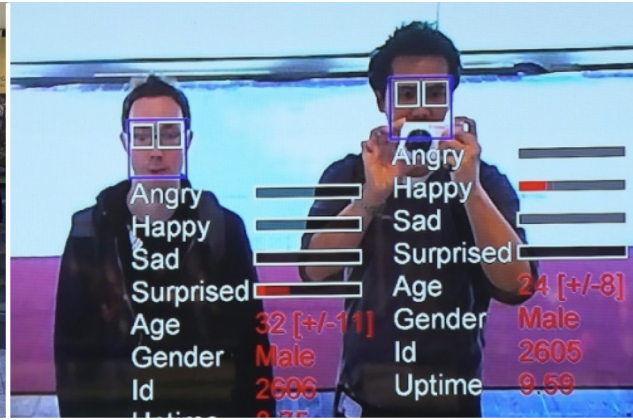
Motion Tracking

Use of the Installations

Digital Communication Analysis

Comments:
Multiple analog and digital observation methods, transferable to urban testbeds with different focus

SMART SQUARE



Analog and Digital Square Observation

Participating Observation

User-/Resident-/Passer-by-Interviews

Photo Analytics

Camera Detection

Motion Tracking

Use of the Installations

Digital Communication Analysis

Comment:
Media and Attention Economy Analytics

CITY SCIENCE

SMART
SQUARE

SMART CULTURE IN SMART CITIES



Uniqueness

- **Smart Culture in Smart Cities**
- Physical and digital dimensions of the square
- Method Mix: analogue and digital
- Multi Stakeholder Perspectives
- Integrated Service Scenarios
- **Urban Testbed**

Comment:
Combining the digital and physical domain
in an inner city urban testbed / living lab

Transferability

Urban Testbeds: Aarhus, Athens, Auckland, Ghent, Glasgow, Cape Town, Melbourne, Trondheim, ...

Institutions: City Labs, Cluster Organizations, Cultural Institutions, Universities

Methods: CSL & eCL, Gehl Institute, Europeana Impact Modelling, DARIAH, Smart City Index, ...

Comments:

Cities with urban testbeds as partners

Multiple stakeholders within the cities

Sharing methods, toolboxes, „playbooks“



1. Urban data platform

Melbourne



3D Development Activity (3D DAM)



Pedestrian counting system



Land Use & Infrastructure Planning

+ Hamburg



CityScope 2.0/ DIPAS



Urban platform masterportal/ API



City Cockpit/ City Keys

2. Smart city urban / living lab

Melbourne



Queen Victorian Market Redevelopment



+ Hamburg



Smart Square



Comment:

Urban Data/Platform and Urban Testbeds cooperations as tangible outcomes of “World Cities“ Hamburg-Melbourne - focus on manageable activities for multiple stakeholders

Cooperation

Commonalities:

- Urban Data / Platform
- Urban Testbeds
- Governance (Digital First)
- City Lab / CityScienceLab

Manageable Activities

- Staff Exchange
- Tools & Platform Design
- Urban Testbed Cooperation

Cooperation

Quadruple Helix Innovation including Cluster Organizations

City Labs / City Science Labs

Urban Data - Urban Data Platform

Urban Testbeds

Comments:

Stakeholders like City Labs and Cluster Organizations increase the sustainability of city to city cooperations. Urban Data and Urban Testbeds are tangible fields for cooperation and transferability between cities.



Prof. Jens Bley – jens.bley@hcu-hamburg.de