

The first trans-continental Networking Academy for African and European Digital Innovation Hubs.

Challenges and opportunities for strengthening African DIHs

The case of Ghana, Nigeria, Tanzania and Uganda

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GLOSSARY & ABBREVIATIONS

AFRICONEU The first Trans-continental Networking Academy for

African and European DIHs

DIH Digital Innovation Hub

ESO Entrepreneurship Support Organisation

EU European Union

FMCG Fast Moving Consumer Goods

GDP Gross Domestic Product

GEM Global Entrepreneurship Monitor

GIZ German Agency for International Cooperation

ICT Information and Communications Technology

SDGs Sustainable Development Goals

SME Small and Medium-sized Enterprise

STI Science, Technology and Innovation

VC Venture capital

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EXECUTIVESUMMARY

02

In this report, we firstly foreground the vital role that African DIHs are playing in supporting the development of startups and catalysing local digital innovation ecosystems. We identify the following six main roles of African DIHs:

Creating a
community and
space where
like-minded
innovators and
other ecosystem
actors can
connect.

Developing the talent pool and skills needed to drive innovation they are also playing an important role in addressing digital divides for women and youth.

Providing spaces and infrastructure (internet and electricity) for entrepreneurs to innovate.

Connecting startups to investment.

Accelerating and incubating startups and supporting entrepreneurs to develop their business ideas into viable ventures.

Educating governments and bringing ecosystem actors together to develop enabling policies for innovation and technology.

Secondly, we highlight the challenges and needs of African DIHs. Our findings revealed four key challenge areas that are limiting the impact of hubs as catalysts for digital innovation in Africa: the failure of current funding models to effectively support the work of hubs; lack of sustainable business models; capacity and expertise gaps and; weak cross-sector partnerships within ecosystems.

Lastly, we provide recommendations for building the capacity of hubs and better supporting them to play their role more effectively. We call for new funding approaches that focus on the longer term sustainability of hubs, recommend key areas for capacity building and emphasise the need for support in the development of cross-sectoral partnerships.



Current funding approaches limit the impact of hubs.

Specifically, funding is focused on short-term programme delivery and does not recognise the longer-term, ecosystem-building work that hubs are doing. Moreover, Funders' emphasis on outputs limits hubs' potential to create systems change.

Many hubs lack sustainable business models.

They are heavily reliant on grants which leaves them financially vulnerable.

Hubs 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 the 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.

Hubs face challenges in building effective ecosystem partnerships with corporates, governments, investors and fellow hubs.

This limits hubs' ability to scale their impact, influence policy and more effectively contribute to developing the digital innovation ecosystem.

MAIN RECOMMENDATIONS

New funding approaches are needed to support DIHs more effectively. Funding for hubs should support their sustainability and long-term impact.

Specifically, more funding needs to be allocated towards covering hubs core costs as well as developing their internal capacity and infrastructure. Additionally, funding for hubs should focus on long-term outcomes and place less emphasis on maximising short-term outputs.

There is a need to provide hubs with funding and expertise to develop sustainability models.

Those business models need to complement and build on rather than take away from the hubs' core mission to support startup and innovation ecosystems.

There is a need to build hubs capacity around business development, investment facilitation, fundraising and developing gender-responsive programmes as key areas where many hubs have capacity gaps.

Support and facilitate partnerships between hubs 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 hubs to develop investment strategies and strengthening hub networks.

Table 1: Challenges and Recommendations for Strengthening African DIHs

05



INTRODUCTION

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, policy makers 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 a number of systemic challenges that are limiting their potential as catalysts for digital innovation. Building their capacity and supporting African DIHs to play their role more effectively is therefore crucial to driving digital growth and economic development in the region.

This report contains an extract of findings from a 6-month research process that took place between February and July 2021. It encompassed desk-based research, qualitative interviews with 60 hub leaders, entrepreneurs, investors, ecosystem enablers and policy makers and two quantitative surveys; an ecosystem with overall 266 respondents across Ghana, Nigeria, Uganda and Tanzania and a DIH capacity needs survey which was completed by 32 digital hub leaders in the four countries. The full findings from the research were published in a final report: State of Play in African DIHs: The case of Ghana, Nigeria, Tanzania and Uganda.

The research was carried out as part of the activities to establish AfriConEU – The first trans-continental networking academy for African and European Digital Innovation Hubs (DIHs). The AfriConEU project aims to support the strengthening of Digital Innovation Hubs in Africa by boosting their capacity to foster innovation and growth and empower women and youth through the digital economy.

METHODOLOGY

RESEARCH BACKGROUND

This research was carried out as part of the establishment of AfriConEU – The first trans-continental networking academy for African and European Digital Innovation Hubs (DIHs). The study aims to analyse the specific needs of the DIHs within these ecosystems and bring to light the challenges they face.

SCOPE

Broadly speaking, our study examined Africa's digital and tech sectors. More specifically however we focused our investigation on the following:

Geographic Scope: This study looked specifically at four Sub-Saharan African countries: Ghana, Nigeria, Tanzania, and Uganda.

TARGET GROUPS

For our study, we identified and targeted four groups of digital ecosystem actors including:



DIHs (this includes tech hubs, entrepreneurship support organisations such as accelerators and incubators) and entrepreneur support networks.



Investors



Startups



Ecosystem enablers
(e.g. policy makers, development partners, universities, ecosystem networks and corporates).

RESEARCH QUESTIONS

What challenges and needs do DIHs face with regards to:



sustainable?







07

supporting the employability potential of youth and women?

How can DIHs be strengthened to further catalyse digital innovation within their ecosystems?

METHOD

Overview

The data gathering phase of our study lasted six months, starting in February 2021 and ending in July 2021. Data was collected using a range of methods including:

- Desk-based research
- One-to-one virtual interviews
- Country-specific virtual roundtables
- Surveys Ecosystem survey and DIH capacity needs survey.

In this section, each data gathering exercise is introduced and discussed in more detail providing greater insights into our methodology.

Desk Research

The primary purpose of the desk-based research was to conduct a literature review that would help contextualise this project. The data gathered was obtained from several sources including, government policies, NGO and international NGO reports, newspaper articles, academic journals, and blogs.



Between March and July 2021, 60 virtual semi-structured one-to-one interviews were conducted with hub leaders and managers, entrepreneurs, investors, ecosystem builders and network organisations. To find participants, key ecosystem actors were identified and approached by leveraging relationships with local AfriConEU partners in each country. The interviews were guided by our four main research questions outlined previously. The responses were summarised and analysed thematically looking at our three key focus areas discussed above.

HUBS

UGANDA	8	
GHANA	6	
TANZANIA	4	
NIGERIA	8	
TOTAL	26	

STARTUPS

UGANDA	2	
GHANA	1	
TANZANIA	3	
NIGERIA	2	
TOTAL	4	

ECOSYSTEM ENABLERS

UGANDA	4
GHANA	8
TANZANIA	1
NIGERIA	4
TOTAL	17

INVESTORS

UGANDA	1
GHANA	2
TANZANIA	3
NIGERIA	3
TOTAL	9

TOTAL

UGANDA	15
GHANA	17
TANZANIA	- 11
NIGERIA	17
TOTAL	60



Between May and June 2021, four virtual ecosystem roundtables were hosted by ATBN in partnership with local DIH partners of the AfriConEU project including HapaSpace (Ghana), Emerging Communities Africa (Nigeria), Buni Hub (Tanzania) and Outbox (Uganda). The roundtables were attended by a cross-section of actors from across the digital innovation ecosystem including hub leaders and managers, entrepreneurs, development partners, investors and policy makers.

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 about how to build the capacity of African DIHs, promote inclusion of youth and women within the digital economy and enable effective innovation partnerships between Europe and Africa.

Surveys

Additional data was collected by administering two surveys:

An ecosystem survey targeted at diverse actors within the four ecosystems which was completed by 266 respondents.

A DIH capacity needs survey that was completed by 32 hub leaders across the four countries.

AfriCon**EU**

CHALLENGES & OPPORTUNITIES FOR STRENGTHENING AFRICAN DIHS



1.1 The role of Digital Innovation Hubs

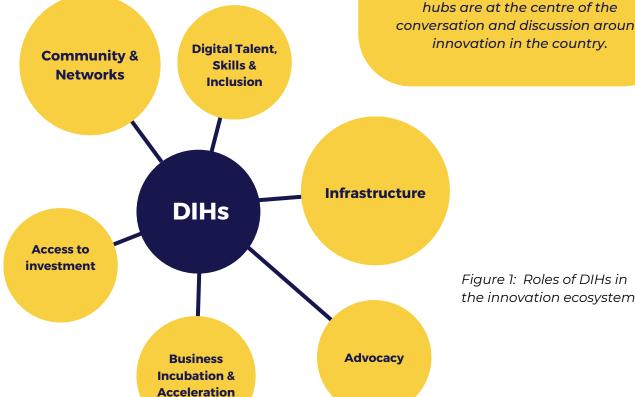
We identify six main roles that hubs are playing to catalyse local innovation ecosystems in Africa (see Figure 1). First, hubs are providing critical support to startups and entrepreneurs by providing infrastructure including workspace and internet connectivity, a supportive community, business incubation and acceleration as well as access to funding. At the same time hubs are contributing to building a diverse talent pool for digital innovation by providing skills training and promoting the inclusion of women and youth.

Lastly, hubs are playing the fundamental role of advocating for and providing guidance in the development of enabling policies for startups, investment and the growth of the ecosystem as a whole. Discussing the catalytic role of hubs one hub leader in Tanzania said.

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Innovation hubs are basically at the core of the innovation ecosystem.

They are conveners, they work with governments, they work with development partners, they work with private companies, they serve entrepreneurs directly and work with policymakers. In Tanzania right now, hubs are at the centre of the conversation and discussion around innovation in the country.





Community and networks

Hubs provide a vital community and space where like-minded innovators and other ecosystem actors can connect.

One interviewee noted that entrepreneurship can be a lonely journey and being part of a hub was important to them because it meant that they did not feel alone. Speaking about the important role that hub communities had to play in the development of his startup, one startup founder in Nigeria said:

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When you participate in local hubs, apart from the advisory they provide, the community is much more important. You meet like-minded people working on similar problems who you can learn from and call upon when you need help. They become friends who can turn into employees and have a fundamental role to play.

While one hub leader describing how their hub is helping to connect the innovation ecosystem in Ghana noted:

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We realised that there were a lot of people trying to develop products and services in various parts of the country, but they were working alone. Also many feared sharing their ideas with others and so were working in silos. One of our efforts has been to bring these people together, especially those who are working in the same value chain, or working on similar products, and also connect them to the global ecosystem and other stakeholders.



Image 1, 2: AfriConEU Networking Academy - Building An Inspiring Business Model, Kumasi, Ghana



Digital talent, skills and inclusion

Nigeria, Tanzania and Uganda

Hubs are playing a crucial role in developing the talent pool and skills needed to drive innovation.



Image 3: Building a Network of Funding Resources, Lagos, Nigeria

A major challenge that is seen to be holding back the development of the African digital ecosystem is the shortage of talent with relevant skills for the fast-evolving digital economy. We found that innovation hubs are playing a crucial role in bridging this gap.

Many of the hubs we spoke to reported having digital upskilling programmes as a focus area of their work. Describing their role within the digital ecosystem, one hub leader in Nigeria explained:

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In the close to five years that we have been in operation, we have probably gotten more people into technology jobs than anyone else across the region. We do what we call talent acceleration, which is basically getting people the skills they need to fit into the global workforce.

In addition to upskilling individuals to develop technology products and careers, hubs are also crucially helping to impart digital skills to small, non-digitised businesses in order to bring them into the digital economy. One hub leader in Uganda described the work that they are doing to bring small and medium sized businesses into the digital economy:

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We also focus on small businesses that want to utilise digital technologies, either for improving their business models or becoming more resilient. For instance, last year, we trained close to 600 small business owners around aspects of how they can utilise the different tools to still stay operational during the lockdown.



Hubs are also playing an important role in addressing digital divides for women and youth.

Our conversations with hub leaders highlighted the efforts hubs are making to address digital divides for women and youth. 94% of the hubs we surveyed indicated that they currently run specific programmes targeting women. Furthermore, during the pandemic hubs have been developing solutions to help women and youth continue to access support online. For example, during the pandemic lockdowns, Social Enterprise Ghana partnered with a telecom company to zero-rate their digital courses on their website resulting in a significant uptick in the number of young people taking part in their online courses. In Uganda, Amara Hub made its training content more accessible by creating bite-sized, shareable content that does not require a lot of data or bandwidth while iSpace Ghana provided laptops and catered for data access to enable female participants to continue with their digital programmes.

Infrastructure

Hubs provide spaces and infrastructure (internet and electricity) for entrepreneurs to innovate.

Hubs provide access to stable internet as well as highly subsidized and flexible office space where startups and entrepreneurs can work on developing their ventures. This is within a context where internet costs and office rents, particularly in cities like Lagos and Accra are notoriously high. In many of these cities, hiring office space also requires large, sometimes multi-year advance payments which puts it out of reach for most startups. Hubs are bridging this gap by offering shared office space on a month-on-month basis at more affordable rates and have thus been the first home for many successful startups.

One hub leader in Ghana elaborated on the work that they are doing to bridge the infrastructure gap for entrepreneurs:

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In Accra, and I want to hazard a guess that this is the case in a lot of emerging markets, there's a serious real estate issue. In places like Lagos and Accra, some of the city's brightest and youngest cannot afford to live in the centre of the city where the most productivity is happening.



Challenges and opportunities for strengthening African DIHs: The case of Ghana, Nigeria, Tanzania and Uganda

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So, you find young people are commuting for up to six hours a day just to get to work and back. That is compounded by the crazy rent rates. Landlords are asking entrepreneurs to pay one year or even two years rent in advance before they [entrepreneurs] can even kick start their businesses. It just doesn't make sense. So, what we are doing as a hub is to essentially invest in co-working spaces, take up that real estate and put some investment and internet into it, make it functional, and then essentially sell it at highly subsidized rates.

Access to investment

Hubs are also playing a role in connecting startups to investment by helping them to become investment ready and providing exposure to investors.

Describing the support, they provide to startups when it comes to access to investment, one hub leader in Ghana explained:

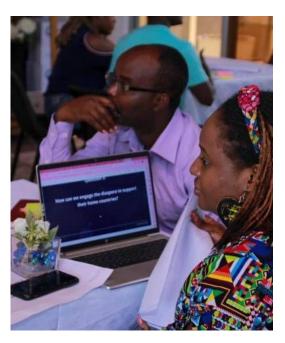


Image 4: AfriConEU International Brokerage Event in Ghana

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We help startups get investment-ready and gain access to investors. We also help prepare them for their pitches and organise pitch nights where they can get peer feedback from their colleagues as well as from the mentors and coaches. Some of the investor networks we have helped startups connect to include EWB Ventures, Accra Angels Network and African Business Angels Network.

Business incubation and acceleration

Hubs are providing entrepreneurs with much needed support to develop their business ideas into viable ventures.

They provide mentorship, training, market research support and in some cases seed funding to entrepreneurs to test and validate their ideas. One hub leader in Uganda described the support they provide to innovators:

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We have supported innovators to come up with different products, primarily medical technologies but also in fintech and agriculture. And we have a comprehensive pathway that we take innovators through. Someone comes to us with a problem, we take them through our pathway including training them on how to develop their concept and proposal. We then go through a vetting process. For example, we invite a team of judges to vet the innovation and make sure it meets all our criteria, that it is commercially viable, is able to deliver impact and is really achievable. Once the innovation passes that stage, it enters our lab and goes through the other stages until it goes to market at which point the entrepreneur is able to establish and manage their startup.





Image 5,6: AfriConEU Networking Academy - Bootstrapping, Revenue Models and Managerial Accounting, Kampala, Uganda



Challenges and opportunities for strengthening African DIHs: The case of Ghana, Nigeria, Tanzania and Uganda

Policy advocacy

Lastly, hubs are playing a key role in educating governments and bringing ecosystem actors together to develop enabling policies for innovation and technology.

Notably, network organisations bringing together different hubs within these ecosystems namely Ghana Hubs Network, Startup Uganda, Tanzania Startup Association and Innovation Support Network Nigeria, have been particularly key to enabling policy advocacy by hubs. Discussing the role of hubs in supporting the development of policy, one investor in Tanzania noted:

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There is actually a lot to be done in terms of education. Especially to solve key challenge areas like government regulation. There is a need to educate policymakers on the importance of nurturing digital industries and getting them to understand that these industries, if optimised, will be able to help solve problems that are affecting millions of people in a short amount of time. I think innovation hubs are well positioned to play this role because you can create an environment where public decision makers and those deploying innovation can sit down to discuss what needs to be done.

1.2 Challenges facing African DIHs

As highlighted above, hubs are playing a vital role in supporting the development of startups and the digital innovation ecosystem as a whole. Our findings however also reveal three key challenge areas that are limiting the impact of hubs as catalysts for digital innovation in Africa.

We found that current funding approaches limit the impact of hubs. Specifically, funding is focused on short-term programme delivery and does not recognise the longer-term, ecosystem-building work that hubs are doing. Additionally, many hubs lack sustainable business models and are heavily reliant on grants which leaves them financially vulnerable.

and drive investment into the ecosystem.

Our research also highlighted that hubs face capacity and expertise gaps in key areas of business development, fundraising, gender-responsive programming and investment facilitation. This is negatively affecting the level of the support that they provide to startups as well as limiting their ability to tap into investment opportunities

Lastly, we found that hubs face challenges in building effective ecosystem partnerships with corporates, governments, investors and fellow hubs which is limiting hubs' ability to scale their impact, influence policy and more effectively contribute to developing the digital innovation ecosystem.

Current funding approaches limit the impact of hubs

Our findings reveal that current funding mechanisms limit the impact of hubs in catalysing digital innovation. These approaches fail to recognise hubs as key actors who are playing a crucial role in the development of the digital innovation ecosystem but rather view hubs simply as a means to deliver programmes and outputs. Below we elaborate on how these funding dynamics affect hubs.

Lack of core funding limits the ability of hubs to invest in their own capacities and infrastructure

One key challenge with current funding models for hubs is that the majority of funding is often allocated towards the delivery of programmes while not enough is dedicated to covering core costs and building the capacity of hubs. Consequently, hubs are not able to sufficiently invest in building their institutional capacity for example for hiring highly skilled teams and developing their infrastructure. One hub leader in Ghana described the situation that hubs are facing as follows:

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For most projects, the organisations that fund hubs to support entrepreneurs, the way they structure these programmes is that a large chunk of the money goes towards startup support costs. They don't allow hubs to actually pay themselves. I think perhaps they don't see hubs as service providers who need to be paid for the projects they are working on. This is affecting sustainability. Even though we see more hubs springing up, they don't have the capacity to hire the best talent that can deliver support training for the startups.



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Another hub leader in Ghana summarised the funding situation of hubs as follows:

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For hubs, infrastructure in particular comes at a huge cost because you need to keep your whole hub running with constant internet and electricity which is expensive. Even though it looks like there are more organisations funding hub projects, these projects are not actually helping the hubs become more sustainable because of the way that they are structured. So, there's a lot of activity going on but it's not really trickling down to actually help build a foundation for hubs to hire the right people and keep their spaces operating at an optimal level so that they can actually support entrepreneurs beyond the programme or project. These projects are typically six weeks or three months and at the end of it, the startups remain in the ecosystem, they still come to these spaces and still need support. Who pays for all that?

Short-term funding limits the effectiveness of hubs' support for startups It was also highlighted because much of the funding that hubs receive is for short-term programmes, this limits the ability of hubs to provide more effective support for startups.

To develop, digital ecosystems require ongoing support that can build a sustainable pool of entrepreneurs with the wide range of skills necessary for successful innovation. However, many hubs are not able to do this as one ecosystem enabler in Uganda noted:

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Innovation hubs are not sufficiently investing in upskilling young people with skills that would enable them to get their products to market. What they mostly offer is the occasional one-day training on product development or marketing. I had a meeting with some funders who were so excited to tell me about a three-day training programme that they would be supporting. And I told them honestly that I didn't think these short-term training sessions are what is needed. The unfortunate truth is that the ability to build a market ready product cannot be taught over three days.

While an entrepreneur in Ghana noted:

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The support that hubs provide is limited by their capacities. For instance, hubs will run programmes and get startups involved. But many of these programmes depend on funding and when the programme ends and the support is pulled, hubs are not able to keep supporting startups with coaching, mentoring or guidance. They may wish they could do more, but they also lack the resources. So, you go through some of these programmes and at the end of the day, when the hubs reach their limit, they pull back and you are left in the middle.

Funders' emphasis on outputs limits hubs' potential to create systems change

Lastly, funders often focus on programme deliverables and outputs without recognising the deeper work that is required for these efforts to actually create meaningful, system-change. It was also noted that the highly bureaucratic funding processes take time and effort away from the real work that needs to be done. One hub leader in Tanzania noted:

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Digital transformation is a process. However, most donors are simply looking at numbers. There is so much that goes into setting up stronger processes, capacity strengthening, doing human-centred design to understand the different contexts and embracing these different contexts. And all that requires funding. So, if a funder comes and says, "I need 10,000 digitally upskilled young people", I say "No, I'm giving you 500, because I need to spend one year really learning about those guys." So, there is a mind shift needed from donors and development partners.

Image 7: AfriConEU Networking Academy -Applying Gender Lens to Science, Technology and Innovation, Tanzania





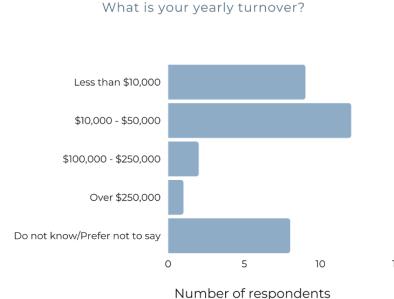
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Similarly, another hub leader in Ghana said:



In many cases funders are in control, and they are very rigid and bureaucratic. The number of things you have to fill in and how you manage your time, in the end some of these projects come at a loss. If you look for example at how much time is allocated per head for a particular project vis a vis what really needs to go into it, you realise that it is just a box-ticking exercise. It is all about "Ok you trained 20,000, that's people great." Mission accomplished. But actually, we need a lot more capital allocated over a longer period of time, with more trust and less rigidity. That is not to say that it is a free lunch. Of course, we need to account for it. But I think it should be outcomes driven and rather than focus on say how many people were trained. While that is an important metric, it is not the most important one. It should be about what did we actually achieve? What is the outcome? Hubs are an important part of the ecosystem, and we need investors to invest in hubs. Those are some of the issues from funders that can be very problematic for those implementing on the ground.

Lack of sustainable business models



As already noted in section 1, funding is a major challenge for hubs. We noted for example that 65% of the 32 hubs we surveyed had a yearly turnover of less than \$50,000 (see Figure 2).

Figure 2: DIHs' yearly turnover

All figures in USD

This is negatively affecting the resilience of hubs leaving them vulnerable to shifting priorities of funders and funding cuts as many of them experienced during the pandemic. It has also meant that their work is often dictated by the priorities of funders which may not be necessarily aligned with hubs' goals or the needs of their local ecosystems. Speaking at our Ghana roundtable about their findings from research that was conducted by Social Enterprise Ghana to understand the situation of hubs in Ghana, co-founder Amma Sefa-Dedeh Lartey explained:



We found that the hubs that were doing well were those that had a commercial offering or had built really strong brands and funding partnerships, over many years, that they had been able to build into a regular revenue stream. Some hubs had full consulting companies that they owned and were doing commercial consulting, feasibility studies, etc. and then putting a part of their profits into the hub. We realised that those that were purely hubs and either did not have solid fundraising expertise and networks, or a business that was viable and profitable, really fluctuated whereby they would get some money for projects and then when the money runs out, they are struggling. There's a need for us to figure out how we can resource these hubs in a more sustainable way

Similarly, one hub leader in Tanzania elaborated on the challenges that the reliance on grants creates for hubs:



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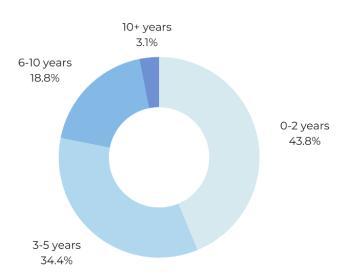
99

Creating investor ready businesses is what hubs should focus on, instead of simply jumping into different projects and activities in order to survive. If hubs have to rely on donor money, it's not sustainable, first of all. Secondly, it always comes with an agenda. They will be told to focus on the health sector or Water, Sanitation and Hygiene for example. So, if for example they would like to support businesses in agriculture, in edtech, healthtech, or in future emerging technologies, like AI and blockchain, they won't be able to do that because whoever is giving them money is telling them to do something else.

Capacity and expertise gaps

Our study revealed that African digital hubs are lacking capacity and expertise in key areas, specifically business development, investment facilitation, fundraising and supporting women and youth. This is linked to the fact that the majority of hubs are still quite young and as one informant highlighted, often the hubs supporting startups are startups themselves. Indeed, our own data found this to be the case. 80% of the hubs we surveyed across Ghana, Nigeria, Uganda and Tanzania had been in operation for less than 5 years, with 35% of them being less than 2 years old (see Figure 3) Below we outline some of the capacity gaps that hubs face and elaborate on how they are affecting hubs.

How many years has the hub/ESO been in operation?



Lack of in-depth business development expertise

23

A number of stakeholders we spoke to felt that hubs are not effectively supporting startups because they (hubs) themselves lack in-depth business development expertise in key areas like marketing, design thinking, market research and user testing that are necessary for developing successful businesses from idea to scale.

Figure 3: DIHs' number of years in operation

25

One entrepreneur in Tanzania commented:



They (hubs) are not doing enough. Some run programmes for entrepreneurs but they are not teaching young people practical ways to run a business. They simply don't teach entrepreneurs how a business should work and how to build business systems.

While one government representative in Ghana noted:



Many hubs have challenges with human resource capacity. Sometimes you have a startup training startups. Many of them have the zeal but they don't have the required knowledge and understanding of how to groom and incubate a company and move it from the idea stage to the market and help the entrepreneurs to sustain it.

Lack of capacity in facilitating investment

It also surfaced that many hubs lack capacity and expertise when it comes to facilitating investment. Our survey of 32 hubs across Ghana, Nigeria, Uganda and Tanzania indicated that 62% of them had no or limited capacity in providing investment matching and advisory services. This is a missed opportunity for hubs as greater competency in this area could enable them to build long-term financial sustainability by investing in the startups they support.

Fundraising

Further limiting the financial resources of hubs is their lack of fundraising skills and capacity. 50% of the hub leaders we surveyed said they have limited or no capacity in grant proposal writing and fundraising. They also highlighted access to funding opportunities, increased visibility and connections to funder networks as some of the key areas where they need support.

Gender-responsive programming

While almost all the hubs we surveyed said they offered specific programmes for women, our findings indicate that hubs still face challenges in reaching women with their programmes due to cultural norms that hinder women's participation.



A number of hub leaders we surveyed stated that they need support in improving their gender responsiveness and designing programmes that address systemic barriers for women.

A hub leader in Tanzania describing some of the challenges that persist around getting more women into their digital programmes said:

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Our programming is focused on 70% women. However, there are still gaps in terms of support for women. Our digital ambassadors who deliver technology in our communities are supposed to be 70% women. But when we send out a call for applications, you find that 70% of those applying are men. Because for women to apply they really have to think about it, or they may have to ask their family. A recent study found that half of digital innovation hubs are having a tough challenge when it comes to onboarding women. As a digital hub or space, you cannot sit back and wait for women to come. Our current approach involves going into communities to understand the norms and see how we can penetrate through those norms. In some contexts, women are allowed to tap into digital and use technology while in others, they are not. So how do we still penetrate such regions? This is part of the normative frameworks that we are now designing.

Challenges in developing effective ecosystem-wide partnerships

Lastly, we found that hubs face challenges in building effective partnerships with other key ecosystem actors including governments, corporates, investors and fellow hubs. Here we shed light on some of the barriers hubs face when it comes to collaborating with various actors.

Government partnerships

As noted in Section 2, COVID-19 has caused governments to put a greater emphasis on enabling digital innovation.



While this has created more opportunities for hubs to engage policy makers, we found that several factors are standing in the way of hubs being able to influence and work more effectively with governments. For example, one government representative in Ghana noted that a lack of specialisation by hubs makes it difficult for the government to outsource enterprise development projects through hubs:



If they [hubs] get their systems right, then things will move faster with the government and the ecosystem will be strengthened. They need to have infrastructural capacity, logistics, human resource capacity and the knowledge for them to be able to really support businesses. They also need to be able to specialise. You ask some of them "What is your area of specialisation?" and they say, "we can do everything". We don't want to work with a hub that is trying to do everything. From agriculture to IT to tourism, some hubs think that they can do it all. There needs to be some level of specialisation.

The need for data to back up the recommendations that hubs are making to governments was raised as another issue that is limiting the policy advocacy efforts of hubs as a hub leader in Nigeria noted:



As an ecosystem, we need to be able to help the government to see the economic value of what we are doing. We need to start having conversations around "How does this digital skills and entrepreneurship opportunity convert into revenue and tax. How does it turn into some form of income for the country?". We need to go at it from an investment standpoint and say for example "if the government invests a certain amount, this is where we can get to in the next two to three years". Until we start to drive that kind of conversation, I don't think that we're going to see the level of interest that we need from the government.

Corporate partnerships

Partnering with corporates can provide a wide range of benefits for hubs. For example,



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a number of hubs have partnered with telecommunications companies and Internet Service Providers to access internet infrastructure at subsidised rates. Corporates can also create pathways to scale for the startups supported by hubs for example by startups leveraging the sector expertise, brand, infrastructure and customer base that these more established companies bring. One hub leader in Tanzania noted:



Increased strategic collaborations and partnership with the corporate world for example banks, insurance companies and telecom companies is extremely important. Activities such as brand acceleration programmes, corporate accelerator programmes, design sprints and corporate VC programmes where corporate companies can offer investment funds to startups. I think these are needed. There is a lot of capital lying around African corporates that is not supporting even 10% of what is happening in their own local ecosystems.

However, it was also noted that developing corporate partnerships was a challenge for hubs as there is often little incentive for corporates to invest in research and development of new ideas and innovation. One hub leader in Uganda explained:



In Europe, innovation and research tends to be grounded in industry, because they have a connection and continuous engagement with academic institutions and the innovation ecosystem. Their industries therefore invest quite a lot in research and development.



Here in Uganda, it is quite different. You don't have corporate companies investing heavily in research and development. I spoke to someone at a corporate and he told me "I don't really have an incentive to invest in research and innovation because I am taxed to the bone. Even if I were to set aside a research fund, the taxation body will come for me" So the incentives for industrial research do not exist. If, for example, there was a tax rebate, to say, "if you invest such and such value into research, that will be taken out of your taxable income." I am pretty sure companies would want to do it as part of their corporate social responsibility.

Investor partnerships

Our findings revealed a disconnect between investors and hubs. Many investors we spoke to described their relationship with hubs as being limited to mentoring or investing in some of the startups participating in hubs programmes. However, there was a clear lack of deeper partnerships around building a stronger pipeline of startups and sharing the associated costs and returns on these efforts. A number of investors pointed to the fact that many hubs are not commercial entities and are therefore more focused on creating impact through their grant-based programmes. The implication here is that hubs do not have 'skin in the game' and are therefore not incentivized to identify and nurture startups that can deliver the highest returns for investors. Indeed, only 13% of the hubs we surveyed said they were investing and taking equity stake in some of the startups that they support.

One investor in Uganda described some of the challenges they are facing in trying to create more commercial partnerships with hubs around sourcing for deal flow:

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"The way that we have structured our fund is that we want to work with all the hubs and offer them a success fee if we raise capital for the startups that they refer to us. We also offer them an opportunity to subscribe for shares in this fund so that when we get upside, they can also benefit. However, so far many of them [hubs] are hesitant. It's difficult even to get a Memorandum of Understanding in place for deal flow. I think this is because many hubs are lacking in their knowledge of investments and how they work."

Hub to hub partnerships

Many hub leaders we spoke to recognised the need for collaborating with other hubs. It was noted for example that hubs could have a stronger influence on government policies and provide more holistic support to startups by working together. However, we found that because as previously discussed many hubs are largely dependent on grants, competition for funding opportunities is affecting joint efforts and collaboration. One hub leader in Uganda noted:



Right now, there's a lot of competition in terms of who's going to win this or that funding or project. I think it would be better to bring us together at one table and understand the niche markets that each hub serves so we can have that conversation and leverage each other's strengths.

1.3 Recommendations for capacity building and strengthening African DIHs

Earlier on, we looked at the vital role that DIHs are playing in developing digital Innovation ecosystems in Africa. We also discussed some of the challenges they continue to face that are limiting their impact. In this section we outline our recommendations for strengthening and building the capacity of African DIHs to play their role more effectively.

Provide funding that supports hubs sustainability and long-term impact

As much as hubs need diversified and sustainable revenue streams, there is recognition that donor funding and grants will continue to play an important role in enabling hubs to do their work. This is because entrepreneurs and startups who are the core beneficiaries of hubs often cannot afford to pay market rates for the services that hubs provide. Additionally, hubs are playing ecosystem-building roles such as advocating for policies that are essential to the development of the digital economy. This foundation-building work cannot be commercialised and will therefore need to continue to be supported by donor and philanthropic funds.

However, as discussed above, current funding mechanisms which are primarily short-term and programme-focused, are affecting hubs sustainability and limiting their impact on startups and the ecosystem as a whole. To address these gaps, funding for hubs should support their sustainability and long-term impact. Specifically, more funding needs to be allocated towards covering hubs core costs as well as developing their internal capacity and infrastructure. Additionally, funding for hubs should focus on long-term outcomes and place less emphasis on maximising short-term outputs.

Support hubs to build more diversified and sustainable revenue streams

To build their resilience, hubs need support to become more sustainable by developing alternative revenue streams. As highlighted previously, many hubs are primarily relying on grants to operate leaving them financially vulnerable. For example, during the pandemic, many hubs saw their funding cut and revenues from office space rental and events diminish. Consequently, as noted in section 2, many hubs are now exploring new revenue generating opportunities in a bid to become sustainable. These hubs could benefit from support in testing and piloting new sustainability models. As an investor in Uganda said:

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Most hubs are run more like charities or NGOs. They need to be more commercial. It would be helpful to train them to be more commercially astute. For example, they could start asking for revenue share from startups that they support. In that way, they can become more sustainable.

It is worth noting however that one potential risk to hubs diversifying their activities is that it could detract hubs' attention from serving entrepreneurs and startups which many of them see as their core role within the ecosystem. There is therefore a need to explore sustainability models for hubs that complement and build on rather than take away from their mission.

Box 1 provides a case study of HapaSpace and demonstrates how hubs could potentially develop commercially viable entities that not only help to sustain their activities, but also complement and contribute to the work that hubs are doing (see Box 1).

During the COVID lockdown, it got to a point where we realised that we would only be able to pay our staff for three months before we would run out of money and have to let them go. But at that time, because our parent company HapaWeb is a cloud service company and during COVID more companies were now moving to cloud services, HapaWeb needed some support. And so instead of hiring other people, they outsourced the business to us. And that was the only way we were able to continue to pay our staff. In many cases HapaWeb has acquired consultancy services on our behalf and then we use some of our disposable time at the hub to execute them. And that keeps financing us. And of course, HapaWeb also uses our space, and they pay us for that. So, in fact, I think that one of the ways that can help hubs to survive is to be able to create multiple streams of consultancy services, beyond the support that they give to the startups. Interestingly sometimes we have even had consultancy services projects, where the startups within the HapaSpace community have been able to execute them and also get paid. So, in the long run it is not only helpful for the survival of HapaSpace alone, but also our small ecosystem

Box 1: How a sustainable business model helped HapaSpace Ghana survive the COVID-19 pandemic

Build hubs capacity in key areas of business development, investment facilitation and fundraising

Support for African DIHs should focus on strengthening their internal capacity and skills. Addressing these gaps is especially crucial in a context where hubs do not have enough resources to invest in their internal capacity and are in many cases newly established.

In particular, we identified business development, investment facilitation and fundraising as key areas where many hubs have capacity gaps. Specifically, hubs need support developing internal expertise on how to take new products to market such as product development, market research and user testing as well as in key aspects for growing and scaling businesses such as finance and strategy. Equally, capacity around facilitating investments, for example being able to take equity and invest in funds, is crucial for developing the long-term sustainability of hubs. In addition, capacity in fundraising is key because as previously noted, donor funds will continue to play an important role in supporting the work that hubs do. The AfriLabs Capacity Building Programme (ACBP) run by AfriLabs, a pan-African network for digital innovation hubs, provides a useful case study as an approach for bridging skills gaps for hubs. The initiative offers training for hub managers in areas such as business development and investment management through a series of quarterly virtual webinars and physical workshops in various African cities[1].

Enable standardisation of support provided by hubs

Standardisation of hub support

This was highlighted as one of the keyways that could help foster stronger working relationships between hubs and governments. Building capacity in this aspect for example by training hubs to deliver a standardised enterprise support curriculum would be beneficial for enabling hubs to become well positioned to work with governments. The work that the National Entrepreneurship & Innovation Programme (NEIP) is doing to drive cooperation and enable a uniform quality of support is provided by hubs across Ghana provides a useful case study (see Box 2,3).

When we came in in 2017, we realised that there was no coordination within the ecosystem. So, what we did was to bring the various actors in the ecosystem together, including private incubation hubs and accelerators.

Box 2a: How NEIP is building the capacity of hubs in Ghana

[1] AfriLabs, 'Needs Assessment Report'



Our strategy for incubating businesses and building capacity is to rely heavily on accelerators and incubators to do this for the government because the government itself cannot provide this training. So, we need to leverage these actors. As a result of our activities, the Hub Network was formed by the private sector, because we were engaging with them and providing government funding to run training programmes on our behalf. Through this approach, in the last four years, we have been able to train close to 80,000 businesses and entrepreneurs across the Ghana in partnership with innovation hubs and accelerators. We are now embarking on a four-year project to strengthen the capacity of hubs in partnership with the World Bank under the Ghana Economic Transformation Programme. Our goal is to partner with the various private actors and ensure that there is some form of benchmarking for incubation hubs. So that it will be possible to categorize entrepreneurial training institutions. For example, identifying a set of criteria that incubation hubs and co-working spaces need to meet. That way we can have a uniform curriculum that will be run by all the hubs. So that if you are an entrepreneur in the northern or southern part of Ghana, you can go to any incubation hub and you are sure to get the same standard of training.

Franklin Owusu-Karikari, Director of Business Support, National Entrepreneurship & Innovation Programme

Box 2b: How NEIP is building the capacity of hubs in Ghana

Build evidence and data to support better policy making

As noted earlier, one of the challenges that hubs face in effectively engaging with governments is the lack of data and evidence to drive the policy agenda.

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Support in this area could include sharing learnings of policies that have worked successfully to drive innovation in Europe for example technology investment tax incentives; facilitating joint information gathering on the economic contributions of the digital economy and hubs; as well as providing expertise in drafting policy recommendations and supporting dissemination of learnings from the data gathered. As an example, one representative from Startup Uganda elaborated on how the hub network is employing a more data-driven approach to strengthen their policy advocacy efforts:



...there is a need as an ecosystem to not only drive these conversations with the government in a joint voice, but also to present clear findings and research, factual proof that can support the demands for better policies. In this regard, startup Uganda is planning to carry out research, to provide evidence to support the policy recommendations that we are pushing for.

Support and strengthen hub networks

Hub networks such as Ghana Hubs Network, Startup Uganda, Tanzania Startup Association and Innovation Support Network Nigeria are playing a crucial role in bringing hubs together and facilitating joint initiatives including carrying out research and policy advocacy. However, many of these networks are newly established and are led by busy hub leaders who have other pressing priorities running their own hubs. Supporting these networks for example through the provision of technical assistance and financial support can help to strengthen their role and create greater impact.

A good example of how this could be done is the support that the German Corporation for International Cooperation (GIZ) is doing by funding a dedicated technical advisor to support the Ghana Hubs Network (see Box 4,5).

Ghana Hubs Network is the umbrella body for innovation hubs in Ghana. It currently has about 40 members and these members are individual hubs that are located in various districts and regions across the country.

Box 3a: How GIZ supported the development of Ghana Hubs Network



My role as a technical advisor is to support the network. The network is governed by a board in terms of its legal and administrative structure. This board has a rotating chair which was initially one year and is currently two years. The board members are all either hub founders or managers. So, on a daily basis, they are also running their own hubs and initially there was a struggle when it came to meeting and really focusing on the activities of the network. This highlighted that there was a need to have someone who could dedicate time to steering the activities of the network. So, I came in as a technical advisor under an agreement between the Ghana

Hubs Network, and GIZ, MakeIT Africa project. My role is to

understand where the network wants to go in terms of its

strategy and then provide technical support. For example, when the network was being formed, we had to develop the team, the organisational structure, and think about how to

develop programmes that will be of value to the members.

Box 3b: How GIZ supported the development of Ghana Hubs Network

Enable partnerships between hubs and corporates

As highlighted previously, corporate partnerships can add value to the support that hubs provide to startups by providing infrastructure, sector expertise and access to markets. However, challenges such as a lack of incentives for corporates to invest in innovation makes it difficult for hubs to attract corporate partners. Support to educate and facilitate investment into the digital ecosystem by corporate actors would help to catalyse relationships with hubs. One example of this is the work being done by the Catalyst Fund through the Circle of Corporate Innovators. Their programme brings together diverse corporate actors including banks, telecommunication companies and FMCGs to support startups. The initiative provides corporates with access to data, de-risked investment opportunities and a knowledge sharing platform to deepen their understanding and engagement with the digital innovation landscape[2].

Support hubs to invest in startups and develop commercially viable relationships with investors

Hubs are working to support the development of startups but are often not able to reap any benefits when these startups become successful. Supporting hubs to be able to take an equity stake in startups and commercialise their investment matching services will not only contribute to the long-term sustainability of hubs but also foster deeper relationships with investors. In addition, this will incentivise hubs to identify and nurture high potential startups. Facilitating collaboration between hubs and investors, as is being done by Afrilabs and Africa Business Angels Network[3] through their Africa Catalyst initiative, is a promising first step. The programme provides co-investment grants to encourage private investment into startups that are sourced through their hubs network. To strengthen this collaboration, a next step could be to enable hubs to co-invest in these deals.

Provide resources and build capacity for genderresponsive programming

Hubs are running programmes to support women's integration into the digital economy, however many of them still face challenges in supporting women due to wider socio-cultural factors. Addressing these systemic barriers for women necessitates gaining a deeper understanding of the contextual factors driving them and designing gender-responsive solutions. These efforts require specialised gender expertise and resources which many hubs lack. Therefore, to enable hubs to more effectively support women's digital inclusion, hubs should be provided with resources to carry out this deeper work and provided with training in gender-responsive research and programme design.



In this report, we highlight the central role that DIHs play in the development of innovation ecosystems across Sub Saharan Africa. Unique to the African context, we found that DIHs in the region take on extra roles which, in other contexts, are usually divided between many other actors, for example, universities for upskilling, think tanks for policy and advocacy, mission driven NGOs for gender and youth empowerment.

Despite their crucial role however, our research showed that current funding mechanisms do not support hubs in a way that enables them to fulfil their role sustainably. Given that DIHs are the de facto innovation ecosystem builders in the cities and countries they operate, we argue that they should enjoy funding that enables them to effectively carry out their role and not be limited to implementing short-term programs alone.

Furthermore, we encourage policymakers, funders, investors, innovators and sustainable development practitioners to recognize DIHs unique contribution to innovation ecosystem growth and find ways to support and collaborate with them.

We also call for these actors to think more strategically about how to continue to develop local innovation ecosystems in a way that ensures their sustainable growth. For example, by introducing innovative funding mechanisms such as catalytic capital, or developing new ways to work with government and municipalities to develop effective policies.

We believe that African DIHs, given their unique position within local ecosystems and continued proliferation in the face of many challenges, can provide immense learning opportunities for the rest of the world about how to support innovation, particularly in low-resource environments. We therefore encourage further research into the operations of African DIHs and how their model can benefit other DIHs and innovation ecosystem builders in other regions.





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AfriLabs. 'Needs Assessment Report', 2020.

Catalyst. 'Catalyst'. Catalyst, 2021. https://africa-catalyst.com/.

Sokolowski, Thea. 'Catalyst Fund Announces Circle of Corporate Innovators'. BFA Global (blog), 15 June 2021. https://bfaglobal.com/catalyst-fund/insights/catalyst-fund-announces-circle-of-corporate-innovators/.

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