



Internet of Production
Alliance

NOVEMBER COMMUNITY CALL

Mapping Global Production

by World Manufacturing Data Awardees and
Development Lead Antonio Anaya

November 28, 2023 at 4 PM UTC

Register here: <https://shorturl.at/rRV04>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101016668.





Agenda

- Welcome & IoP Alliance Updates
- Open Know-Where: Overview
- Presentation of R2 Awardee Projects
- Discussion: call for ideas and initiatives

Reminder: Community Notes

<https://shorturl.at/ilKSX>



IOP Alliance Community Updates

Speaker: Andrew Lamb | Chairman of the Internet of Production Alliance



Production Trials Complete 🛠️



3 products: (1) writing aid, (2) test tube rack, (3) tibial fracture fixation
Image provided by: <https://aaenics.com>

- Trials of the distributed manufacturing of healthcare devices have been completed by the makerspaces participating in the Innovative Manufacturing Awards Programme:

<https://www.internetofproduction.org/innovative-manufacturing-awards>



INNOVATIVE MANUFACTURING AWARD WINNERS

- **Design & Technology Institute, GH**
- **Kumasi Hive, GH**
- **Triple Dimension, GH**
- **Fablab Winam, KE**
- **Gearbox, KE**
- **I.O.Me254, KE**
- **Flat Rock Studio, SA**
- **The Makerspace, SA**
- **TMG Makerspace, SA**





Distributed Manufacturing Ltd invites you to the



Innovative Manufacturing in Africa Showcase Webinar

Thursday 14 December 2023, 11 AM UTC
Via Zoom

This online event outlines the end of our project 2023. Learn more about this work and hear from makerspaces leaders across Africa.

Register here: <https://shorturl.at/cdhkt>





Internet of Production
Alliance

DECEMBER COMMUNITY CALL

 Launch: Business Models

Catalogue and Website


by Anna Sera Lowe

Manufacturing Change

December 12, 2023 at 4 PM UTC

Register here: <https://shorturl.at/oqKUX>



 This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101016858.





IOP Representation

IOP Chair Andrew Lamb will be attending the upcoming event in Washington, D.C.:

Global Digital Health Forum, 2023

🔊 Listen here:

<https://www.gdhf.digital>



Major Supporters



BILL & MELINDA
GATES *foundation*





MOMENTA

Podcast Alert!

The Internet of Production has been featured in Momenta's *The Digital Thread* Podcast Series, Episode #219:

**Shaping the Future:
A Dialogue with Andrew Lamb on
Connectivity in Manufacturing**



Listen here:

<https://shorturl.at/bprxy>



NOV 22, 2023 | 5 MIN READ

Andrew Lamb

Podcast #219 Internet of Production



Posted by
Ken Forster



The Digital Thread
#219

WITH
Andrew Lamb

[Privacy policy](#)



The Digital Thread
Andrew Lamb, Chair of the I...

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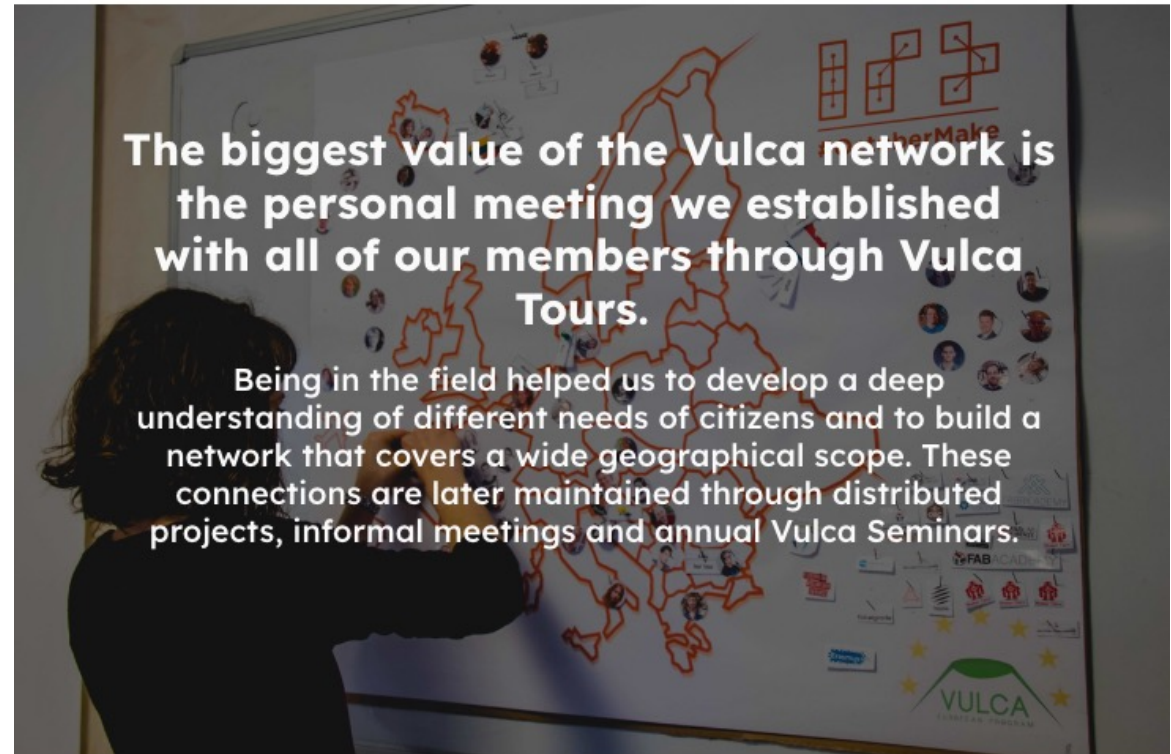
Exploring New Collaborations

Meeting with the
VULCA Network of
European Makerspaces:

<https://vulca.eu/network>



NETWORK



**VULCA AIMS AT BUILDING A FUTURE EUROPEAN
SOCIETY THAT FOSTERS INNOVATION AND
COOPERATION AT THE CITIZEN LEVEL**

<https://socapglobal.com/events/socap23>

**REGISTER**

MAKE

Exploring policy solutions to promote makers in Europe & Africa

Join the next community call for
insightful discussions by experts on
shaping policies in the makerspace
ecosystem.

13th December, 2023
3pm CET



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101016858.



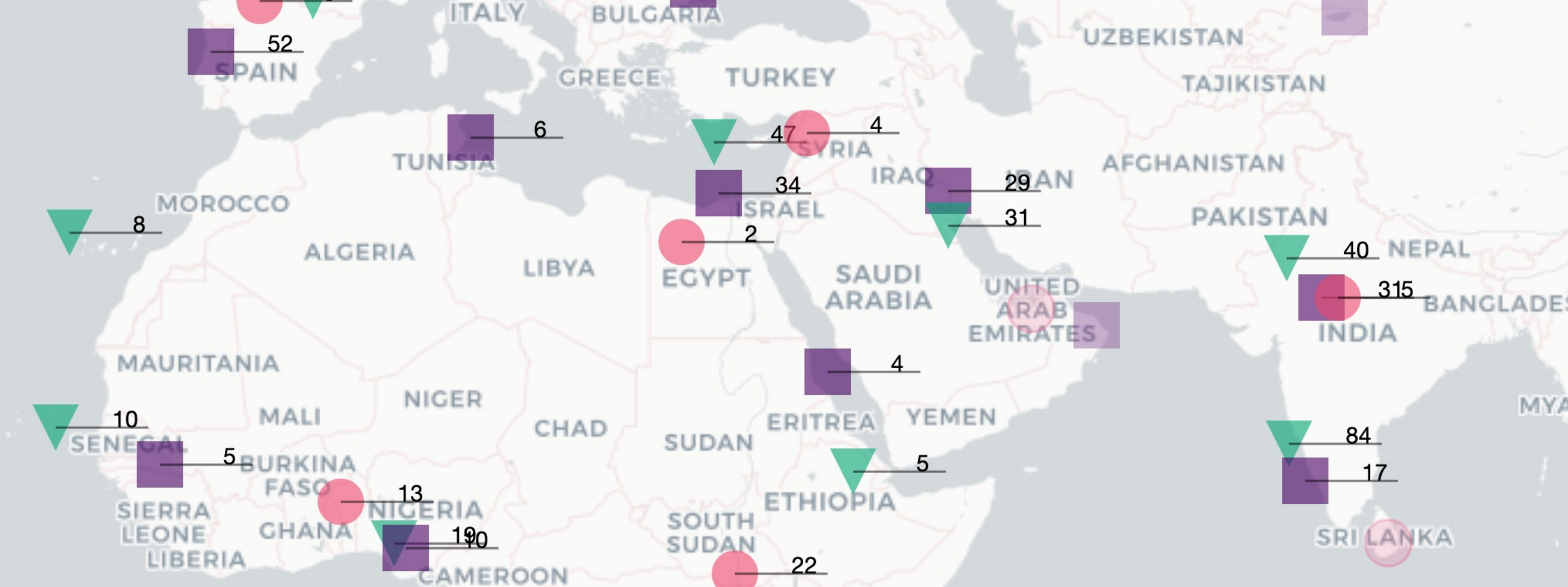
Jessica Nguema

Congratulations to Jessica 🎉

She will be taking maternity leave Nov 27 2023 - May 2024. During this time, the following projects will be managed by:

- **mAkE:** Barbara Schack
- **IMA:** Andrew Lamb





Open Know-Where (OKW) Overview

Speaker: Antonio Anaya | DevOps Engineer, Internet of Production Alliance



Data collection in practice

Exploration to find different ways for knowing where to make things.

Snapshot of community applications

Reliability & Quality

Insightful & Helpful

Surveying (In-situ)

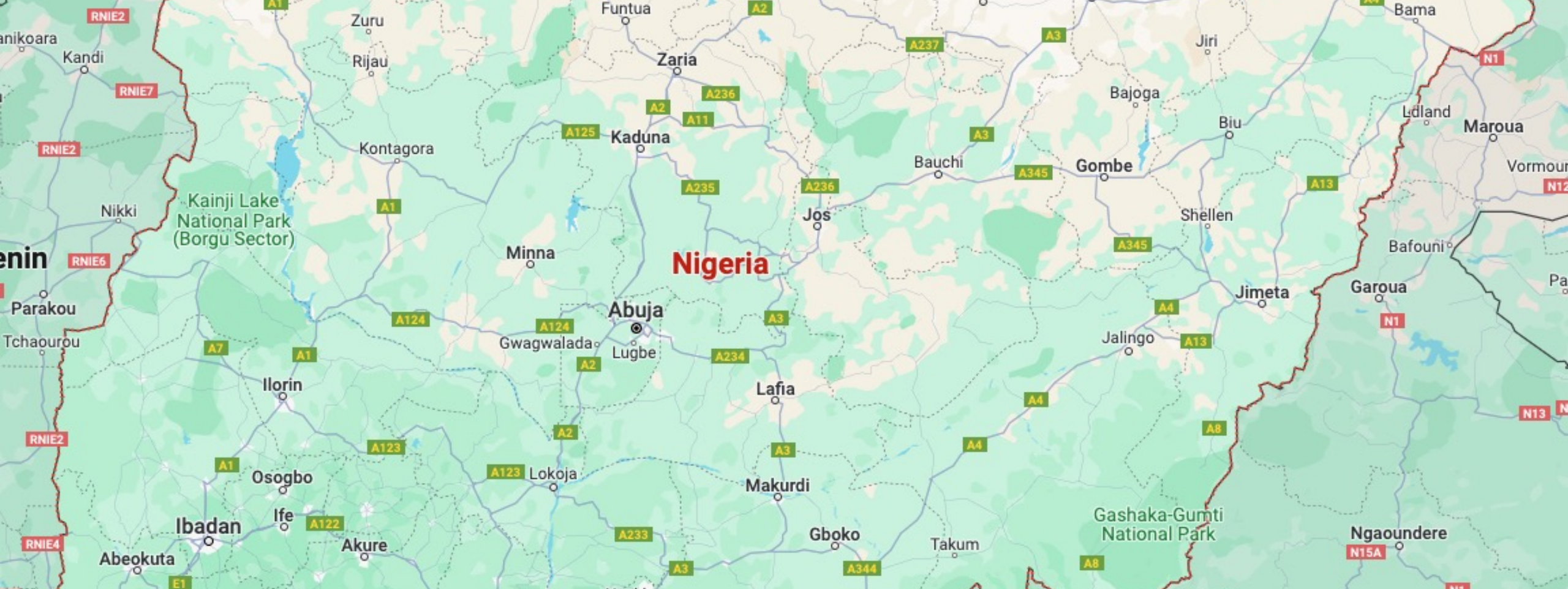
- Organizing communities

Online forms

- Mapping existing networks

Querying Internet search engines

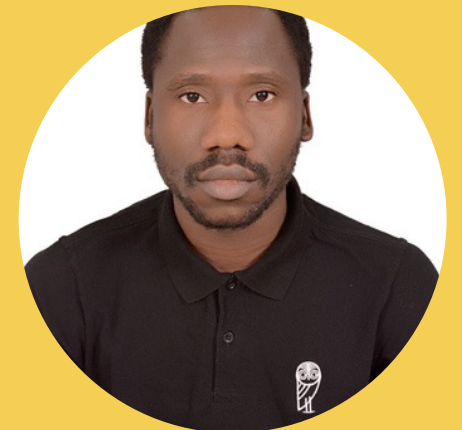
- Covering extended areas



Awardee Presentation: Education4All

Speaker: Oluwatobi (O'Great) Fakoya

Team Members: Bolaji Akorede, AbdulwasIU Tiamiyu, Suleiman Abdulsalam



Mapping Out Manufacturing Capabilities in Nigeria

A Project funded by the Internet
of Production Alliance



**Internet of Production
Alliance**

Education 4 All Initiative

Unpacking Sustainable Development Goal 4

**Team Member :
Oluwatobi Fakoya, Akorede Bolaji,
Abdulwasiu Tihamiyu and Suleiman
Abdulsalam**

Outline

- General Overview of the Project
- Data Collection process
- Questionnaire Design
- Overview of the Project
- Recommendations

General Overview of the Project

- The Open Know-Where project by the Internet of Production Alliance is a standardized mapping process for documenting and sharing information about the location of manufacturing facilities and capabilities on a global scale.
- The goal of this data collection is to map out the capabilities of local manufacturing organizations across Nigeria for global awareness and patronage.

Data Collection process

- **Recruitment**
 - We had advertisement on several platforms to recruit volunteers in addition to our already established team of volunteers
 - We received more than 80 applications
- **Shortlisting process**
 - We checked through each volunteers profile, added them to a group.
 - We held both individual and group discussion with the volunteers in order to get to know each of them, their experiences and commitment.
 - 40 volunteers qualified out of the 80 volunteers that registered.

Data Collection Process

1. Recruitment: > 80 volunteers
2. Shortlisting: 40
 - a. Experience
 - b. Proximity to manufacturing facilities
 - c. Age/Education

Questionnaire Design

The survey questions were grouped into four sections after the consent and volunteer's name. Some questions were made compulsory while others were optional.

- **Facility Information:** Name, contact, machines and location of the manufacturing facility.
- **Facility Status:** Affiliation, operation hours and type.
- **Access Type:** Access type, accessibility, certifications, and maintenance.
- **Machine Information:** Name, maker and model, raw material, end product(s), required skills.

KoboToolbox Mapping Out Manufacturing Capabilities in Nigeria - Data Collection Form 110 submissions

Form Preview

* Do you agree to participate?

☐ Yes
☐ No

* What is your name?
Eg Chisoma, Adhunik, Agari

▶ Facility Information

▶ Facility Status

▶ Access Type

▶ Machine Info.

Submissions Downloads

Training of Final volunteers

- We added the final selected volunteers to another group
- Organised a 3 days intensive training for them
- We trained them on how to use Kobotoolbox
- Explained the aim of the project to them thoroughly.

Verification before approval

- All data were verified by the edu4all team before the approval of the data

Funds Allocation

- Remuneration for volunteers: For every data point (facility) that a volunteer got, he/she was remunerated.
- T-shirts were provided to every volunteers
- Certificate for Volunteers (Still in the pipeline)
- Logistics

Duration of the Project

Numbers of facilities : 50

Project commencement: June 19

Duration: 5 weeks

[Volunteers' Feedback](#)

Recommendation

- Quicker response to email in future correspondence.
- Increased funding to motivate volunteers.
- Letter of Introduction from lead organization to ensure transparency.
- Future collaboration with Edu4all in funded projects.





Awardee Presentation: MboaLab

Speaker: Stephane Fadanka





**Internet of Production
Alliance**



OKW R2 Manufacturing World Map Data Award

Mapping Manufacturing Capabilities in Yaoundé and Douala, Cameroon

28/11/2023 | ONLINE

By Stephane Fadanka

Executive Director, Mboalab

Outline

- 1 Context
- 2 Objectives
- 3 Strategy and Activities
- 4 Progress
- 5 Key Findings OKW experience



Introduction

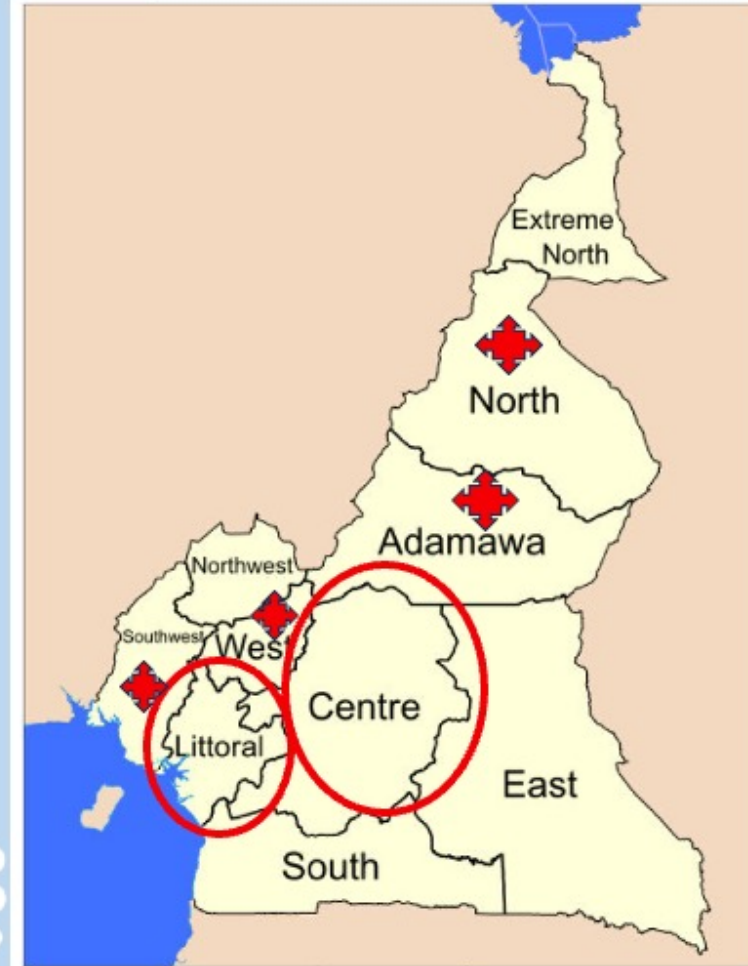
❑ 10 Regions

❑ Nature:

- Formalised (DiHs) and makerspaces
- Local companies and privately owned businesses
- Other: Technical schools and universities

❑ Mostly in the Littoral and Centre regions

❑ New spaces - Adamawa and North region



Objectives

❑ Map machinery and production capacity in Yaoundé and Douala.

1. Changed to all Cameroon (Other regions were involved)
2. Strengthen network and collaboration.



Methodology

01

Communication

- Events
- Social Media
- Network

02

Online Survey

- Kobo toolbox
- Pre-trial with Beta testers
- Refinement and Publication

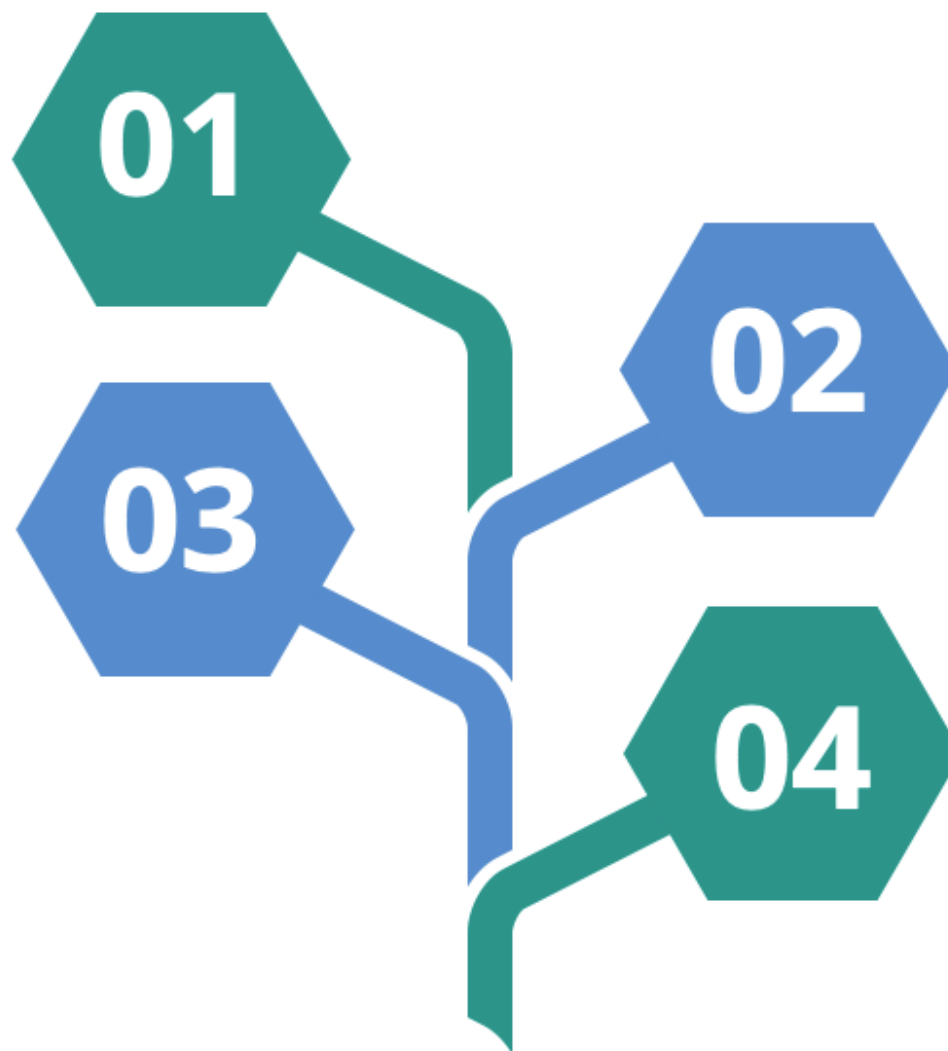
03

In-Person Visits and Interviews

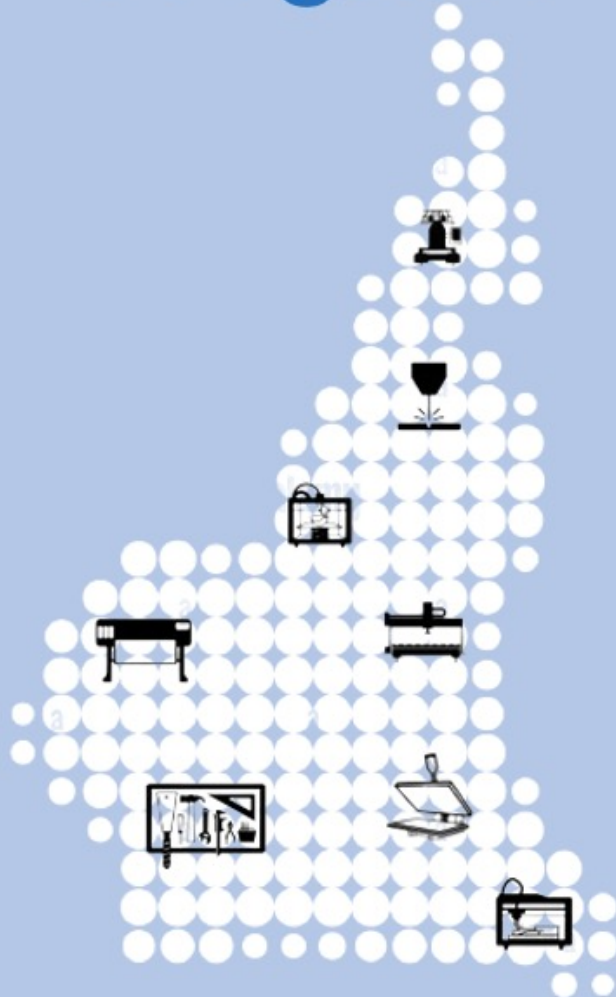
04

In-Person Seminar

- Gathering key stakeholders in Yaoundé
- Project details objectives and benefits
- Interviews
- Presentation of the survey



Progress



1. Survey designed and validated
2. Shared with Beta tester
3. Optimization was made

KoboToolbox Mboalab OKW R2 Data Survey

Form Preview

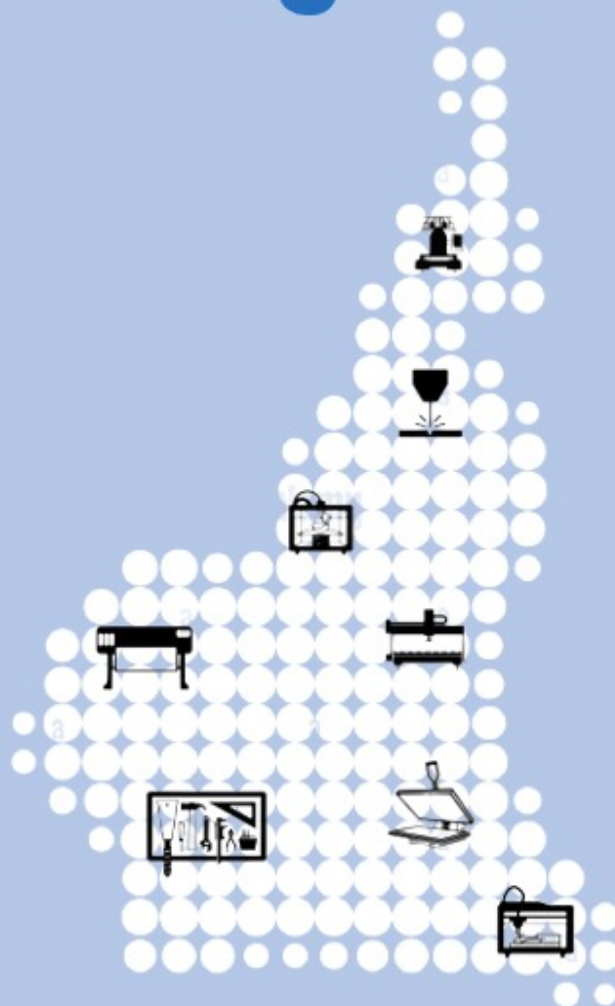
KoboToolbox Choose Language English

Mboalab OKW R2 Data Survey

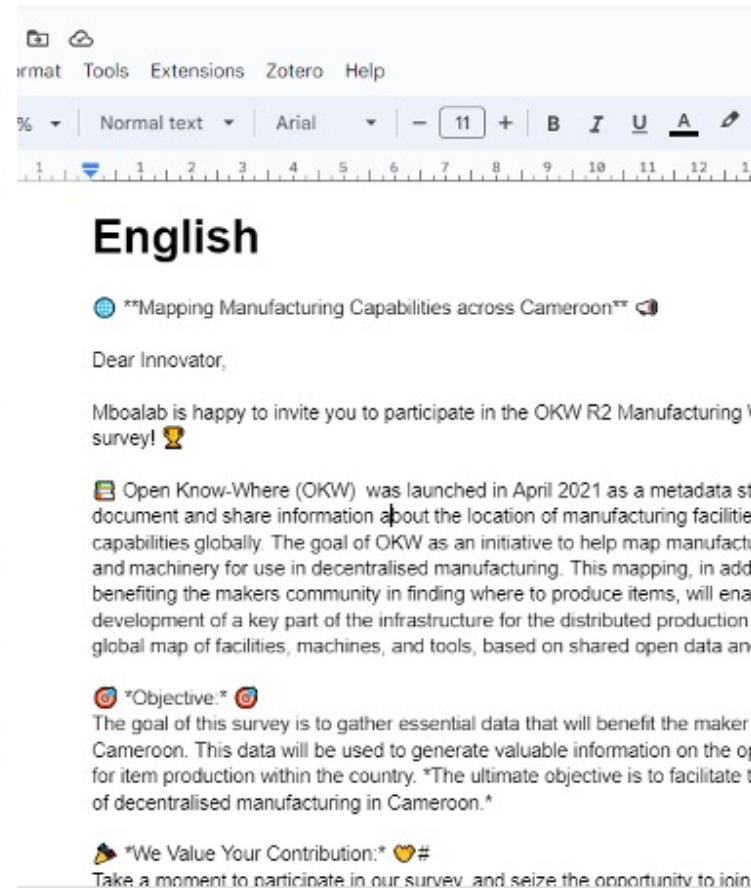
The following survey has been designed as part of the prestigious OKW R2 Manufacturing World Map Data Awards. The primary objective of this survey is to gather essential data to create a comprehensive map of manufacturing facilities and machinery in Cameroon. This map aims to benefit the maker's community by providing valuable information on optimal locations for item production. Our ultimate goal is to establish a key infrastructure for distributed hardware production through the collaborative efforts of sharing open data and open APIs. Your valuable contribution to this endeavor is immensely appreciated. Thank you for participating!

[Mboalab OKW R2 Data Survey | KoboToolbox](#)

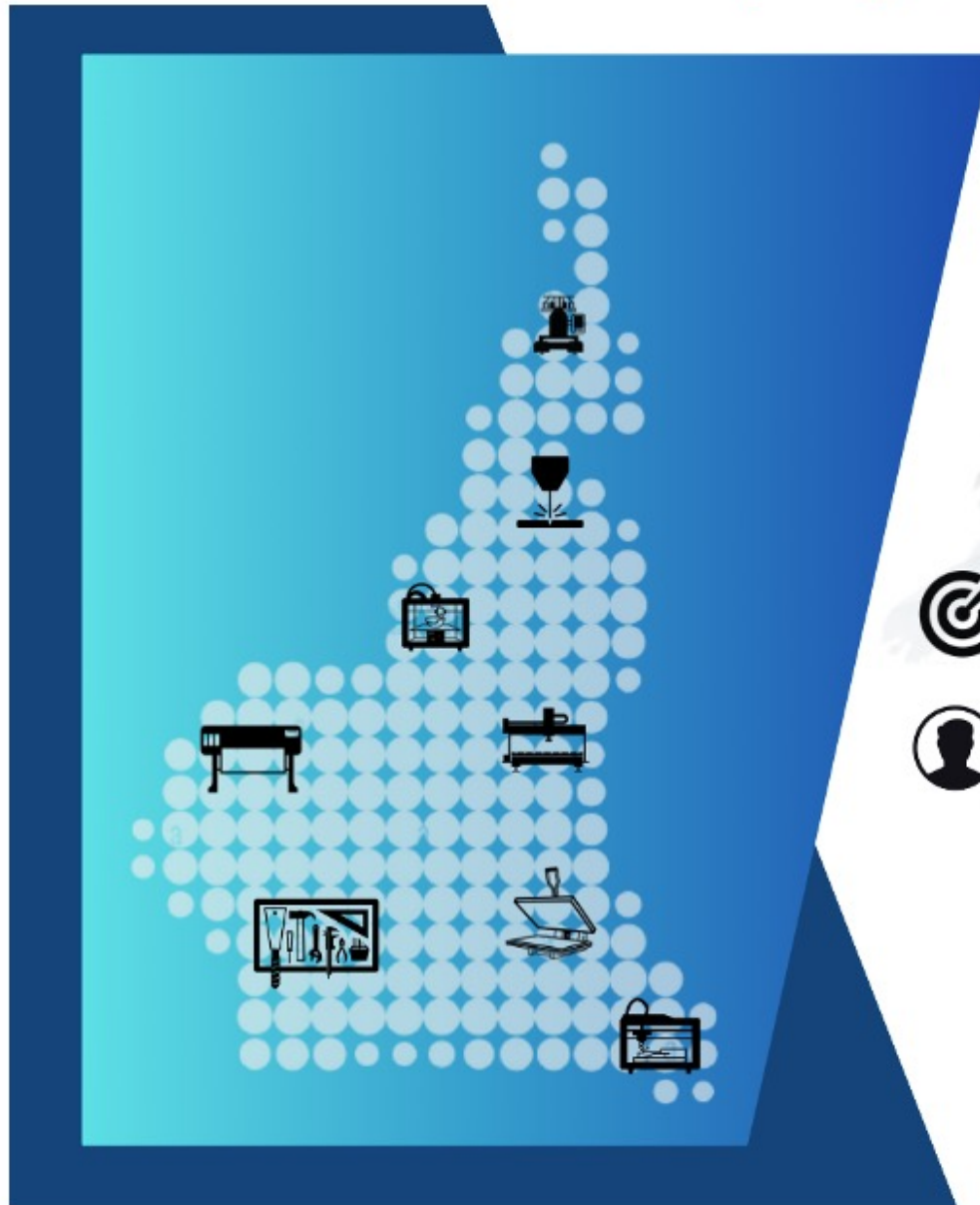
Progress



Communication (Social Media, Field Visits in Yaoundé)



Example Flyer Used



Internet of Production
Alliance



OPEN KNOW-WHERE (OKW) R2 MANUFACTURING WORLD MAP DATA



Mapping Manufacturing Capabilities
across Cameroon



Makerspaces, FabLabs, and innovation hubs

Contact Us



+237-697465154



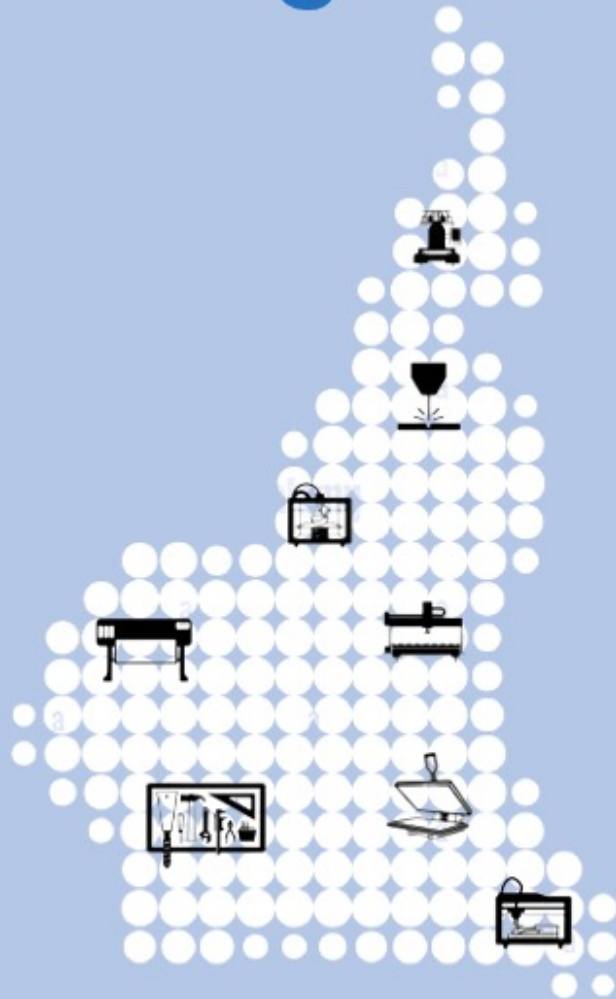
mboalab@gmail.com



www.mboalab.net



Progress

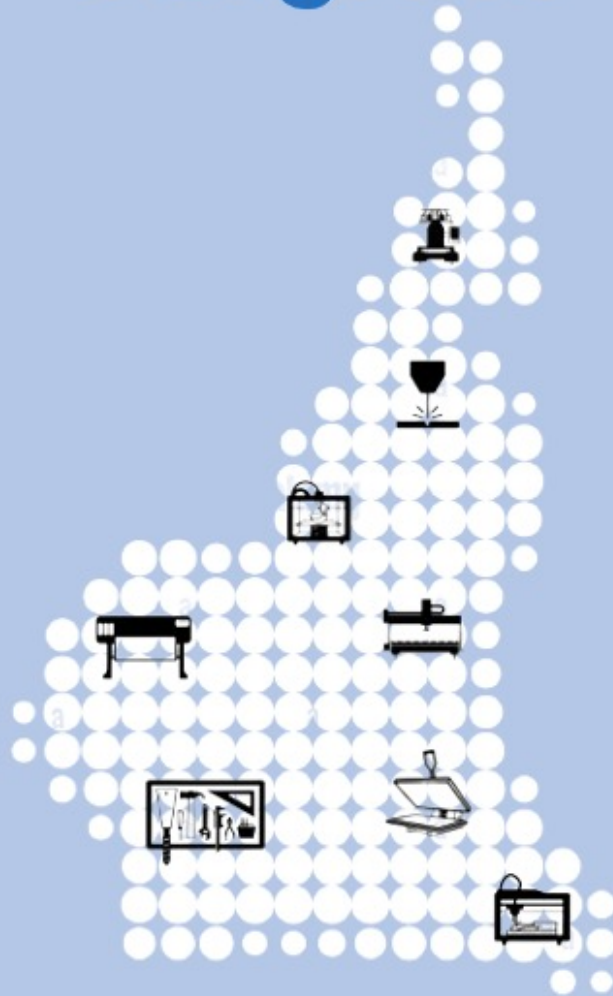


In-Person Seminar in December 2023



- Gathering +- 25 key stakeholders in Yaoundé
- Project details objectives and benefits
- Interviews
- Presentation of the survey

Progress



❑ Survey Filled by 3 Testing organisation then optimised.

❑ A total of 20 Spaces/Organisation were identified and Approached.

- 8 in Yaoundé
- 5 in Douala
- 3 in Buea
- 4 in West and other regions

• Some reluctances observed, but most organisations were enthusiastic and interested!

• Mixed Online + In-person Data collection Works best;

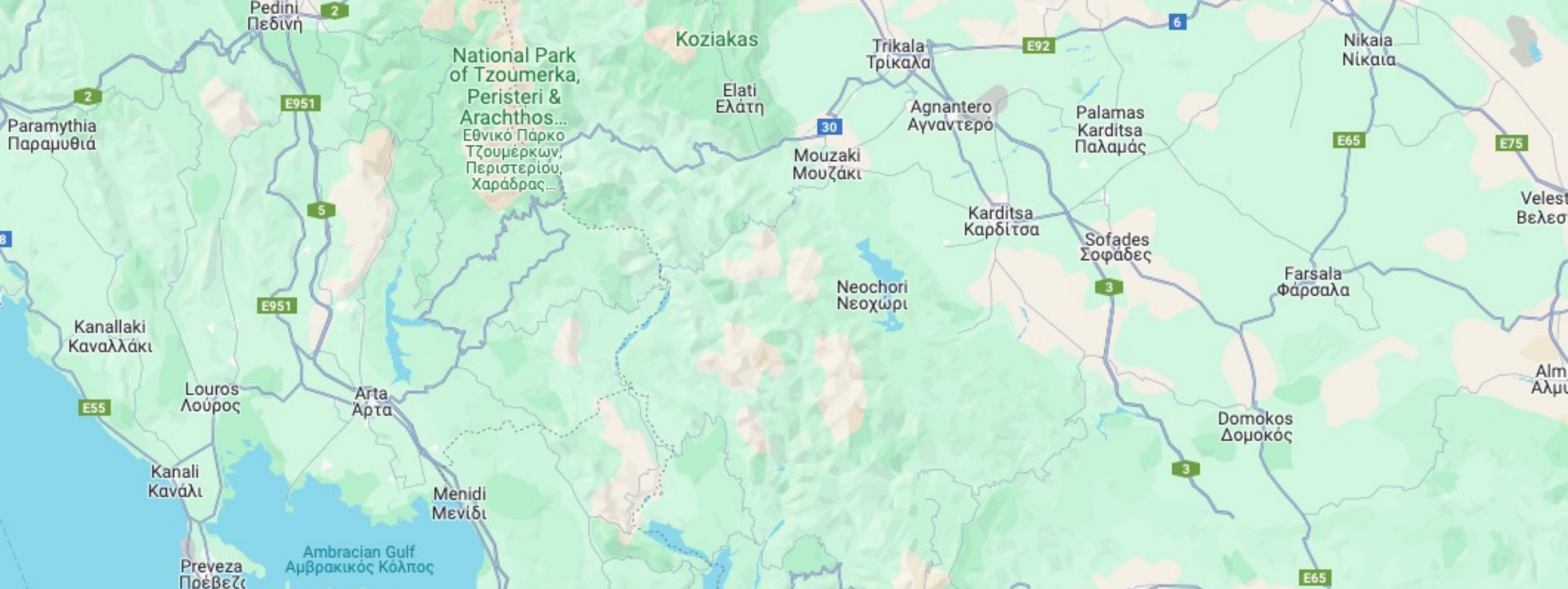
Key Findings OKW experience

- ❑ Physical contact and trust is important for people to share their data and contribute.
- ❑ Communication (Regular reminders etc, be clear on the objective and advantages.)
- ❑ Growing community of Makers and importance to cluster as a network and know each other.
- ❑ OKW strong support to strengthen already ongoing efforts to create a community of makers in Cameroon.

Recommendations

- **Language barrier:** would be good to have the final OKW resource in other language when finalised.

THANK YOU



Awardee Presentation: Greece

Speaker: Spyros Nompilakis





MAPPING MANUFACTURING CAPABILITIES OF MAKERSPACES IN GREECE

SPYROS NOMPILAKIS

SURVEY STRUCTURE

- 43 Questions
- Deployed in September 2023
- Left open for 40 days

SURVEY PARTICIPATION

- Shared with 26 spaces
- 6 turned out to be closed
- 15 participated
- 1 clearly expressed no interest to

DATA COLLECTED

Location entries 15

Machines 107



THANK YOU!

SPYROS@BLUEGREECE.ORG

Open Know-Where Initiative Relaunch 🎉

Meeting resources, as well as all items related to Open Know-Where can be found on the IOP community forum:

<https://community.internetofproduction.org/c/okw/13>

Join the conversation!

Mark your calendars for the upcoming OKW Initiative Meetings in 2024 (02:00PM UTC/GMT):

- Jan 25
- Feb 22
- Mar 28
- Apr 25
- May 23

Everyone is welcome to sit in on these meetings, you do not have to already be a part of the group.

We look forward to new faces and voices joining the conversation in 2024!

Questions and Open Discussion

Questions for the Awardees and Discussion of What Comes Next

<https://shorturl.at/ilKSX>

Thank you for joining us



Please get in touch if you have any questions or queries:

X: @IoP_Alliance, @openknowhere

Email: info@internetofproduction.org

Join our community discussion:

<https://community.internetofproduction.org>