

A JOURNEY THROUGH
Open Cities Africa

Session 4: Friday: 11:00 - 12:30

Presenter: Carter Draper
iLab & Open Cities Monrovia



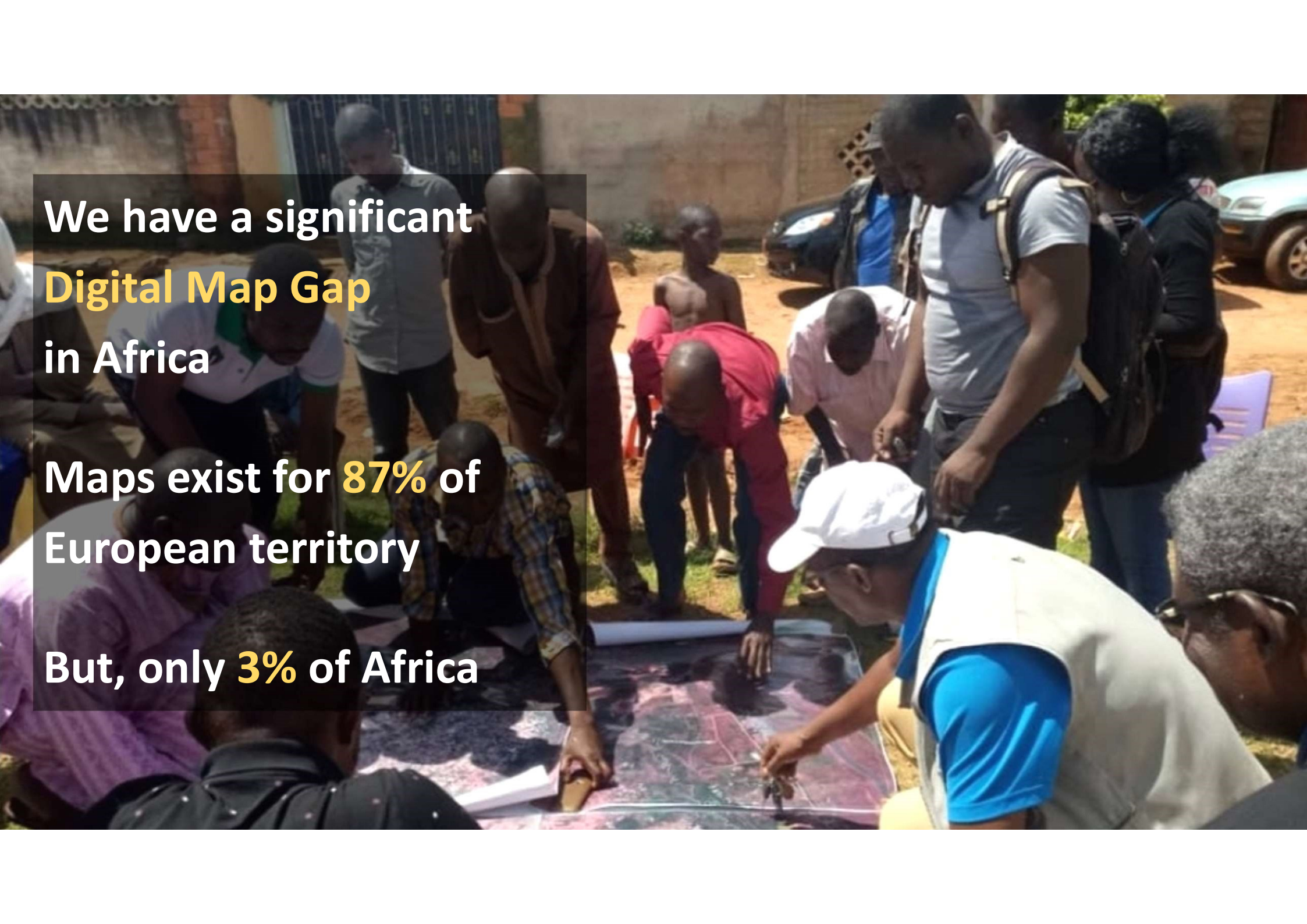


2.5 billion more people
living in urban areas
by **2050**

60% of the new urban
areas of **2030**
do not exist yet



Understanding and
quantifying
disaster risks requires
accessible, detailed,
up to date **data**

A group of people, including men and women of various ages, are gathered outdoors around a large map spread on the ground. They are actively engaged in a community mapping activity, with some pointing at the map and others looking on. The setting appears to be a public space, possibly a market or a community center, with buildings and a car visible in the background. The text overlay is positioned on the left side of the image.

We have a significant
Digital Map Gap
in Africa

Maps exist for **87%** of
European territory

But, only **3%** of Africa



Disruptive Technologies

satellites...

drones...

GPS mobile phones...

street view...

open data...

machine learning...

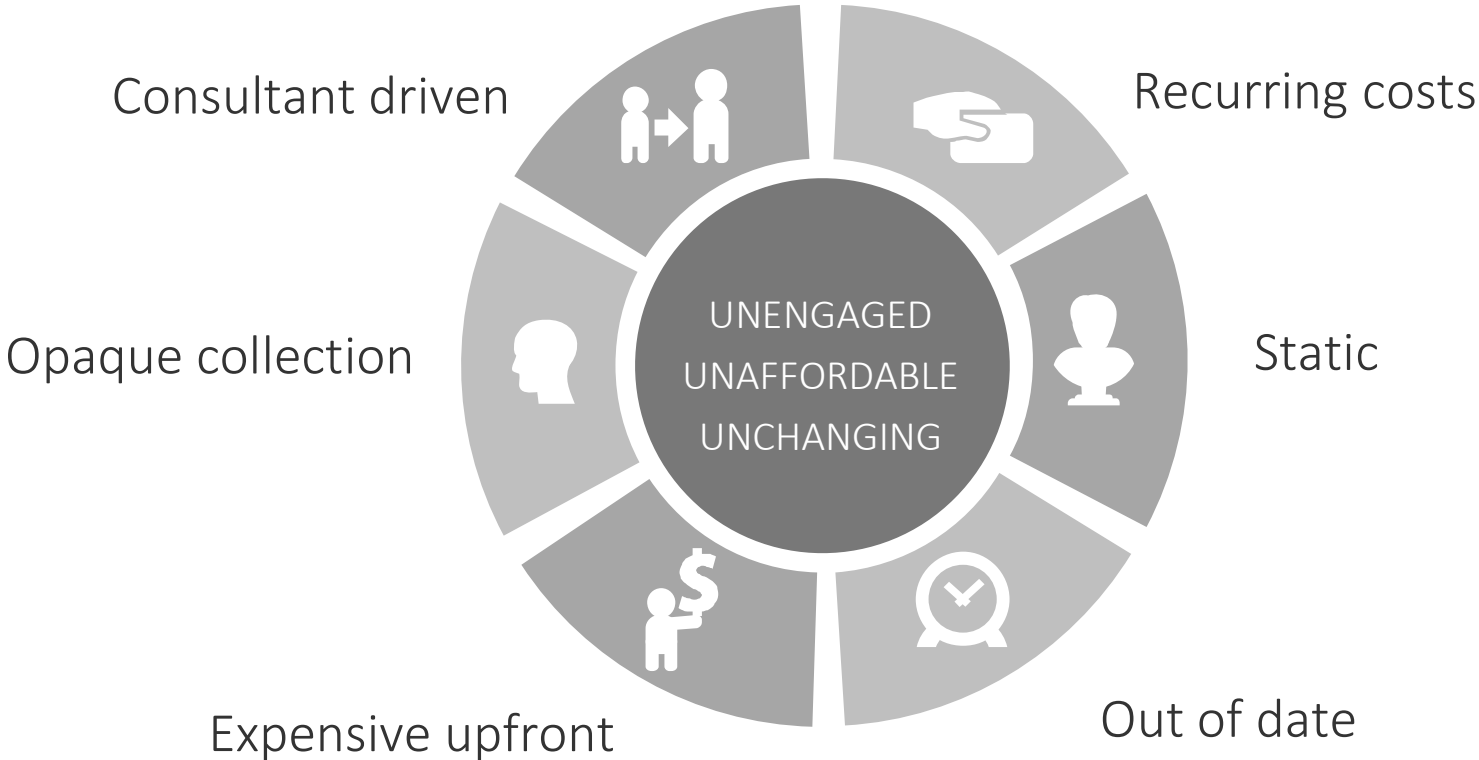
An **opportunity** for **youth, women,** and any **citizens** to participate in the creation of **resilient societies**

Invest in **Human Capital** by building networks and relationships between:

- local governments
- universities
- private sectors
- communities

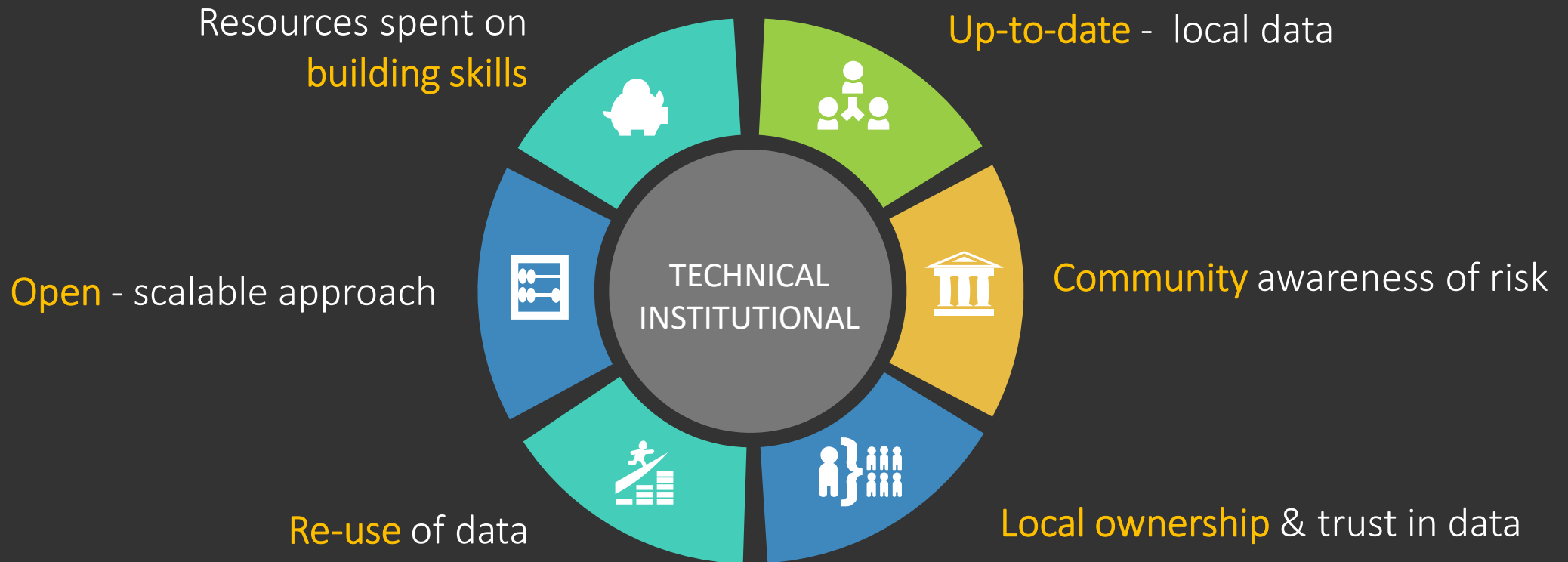


TRADITIONAL APPROACH TO DATA COLLECTION



DISRUPTIVE TECHNOLOGY AND HUMAN CAPITAL

COLLABORATIVE APPROACH TO GEOSPATIAL DATA COLLECTION



Geospatial Market growth from
US\$ **9.8 billion** in 2017 to
US\$ **17.5 billion** by 2023

Geospatial data and services
generate US\$ **400 billion**
in global revenue





Open Data for
Resilience Initiative

OPEN CITIES AFRICA

OPEN DATA TODAY TO BUILD RESILIENT AND SUSTAINABLE SOCIETIES TOMORROW

ABOUT

ACCRA [Ghana](#)

ANTANANARIVO [Madagascar](#)

BRAZZAVILLE [ROC](#)

KINSHASA [DRC](#)

KAMPALA [Uganda](#)

POINTE-NOIRE [ROC](#)

MONROVIA [Liberia](#)

NGAOUNDÉRE [Cameroon](#)

SAINT-LOUIS [Senegal](#)

STONE TOWN [Zanzibar](#)

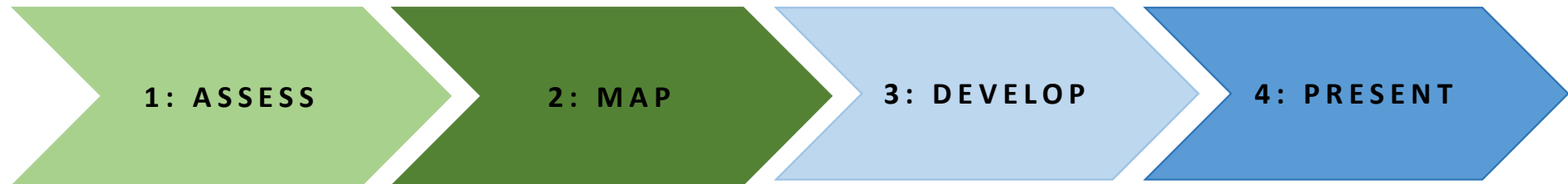
VICTORIA [Seychelles](#)

Open Cities Objectives

1. Collect Data and put it to use
2. Build local skills
3. Create partnerships and networks



Four Phases of Implementation



- Problem Statement
- Existing Data
- Local Partners
- Begin Training

- Engage Community
- Mapathons
- Data Collection
- QA/QC

- User Centered Design Approach
- Stakeholder Engagement
- Products such as: Atlas, maps, web applications, databases, apps

- Results and Feedback
- Present to the community

LOCAL PARTNERS

LOCAL GOVERNMENT



UNIVERSITIES



COMMUNITIES



REMOTE MAPPING

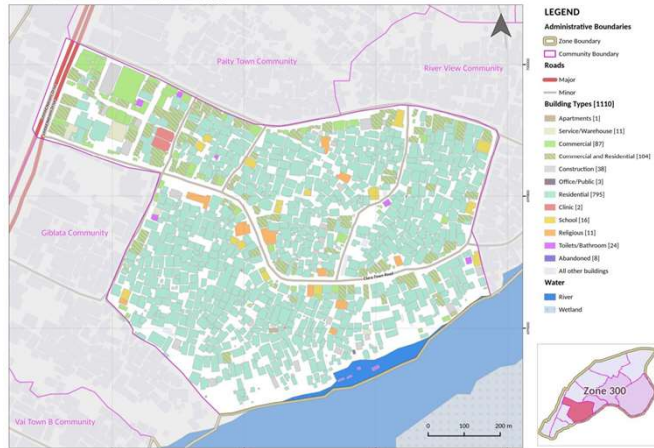


FIELD MAPPING



OPEN CITIES AFRICA: PRODUCTS

Zone 300, Clara Town Community: Building Type or Use



Open Cities Accra - Akweteyman – Drone Imagery

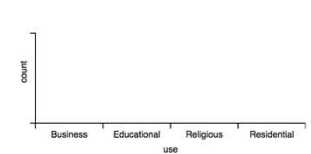


To view the results of the household survey, select a shehia then click on one of the four question categories to view the results.

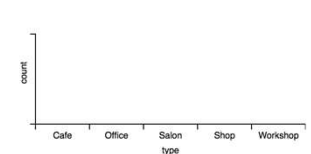
Select a shehia

- Building properties
- Flooding
- Waste and Mobility
- Improvements wishlist

Classification by building use



Classification by business type



Cross-continental network of experts

REGIONAL MEETINGS convene consortia of local government and innovation teams for a suite of **TECHNICAL & GOVERNANCE, WORKSHOPS & EVENTS**

50 DELEGATES at each event, half francophone and half anglophone, with many cultures, languages, and religions represented.

WORKSHOPS and ON-LINE TRAINING IN:

- data collection
- gender analysis
- validation and QA/QC
- stakeholder engagement
- user-centered design
- geospatial governance
- capacity building
- civic engagement



THE RESILIENCE ACADEMY

The Resilience Academy is a university partnership program focusing on skills and knowledge transfer on urban resilience.

The Academy concept revolves around THREE main activities :

1. Student internships for large-scale data collection campaigns
 - Provides Practical Training
2. Climate Risk Geodatabase
 - Promotes sharing and use of digital/geospatial data
3. Online Learning Materials
 - Online academic modules can be used for vocational training and embedded into local university curricula.



OPEN DRI Open Data for Resilience Initiative



OPEN DATA CREATED

- Across **12 cities** simultaneously
- **500,000** features mapped
- **100's** of sqkm of drone imagery collected

DIGITAL SKILLS

- **500 people** trained on digital cartography
- At **41% female participation rate**
- Over a thousand local citizens engaged in mapping

REGIONAL NETWORK

- Two regional knowledge exchanges
- Online training platform with over **100 participants**





What's Next?

- Machine Learning
- Sustain and Grow
- New Cities

An aerial photograph of a coastal settlement. The left side shows a rocky beach with waves crashing against the shore. The middle and right sides show a dense cluster of buildings with colorful roofs in shades of blue, green, and red. The ground is a mix of dirt and sparse vegetation.

Be part of the future of information and skills in Africa

JOIN US FOR

**A JOURNEY THROUGH OPEN CITIES
VOYAGE AU COEUR DES 'VILLES OUVERTES'**

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TO LEARN MORE: www.opencitiesproject.org