



Paving the Foundation for Disruptive Technologies in Tomorrow's Digital Innovation Hubs

TecHub Catalyst Program

Building the IoT tech capacity of African Tech Hubs

Call for application proposal

Deadline for submission: 15 January 2024



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 101016895

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1. Background

Hubiquitous is a EU-Africa project aiming at creating a **sustainable and impactful ecosystem of technology hubs in Africa**, particularly focusing on Internet of Things (IoT) and related technologies. The project has the ambition to increase the technology level and capacity building of local TechHubs in African countries.

The project is backed by a consortium of five European and four African partners from eight countries. The project seeks to create and support TechHubs across selected countries, which will form the foundation of the provision of cutting-edge solutions for Africa's emerging issues. The project duration is 42 months and is financed by the European Commission under the Horizon 2020 program.

The project proposes three highly innovative concepts called Innovation Enablers: Solution Lab, Application Business Box and MeetHub online platform. The purpose of these enablers is to provide technical (e.g. IoT, AI and BigData disruptive technologies) as well as entrepreneurial development skills to TechHubs and startups/entrepreneurs.

The project is now launching the "TechHub Catalyst Program" to develop the IoT technical capacity for TechHubs. The program includes capacity building in IoT technologies, acceleration of startups and MVPs, and support of talent and tech communities. The program includes a European-African dimension for long-term collaboration between African and European TechHubs.

2. The TechHub Catalyst Program

2.1. Overview

The TechHub Catalyst Program intends to bring at least **10 African Tech Hubs** to a higher level in IoT and emerging technologies. The program will focus on increasing the hubs' IoT capabilities as well as boosting the **development of sustainable value-added services**.

The Hub Catalyst Program will empower the hubs for technological innovation, skill development, and entrepreneurial growth within their local ecosystems. We will provide **intensive IoT training** to the hub personnel (“Train the trainers”). This includes both virtual and in-person training on cutting-edge technologies. The in-person training will take place in Tanzania for one week. We will also provide the **“Solution Box”** package to the hubs. The Solution Box will be used to set up or upgrade the hub's **in-house IoT lab**.

Using the acquired competencies, the hubs will launch a **short IoT certification course** with their community. This is a pre-designed IoT certification program including one hackathon. Each hub will also need to develop or improve **two “Minimal Viable Products” with IoT technologies**.

Finally, we will invite all successful hubs for the **“Hubiquitous Innovation Week” in Europe**. The hubs will have the opportunity to present their success stories and demonstrate their MVPs. The event will also offer opportunities for partnerships with European counterparts in Brussels and Berlin.

2.2. Your benefits

The hubs joining the program will get the following benefits:

- Improve the hub capacity on IoT technologies through **intensive “train the trainers”**.
- Receive a complete IoT hardware and software **“Solution Box”** to enable the creation of an IoT Lab.
- Design **new tech services** which could be a possible additional revenue stream.
- Participate in the **HUBiquitous Innovation Week in Europe** to showcase the hubs’ achievements.

Additionally, to help the hubs bootstrap their new services, a **contribution of max 10,000 euros** will be awarded. This contribution can be used for travelling expenses reimbursement, event organisation (e.g. hackathon) and MVP costs.

2.3. What do we expect from you?

With our support, the hubs will need to deliver the following over 5 months:

- Nominate **two experts** at the Hubs as Trainers.
- **Deploy the IoT Lab** at your premises using the Solution Boxes for both training and developing MVPs
- Participate in the **train the trainers** sessions, including the in-person Workshop in Tanzania

- Run a short **IoT certification course**
- Accelerate **two innovative MVPs** based on the Solution Box
- Co-create **new revenue streams** based on innovative services
- Participate in the **Hubiquitous Innovation Week in Europe**
- Prepare a report of your activities

Additionally, the hubs should continuously monitor the progress and impact of their programs. They will collect feedback from participants and startups to make improvements and adjustments as necessary. They should also actively collaborate with **other hubs** in the program, sharing knowledge and best practices to create a supportive network of technology hubs.

By fulfilling these responsibilities and taking proactive steps, hubs can fully participate in and benefit from the Hubiquitous program, contributing to its success and realising their potential as catalysts for technological innovation and entrepreneurship in their respective ecosystems.

2.4. The Solution Box

The Solution Box is a key-in-hand solution for equipping your TechHub with advanced technologies such as **Internet of Things, Edge computing and Artificial Intelligence**. These resources are hardware, software and course, and are packaged in an integrated and consistent way. The box includes:

- Open-source IoT hardware and software with rapid prototyping kits.
- Development tools, libraries and platforms for AI
- Open IoT cloud platforms for data



Figure 2: The Solution Box

Regarding hardware, the box includes the following **key components for the hubs IoT Lab**:

- **3 LoRaWAN IoT gateway**
- **15 development LoRa boards** (e.g. WaziDev, WaziSense...)
- **More than 100 sensors** of various types
- Accessories for power, connectivity and prototyping



The WaziGate LoRaWAN gateway

The box also includes access to the **WaziLab Learning Center** (<https://lab.waziup.io>). WaziLab is a platform for learning and teaching IoT through live prototyping. It simplifies the prototyping process for startups through better hardware accessibility, guided prototyping, IoT capacity building and initial business support for startups. It features:

- Hubs program management (e.g. Startup accelerator program, IoT certification program)
- Online courses at your own pace
- Live prototyping and solution building
- IoT Lab management



Figure 1: The WaziLab Learning Center

This box will be delivered at an earlier stage of the program to the selected hubs. It will enable them to easily go through the technical sessions provided in the webinars and understand the technological tools

to be used in the program. This platform has been designed and managed by the project to ensure accelerated capacity development of Hubs, entrepreneurs, and students to meet their goals in IoT.

2.5. Activities

The TechHub Catalyst Program activities are divided into 3 main phases:

- **Phase 1 - Train-the-Trainers and Managers:** The phase includes online training of the hub and an in-person one-week workshop in Tanzania.
- **Phase 2 - IoT certification course and MVPs for your community:** Launching of a pre-designed IoT certification program including one hackathon. The phase also includes the acceleration of 2 MVPs along with the established business models.
- **Phase 3 - Hubiquitous Innovation Week and Program Closing:** Presentation of the hub's success stories and a showcase of the MVPs at the Global Innovation Gathering (GIG) in Berlin and a workshop at Re:publica in Berlin. Connecting with European StartUps and Investors at a one-day event in Brussels at BeCentral.

2.5.1. Phase 1: Train-the-Trainers and Managers

The Train-the-Trainer and Managers phase will be divided into two parts: **an online training and an in-person workshop**. The online phase will include a series of webinars on IoT and AI technologies. It will include an initial high-level introduction to the program objectives, technical tools and technologies available in the program, the solution box, pedagogical skills, and fundamental business skills.

All courses will be taken at the WaziLab Learning Center, where hubs can access high-quality courses and videos with experts in the domain of IoT and AI. Participants will also be required to participate in the **one-week workshop** in Tanzania. A team of at least **2 persons will need to participate physically**. The workshop includes:

- technical training on **new IoT and AI technologies**,
- capacity building for **conducting IoT certification programs**,
- ideation and **co-design of new IoT-based services** for the hubs,
- ideation and **design of the MVPs**.

The technical team will participate in a tech and business training event. The objective of this event is to get the proper training through in-person training. **The event's in-person participation is mandatory.**

To support the training phase, Solution Box packages will be provided to the hubs.

2.5.2. Phase 2: IoT certification course and MVPs

The IoT certification course and MVPs phase will take place for 1.5 months and will involve two parts:

- A **short IoT certification program** that needs to be run at your hub for your tech community
- **Co-design and acceleration of 2 MVPs** along with the established business models

The participants will be required to launch a short (max 1.5 month) IoT certification program. The IoT certification program will be pre-designed and available through the WaziLab platform. The hubs will need to select 25/30 persons for IoT training and organise one **hackathon**.

The hubs will be required to **develop two Minimum Viable Products (MVPs)**. At least one MVP should be developed by the hub for an **industrial partner**. The other MVP will be developed by a startup with the assistance and technical mentorship of the hub. The MVPs should be based on IoT, with the help of the Solution Box content and knowledge.

2.5.3. Phase 3: European Innovation Week and Program Closing

In phase 3, the aim will be to organise a vibrant European Innovation Week where one representative of the successful Tech hubs will be invited to participate. This phase will have the following activities:

- **One workshop at Re:publica in Berlin** between the 27th and 29th of May 2024. The motivation behind this workshop is to give the floor to TechHubs to share with the audience best practices to sustain TechHubs based notably on their work achieved during the Tech Hub catalyst program.
- **Participation in the Global Innovation Gathering** to connect with European StartUps and Investments.
- **One day at Centrale Be in Brussels** (<https://www.becentral.org/>) the tech hubs will be invited for short talks to present their hubs and their new IoT-based services. The one-day session in Brussels is a great opportunity for inviting European Commission officers and policymakers to engage in one-to-one formal or informal discussions between EC and Tech hubs along with panels and inspiring talks.

Additionally, the hubs will be asked to provide a full report of their activities. The report includes:

- Report on the train the trainers phase
- Report on the MVPs (prototypes, business models, pitches, photos...)
- Report on the IoT certification program and hackathon (number of participants, prototypes developed, photos...)
- Report on the Innovation Week and hub pitches.

2.6. Detailed timeline

HUB catalyst program timeline is given in the Table below.

Task #	Activity	Dates
Call for applications		15th Dec 2023 to 16th Feb 2024 - 2 months
T0.1	Call open	15th Dec 2023 to 15th January 2024
T0.2	Selection process	15th January 2024 to 31st January 2024
T0.3	Onboarding and Agreement Signing	1st to 16th of February 2024
Phase 1 - Train the trainers		19th of February to 29th of March - 1.5 months
T1.1	Train the trainer's online session	19th February to 24th March 2024
T1.2	Train the trainer's physical workshop	25th to 29th of March 2024
Phase 2 - IoT certification course and MVPs		1st of April to 17th of May - 1.5 months
T2.1	Short IoT certification course	1st April to 17th of May 2024
T2.2	MVP acceleration	1st April to 17th of May 2024
Phase 3 - Hubiquitous Innovation Week and Program Closing		20th May 2024 to 15th of June 2024 - 3 weeks
T3.1	Innovation Week	27th to 31st May 2024
T3.2	Final Review and Program End	3rd June to 15th June 2024

Key dates:

- **Submission deadline: 15th January 2024**
- **Results announcement: 31st January 2024**
- **Program starts: 19th of February 2024**
- **Program ends: 15th of June 2024**

The diagram below gives an overview of the timeline.



Catalyst Program timeline

3.3. Budget

The project has a total budget of **100,000€** to support the hub activities, with a maximum of **10,000 euros allocated for each hub**. The following expenses will be covered:

- Travel expenses will be covered for 2 persons for the **“Train the Trainers” event** in Tanzania (travel, accommodation and meals)
- Travel expenses will be covered for 1 person for the **Innovation Week event in Europe** (travel, accommodation and meals)
- Contribution to **training facilitation and MVP costs**, up to a maximum of 2000€
- Contribution to the **creation of a full report** of the activities, up to a maximum of 2000€
- The Solution Box will be provided, which has a value of approximately 1000€.

Participants will need to submit adequately detailed records of expenses to the project, via logs or receipts. Any other special conditions will be addressed on a case-by-case basis.

2.7. Sustainability after the end of the program

After the program ends, the hub will be included in the Hubiquitous community. They will continue to get support from the project members to develop their new services and business opportunities.

3. How to apply?

3.1. Overview

Hubiquitous invites eligible applicants to participate in the TechHub Catalyst Program which will build the technology and entrepreneurial capacity of African TechHubs. The program will run for 5 months and will **target “Tech Hubs” in general**. This includes MakerSpaces, FabLabs, and Technical training centres. Applicants are required to have a **good physical infrastructure** that can support the training of a suitable number of innovators. This includes **partially or fully equipped labs, prototyping spaces, or classrooms**. For example, the labs could be equipped with 3D printers, laser cutters, CNC machines and soldering equipment.

TechHubs should also have **appropriate personnel** (Managers, Technical Trainers, Lab Assistants, etc.) that can drive quality courses in the Internet of Things (IoT), Artificial Intelligence (AI), or Machine Learning (ML) and have the capability to support entrepreneurs and start-ups accelerate their innovations to viable solutions. TechHubs that are already engaged in providing **technical training** will have an added advantage. It may include targeted training in IoT to support and capacity-build local innovators and entrepreneurs.

The application should be filled in this online form: <https://forms.gle/HkBZhQ7oCmVBm1EA7>

3.2. Eligibility criteria

To be considered for the program, TechHub should:

1. be **legally registered** with a valid certificate of registration within an African country.
2. have a **physical address** in an African country.
3. **complete application forms** & submit all documentation highlighted for upload in the application form.
4. Complete the application **before the deadline**.

It is important for hubs to carefully review the specific eligibility criteria outlined in the call for applications. Hubs that fail to fulfil any of the criteria will automatically be disqualified.

3.3. Application Process

Applicants are required to prepare the following documents as part of the submission process of this program:

1. **Certificate of Incorporation or Registration:** Proof of the hub's registration as a legal organisation in an African country.
2. **Curriculum Vitae (CV) of two trainers:** CVs of trainers who will be involved in delivering technical training services. These CVs should highlight their qualifications and experience. At least one of

the two trainers should also have some managerial experience, as they will need to launch the IoT certification course.

3. **Letter of commitment:** Signed letter by the hub manager (see attached template).

The documents should be properly uploaded in the submission form. Additionally, they will be required to fill out an application form here that contains the following sections:

- **Section 1. Hub Identity:** Provide information about the hub such as the hub name, location, website, category, experience, and a short description of its activities. The Certificate of Incorporation or registration is uploaded in this section.
- **Section 2. Hub Capacity:** Provide information about the staffing level of the hub, infrastructure, equipment capacity, training programs, and MVP capacity. This section is meant to ensure the hub's ability to host and sustain the program beyond the project period.
- **Section 3. Program Implementation:** Provide details of the personnel that will participate in program activities. **Upload the CVs of each in this section.** Provide details on your availability and interest for the training sessions and IoT certification course. Provide details of the MVPs that will be presented in the program. These should be hub and industry-related. Include services that the hub will introduce following the train-the-trainer program.
- **Section 4. Applicant's Details:** Provide details of the person making the application for the program. This can be one of the persons who will be engaged in the program or an authorised person applying on behalf of the hub. **Upload the letter of commitment** here.

Please read carefully the instructions before making your application. All responses must be in English. After submission, hubs will receive a confirmation or acknowledgement notification of the successful application.

3.4. Review of Applications and Selection Criteria

The assessment process will be done in two main stages: Form response assessment and direct interviews. The form responses will be evaluated on a total of **100 points** and will be assessed as:

1. **Hub Capacity (50 points)**
 - Hub has sufficient staff capacity to support the program
 - Hub has sufficient infrastructure and equipment to support the program
 - Hub has run IoT training in the past
 - Has supported a few MVPs in the past
2. **Program Implementation (50 points)**
 - Hub has provided details of the 2 Technical Trainers
 - Hub has uploaded the CVs of the 2 Technical trainers
 - Personnel chosen are available over critical dates of the program
 - IoT certification course
 - Hub has provided 2 MVPs (one hub and one industrial-related MVP)
 - Hub will be able to introduce services following the completion of the train-the-trainer program

The selection process will be complemented with interviews with the hub manager, before final selection. This will allow the committee to gain a deeper understanding of the hub's capabilities and alignment with the program's goals.

4. Privacy policy

HUBiquitous will use the personal information provided solely for this call for proposal application and implementation of the program and will not use it for any other purposes without the applicant's explicit consent.

5. Contact details

For any inquiries please contact:

hub-catalyst@waziup.org