

HCU | HafenCity Universität
Hamburg

City Science Lab

A Cooperation with the
MIT Media Lab



Cooperation with the MIT Media Lab



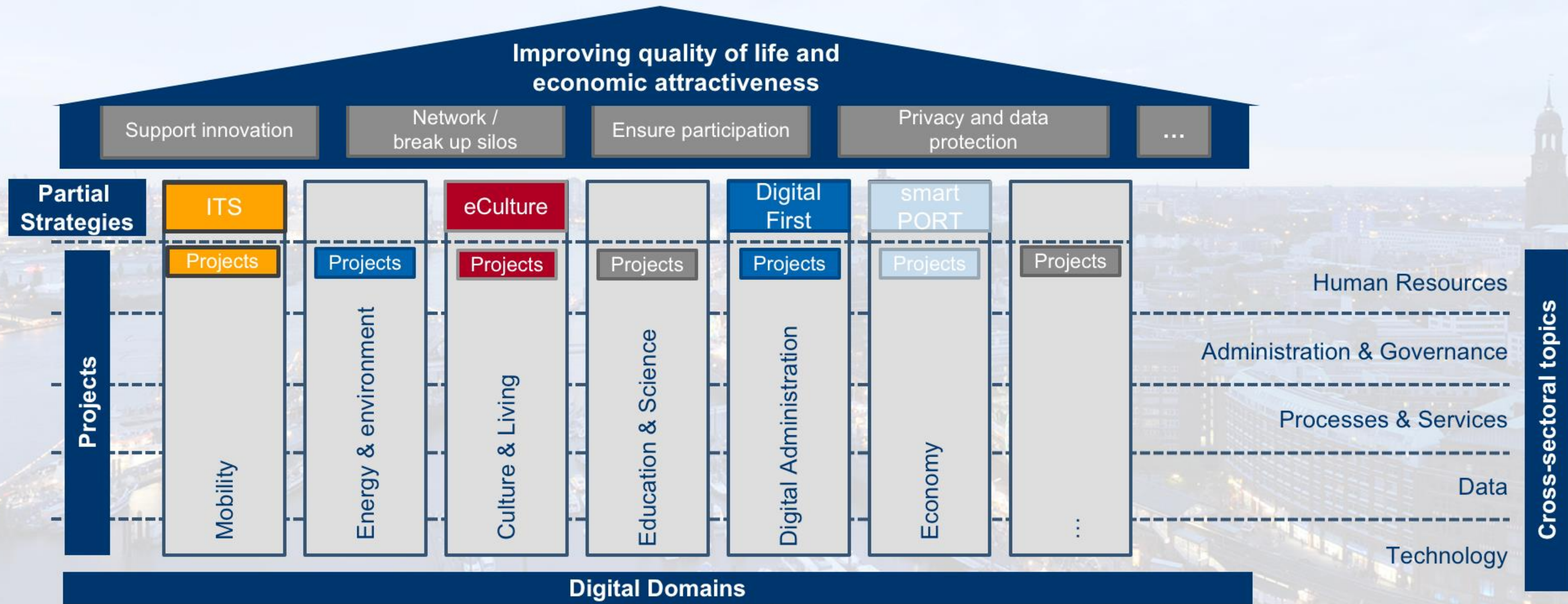
Background

Prof. Jens Bley:

- **CityScienceLab@HCU**
Initiator SmartSquare
Co-Founder eCultureLab
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

SMART CITIES



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

...

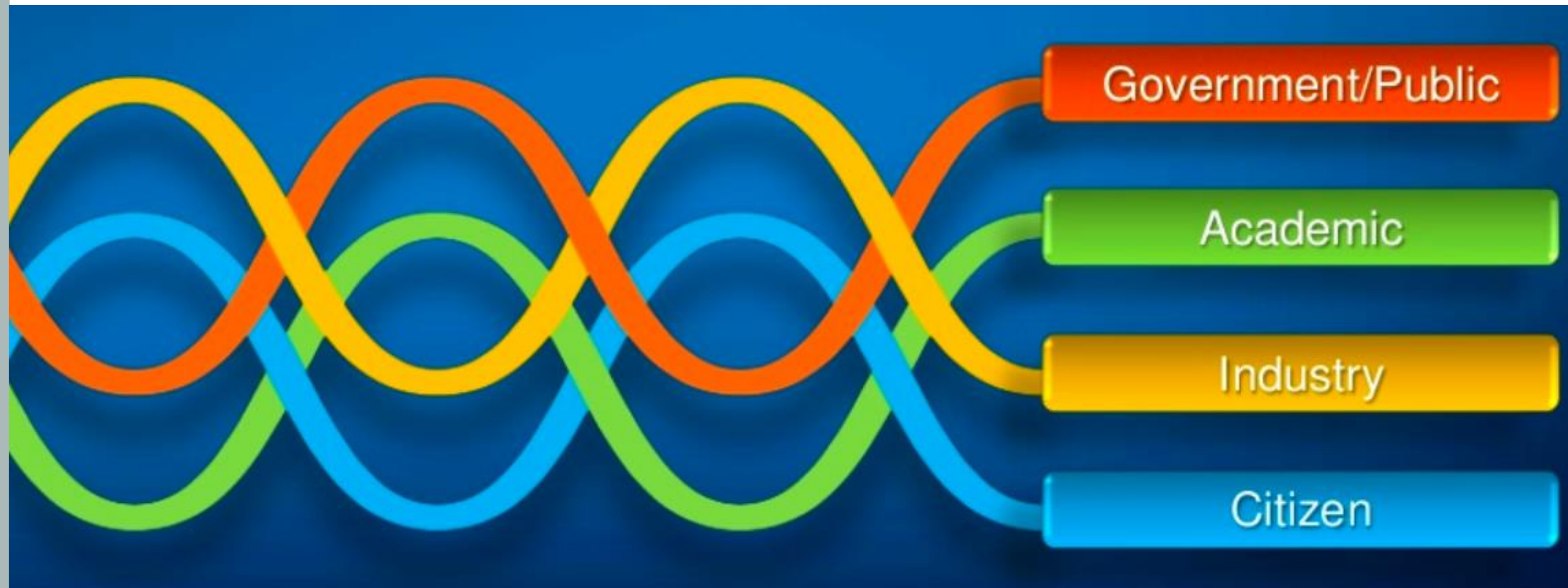


Context: Multiple Stakeholders

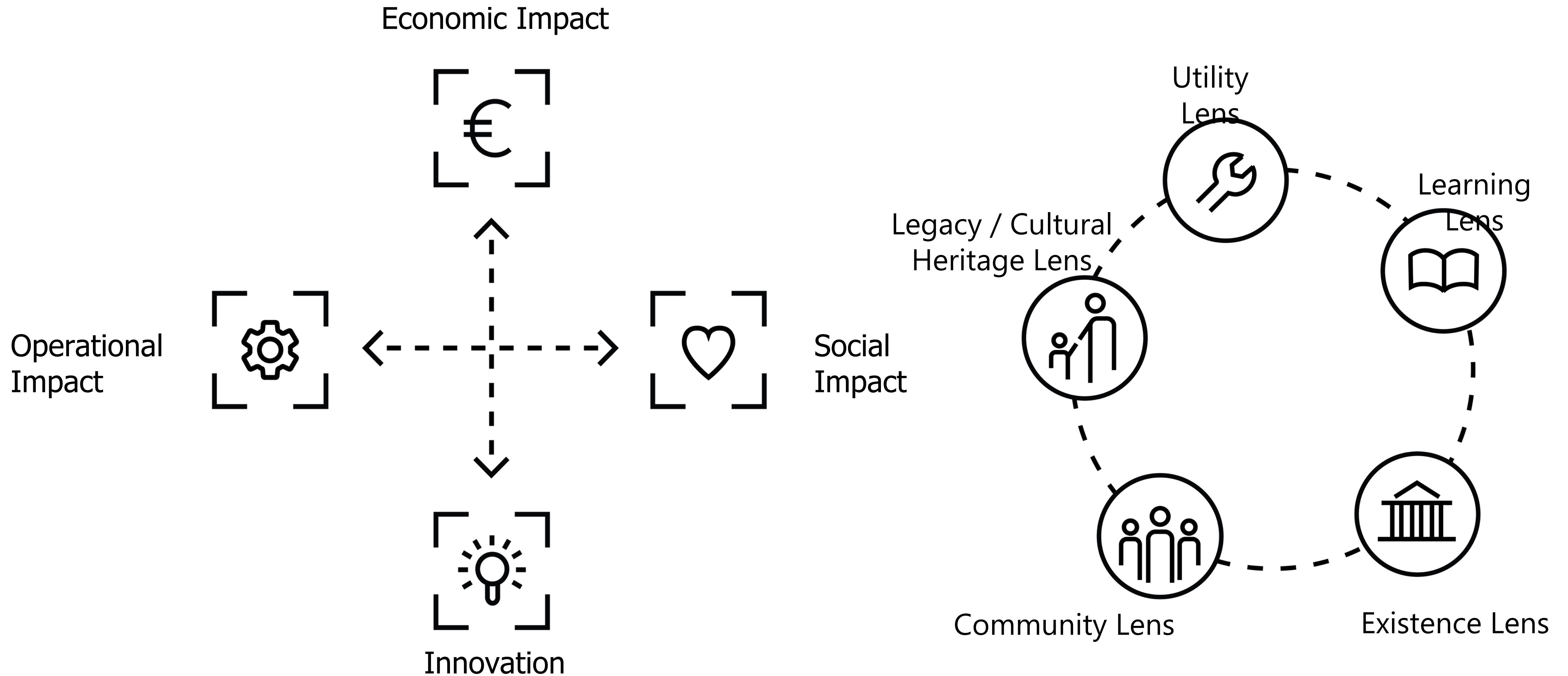
Smart Cities - **Quadruple Helix Innovation**

Smart Cities - **Multiple Stakeholders Engagement**

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



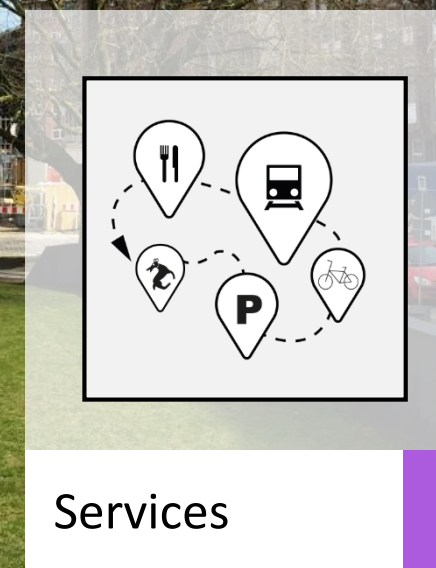
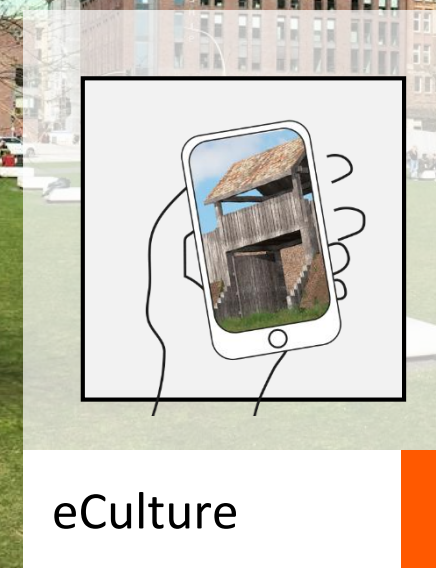
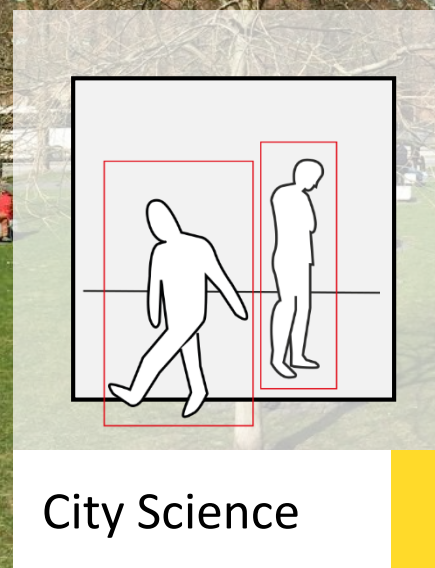
Impact Perspectives STAKEHOLDERS Value Lenses



Revitalization of an Inner City Urban Square in Hamburg

SMART
SQUARE

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



SMART SQUARE



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

SMART CULTURE IN SMART CITIES

Analogue and Digital Urban Studies

City Science

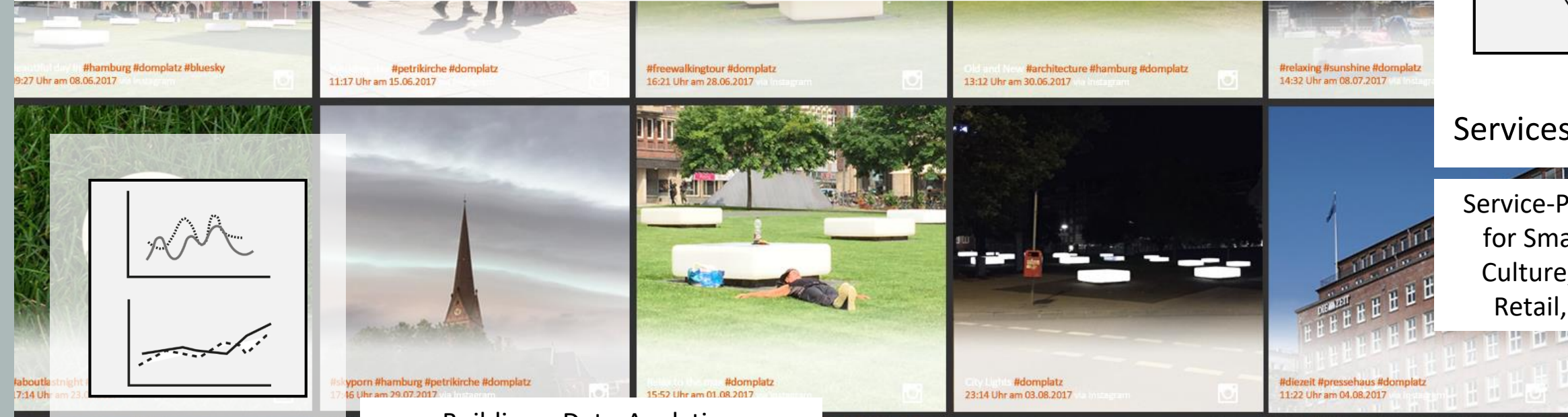


Digital Cultural Services in an Urban Living Lab

eCulture

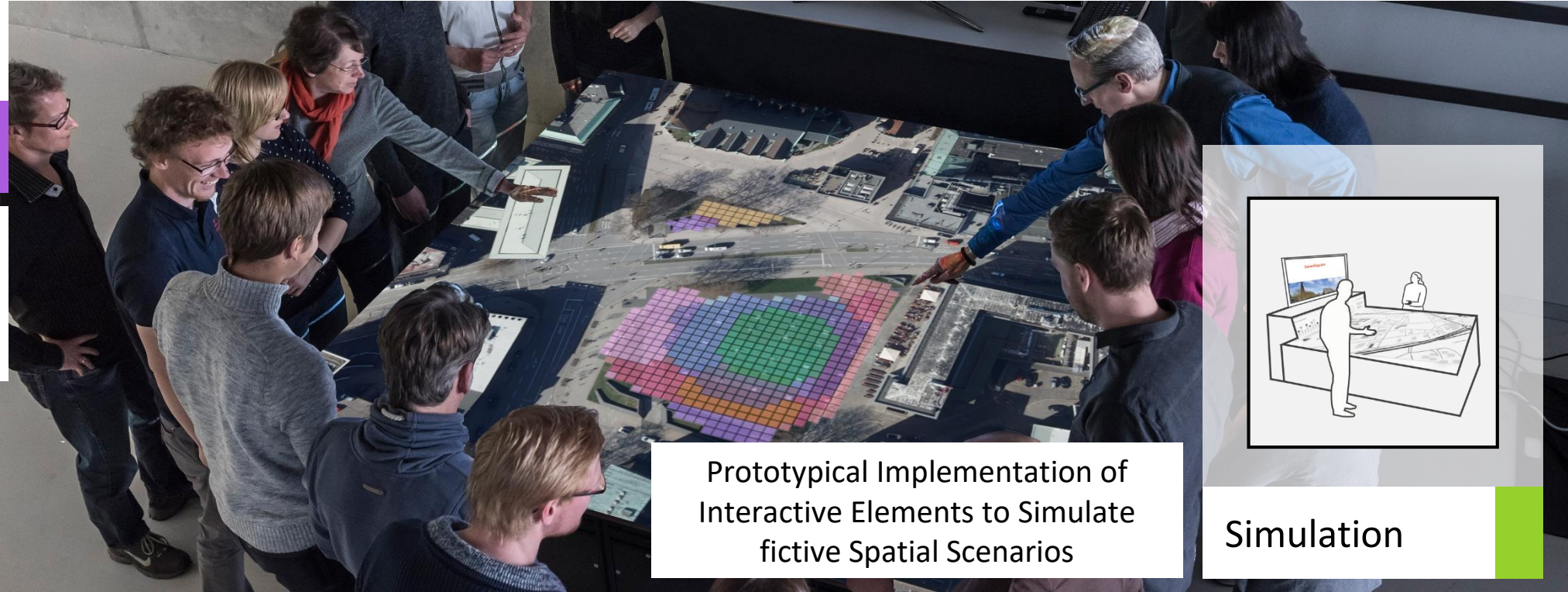
Services

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



Analytics

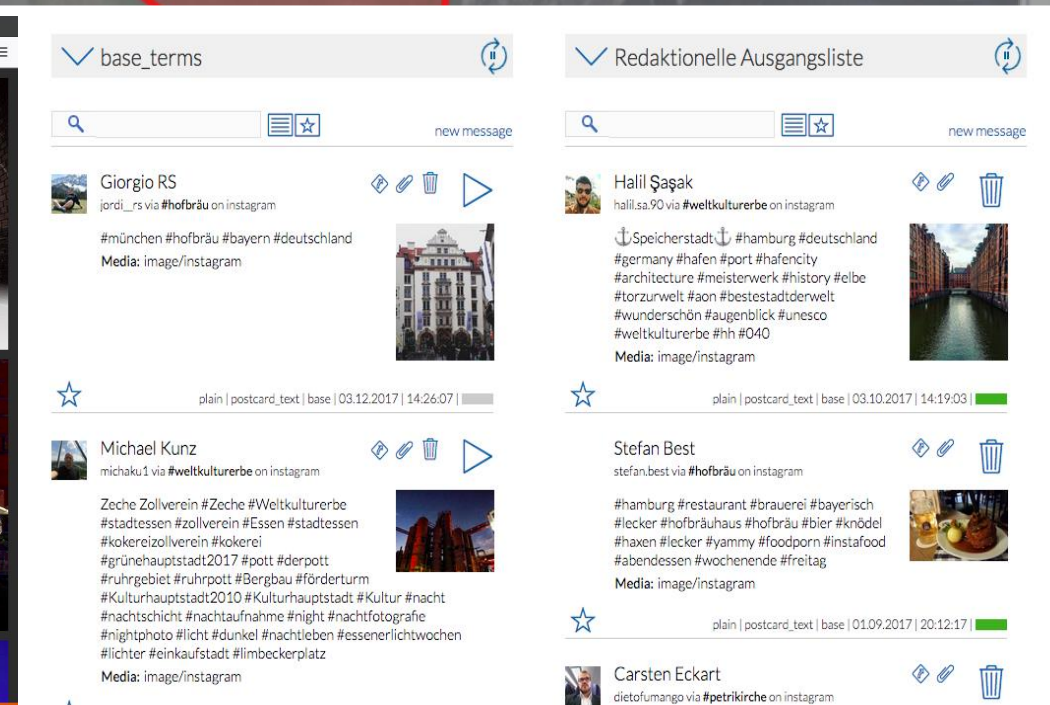
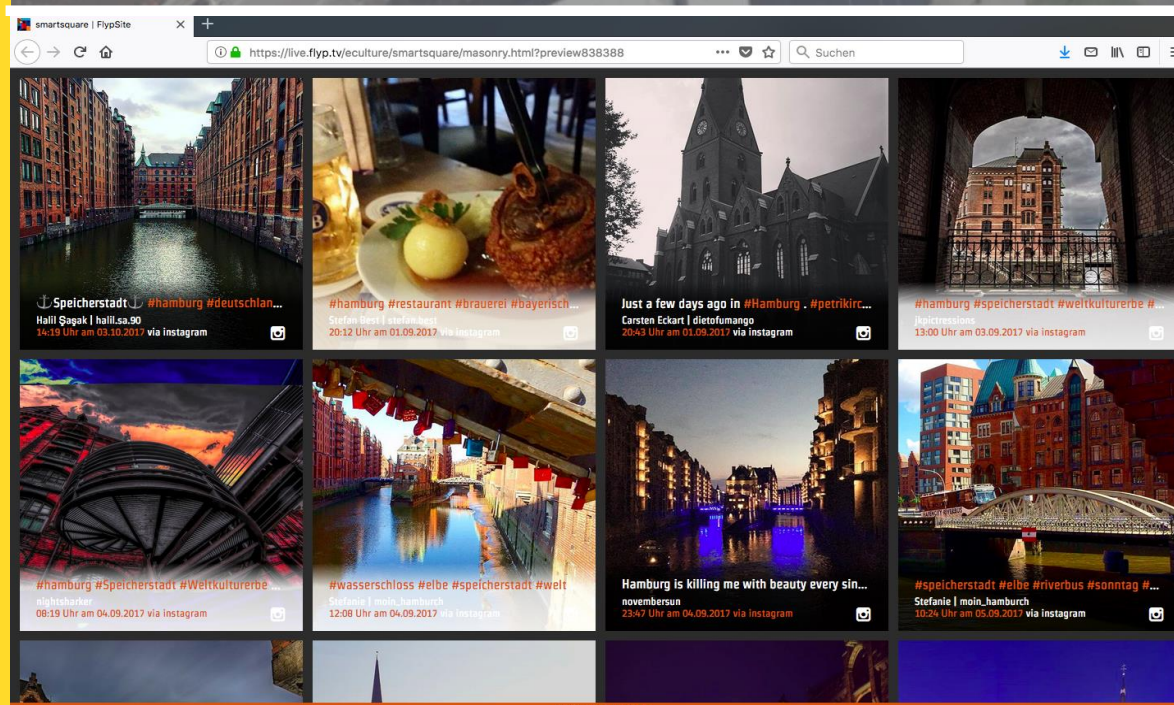
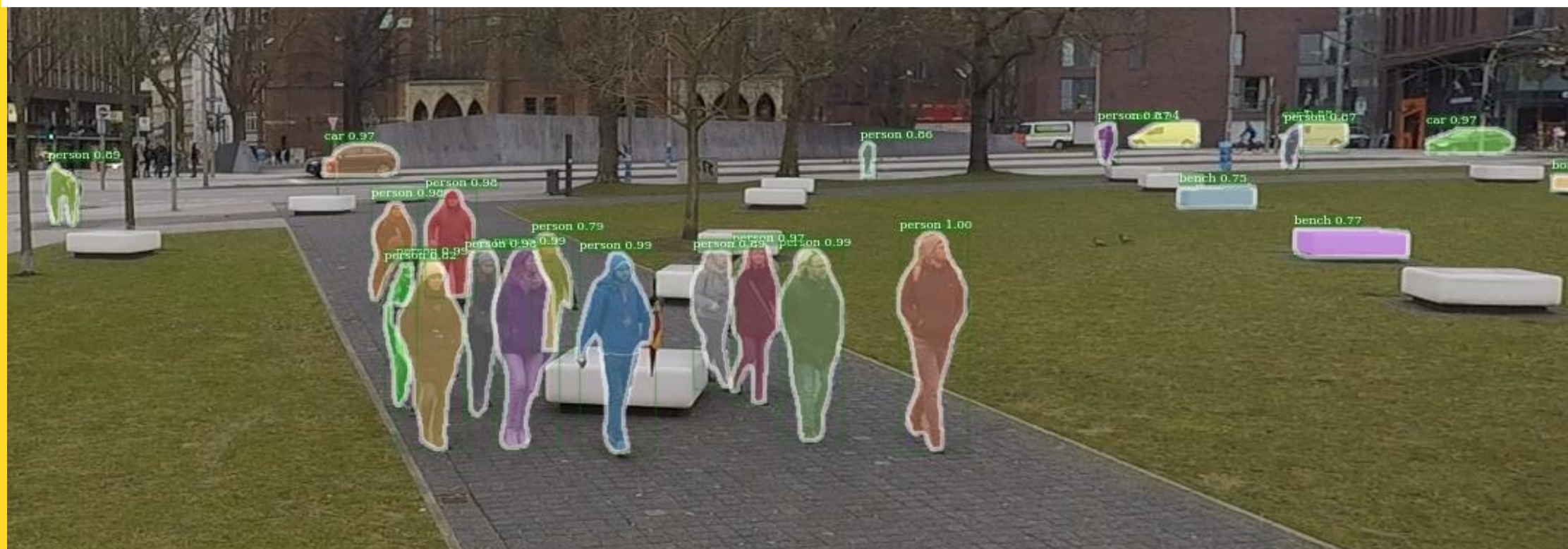
Building a Data-Analytics-Platform and Monitoring-Dashboards



Prototypical Implementation of Interactive Elements to Simulate fictive Spatial Scenarios

Simulation

SMART
SQUARE



Analogue and Digital Observation

Participant Observation

User-/Resident-/Passer-by-Interviews

Photo Analytics

Camera Detection

Motion Tracking

Use of the Installations

Digital Communication Analysis

CITY SCIENCE

SMART
SQUARE

SMART CULTURE IN SMART CITIES



Uniqueness

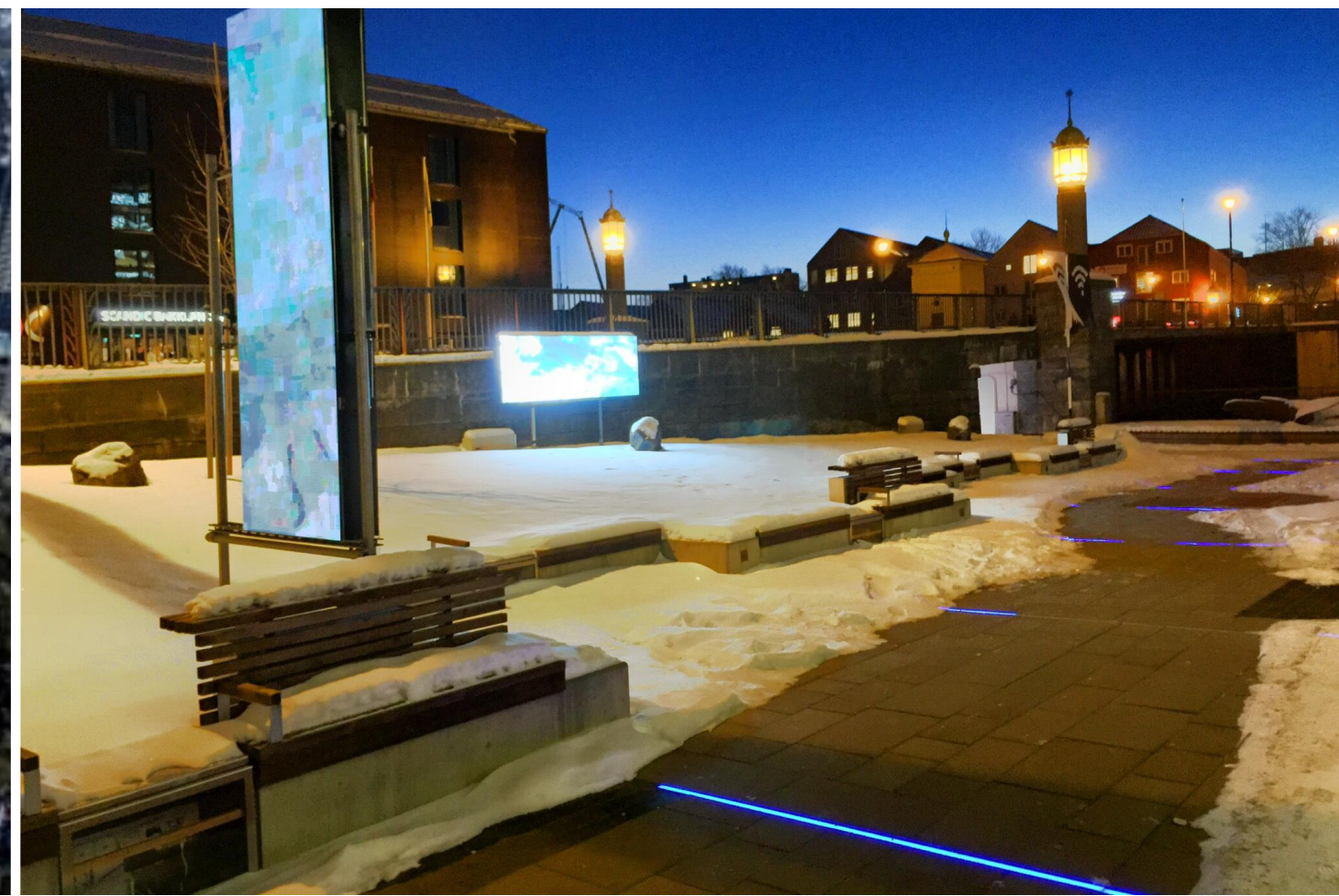
- **Smart Culture in Smart Cities**
- Physical and digital dimensions of the square
- Method Mix: analogue and digital
- Multi Stakeholder Perspectives
- Integrated Service Scenarios
- **Urban Testbed**

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, ...



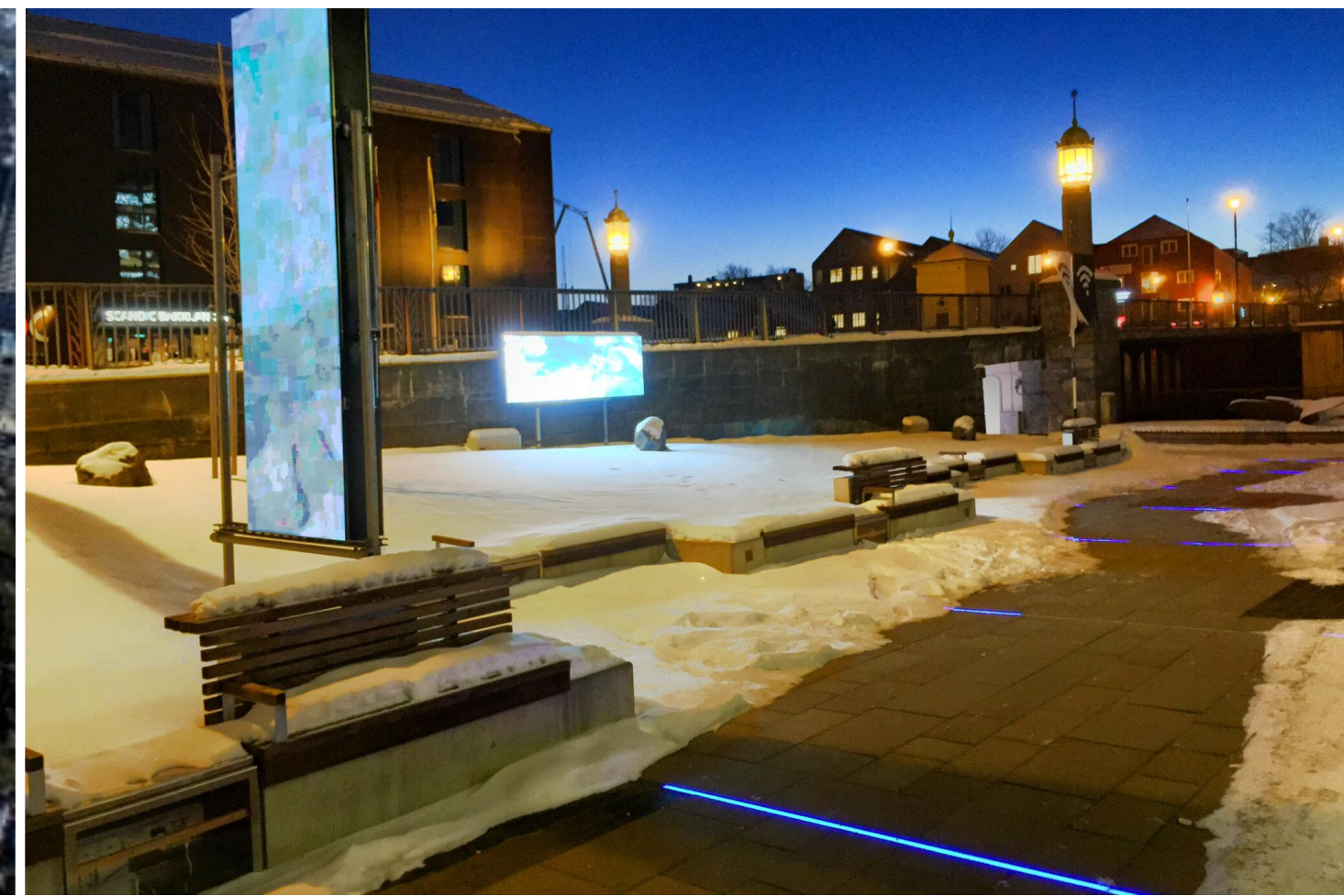
Transferability

Innovationsforum eCulture 2017/18: SME forum, VR/AR, Urban Media, Business Models

Travelling Conference 2019: Innovationforum to Australia und New Zealand

Horizons 2020 - STARTS: Artist-driven service innovations in urban testbeds (arenas), Co-Creation

Horizons 2020 - Digital Transformation / Cultural Heritage : MySmartCulturalQuarter(s)



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 Victoria Market Redevelopment



CityLab



Melbourne Innovation Districts

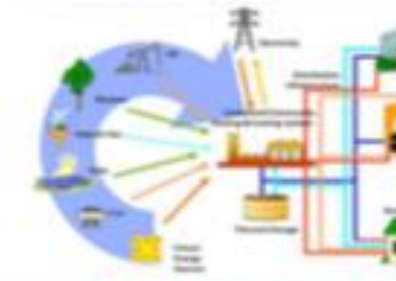
+ Hamburg



Smart Square



eCulture/ CityScienceLab of HCU



Smart City Lighthouse Projects

Cooperation

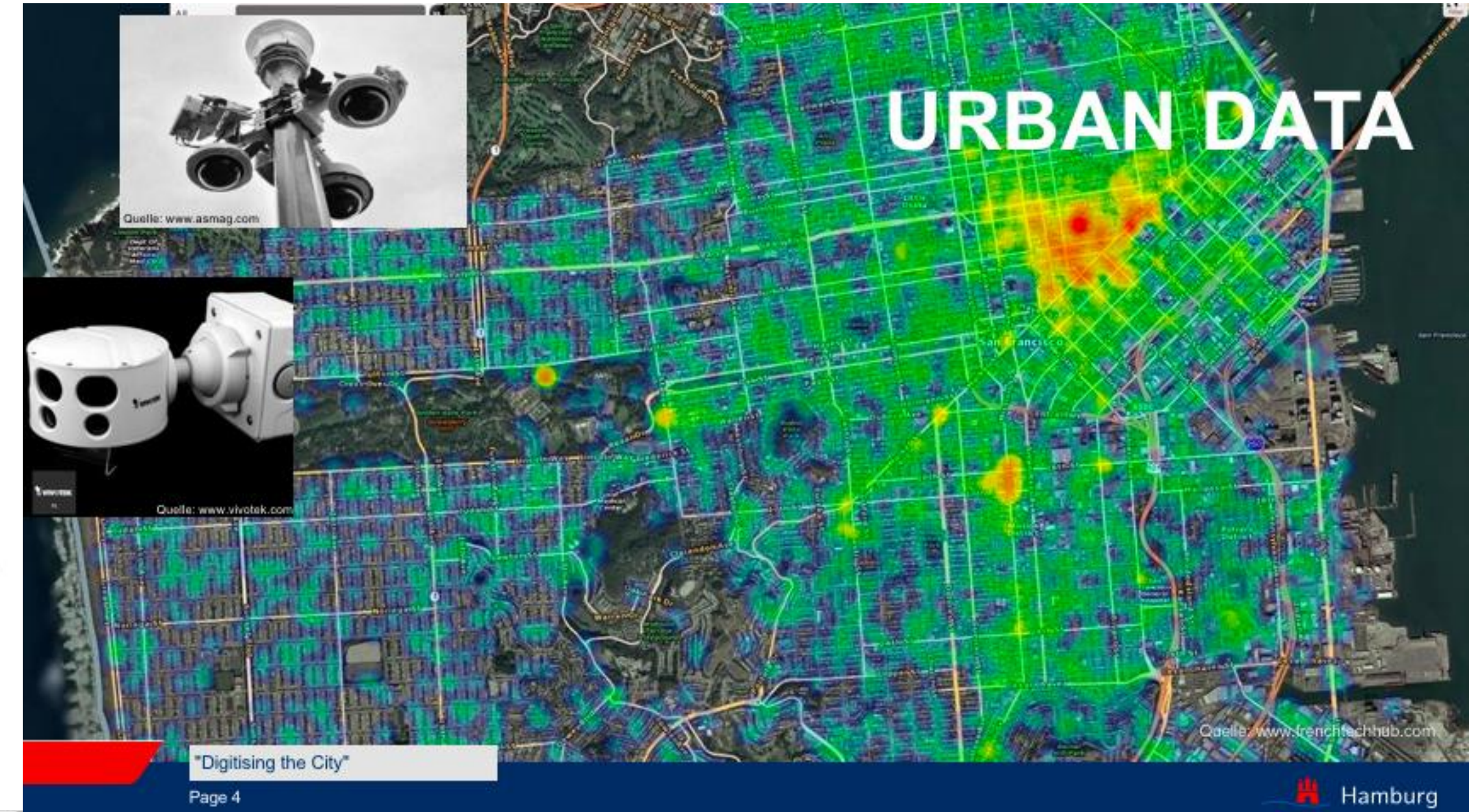
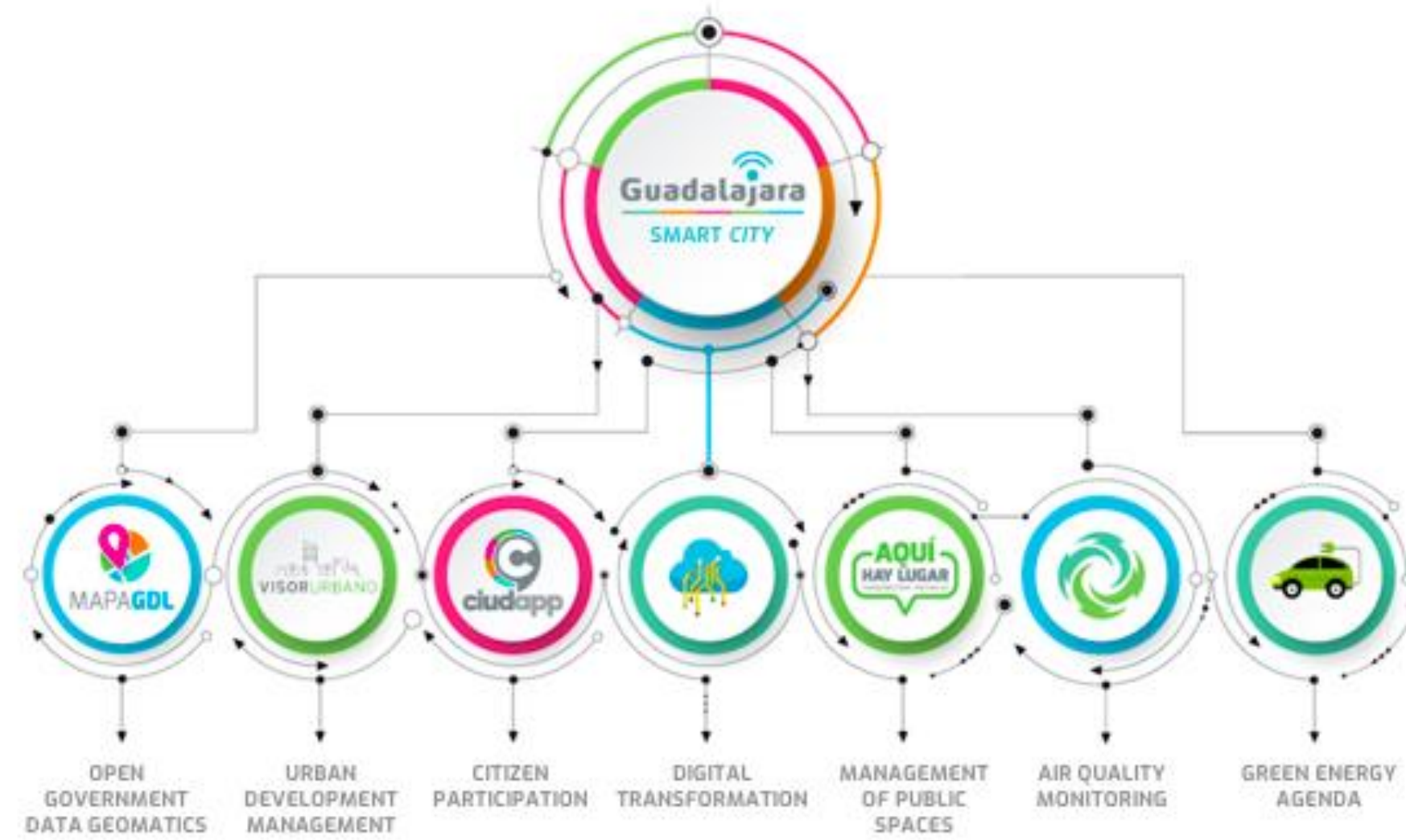
Commonalities:

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

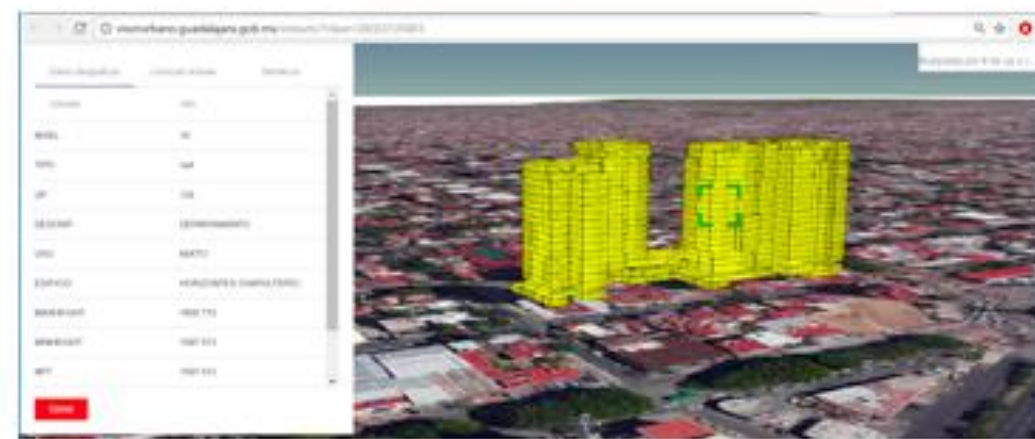
Manageable Activities

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

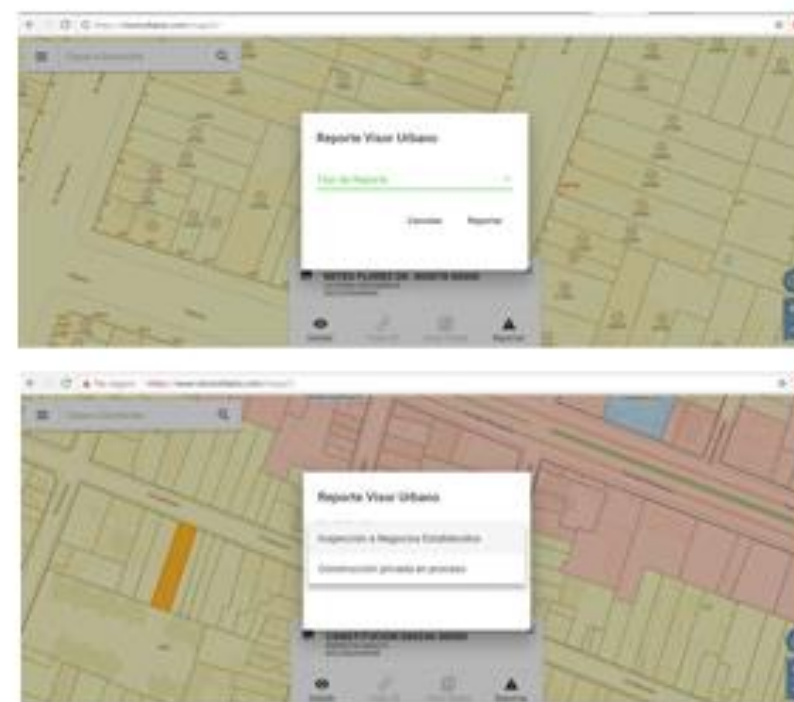
In **Guadalajara**, we are working on transforming the city into **Smart City**.



Citizen Reports



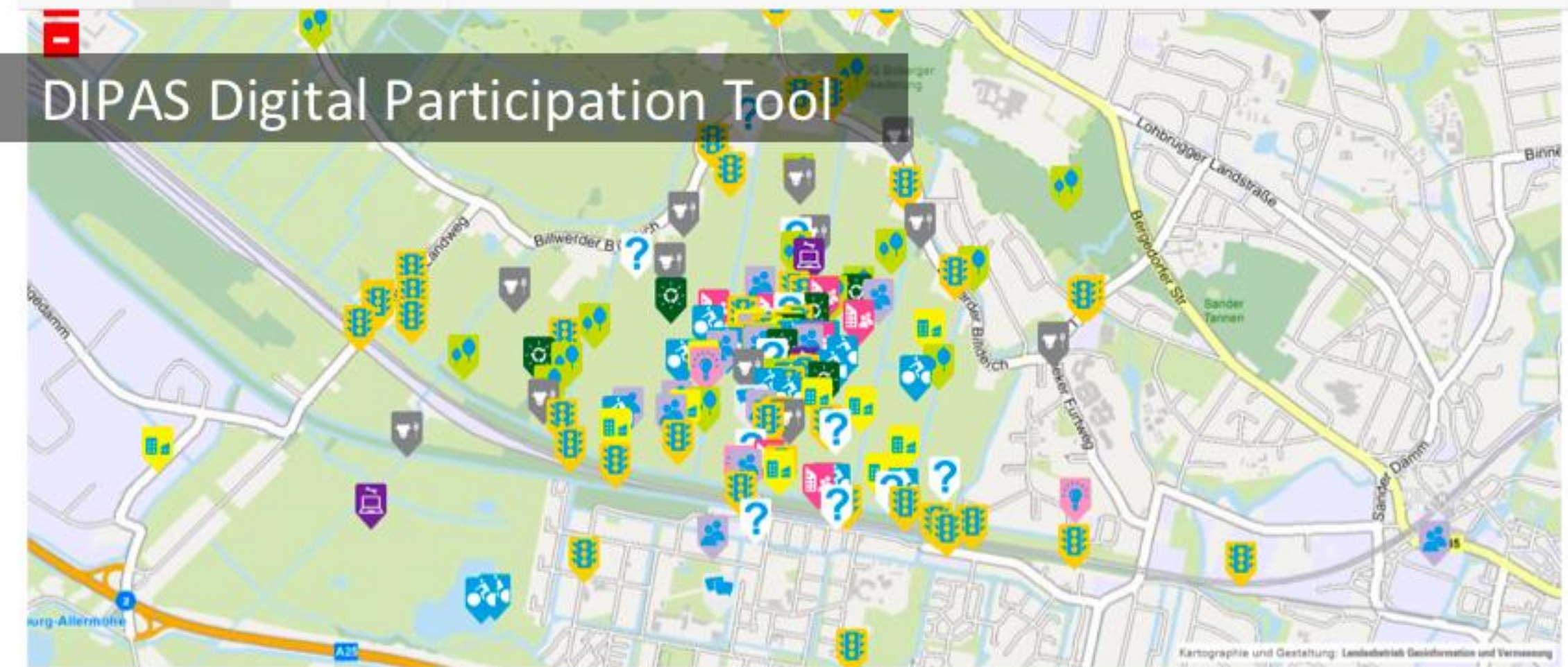
One can look up the information on **Visor Urbano**



Citizen can write the report on **Ciudapp**



DIPAS Digital Participation Tool



Cooperation

Quadruple Helix Innovation including Cluster Organizations

City Labs / City Science Labs

Urban Data - Urban Data Platform

Urban Testbeds

