USE OF DIGITAL TOOLS BY THE WALES AFRICA COMMUNITY

Needs Assessment & Recommendations to Optimise Their Use

ABSTRACT

The Covid-19 pandemic has highlighted and accentuated the need for Wales-based international solidarity groups to make use of emerging technologies when working with partners overseas. Hub Cymru Africa commissioned this research to facilitate best use of digital tools within the community. This paper identifies good practices as well as opportunities and challenges for groups and funders alike.

Julian Rosser on behalf of Hub Cymru Africa

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Foreword by the Head of Partnership

The value of digital tools to create communities across nations, organise and work towards a common goal has never been more starkly demonstrated than during 2020. The Covid-19 global pandemic and the Black Lives Matter movement have created opportunities for us to reflect on what we do and why, and accelerate change. Through adaption we can work towards climate justice and more power can be ceded to partners.

Small organisations, diaspora and NHS Health Links are no longer travelling to visit their partners and families across Africa, but instead have pivoted to continue much of their work through the lens of their smart phone, various online teaching platforms and messaging applications. Their capacity for change, adaption and the ability to work together and stand in partnership and solidarity has been remarkable. While the pandemic has been devastating, we can only hope that some of these positives are embedded into future practice.

Hub Cymru Africa commissioned this report to assist the digital transition within Wales' international development community and to assess what tools were in use here and by our partners in Africa and across the UK. The aim is to understand both the opportunities and the challenges of this new, digital way of working but also to identify future opportunities for shared activities and new ways to work together.

I'd like to thank everyone who has participated in surveys, workshops and interviews, and I hope you can see the value of your willingness to share and contribute to learning within the sector reflected in these pages. Particular thanks to Julian Rosser who undertook this work on our behalf, and Hannah Sheppard in the Hub Cymru Africa team, who has co-ordinated this work from beginning to end.

This report contains some pertinent recommendations for funders and organisations in the way we work with our partners. There is huge capacity for small organisations to make better use of free technology in their work with partners and Hub Cymru Africa looks forward to working with you on that endeavour.

Claire O'Shea
Head of Partnership

Report by Julian Rosser

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Hub Cymru Africa

Hub Cymru Africa represents the international solidarity sector in Wales. Through mentoring, training, events and communications, we support the international solidarity sector in Wales to increase its capacity and effectiveness.

We are a partnership working for the Wales and Africa community, bringing together the work of the Wales and Africa Health Links Network, the Sub-Saharan Advisory Panel and Fair Trade Wales, based at the Welsh Centre for International Affairs.

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Use of digital tools by the Wales Africa Community

Needs Assessment and Recommendations to Optimise Their Use

Introduction

The Covid-19 pandemic has highlighted and accentuated the need for Wales-based international solidarity groups to make use of emerging digital technologies when working with partners overseas. Hub Cymru Africa is keen to support groups in Wales to make the best use of digital tools and is planning new project work to do this. This needs assessment is based on desk research, an online survey of 37 stakeholders and interviews with 26, plus two online workshops held in November 2020, attended by 18 stakeholders.

Parameters

By digital technologies we mean electronic tools, systems, devices and resources that generate, store or process data. We have included everything that might be done by Welsh organisations and their partners including the use of computers and mobile phones to deliver project work, manage projects and organisations, store and process information, communicate between partners, and with other people and groups.

By the Wales International Development Sector we mean organisations based in Wales, or with operational bases in Wales, which fund or manage work in developing countries in support of the United Nations Sustainable Development Goals. These could be charities with significant budgets and staff working in many countries or smaller, volunteer-led groups which support work in one village. Though much of this work is done by voluntary sector organisations, we also include public and private sector organisations which are important parts of the community. While the main focus of this research has been on Africa, there are plenty of groups in Wales who have links with developing countries in other continents. We hope that this work will also have relevance to them.

The online survey

Survey Responses

- 37 responses
- 13 from Africa
- 23 from Wales

Organisations working on… (nearly all questions were 'tick all that apply' so few add up to 100)

- 65% Health
- 59% Education
- 35% Livelihoods
- 32% Climate Change and Environment

Respondents in or linked with:

- Cameroon
- Democratic Republic of Congo
- Ethiopia
- Ghana
- Kenya
- Lesotho
- Liberia
- Malawi
- Nigeria
- Rwanda
- Senegal
- Sierra Leone
- Somaliland
- South Africa
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Pandemic Impacts

- 97% of survey respondents said their work had been disrupted by the Covid-19 pandemic
- 81% have employed digital technology to help overcome these disruptions
- 73% would benefit from additional support to employ new digital tools

What do groups need new digital tools for?

Which areas of work do you think new digital tools may help with?

62% to deliver training
62% to gather information
57% to discuss plans in groups
51% to share and collaborate on documents
51% to share photos and videos
49% to deliver specific project activity

46% to communicate externally
43% to track finances
43% to communicate with stakeholders
43% for communications between two people
38% to log outputs and outcomes

What has worked well for you in responding to the pandemic?

WhatsApp has been an important part of communications between Wales Africa partners for several years and usage of the app has increased during the pandemic. Use of Zoom has increased massively from a very low level to being the most referenced digital tool, being used for one to one communication, meetings and training events with high, but not universal, success. Respondents also report continuing to make use of email, telephone calls, photo and video sharing.

What is their current use in the sector?

What types of digital tools do you currently use in your project work?

94% email
76% SMS/WhatsApp
73% video calls
56% social media
43% online document storage and sharing
24% apps for specific project activity
16% tools for measuring change
8% training platforms

What do you use digital tools for?

89% sharing photos and video
84% for comms between two people
84% to gather information
78% to discuss plans in groups
62% to share and collaborate on documents
54% to communicate externally
38% to deliver specific project activity
38% to consult with stakeholders
35% to deliver training
32% to log outputs and outcomes
27% to track finances

Analysis: The gap between actual and potential use of digital tools

The sector in Wales is diverse. It includes some organisations which are making full and innovative use of digital tools and many which are just beginning to explore the potential of technology to deliver their work. For most of the former, there is little gap between their potential and actual use of digital tools. As organisations become smaller and more poorly resourced, effective use of digital tools becomes patchy, inconsistent and, in a small number of cases, risks doing more harm than good (as highlighted on page 10). There are also many organisations making good use of digital technology who could be doing even better with some expert support.

Barriers

What are the main barriers to optimum uptake of digital tools by Welsh groups and their partners?

Barriers in Wales

- Lack of expertise and prioritisation in small organisations – many organisations in Wales have fewer than five volunteers undertaking almost all of their activities in Wales in a few hours a week. Lacking time to dedicate to innovation or learning, these groups can be slow to adopt new technology.
- Limited awareness of available tools – quite a number of small groups are unaware of simple, free tools which could support them in their work.
- Lack of money for licenses for online platforms and apps – several groups complained that while digital tools existed which could be used in their work, they cost too much.

Barriers in Africa

- Availability of data – in many communities, particularly in rural areas, it is not possible to connect to the internet. The picture is diverse across Africa. Some countries have excellent mobile coverage. Uganda, Namibia and Rwanda have a higher percentage[1] of their populations covered than the UK. Much of this coverage is 2G and 3G – though the industry predicts that connections on 4G will rise from 9% in 2019 to 27% by 2025 across Sub Saharan Africa[2]. 13 African countries have such limited mobile signal that 90% or less of their population has signal available[3].
- Cost of data – when available, data can be very expensive, making it impractical for some projects to rely on participants using the internet. Africa has some of the cheapest data costs in the world and some of the most expensive. 1GB of data costs

[1] Global Economy, ***Mobile network coverage - Country rankings*** (2016), https://www.theglobaleconomy.com/rankings/Mobile_network_coverage/ (Accessed Nov 2020)
[2] GSMA, ***The Mobile Economy Sub-Saharan Africa 2020*** (2020), https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/09/GSMA_MobileEconomy2020_SSA_Eng.pdf, (Accessed Dec 2020)
[3] Global Economy (2016), (Accessed Dec 2020)

just $0.50 in Somalia, $0.73 in Tanzania, $1.62 in Uganda, $3.25 in Liberia, $4.78 in Namibia, $8.81 in Madagascar, $13.87 in Botswana. The average cost in the UK is $1.39[4].

- Lack of appropriate hardware – mobile phone usage is widespread across Africa but the age and functionality of equipment varies widely. A survey of six Sub Saharan African countries in 2017 found that, while 75-91% of adults had a mobile phone, only 13-51% had a smart phone with the figure typically being around 30%[5].
- Lack of expertise in small organisations and community – as in Wales, small organisations in Africa often lack expertise in the use of digital tools. Internet use in Sub Saharan Africa was around 20% in 2016[6], though varies widely across the continent. Around 12% of the population of Sierra Leone uses the internet, 22% in Uganda and 54% in South Africa.
- Cost or availability of electricity - a fundamental problem for many areas, particularly rural communities. In 2018 48% of people in Sub Saharan Africa had access to electricity. This had increased rapidly from just 38% in 2014 but the picture is mixed with just 18% of people having access to electricity in Malawi, 26% in Sierra Leone, 41% in Zimbabwe, 75% in Kenya and 93% in Gabon[7].
- Government control or taxation of internet. Several interviewees remarked that government control, disruption or taxation of the internet made things difficult. A report by the Collaboration on International ICT Policy for East and Southern Africa described the period 2016-2019 as a "golden era" of network disruptions in Africa during which at least 22 countries experienced a government-ordered network disruption, with popular social media sites such as Facebook and Twitter being the main target[8].

What would help?

Survey Responses:

- 81% funding to apply solutions in Africa
- 61% training on how to use digital tools
- 48% guides and signposting to available resources

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[4] Cable.co.uk, ***Worldwide mobile data pricing: The cost of 1GB of mobile data in 228 countries*** (2020), https://www.cable.co.uk/mobiles/worldwide-data-pricing/#regions (Accessed Dec 2020)

[5] ***Pew Research Center, Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa (***2018), https://www.pewresearch.org/global/2018/10/09/majorities-in-sub-saharan-africa-own-mobile-phones-but-smartphone-adoption-is-modest/ (Accessed Dec 2020)

[6] Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina, Our World in Data, ***Internet*** (2015), https://ourworldindata.org/internet (Accessed Dec 2020)

[7] The World Bank, ***Access to Electricity***, https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ZG (Accessed Dec 2020)

[8] Collaboration on International ICT Policy for East and Southern Africa, ***State of Internet Freedom in Africa*** 2019 (2019), https://cipesa.org/fifafrica/2019-state-of-internet-freedom-in-africa-report-launched-african-countries-are-broadening-control-over-the-internet/ (Accessed Dec 2020)

- 45% funding to apply new tools in Wales
- 32% funding to develop a new tool for specific use

It's unsurprising that most groups prioritise funding for delivery of project work in Africa. There is, though, a significant appetite also for training, guides and signposting. Interviewees stressed a desire to network more to share learning and experiences.

Account of assets

Which current assets within Wales provide the most scope for development?

- Wales Africa groups with experience to share – the main asset to the sector is the organisations already using digital technology, most of whom are enthusiastic to share their experiences and help others. In particular I would mention those listed in the notable successes section of this report but that is hardly exhaustive. More networking between groups will help mutual support and Hub Cymru Africa maintain a good overview of activities in the sector.
- Learning@Wales - a national E-learning platform managed by the Digital Learning Wales Team. The Digital Learning Wales team is also responsible for the development and management of national NHS E-learning courses for Wales. This platform, which was initially developed for the public sector in Wales, is being made available for use by voluntary organisations.
- Universities – there is a wealth of knowledge and experience in Welsh universities. The University of South Wales helped developed the technical specs for the Agri Tech Talk Africa App for monitoring farming yields.
- Hub Cymru Africa – supports the international development community in Wales with training, advice, mentoring and access to information and networking opportunities. Groups starting new projects would benefit from early conversations with the HCA team who will likely have insight and be able to suggest other routes to access support.
- Funding organisations – while there are few large funders in Wales, organisations like the Waterloo and Moondance Foundations, as well as WVCA, provide significant funding for international development projects.
- Welsh Government – the Welsh Government supports international development through its Wales and Africa programme and its broader international strategy.
- NHS Institutions in Wales – most NHS organisations in Wales have an active link with partners in Sub Saharan Africa. There is scope for significant development of several of these links to incorporate better digital tools.

Outside Wales, it's worth noting that the Tropical Health Education Trust (THET) is developing an online learning platform which could be of use to groups involved in health projects.

SWOT analysis

What are the strengths and weaknesses of the sector in Wales?

Strengths

- Diversity
- Agility
- Sector keen on sharing information and good practice
- Some leaders in digital development
- Strong relationships with African partners

Weaknesses

- Low technical expertise
- Low level of financial resources
- Small organisations can struggle to build expert capacity
- Lack of dedicated expert support
- Low capacity to deal with equality of access issues in Africa

Opportunities

- Comparatively low cost of effective interventions in many countries
- Decreasing costs and increasing availability of data across large parts of Africa
- Increased availability of cost-effective apps to support work
- More interest in digital solutions due to the pandemic
- Potential to make sector less carbon intensive by reducing travel

Threats

- Diversion of funding into Covid response projects
- In-country suppression of online activities
- Conflict of Chinese and American systems and software risks products becoming ineffective

Risks

As with all new technologies, there are risks which come from the deployment of new digital tools. These range from risks to project effectiveness to actual harm being suffered.

- Inappropriate use of technology risks entrenching inequality and disadvantage faced by excluded groups including women, disabled people and ethnic/linguistic marginalised communities. The mobile gender gap is pronounced in Sub Saharan Africa with 69% women and 82% of men having a mobile phone in 2019 and 29% of women to 49% of men having access to mobile internet[9].

[9] GSMA, ***The Mobile Gender Gap: Africa*** (2019), https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/The-Mobile-Gender-Gap-in-Africa.pdf (Accessed Dec 2020)

- Statistics on use of digital technology by people with disabilities in Africa are sparse but it is clear that people with disabilities have less access to digital tools and the internet. It's worth considering the *5 As of technology access*[10] to understand some of the challenges faced by excluded people and how to address them.
- Resources can get dragged into costly projects which are not sustainable or incur unexpected long-term support costs. New digital tools can be expensive and their development can be time-consuming and frustrating. Interviewees gave examples of problems including developers using operating systems which became unsupported by the companies that created them, undermining the effectiveness of the product, unexpected charges for numbers of users which made scaling up impossible, costs for data storage becoming unsustainable. There could be significant opportunity costs in investing time in new complex bespoke tools when use of existing systems may do the job better. It is worth engaging with the *Principles for Digital Development* when designing new digital tools or implementing new projects[11].
- Organisations risk investing in systems which go out of date too quickly. The digital world is fast moving and new tools may rely on components which become unsupported by the software companies that created them.
- Too many organisations risk wasting resources experimenting with the same thing. Many organisations in Wales work on similar projects to each other and to many other groups around the world. More collaboration and communication between groups would allow for more cooperation in the development and uptake of new tools.
- Export of inappropriate technology to Africa may leads to waste problems. Many schemes exist to export computer equipment to Africa as a way of boosting digital engagement. If done well these schemes can be of great benefit. There is a risk, though, that export of equipment leads to increasing problems of e-waste. The UN Environment Programme reports that *"E-waste management has become a major challenge facing many African countries… Open dumping, burning and landfilling are the predominant disposal methods used in Africa, with potential serious implications for human health and the environment. Heavy metals and other hazardous substances found in electronics contaminate groundwater and pose other environmental and public health risks."*[12]
- Use of technology may lead to problems with data protection, online abuse and privacy. Use of technology without appropriate safeguards may lead to people's personal and sensitive information being shared without their consent or knowledge. Google stores huge amounts of content, including emails and responses

[10] Wayan Vota, ***The Digital Divide is Not Binary: The Five A's of Technology Access*** (2019), https://www.ictworks.org/digital-divide-technology-access/#.X9UGecj7TIV (Accessed Dec 2020)
[11] Principles for Digital Development, https://digitalprinciples.org/ (Accessed Dec 2020)
[12] United Nations ***Environment Programme, Turning e-waste into gold: the untapped potential of African landfills*** (2018), https://www.unenvironment.org/news-and-stories/story/turning-e-waste-gold-untapped-potential-african-landfills (Accessed Dec 2020)

to forms, which could be accessed in response to requests from governments[13]. A bigger risk is that user error or deliberate misuse leads to data being used inappropriately.

- Opening up access to online spaces can make people vulnerable to online harassment and abuse. In *Alternate Realities Alternate Internets* the authors conclude that, for women "the internet, once viewed as a utopia for equality, is proving to be the embodiment of old systems of oppression and violence"[14]. In their large study across five African countries they found that 28% of women interviewed had experienced some form of online violence.

Main lessons

There is huge capacity for small groups to make better use of free technology.

App development is difficult and costly and should be approached with caution. Groups in Wales have had mixed experience of developing their own apps. Some have managed to do so successfully with very limited budget. Others have spent significant time and money to not achieve the results they are looking for. Reasons for this are diverse but include unexpected costs to add extra users and low take-up of tools by intended users. It is important for groups to get expert support when approaching such projects. There are industry standardised templates in existence to help communicate the ambition to the developers, however these are not currently in use within the sector and the level of assumed knowledge within them could exclude non-experts.

Understanding of inclusion and risk should be built into all stages. Consideration of difficult and challenging issues should not be saved for intermediate and advanced training. They should be communicated and understood at all stages of any organisation's digital journey.

Small groups need basic signposting and training. Simple, curated resources and training sessions could make a significant difference to the effectiveness of many of the small groups working in Wales at the moment.

More advanced groups need more expert support. As groups develop their capacity and experiment more with applying digital tools they need increasingly expert advice to explore which app or platform will be best for their needs, or to develop new tools themselves. Some of this can be achieved by networking and peer support but dedicated expert capacity could help move more medium sized organisations in Wales to become high performing in their use of IT.

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[13] Wayan Vota, ***Which African Governments Spy on Technology Users the Most?*** (2017), https://www.ictworks.org/which-african-governments-spy-on-technology-users-the-most/#.X9VMENj7TIU (Accessed Dec 2020)

[14] Neema Iyer, Bonnita Nyamwire and Sandra Nabulega, ***Alternate Realities, Alternate Internets: African Feminist Research for a Feminist Internet*** (2020), https://ogbv.pollicy.org/report.pdf (Accessed Dec 2020)

Bigger groups would benefit from support with ethical issues. Larger groups do not need so much technical support but would benefit from a forum to share skills, network and discuss issues of common concern.

Model of support to optimise use of digital tools by Welsh groups and their partners

<table>
<tr><td>Organisation status</td><td colspan="4">Starting digital journey</td><td>Experienced and expert</td></tr>
<tr><td></td><td colspan="5">→</td></tr>
<tr><td rowspan="2">Support needed</td><td>Simple guides, signposting, training</td><td>More support with inclusion and ethical issues</td><td>Expert support with technical issues</td><td>Support to develop new bespoke tools</td><td>Forum to share skills, network and discuss issues</td></tr>
<tr><td colspan="5">Funding for implementation of projects</td></tr>
</table>

Notable successes

Niokolo Network – using video to communicate with community groups in Senegal

Niokolo Network[15] is a small Cardiff-based charity which works in partnership with a Senegalese Community Based Organisation called Kamben, and their sister NGO Kamben Film Group. They have made educational films in local languages for more than four years – organising community screenings on topics including bush fires, birth registration and forest conservation. The Covid-19 pandemic has impacted the groups' ability to make films and to run screenings for large groups. Instead they have worked together to produce shorter cartoons, which can be produced in a socially distanced way. These are distributed via WhatsApp groups to a gender-balanced cohort of village volunteers who distribute them further.

Dolen Cymru – using WhatsApp groups of teachers and experts in Lesotho

Dolen Cymru[16] is making use of WhatsApp groups to support teachers in Lesotho and work with experts to develop teaching materials. Through the teachers' group, education professionals can support each other and seek advice. The expert group uses WhatsApp for mutual support in developing materials and resources for school use. Dolen Cymru also co-ordinates a WhatsApp group for development education professionals in Wales to network and share information.

Interburns – online learning and app development

Swansea-based Interburns[17] was set up in 2006 with the aim of transforming the way burn care is delivered in low and middle income countries. From an initial link between burn surgeons in India and the UK, it is now a global organisation with programmes in Bangladesh, Ethiopia, Ghana, India, Malawi, Nepal, the West Bank and many other locations. Historically, Interburns has delivered training courses face to face. Over the past year the group has been working on how to move all of its content online, developing training through Learning Management Systems such as Braincert and delivering sessions over Zoom. The group has also developed a web-based app to assess the suitability of burns care facilities.

Giakonda – installing solar and IT solutions, online and offline in Zambia

Giakonda Solar Schools[18] has been working in Zambia since 2016. The group's core work has been to install solar panels and computer equipment in schools, opening up learning opportunities, particularly in programming. Giakonda uses Raspberry Pi computers[19] to provide cost effective, low energy computing power which can be used online or to access

[15] Niokolo Network, https://www.niokolonetwork.org/ (Accessed Dec 2020)
[16] Dolen Cymru, http://www.waleslesotholink.org/ (Accessed Dec 2020)
[17] Interburns, https://interburns.org/ (Accessed Dec 2020)
[18] Giakonda Solar Schools. https://www.giakonda.org.uk/ (Accessed Dec 2020)
[19] Raspberry Pi Foundation, https://www.raspberrypi.org/ (Accessed Dec 2020)

offline teaching and information packages such as the Rachel Education Package[20]. The group has more recently been implementing low cost solutions to get rural schools access to the internet.

CEMPOP – app development to support farmers in Uganda

Community Enterprise Model for Plant Oil Production[21] (CEMPOP) in Uganda has been supported by Cardiff University and the Welsh Government to develop the cultivation, processing and mint as a cash crop. The group is working with 75 farmers growing mint and supports them with advice. As visiting farms became more difficult thanks to the pandemic the group developed digital methods of support. Using a Uganda-based, volunteer app developer they have started use of an app which allows farmers to register on the scheme, give feedback on how their crops are growing and get advice form agronomists on growing methods and the best harvest time.

United Purpose – Jokalante – to deliver voice-based information in Senegal

Cardiff-based United Purpose[22], formerly known as Concern Universal, is a movement of people and organisations that strive to end poverty and inequality across the globe. For more than 40 years, they have worked with frontline activists, community organisations and individuals to help people gain agency over their own lives. United Purpose established Jokalante[23], a Senegal social enterprise established with a consortium of INGOs. Jokalante uses ICT based tools to deliver and receive information by voice in local languages to rural populations. This has been used to promote access to agriculture technologies, early warning systems for crop failure, climate advice and to gather information from the community. The system has also been used by Niokolo Network (see above).

Agri Tech Talk International – a new app to assess food security

Agri Tech Talk International CIC[24] has developed an app to support crop yield assessments over large areas to evaluate food security. The group, a spin-off from Bangor University, has been working with tools to evaluate agricultural success for many years but they have now made the tools available on an app which can be used by large NGOs, international organisations and governments to assess food risks and evaluate large projects. The development of the app was supported by CEMET[25], based at the University of South Wales, which aims to provide Welsh SMEs with access to funded Research & Development. CEMET helped to design the technical specifications which were then used by a Cardiff-based app developer to design the app.

[20] World Possible, https://store.worldpossible.org/ (Accessed Dec 2020)
[21] Community Enterprise Model for Plant Oil Production, http://cempop.blogspot.com/ (Accessed Dec 2020)
[22] United Purpose, https://united-purpose.org/ (Accessed Dec 2020)
[23] United Purpose, ***Q&A: being a female entrepreneur in Senegal*** (2018), https://united-purpose.org/stories/2018/3/6/qa-being-a-female-entrepreneur-in-senegal (Accessed Dec 2020)
[24] Agri Tech Talk International CIC, http://www.agritechtalk.org/aboutus.html (Accessed Dec 2020)
[25] CEMET, https://www.cemet.wales/ (Accessed Dec 2020)

Recommendations

While this report has been commissioned by Hub Cymru Africa to inform its future project work the recommendations are pertinent to groups in the Wales Africa community themselves, as well as funders, the Welsh Government and public sector bodies keen to work towards a Globally Responsible Wales as required by the Wellbeing of Future Generations Act.

HCA and funders should prioritise actions to support inclusion in digital development including: basic training and information, awareness raising, expert support and support for networking.

HCA should support groups working on addressing more sophisticated areas of concern: data protection, dignity, inclusion and privacy.

Funders, including the Welsh Government, should consider dedicated grant support to promote digital inclusion in development projects. Support for digital projects should be conditional on projects being able to demonstrate that they will address, rather than worsen, inequalities.

HCA should develop and maintain curated signposting online to digital tools for the Wales Africa community.

HCA should develop training webinars, workshops and discussion for Welsh groups and/or their partners.

HCA and funders should consider ways to encourage collaboration between groups in Wales (and outside Wales) working to solve similar problems and develop similar tools.

HCA should investigate developing a project to link technical specialists with Wales Africa groups to support development of new tools and make better use of existing ones.