



List of selected challenges (Part 1)

November 2022

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COVER PAGE

Deliverable D2.2

List of selected challenges (part 1)

Work Package 2: Pooling of challenges and engaging stakeholders

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The IDEA D4D Hub project is funded under the Horizon 2020 Programme. With a duration of 22 months starting in December 2021, it seeks to strengthen the capacity of civil society organisations and academia in Africa to participate in a meaningful dialogue around inclusive digital transformation. It is implemented by 5 partners; betterplace lab, Enabel, Expertise France, GIZ and Smart Africa Secretariat.

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I. Overview

Objectives of WP2

The objective of Work Package (WP) 2 is to pool the challenges that society is facing in digital transformation to tackle them in the process of ICT research and innovation, and to facilitate practical collaborations between key stakeholders of the digital economy and society to boost the development of new strategic partnerships and collaboration for joint digital social innovation.

Specific objectives:

1. To ensure that digital transformation serves the public interest by putting values, needs and general interests of society at the centre of this revolution
2. To ensure that key challenges hindering a human-centred digital transformation (e.g. unequal access to digital opportunities, human rights risks, digital gender gap, etc.) are addressed through multi-stakeholder co-created research and innovation initiatives
3. To facilitate practical collaborations between key stakeholders of the digital economy and society to boost the development of new strategic partnerships and collaboration for joint digital solutions.

The WP is led by Enabel, with the implementing support of betterplace lab (BPL) in the first and last activities. The main output of WP2 is that “Key challenges for human-centric digital transformation in the partner countries have been identified and innovative solutions have been co-created”.

This includes the following tasks:

1. T2.1: Stakeholders Identification: Stakeholders active and relevant in value driven, human centred digital transformation have been identified
2. T2.2: Selection of challenges: Challenges towards a value-driven, needs-based and human-centred digital transformation are selected
3. T2.3: Methodology of the Innovation Days
4. T2.4: Innovation Days: 4 hybrid Innovation Days with AU and EU participants (Morocco, Burkina Faso, Uganda, Moz)
5. T2.5: Monitoring of the Innovation Days

This report is the first of two reports on the challenges identified. The report mainly focuses on Mozambique, where the workshop took place on 12th of July 2022 and the Innovation Days on the 17-19 of October 2022. In addition, a first workshop took place in Burkina Faso with civil society organizations (CSOs) on 28th of September, with a second one scheduled for 2nd of December. The Innovation Days in Burkina Faso will take place in January/February 2023.

The second report on the challenges identified will focus on Morocco, Tunisia and Uganda.

Objectives of T2.2

General objective

To prepare the ground for the innovation days and foster bottom-up engagement, an Open Call will be organised to identify the most pressing ICT/digitalisation challenges in Africa as identified by civil society and academia and/or other digital economy and society stakeholders. The deliverable analyses the challenges identified.

Approach

By building on the results of WP1, the 20 participants of each workshop will be asked to share the key challenges they experienced in their countries in regard to an inclusive digital transformation. In addition, the selection of the challenges will capitalize on the inputs received throughout the various calls and surveys done with the CSOs prior the workshop. These inputs will be used as the basis for formulating the open call that will be used to identify, attract and select the remaining 50 participants (i.e. government, policy makers, private sector, entrepreneurs, digital innovation hubs, etc) from Europe and Africa as well as identifying the topics of the Innovation Days.

The selection of the challenges will be done within the same open call as the one to identify the 50 remaining participants of the Innovation Days. In a dedicated section, the open call will ask the participants to choose the one or two challenges they believe are the most pressing based on the list of challenges identified during the workshop by the CSOs. They will also have the opportunity to add other pressing challenges they think are relevant to address during the Innovation Days. Once the call closes, the most pertinent design challenges for advancing human-centric digital transformation will be selected by the selection committee and become the topics of the Innovation Days.

Please also see Deliverable D2.3 Methodology for the Innovation Days.

II. Main Results

The following section will highlight the challenges that CSOs have identified prior and during the workshop organized by Expertise France with support of Enabel. CSOs were asked to identify a list of numerous challenges they face in regard to a human-centric digital transformation in their country both in society and in the digital economy. Based on the challenges identified, desk research was conducted by Enabel to deepen the topics and challenges as to support the final selection of the challenges for the Innovation Days (based on relevance, urgency, scope).

A) Mozambique

Importance of Digitisation for Civil Society Organisations (CSOs) in Mozambique

In Mozambique, digital technologies are often presented as an important ingredient for achieving inclusive and sustainable economic development. Given the amplifying nature of the digital divide, the number of CSOs operating in the country has gradually increased over the past years. However, many remain in a state of precarity when it comes to offering viable digital services/ products to their audience or when trying to digitalise their own value chain. Of the constraints that civil society organizations face nowadays in their digital transformation, the covid crisis has accelerated the need to digitize (teleworking, remote management of teams, digital communication, e-commerce). Today more opportunities exist in this field, in particular regarding the youth and the green sector.

- Civil society engagement on environmental and climate action is growing but need to be reinforced; the voice of youth should be channeled by creating and supporting youth movements also by supporting the promotion of digital tools and innovative communication to ensure that no one is left behind. Many organizations claim they are working on youth, digitalization and employment, but very few are technically prepared or even specialized in these areas.
- More attention should be paid to including vulnerable or marginalized youth groups into employment initiatives. The specific needs of the media should be considered to enhance freedom of expression: supporting independent and pluralistic media, regulatory framework, access to information and fighting misinformation, promoting digital tools and innovative communication, also through social media.
- Focus should be put towards the development of inclusive youth digital literacy and innovative communication supporting and promoting digital entrepreneurship and business incubators.

According to the participants at the workshop for CSOs organised by the IDEA Project in Maputo on the 12th of July, digitisation means:

FUTURE
INCLUSION

CONNECTION
NEW WORLD ORDER
INNOVATION

Identification of Digitalisation Challenges for CSOs in Mozambique

Level of digitalisation of CSOs in Mozambique

Due to the rapid development of digitalisation partly due to Covid, CSOs had to adapt quite rapidly to the modernization of processes to remain relevant in the market and for their beneficiaries. However, this urgent shift toward new processes has created a digital divide between CSOs that one can describe as the following three levels:

- Level 1 (strong): Digital transformation is understood as the basis for the CSO development and is broad-based. The organization's processes and procedures are all digital, spanning the entire value chain from suppliers, partners to its target audience, all of whom are aware that the organization makes use of technology to deliver its projects. The processes go beyond organizational boundaries to enable collaboration with partners and are supported by smart technology tools that enable agile decision making. Moreover, the organization has equipment, management software and infrastructure.
- Level 2 (medium): Digital transformation is also understood to be a basis for the organization's development, but because of financial or structural reasons, not all processes have been digitized yet. There is both digital and manual information processing at an intermediate level. The CSO may have equipment and use digital tools, but they are always outdated and often not accessible to all.
- Level 3 (low): There is no responsibility for digital transformation within the organization, and there is no formulated vision regarding this issue or defined processes. Often they have only one computer, which is shared by everyone in the organization, and most of the time these organizations find it difficult to grow, because their resources and projects are implemented for a small number of beneficiaries.

On average, most CSOs in Mozambique ranged from level 3 to level 2. CSOs which have an intermediate level show willingness to increase their capacity, so as to better deliver their value proposition and achieve their purpose. Level 3 CSOs show more struggles and difficulties to move to level 2 as the mindset is not always present as well as the investment capacity to digitize.

Challenges faced by CSOs

Access to technology: In many organizations, technical and financial resources are still limited and so they cannot, for example, afford the latest versions of computers, some material is obsolete, access to management software is costly and often out of reach. This results in their

agility and delivery of projects being affected. The most important aspect highlighted by CSOs is the need to guarantee access, as their target audience often do not have a mobile device, a constraint that is even more important in districts, where the level of education of the population is lower. Another important aspect is that the infrastructure (internet network and electricity) in most districts of the country is still non-existent and is one of the factors that slows down local development.

Use of Digital Tools: Organizations look at digital tools as a resource that aims to facilitate communication and access to information, through electronic devices such as computers, tablets and smartphones. There is a great desire to use the various platforms, however, most of them are unknown by the organizations or they have no knowledge of how to use them. Among those cited that the organizations would like to use are: Mailchimp, Kinemaster, Google Drive, One Drive, Dropbox, Websites, API, AVA (Moodle), Google Suite, Ms Office, Cloud Service, LMS, Adobe Suite, WhatsApp Business, Skype, Social Networks - Facebook Ads, Google Ads, Youtube, Instagram.

Digital Literacy: Often, the lack of use in digital tools is due to a lack of knowledge of how to use them. It is therefore needed for CSOs to have access to digital literacy trainings, adequate digital skills both for employees and beneficiaries of programmes, as these skills are necessary for individuals to relate to the digital world and ensure digital inclusion in the access, and usage of digital services/ products.

Digital strategy: Organizations do not have a digital development strategy, even when it comes to accessing funds. Although they are usually asked for anti-corruption and sexual harassment policies, a digital policy or a digital marketing plan for the organisation is never required. Without such a strategy, they don't have a clear vision of what processes they need to digitize. Many CSOs feel that they do not understand the steps and procedures in defining the path to digitisation, they may even digitize processes that are not relevant or efficient for the organization. In Mozambique, a large number of institutions, especially in the regions, do not even have a defined strategy on digitalisation, although they have already thought about the need to invest in digital.

Resistance to Change: Change happens both internally and externally to the organization and ranges from changes in procedures to the implementation of quality programmes, management changes, workforce, etc. In Mozambique the culture of change is quite low making CSOs reluctant to adopt new strategies and processes including digital technologies. The unknown surrounding the access, usage and availability of digital transformation for CSOs in the country is prevented by the fear and uncertainty of what digitalisation brings (assumption of high costs, low governmental support, absence of framework, absence of digital skills, no cybersecurity, scams, etc).

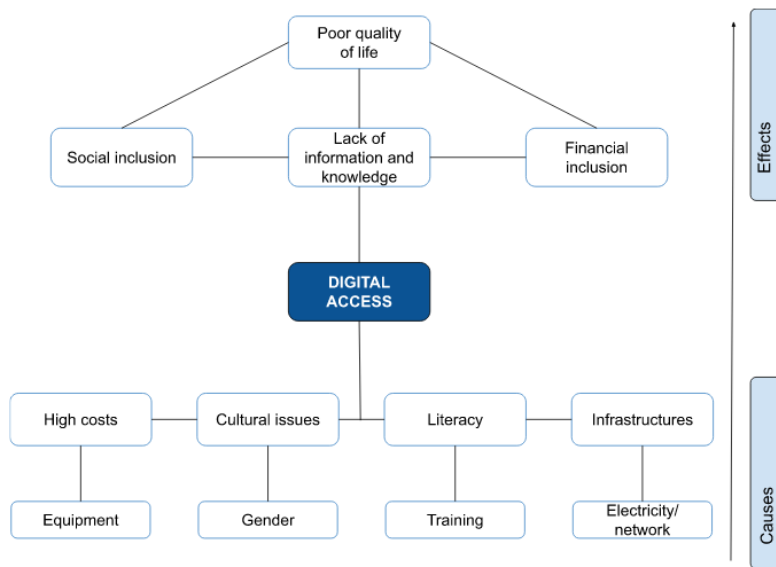
There is a real need to innovate, to take a new direction and follow the national development, one of the participants stressed the lack of conditions in the country for a CSO to be level 1, because it would be very far from meeting the needs of its target audience, the level of evolution

of organizations has to be accompanied with the national capacity, a clear example is the quality of internet offered in the country that leaves most people wanting. The functioning of the interconnection platform of the universities is an example of something that has been long requested by students, so the country has to start taking good steps in public services, although it also faces many challenges.

Digitisation Issues in Mozambique

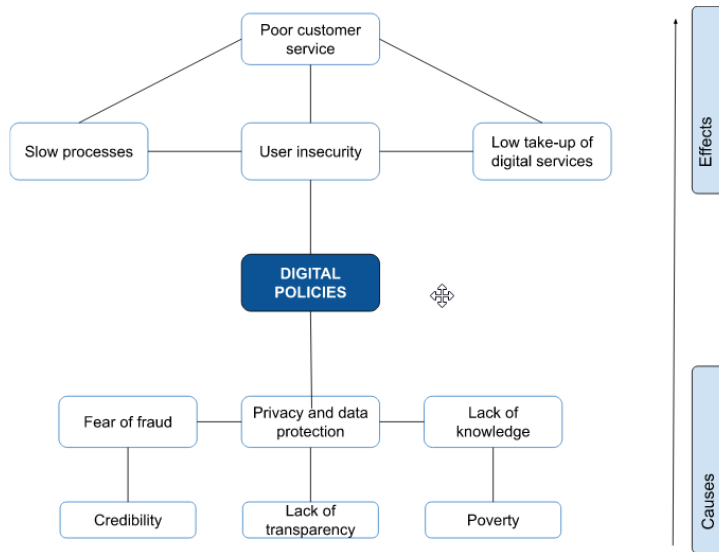
The following trees give an in-depth look into the four key challenges identified by CSOs being digital access, digital education, digital policy and digital inclusion.

- **Digital Access**



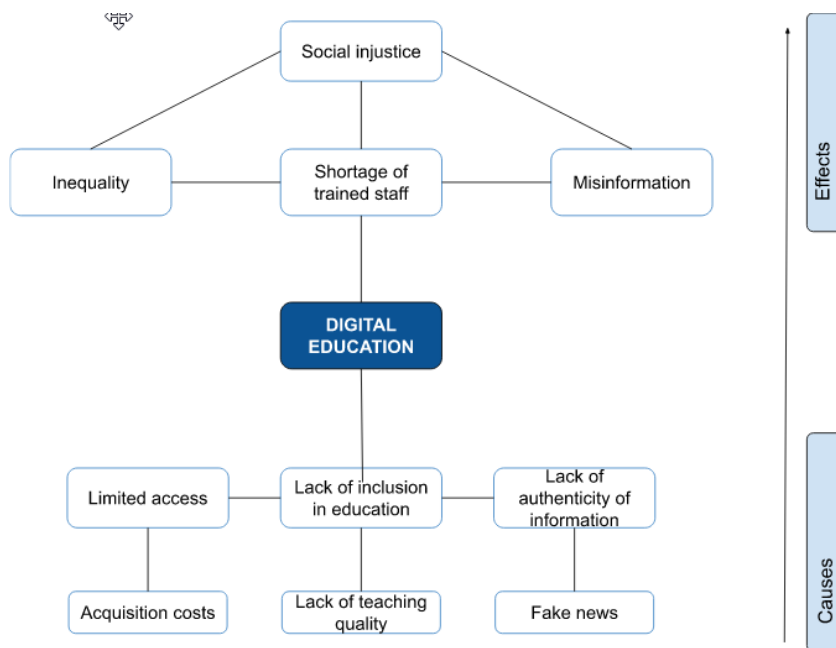
The percentage of people who have internet access has more than doubled from 15 to 32 percent between 2015 to 2021. Despite this impressive achievement, this means that more than two-thirds of Mozambicans still do not have access to the internet and are therefore excluded from the digital world . Among the unconnected, almost three-quarters say they can't afford internet services or internet-connected devices like smartphones and computers. A third of the population live in rural areas without any mobile broadband signal – unable to connect at any price. And a third of mobile phone users lack the skills to use the internet on their devices. These barriers are even starker for the lowest-income families, women, and other vulnerable groups. Digital access is still marked not only by a lack of capacity to acquire technology, but also by women's low access to technologies, a cultural barrier that must be overcome by expanding education.

- **Digital Policies**



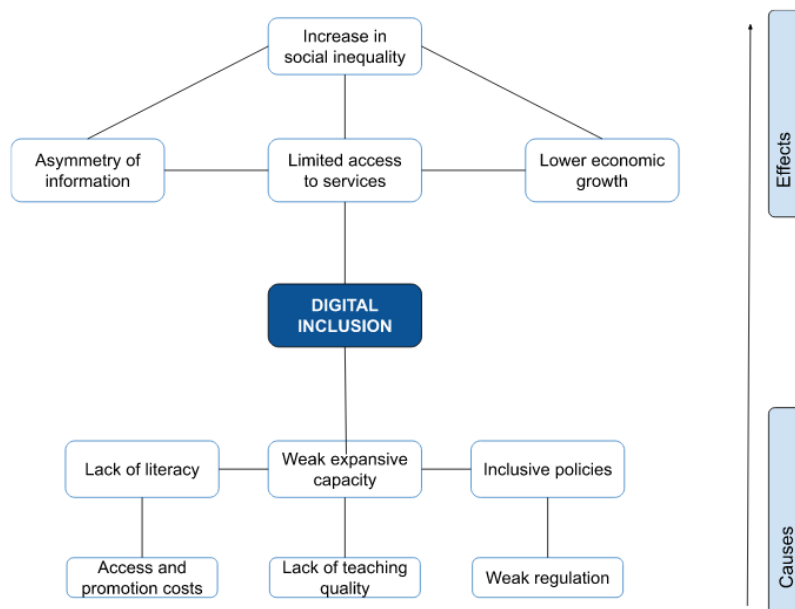
Mozambique has developed an Information Society Policy, which establishes the guidelines for sustainable development, aiming to turn Mozambique into an inclusive and competitive society through the massification of Information and Communication Technologies (ICT), but at the moment most of the CSOs are unaware of these policies and how they can be useful. Most of the applications contain policies that are often ignored by the users and the organizations currently do not have any policies regarding digital content.

- **Digital Education**



One of the challenges in the Mozambican education system is lack of access to educational material. Learners and teachers cannot always afford to purchase books or copies of didactic material or access online learning content, which greatly limits learning opportunities. There has been a lack of investment in the digital education system. For example, the schools located in the cities and urban areas may have computer rooms. However, there is no maintenance which results in an equipment in poor conditions as well as no teachers having the required digital skills to use the equipment and teach one's students to use it. Similarly, for the schools located outside the main cities and in rural areas, the likelihood for a school to have a computer room is close to none as the infrastructure is lacking and the connectivity is non-existent due to electricity shortage. There is also no digital education model or a set of pillars and characteristics that will allow CSOs to define it or work towards it.

- **Digital Inclusion**



The 2019 GSMA Global Gender Gap Report indicated that the quantitative gap between female and male mobile phone owners in Mozambique is the third-largest in the world. Even though mobile phone ownership and internet use have increased among Mozambican women over the last years, there are still persistent gender gaps in terms of digital skills as well as access to digital devices and the Internet. If these inequalities are not addressed, they are likely to become more deeply entrenched and to compound the risk of Mozambican girls and women being left behind in the digital transformation.

At the moment we have not yet managed to democratize technology and make it accessible to as many people as possible. Thus, the quality of life of minorities improves even more slowly. This is one of the great challenges of the country. Social differences remain in society, and it

requires that the OSC have a strong approach to this issue, to make technology, especially the Internet, accessible to as many people as possible while protecting their rights. CSOs believe that if the growth of digital inclusion is slow due to the geographical, social, and cultural characteristics of the country, it is a priority to be pro-active and avoid waiting for governmental initiatives as well as to develop new innovative approaches that can become inclusive models for the digital transformation of the country.

Open Call and selection of challenges

Following the results of the workshop, the four key challenges expressed by CSOs were therefore digital access, digital policy, digital education and digital inclusion. As digital inclusion is an essential topic to all other three topics, it was decided to see digital inclusion (in particular gender and marginalized groups) as a transversal theme to access, education and policy.

As a result, the Open call offered the possibility to applicants to select one of the three categories to work on during the Innovation Days and/ or to suggest any additional digital challenges they may see as urgent in Mozambique:

- Digital Access & Inclusion: cost & affordability, e-waste
- Digital Education: digital skills & literacy, issues such as misinformation and verifying information, data collection and protection
- Digital Policy: digital transformation not given political priority; lack of cyber regulations, digital advocacy; government understanding regarding digital issues faced by CSOs/academia and regarding the opportunities of digitalisation in/ for the country

During the Innovation Days, each participant was put in a specific team, with 5 to 6 other members sharing expertise and experience to the challenge at play and willing to collaborate on the same challenge.

We then had the following repartition:

Topics of the concept note	Number of teams
Digital Policy	3
Digital Education	4
Digital Access & Inclusion	2

B) Burkina Faso

Overview of challenges

Based on the results of the surveys circulated to 36 organizations and which gathered responses from 28 of them, 9 topics were chosen and presented to the participants.

The topics selected were the following:

- 1) Insufficient access of rural populations to a stable and affordable internet connection
- 2) Rigidity of digital policies against internet users in Burkina
- 3) Lack of youth participation in good governance and the defense of freedom of expression
- 4) Insufficient access to public data and lack of relevant digital strategy
- 5) Insufficient awareness of the benefits of digital technology (government)
- 6) Destruction of digital infrastructure through vandalism/terrorism
- 7) Insufficient digital content tailored to local needs
- 8) Lack of state support for private digital initiatives and research
- 9) Lack of awareness of public and personal data protection legislation

Description of the most (3) pressing challenges

Out of those 9 topics, the participants of the workshop were asked to vote for the topics they believed are most relevant and wanted to discuss during this workshop. The following three were selected:

- Insufficient access of rural populations to a stable and affordable internet connection
- Insufficient awareness of the benefits of digital technology (government)
- Insufficient digital content tailored to local needs

The first topic (access of rural populations to a stable and affordable internet connection) was deemed as the most important by the participants, and thus two groups focused on this challenge during the workshop.

Insufficient access of rural populations to a fluid and affordable internet connection

Africa is facing an energy deficit which is an obstacle to its economic development. This is the case in Burkina Faso (19%), Burundi and Chad (11%). These rates of access to electricity are even lower in rural areas, particularly in West Africa, where the national electricity networks serve only 8% of the population on average. There is a great lack in rural areas; in fact, the electrification of cities is not accompanied by that of rural areas, the general tendency being to give priority to supplying cities to the detriment of rural areas for reasons of "profitability".

In addition, when the mobile network reaches rural areas, there is a problem with the security of mobile supports on overhead cables (theft of poles, wires, etc.) and maintenance difficulties. As the mobile service in rural areas is not sufficient, people are forced to use roads, tracks, or even

rivers (dugout canoes) to move around in order to communicate. As a result, villages, communes and departments are isolated and have great difficulty communicating, not only with each other but also with development partners and the administrative services to which they are attached. Another weakness is the organization and management of community centers in rural areas. Another weakness is the lack of local maintenance technicians in rural areas who can quickly respond to the need for maintenance and repair of equipment; there is therefore a crucial need for technical training of local agents as well as support measures to be taken for them (adequate remuneration). The use of Network for Information and computer Technology (NICT) in rural areas requires a precise knowledge of the information and communication development needs of rural populations.

Insufficient awareness of the benefits of digital technology (government)

The fact that Burkina Faso is a landlocked country means that it has to make a twofold effort, compared to coastal countries, to access digital resources, particularly fiber optics, which is the best way to access these resources. Although it has been connected to fiber optics since the mid-2000s, this landlocked status partly explains why the country has a relatively low Internet penetration rate (18% in 2017 compared to an average of 28.15% in the WAEMU region) compared to most coastal countries in the subregion. However, Burkina Faso has significant experience in the area of e-democracy, especially since digital technology is a priority for governments in the management of public affairs. For example, Burkina is ahead of several countries in the West African subregion in terms of opening up government data (Open Government). Since 2011, Burkina Faso has had a ten-year program for the modernization of the administration 2011-2020. This program, whose objective is to improve the quality of public service and the proximity of the administration to citizens, serves as a basis for the development of e-government in Burkina Faso.

Despite some key ambitions, the DGTIC, General Directorate of Information and Communication Technologies of the Ministry of Digital Transition, Posts and Electronic Communications in partnership with the Delegation of the European Union within the framework of the programming of the next European Development Fund have recently conducted a workshop to assessing the progress of digitalization in Burkina Faso. The lack of government interest in digital issues seems to be linked to CSOs not playing their role sufficiently as a counterweight and advocate to the government. Topics of interest might gather economic opportunities, infrastructure and network regulation, taxation, partnerships between state and private sector, universal funds... Yet, CSOs can be a major actor in pushing the government to act and make it accountable for its actions. There is therefore an important need in training civil society organizations, especially on advocacy strategies in order to highlight the role of the internet and the asset of digital products and services to governments. It is also important to make specific, clear and coordinated suggestions to the government, in order to make the needs of CSOs heard. To this end, a clear mapping of the needs and capacity of CSOs should be done as a first step.

Insufficient digital (educational) content tailored to local needs

Due to Covid many teaching and learning platforms and tools/applications were put in place and operational in Burkina Faso. These include public, private and community radio and television channels with clear lesson schedules, ministry of education and related institutional websites and portals, interactive audio and video conferencing platforms and tools, and various learning applications. Comprehensive content coverage within the allocated lesson durations, however, remains a challenge with some learners and parents finding the television classes 'too fast' to be assimilated. These learners are sometimes forced to record the broadcasted lessons on their mobile phones in order to listen or watch again later for a better understanding. The learners also find it difficult to pose questions to the lesson presenters (educators) and have to seek answers from their parents, some of whom are unable to assist.

In the workshop, different types of contents were discussed, in particular media and blog content, specifically because a few content creation organizations were present and felt they were not sufficiently equipped to 1) design a viable business model for digital content creation, 2) evaluate local needs and 3) collaborate with other relevant actors (academia, government, NGOs). Some of the challenges identified on content needs: 1) language and accessibility of content in local languages; 2) format (audio and visual for people who cannot read), 3) no diagnostic of the local needs.

The open call in Burkina will be launched to gather the inputs and insights of the remaining 50 participants that will attend the Innovation Day and together with CSOs design relevant, sustainable and innovative solutions to the three most pressing challenges as described above. The open call will help in identifying and selecting the relevant stakeholders based on their expertise and background for each topic as to best design the teams. Moreover, the open call will be an opportunity for the new participants to list any additional challenges they might find important when it comes to human centric digital transformation.

III. Final List of challenges

Overall, 14 challenges in total were identified by CSOs and stakeholders from the digital ecosystem in Mozambique (5) and only by CSOs in Burkina Faso (9). The most urgent three challenges per country will be used as topics for the Innovation Days. It is to be noted that some challenges occur in both countries as well as some others that are unique to each country. This can be explained by the difference in the level of digital maturity and ecosystem of each country as well as the digitalisation of sectors/ industries (digital society vs digital economy) in that same country. The digital economy in Mozambique including the development of private sector, startups and support organizations (incubators, accelerators) tend to lag behind a much more flourishing digital economy in Burkina Faso. However, the two countries are equally advanced when it comes to the role of CSOs within the topics of digital rights and digital society and their presence online (playdoyer, engagement level with citizens, institutions).

Overview

Topic	Challenge	Mozambique	Burkina Faso
Digital Access	Last mile connectivity	X	X
	Access to equipment	X	
	Access to knowledge (Open data)		X
Digital Policy	Lack of support for digital research		X
	Rigidity of digital policies for the user		X
	Participatory Governance	X	X
Digital skills	Trainings/ knowledge	X	X
Digital content/ tools	Development & Appropriation		X
	Awareness	X	X
	Usage	X	
Digital strategies	Mindset/ resistance to change	X	X
	No expertise or clear pathway to do so	X	X
Digital rights	Awareness of data protection/ Cybersecurity laws		X
	Freedom of speech on cybernet		X
Digital public goods	Vandalism		X

Innovation Days

Mozambique	Burkina Faso
Digital Access	Digital Access for rural population

Digital Education	Local appropriation of digital content & development
Digital Policy	Digital Policy
=> Inclusion and gender mainstreamed throughout the three topics	=> Inclusion and gender mainstreamed throughout the three topics