

INTERCONTINENTAL COOPERATION TO FOSTER THE CAPACITY OF EUROPEAN AND AFRICAN DIGITAL INNOVATION HUBS TO ACCELERATE THE DIGITAL TRANSITION - THE AFRICONEU PROJECT

Authors: Ana Aleixo⁽¹⁾; Ana Solange Leal⁽¹⁾; Eunice Ball⁽²⁾; Marta Coto⁽¹⁾; Saša Štraus⁽³⁾; Stav Bar Shany⁽²⁾

¹INOVA+ Innovation Services, S.A. (Portugal)

²ATBN Africa Technology Business Network (United Kingdom)

³ITC Murska Sobota (Slovenia)

Abstract

The digitalisation of the economy and industry has become a priority for the European Union (EU) in the past few years, which has been reflected in its strategies and funding programmes. Since 2016, the EU started to actively invest in the creation and support of Digital Innovation Hubs (DIHs) as the main structure for supporting the digital transformation of European businesses and innovation ecosystems, which importance was intensified with the COVID-19 pandemic. Within this line and taking into consideration the looked-for international partnership building between Europe and Africa, DIHs now represent a central factor in developing digital business opportunities between African and European entrepreneurs and start-ups. However, although Africa is undergoing a rapid digital transformation which translates into a strong potential for the digital economy to drive growth on the continent, this progress is still challenged by a variety of structural and systemic factors that restrict the creation of an enabling business environment and a strong digital innovation ecosystem capable of offering the required support services for boosting digital entrepreneurship. Therefore, the collaboration between Africa and Europe on an equal footing is critical for accelerating the digital transformation and contributing to the sustainable economic growth of both continents.

In this paper, the assessment of available and needed capabilities of the digital innovation ecosystems will be explored in four specific countries (i.e., Nigeria, Uganda, Ghana and Tanzania) through the research activities conducted as part of the AfriConEU project - an Innovation Action funded under the European Union's Horizon 2020 research and innovation programme. These results are key to attaining the project's main and ambitious objective: to create the first Trans-Continental Networking Academy for supporting African and European DIHs in terms of capacity building, knowledge sharing, networking, collaboration, joint projects and ventures development.

Also, this paper will present the actions taken within the AfriConEU project to identify and record the state-of-the-art on existing capacity building and partnership programmes targeted towards DIHs, which included desk-based research through qualitative and quantitative methods (interviews, surveys and roundtable discussions). The findings of the research allowed us to gain insights into the state of the digital ecosystems examined in terms of the needs, challenges and opportunities for strengthening digital innovation and transcontinental partnerships between African and European digital actors and understand the impacts that the pandemic has had on African digital economies. The analysis shall contribute to the formulation of recommendations to improve capacity building, as well as develop materials to support new DIHs in setting up their organisation and in optimising their operations and services.

The conclusions of the work carried out will shape the design of the future AfriConEU Networking Academy, and its two flagship programmes: 1. Capacity Building for African DIHs, and 2. Partnership Building between African and European DIHs; seeking to ensure that the training and services offered to respond to the actual needs of DIHs, entrepreneurs and start-ups.

Keywords: Digital Innovation Hubs, international cooperation, digital transition, innovation ecosystem, capacity building

1 INTRODUCTION: DIGITAL INNOVATION HUBS IN EUROPE AND AFRICA AND THE CONCEPT OF THE AFRICONEU PROJECT

Over the last few years, digital innovation has increasingly become an important driver for Africa's social and economic development. Digital technologies are enabling solutions to address the region's pressing social challenges and creating a growing number of economic opportunities. At the centre of this digital transformation are innovative entrepreneurs supported by an ecosystem of investors, international development and philanthropic partners, policymakers and government actors, corporate partners, ecosystem enablers and Digital Innovation Hubs (DIHs). DIHs in particular are not only directly supporting entrepreneurs but are also playing a central role in connecting the various actors and developing the ecosystem. However, African DIHs continue to face several systemic challenges that are limiting their potential as catalysts for digital innovation. Building the capacity of African DIHs to play their role more effectively is therefore crucial to driving digital growth and economic development in the region.

At the same time, the digital economy presents a unique opportunity to enhance trade and economic relations between Europe and Africa. On the one hand, Europe's more advanced digital ecosystems present opportunities for transferring technological expertise and investment. On the other, Africa's growing digital markets and youthful population provide investment and human capital opportunities for European businesses and investors. Hence, enabling collaboration and developing stronger partnerships between European and African digital innovation ecosystems has the potential to create immense benefits for both regions.

In perfect alignment and to meet these challenges and create synergistic partnerships between the two continents, the AfriConEU project (an Innovation Action funded under the European Union's Horizon 2020 research and innovation programme) aims not only to enhance the capacity of African DIHs to accelerate the digital transformation of the African economy and society but also to help Europe find and exploit the valuable opportunities Africa has to offer. It will achieve this goal by developing, testing and validating a mechanism to share learnings, best practices, experiences and resources between DIHs in Africa and between DIHs in Africa and Europe, in a way that is aggregated, easy to understand, replicable and self-sustaining.

The mechanism created for this purpose is called *AfriConEU Networking Academy* and, as illustrated in Fig. 1, will offer two Flagship Programmes. The first one is dedicated to Capacity Building for reinforcing the role of African DIHs as innovation intermediaries matching demand and offer of digital services and technologies and supporting digital entrepreneurs. The second one is dedicated to Trans-continental Partnership Development between DIHs, start-ups, entrepreneurs, investors etc. from both continents.



Figure 1. The AfriConEU Networking Academy

The AfriConEU Networking Academy will be developed upon the findings of an in-depth analysis of the local innovation ecosystems (namely Nigeria, Uganda, Ghana and Tanzania) and their DIHs needs as well as collaborative design activities. In this respect, the AfriConEU Networking Academy will provide access to a variety of tools, resources and hands-on opportunities for capacity building and joint

programmes development to DIHs, start-ups and other stakeholders from both continents. It will offer a range of different learning and knowledge sharing tools and opportunities (webinars, masterclasses, bootcamps, etc.) and cover a variety of thematic areas perfectly aligned with the identified needs of local DIHs and stakeholders (e.g., technology transfer, sustainability models, access to investors, etc.).

This paper will focus mainly on sharing the results of the context and state of the art analysis (which constitutes the first phase of the project, as further explained in the next section) of DIHs in Nigeria, Uganda, Ghana and Tanzania, while identifying and mapping the existing capacity building programmes targeted to DIHs. Findings on the potential for the establishment of strategic partnerships between DIHs from Africa and Europe will also be presented.

2 METHODOLOGY

Regarding the methodological approach used in the AfriConEU project, it was decided to follow a Community of Practice (CoP) approach given that CoPs refer to “groups of people who share a concern, a set of problems, or a passion/interest about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis”^[1]. According to Lave and Wenger, learning in a CoP happens in social relationships rather than through the simple acquisition of knowledge^[2]. In this respect, three key dimensions define a CoP: i) shared interest in a domain of practice (domain), ii) mutual engagement (community) and iii) development of a shared repertoire of resources (practice).

Transferring these concepts into the AfriConEU project, it is being assumed that by bringing together DIHs with similar needs and interests for supporting digital entrepreneurship (i.e. “domain”), they will engage in joint activities and discussions, help each other, share information and build relationships that will enable them to learn from each other^[3] (i.e. “community”). As an extension, they will co-create resources, tools and strategies (i.e. Networking Academy offering) that will help them develop knowledge on the domain (i.e. “practice”).

On this basis, the consortium of the project composed of eleven organizations from European and African countries (including clusters and DIHs, but also local partners from the four African countries), aims to facilitate the formation of a CoP between African and European DIHs and facilitate its activities to foster their growth and sustainability, although ultimately it will be the members of the CoP who will define and sustain it over time^[4]. With this approach, it is expected that African and European DIHs will collaborate not because they are obliged to do so, but because they share common needs, interests and mutual benefit opportunities, which will propel them to interact on an ongoing basis that leads to deepening their knowledge and expertise. This is why the AfriConEU project will focus, among others, on highlighting the common needs/interests/benefits of DIHs in both continents.

Concerning the methodological stages of the project, a collaborative approach has been devised for developing the AfriConEU Academy that will (i) use the outcomes of research activities exploring the needs, strengths and weaknesses of 4 African innovation ecosystems, (ii) highlight mutual benefits for EU-African collaboration, (iii) take the best advantage of existing capacity building programmes targeted to DIHs both in Africa and Europe, iv) combine them with experts and target beneficiaries’ insights and (iv) synthesize them into the AfriConEU Networking Academy. This shall drive a deliberative, collaborative and integrative process for providing African and European DIHs with specific tools, resources and opportunities to strengthen their capacities for driving digitalisation forward. In detail, the deployment of the project has five distinct but interlinked phases (Fig. 2).

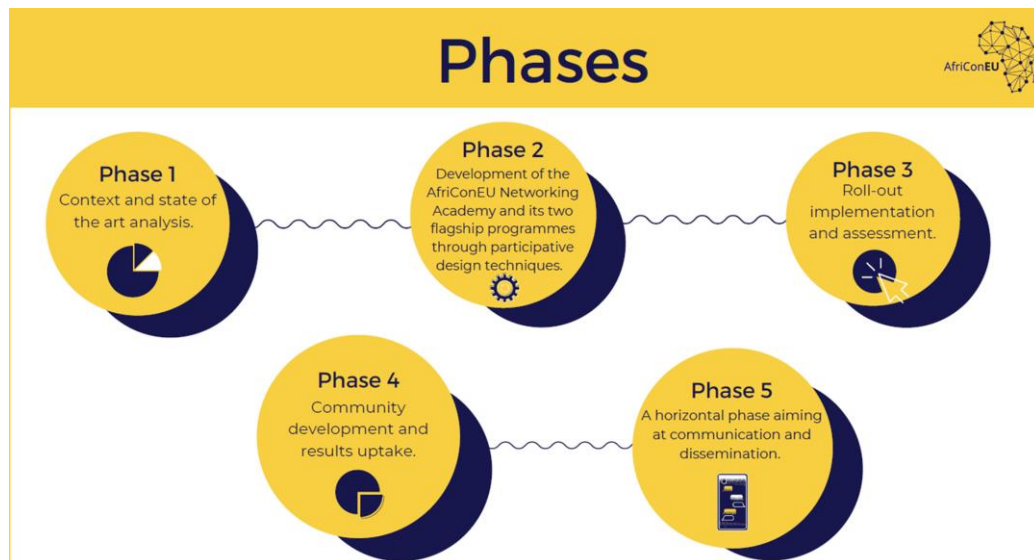


Figure 2. The Phases of the AfriConEU methodology

As previously discussed, this paper will focus on the dissemination of the results of the research activities conducted in Phase 1 – Context and state of the art analysis, which in turn will be key to the design and organisation of the Phase 2 activities (that aim to develop the AfriConEU Networking Academy and respective flagship programmes).

Several research activities were conducted feeding off each other in order to have recommendations perfectly suited to the reality to which the project intends to apply its mechanism. First, a set of activities to put together an overview of the African ecosystems (with a focus on the impact of COVID-19 on Digital Innovation ecosystems) were organised, also to map which challenges and opportunities can be undertaken to strengthen African DIHs. For this, more than one source of data gathering was used:

1. **Desk-based research** was conducted to help contextualise the project. This phase of the study was concerned with literature that provided insight into the tech and innovation ecosystems of the four African countries targeted. The data gathered was obtained from several sources including, government policies, NGO and international NGO reports, newspaper articles, academic journals, and blogs.
2. Semi-structured one-to-one **interviews** were conducted with 60 hub leaders and managers, entrepreneurs, investors, ecosystem builders and network organisations (Table 1). The interviews were guided by four main research questions: 1. What role do digital innovation hubs (and similar actors) currently play within the digital innovation ecosystems in Nigeria, Uganda, Ghana and Tanzania?; 2. How has COVID-19 affected digital innovation ecosystems and how have DIH responded to the challenges?; 3. What gaps still exist in terms of the role that DIH can play in strengthening digital ecosystems? How can DIHs be supported to play a greater role?; 4. What opportunities and challenges exist around collaboration with EU DIHs and ecosystems.

Table 1. Number of interviews conducted by country

Interviewed	Nigeria	Uganda	Ghana	Tanzania	Total
DIHs	8	8	6	4	26
Ecosystem Enablers	4	4	8	1	17
Startups	2	2	1	3	8
Investors	3	1	2	3	9
Total	17	15	17	11	60

3. Four virtual ecosystem **roundtables** were hosted by AfriConEU, each targeting one of the four countries at the centre of the study: Nigeria, Uganda, Ghana and Tanzania. The roundtables were attended by actors from across the digital innovation ecosystem including hub leaders and managers, entrepreneurs, development partners, investors and policymakers. During each roundtable, there was a panel discussion about the impacts that COVID-19 has had on digital ecosystems followed by a co-creation workshop in which participants interactively shared ideas on how to build the capacity of African DIHs, to promote inclusion of youth and women within the digital economy and to enable effective innovation partnerships between Europe and Africa.
4. Additional data was collected by administering two **surveys**: [1] an ecosystem survey targeted at diverse actors within the four ecosystems which was completed by 266 respondents: [2] and, a DIH capacity needs survey that was completed by 32 hub leaders across the four countries.

The results of this research will be applied to find capacity-building materials tailored to DIHs needs, in order to expand their knowledge and support them in their capacity building. The goal is to combine these outputs with an intensive web search on the available capacity-building materials to map and collect into a database, which will be made available to the public on the project's webpage (<https://africoneu.eu/>).

Additionally, and to gather feedback and lessons learned from existing initiatives and discover good practices for enforcing DIHs capacities, the research team conducted interviews with 182 organizations. The study was based on an extensive preparatory study, which resulted in the creation of the questionnaire and all relevant tools, allowing efficient and repeatable execution of the interviews, gathering and documenting answers, and interpreting results. Online surveys were chosen as the most appropriate method to collect information, being targeted to three different groups: [1] DIH helpers or trainers of existing capacity building programmes targeted to DIHs from Africa and Europe; [2] DIHs that have participated in capacity building programmes; [3] DIHs that were part of the research of local innovation ecosystems in Nigeria, Uganda, Ghana and Tanzania.

In addition to the contextual analysis, this first phase of the project also included the identification of existing capacity building initiatives targeted towards African and European DIHs with the aim of exploring the methods used and the outcomes achieved. The literature review was complemented by in-depth interviews with designers, trainers and trainees of past/existing capacity building programmes, to map the success factors and obstacles associated with these practices and produce useful insights for the first flagship programme of AfriConEU focusing on DIHs capacity building.

Finally, the research activities were completed with the organization of four additional roundtables targeted to DIHs from both Europe and Africa, intended to identify current perceptions towards cross-continental and intracontinental partnerships and define particular needs and preferences. Gathered insights will feed into the design of the second flagship programme of the AfriConEU Academy, which will aim to facilitate exchange, new trans-continental partnerships and joint projects developments between the two continents.

3 RESULTS

After a detailed analysis of the data collected through the several methods used (both primary and secondary), the respective results and recommendations coming out of them will be presented in this section. For better comprehension, the section will be divided into **5 subsections**. **Subsection 3.1** introduces the findings from the desk-based research, roundtables and interviews to provide snapshots of the digital ecosystems in the four focus countries. **Subsection 3.2** presents the impact of COVID-19 on African digital innovation ecosystems based on interviews, surveys and roundtable discussions. In **Subsection 3.3**, the key roles that DIHs are playing in catalysing local innovation ecosystems are identified, and the challenges DIHs face are presented, as well as the respective recommendations to address them. In **Subsection 3.4**, the main lessons and best practices learned from existing initiatives for enforcing DIHs capacities are summarised. And finally, **Subsection 3.5** presents a set of approaches and recommendations to drive better collaboration between Africa and Europe.

3.1 Overview of African Digital Innovation Ecosystems

In assessing the landscape of African Digital Innovation Ecosystems, six main areas were targeted: markets, policy, finance, culture, infrastructure and human capital. The data and the framework are combined to provide individual country snapshots. Table 2 highlights the key insights emerging across the four countries.

Table 2. Overview of African Digital Innovation Ecosystems

Markets	Driven by mobile adoption, digital markets are growing but affordability and access remain limiting factors. These factors combined with gender and geographical gaps result in women and those in rural areas being excluded from participating in the digital economy.
Policy	Broad level ICT frameworks exist but policy gaps remain with regards to enabling digital adoption and innovation. In some instances, the impacts of positive policy initiatives are diminished by restrictive and punitive government regulations.
Finance	Investment into African tech markets continues to grow. However, driven by a lack of patient, catalytic capital, early-stage startups and certain key sectors remain under-funded.
Infrastructure & Support	Addressing infrastructure gaps particularly in rural areas is high on the agenda for both private and public actors. The number of digital innovation hubs is growing but funding constraints limit the support they provide to startups.
Culture	On the whole, entrepreneurship is regarded as a positive solution to unemployment and a way to increase financial and economic participation. However, cultural and socio-economic barriers prevent many women and youth from pursuing digital entrepreneurship.
Human Capital	There is increasing emphasis on digital skills development. However, education systems are not adapting and meeting the demand for advanced digital skills.

3.2 Impact of COVID-19 on African Digital Innovation Ecosystems

The data collected shows that COVID-19 has had both **positive and negative effects** on the digital economies of the four countries researched. A top-line summary of the findings is contained in Table 3.

Table 3. Impact of COVID-19 on African Digital Economies

Markets	Accelerated adoption of digital tools, boosting demand for businesses in digitised sectors. In contrast, non-digitised businesses and traditional sectors such as hospitality and tourism were hard hit.
Policy	Increased prioritisation of digital innovation and entrepreneurship by governments.
Finance	Highlighted and widened existing financing gaps, prompting new solutions by traditional investors and governments targeting startups and small and medium businesses.
Infrastructure & Support	Increased strain on digital infrastructure prompting prioritisation of infrastructural investments. Created new opportunities for DIHs and helped them to scale through online programmes. However, funding cuts and loss of revenues from office space rental and events have exacerbated sustainability challenges for DIHs
Culture	Lowered cultural barriers to the use of technology and driven adoption. However, widened digital divides particularly for women and youth.
Human Capital	Tech jobs are being extended to secondary cities and there is an increased interest in digital jobs and online economic opportunities.

3.3 Challenges and opportunities for strengthening African Digital Innovation Hubs

Through the research done to access the challenges and opportunities for strengthening African DIHs, the following six key roles that DIHs are playing in catalysing local innovation ecosystems in Africa have been identified:

1. Creating a community and space where like-minded innovators and other ecosystem actors can connect;
2. Developing the talent pool and skills needed to drive innovation, which plays an important role in addressing digital divides for women and youth;
3. Providing spaces and infrastructure (internet and electricity) for entrepreneurs to innovate;
4. Connecting startups to investment;

5. Accelerating and incubating startups and supporting entrepreneurs to develop their business ideas into viable ventures;
6. Educating governments and bringing ecosystem actors together to develop enabling policies for innovation and technology.

Furthermore, the results also reveal four key challenge areas that are limiting the impact of DIHs as catalysts for digital innovation in Africa. These challenges are highlighted in Table 4 with the respective recommendation to address them.

Table 4. Challenges and Recommendations for Strengthening African DIHs

Challenges	Recommendations
Current funding approaches limit the impact of DIHs. Specifically, funding is focused on short-term programme delivery and does not recognise the longer-term, ecosystem-building work that DIHs are doing. Moreover, the Funders' emphasis on outputs limits DIHs' potential to create systems change.	New funding approaches are needed to support DIHs more effectively. Funding for DIHs should support their sustainability and long-term impact. Specifically, more funding needs to be allocated towards covering DIHs core costs as well as developing their internal capacity and infrastructure. Additionally, funding for DIHs should focus on long-term outcomes and place less emphasis on maximising short-term outputs.
Many DIHs lack sustainable business models and are heavily reliant on grants which leaves them financially vulnerable.	There is a need to provide DIHs with funding and expertise to develop sustainability models. Those business models need to complement and build on rather than take away from the DIHs' core mission to support startups and innovation ecosystems.
DIHs face capacity and expertise gaps in key areas of business development, fundraising, investment facilitation and gender-responsive programme design. This is negatively affecting the level of support that they provide to startups and women as well as limiting their ability to tap into investment opportunities and drive investment into the ecosystem.	There is a need to build DIHs capacity around business development, investment facilitation, fundraising and developing gender-responsive programmes as key areas where many DIHs have capacity gaps.
DIHs face challenges in building effective ecosystem partnerships with corporates, governments, investors and fellow DIHs which is limiting DIHs' ability to scale their impact, influence policy and more effectively contribute to developing the digital innovation ecosystem.	Support and facilitate partnerships between DIHs and diverse actors across the ecosystem. For instance, by facilitating investment into the digital ecosystem by corporate actors; building evidence and data to support better policy making; supporting DIHs to develop investment strategies and strengthening hub networks.

3.4 Lessons learned from existing initiatives and good practices for enforcing DIHs capacities

From the online surveys made to DIH helpers or trainers many conclusions were drawn, as presented next:

- **Capacity building programmes' topics:** 17% of the inquired DIHs reported the need for additional knowledge on DIH expansion & networking, 16% on DIH strategy & business development, 13% on DIH service portfolio and development, 12% on DIH sector-specific topics, 11% on DIH skills and knowledge creation and 11% on DIH communication & awareness creation. In turn, about 50% of the inquired African DIHs expressed the need for additional knowledge on DIH strategy & business development. It is worth mentioning that DIH helpers programmes cover topics like DIH expansion & networking, DIH strategy & business development, DIH communication & awareness creation, and DIH service portfolio and development. The highest interest is in DIH expansion and networking, service portfolio & development and DIH communication & awareness creation. Within this analysis, it was also accessed that two-thirds of the existing programmes are cross-sectoral.

- **Methods in programmes:** The most used methods for capacity building programmes are online webinars with keynote speakers, online courses, face to face short courses, mentoring/coaching. DIHs prefer mentoring/coaching, face to face short courses, online courses and online webinars. DIH helpers mainly offer online programmes (webinars and courses). The DIH helpers assess that DIHs' preferred methods are face to face short courses and mentoring/coaching. The African DIHs also stated that the most effective method is face to face workshops. As one-third of DIHs participated in three to five capacity building programmes, they are unsatisfied with the practicability of programmes.
- **Knowledge sharing, satisfaction and obstacles:** DIH helpers mainly use specific and targeted campaigns, websites, and social networks to disseminate their activities. Although only half of DIHs received support from DIH helpers, a few are very active, as one-fifth of DIH helpers supported more than 100 DIHs. Near 20% of the DIHs respondents referred to search, mainly, for information about capacity building programmes and other support at conferences and events on the DIH helpers' websites. DIHs think that the biggest obstacle for participation in more capacity building programmes is a lack of time and information about the availability of the training, while DIH helpers provide the information about training, and they assess lack of information as the least problematic area. DIH helpers assess that lack of time as the biggest obstacle for DIH to participate more. Half of the DIH helpers monitor participants satisfaction, half of them with a post-assessment questionnaire. For better alignment with DIHs, needs and preference evaluation methods are extremely important.

3.5 Challenges and Opportunities for Trans-Continental Collaboration

These insights were gathered through virtual roundtable engagements with DIH actors in Africa and Europe. The focus was on further understanding the shape and form those various interventions can take to drive better collaboration between Africa and Europe. It was sought to understand the opportunities that exist and can be leveraged while probing for new ideas and avenues for impact.

The engagement focused on key themes identified through the overview of African Digital Innovation Ecosystems that explored the digital innovation ecosystems of Nigeria, Uganda, Ghana and Tanzania. These included improving access to funding for African DIHs and early-stage start-ups, improving knowledge exchange between African and European DIHs to build their capacity and improving access to markets for African and European start-ups.

3.5.1 *Improving access to funding for African Digital Innovation Hubs and early-stage start-ups*

The following action areas and approaches were proposed for adoption to build interventions that address the needs identified and take advantage of the opportunities:

- “*Seeing is believing*”: the stories of successful investments and exits of African DIHs and start-ups on the European continent should be amplified in both continents;
- Regulatory guides: Investment playbooks should be created and documented to enable potential European investors to understand how to manoeuvre the regulatory hurdles and the incentives that exist to investment;
- Convening platform: More convening platforms for investors/funds in Europe and African DIHs and start-ups should be created. This could take the format of both online and in-person platforms. Furthermore, this could include a database of potential businesses that require and are ready for funding;
- Work with Embassies: European embassies in African countries have platforms that seek to introduce European actors to local markets. Projects like AfriConEU should seek to build connections with European embassies in African markets for purposes of supporting market entry, driving information awareness and hosting exchange activities for capacity building;
- Business development service collaborations: African DIHs should be supported to build strong collaborations with European business development service providers to develop the know-how to support start-ups seeking to increase investment from European markets;
- Investor education: Initiatives like AfriConEU should support its network to undertake awareness roadshows in Europe geared towards helping European investors and financing institutions to understand the African context and its successes.

3.5.2 Improving knowledge exchange between African and European DIHs to build their capacity

The following action areas and approaches were recommended to improve the capacity of the DIHs:

- Embedded technical assistance: More work should be put on building know-how and case studies on the importance of business development services to businesses in the African market. These success stories should enhance the ability of funding institutions locally and in Europe to plan for and budget for technical assistance support for start-ups;
- Use a scorecard to build credibility: working with DIHs to build a ranking system for experts providing business development support services from Europe and Africa. This would help build the credibility of such an offering for start-ups in the ecosystem.

3.5.3 Improving access to markets for African and European start-ups

The following actions and approaches were recommended to help African and European start-ups and DIHs to improve access to markets:

- CoP: Establish communities of practice focused on market access for start-ups with European and African actors engagement. Some of the potential engagements could include seminars, workshops, matchmaking between actors, etc.;
- Portal to address information asymmetry: A one-stop portal between Europe and Africa on market access should be developed. It can leverage various interventions receiving support in both continents. It can include soft landing initiatives, digital tax guidelines, compliance, etc.;
- Market access needs assessment: Dig deeper into the market access needs from African and European start-ups and DIHs.

4 CONCLUSIONS

The AfriConEU project contributes to strengthening and reinforcing the digital innovation ecosystems in Africa by targeting existing DIHs and supporting them through capacity building and networking activities.

In this first phase of the project, the study activities present not only a timely and much-needed overview of the current situation but also showcase the importance and resilience of Africa's DIHs. The information gathered, by engaging with stakeholders, provides key insights into the challenges and needs of African DIHs working through a global pandemic. These insights provide the basis for the recommendations presented in this paper. In line with AfriConEU's commitment to knowledge sharing, it is anticipated that this study will also serve as the foundation for more knowledge creation about African DIHs and the impact of COVID-19 on digital innovation.

Furthermore, it is expected that the mapped materials (capacity building programmes) that are being organised and consolidated in the AfriConEU's website^[5] will support new DIHs in setting up their organisation and already operating DIHs in optimising their operations and services. This list will continuously be updated as new needs in the community are identified and new training emerge.

Finally, the ultimate goal is that the findings of this report will provide useful information not only for the design and co-creation of the AfriConEU Networking Academy but to all of those interested in strengthening African digital ecosystems and EU-Africa innovation partnerships.

ACKNOWLEDGEMENTS

This paper was written within the scope of the project "AfriConEU" (GA N° 101016687), an IA project funded by the European Commission in the context of the H2020 Programme. We extend our gratitude to the members of the AfriConEU consortium, survey respondents, interview participants, roundtable panellists and attendees, consultants and EU representatives for their valuable contributions. Further information about the project, its goals, work and results can be consulted in <https://africoneu.eu/>.

REFERENCES

- [1] Wenger. et.al., *Cultivating Communities of Practice: A guide to managing knowledge*. Harvard Business School Press, 2002
- [2] Lave, J.; Wenger,E. *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press, 1991
- [3] Wenger E., Trayner, B., "Introduction to communities of practice". 2015. Retrieved from <https://wenger-trayner.com/introduction-to-communities-of-practice/>.
- [4] Cambridge, D., and Suter, V., *Community of Practice Design Guide: A Step-by-Step Guide for Designing & Cultivating Communities of Practice in Higher Education*, 2005.
- [5] AfriConEU project, *Training Resources*, Accessed 3 January 2022. Retrieved from <https://africoneu.eu/training-resources/>