

ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

The Internet is presented as a panacea for the challenges that young people face, but this is not necessarily the case. Despite being drivers of Internet take up, young people's use of the Internet is not optimal, especially within contexts of deprivation. The arising policy question this research seeks to answer is: what are the best approaches to ensuring that Internet access and use benefits youth within a context of poverty.

The study investigates - from young people's perspective - whether the Internet could be used to help them deal with the various issues they face. With a focus on Nigeria, Rwanda and Tanzania, the paper considers what the policy implications of this are and proposes possible policy interventions.

Evidence is necessary to understand the effect access to ICTs specifically the Internet has on young people's opportunities to break the cycle of poverty and access economic and social growth opportunities. In this research, Research ICT Africa (RIA) seeks to understand the way in which young people make use of the Internet within particular contexts. The mixed methods use combines RIA's After Access 2017 quantitative survey data collected in seven countries with qualitative data collected through focus group discussions in three of those countries (Rwanda, Tanzania and Nigeria). In this study, simple descriptive statistics were drawn from the data to provide an understanding of the type and extent of ICT use among the youth in each of the countries where focus groups were conducted. Data have been disaggregated by age, gender and geography to provide a sense of variations

within youth. The focus groups explored young people's access and use of the Internet in the contexts of continued deprivation, gender inequalities and generally restricted opportunities for upward social mobility.

The potential for young people to strengthen and grow the continent's economies is only possible if they are adequately supported and provided with the tools they need to create a sustainable livelihood. Economic opportunities are a significant concern for young people globally, with youth three times as likely to be unemployed as their adult counterparts. Young people interviewed in urban and rural contexts across the three African countries experience poverty in a way that leaves them economically and socially deprived. Young people in all of the countries are acutely aware of the barriers to upward social mobility in their lives and those of their families.

Lack of finances to support further education and training, or to set up their businesses, and lack of opportunities for meaningful employment are most often cited as holding them back.

For young women, gender norms formed an additional barrier. Increasing the numbers of young people in employment will depend on providing them with the right kinds of skills for the jobs available and stimulating inclusive economic and employment growth. Despite the various challenges facing young people, they are at the forefront of Internet adoption. The way in which youths use mobile phones and the Internet is crucial for ensuring that ICTs contribute to their social and economic development.

In line with overall figures for the African continent in Rwanda, Tanzania and Nigeria youth make up a significant part of the population. The nationally representative sample for the RIA survey is drawn from the national census in each country which only covers people 15 years and older. The data provided insight on 26% of the youth in Tanzania, 20% in Rwanda and 25% in Nigeria. The majority of young participants in Rwanda and Tanzania reside in urban areas (57% in Rwanda and in Tanzania), while in Nigeria, more of the young participants (53%) live in rural areas.

Each of the countries face significant challenges with low levels of education and with high youth unemployment. Much lower numbers of youth aged 20 to 24 are students, with only just under 11% of youth in Rwanda and Tanzania and just under 28% in Nigeria.

An interrogation of the rest of the activity data indicates that significant numbers of youth in this older age bracket are unemployed. Unemployment was experienced by most young people, regardless of their educational background. In Tanzania, the gender difference in self-employment was most noticeable, while in Nigeria's (40%) of young men and (38%) of women in self-employment is very similar. Young people reported resource deprivation due to poverty as the context in which they existed. Some, as indicated in the focus groups, had dropped out of school or could not further their studies due to a lack of income. Gendered cultural norms play out within this context as well. Young women were particularly vulnerable as they often engaged in risky behaviours such as transactional sex or prostitution to secure some form of income. In Tanzania specifically, there was little community support to educate young women fearing an investment in them would not pay off as they were likely to fall pregnant or marry early.

Mobile phone ownership is prevalent amongst the youth in particular for the older age group- 20 to 24-year-olds. Phone ownership was most prevalent in Nigeria (64%), followed by Tanzania (59%) and Rwanda (47%). In Tanzania and Rwanda, the majority of teens and young adults owned "Basic Phones", while their Nigerian peers had a higher ownership of "Feature Phones" and "Smart Phones". This ownership trend in Nigeria was mainly the case among Nigerian 20 to 24-year-olds, with 31% owning feature phones, and 17% owning smartphones. Mobile phones remain the main point for first Internet access and use. In both Nigeria and Tanzania, the majority of those who said they had used the Internet did so first by using mobile phones. The majority of Rwandan teens and young adults who said they had used the Internet (9% and 8% respectively) did so first on a computer (85% and 58% respectively). In the qualitative discussion, we find this lack of ownership of devices leading to the borrowed use of smartphones or laptops by youth to access the Internet. Alternatives to mobile access included Internet cafes in Tanzania and Rwanda or through public access points in Rwanda.

Nevertheless, young people were using the Internet and mobile technology pro-actively to access information and networks in an attempt to place themselves in a better position.

Findings from the qualitative and quantitative data indicate that young people who access the Internet, spend most of their time on social media. In Tanzania, for example, 82% of the 15-19 age group spent most of their time on social media in contrast to 64% of the 20-24-year-old cohort. Platforms such as Facebook and Twitter, and tools as WhatsApp are used to stay in touch with friends and relatives, read up on news or celebrity gossip. Youth in the focus group discussions further

explained that social media and the broader internet, are also frequently used to look for information, find learning content or learning support, search for jobs, or promote small businesses. In general, there is the view that the Internet addresses some of the challenges that participants face. Employment opportunities, economic activities, educational use and finding inspiration online are some of the ways the Internet is used in addressing challenges.

Access to technology remains constrained however, due to weak and unreliable networks, expensive devices, expensive price of services and a lack of digital literacy (not knowing how to use the Internet, not knowing when or how to verify information, but also not having sufficient knowledge of English as the dominant language on the Internet).

The lack of access to a device stands out as a barrier to Internet use in Rwanda and Tanzania. In cases where one has access to the Internet, there were restrictions by schools or parents. The widely held view of young people as 'digital natives' - likely to be more aware of the Internet, is challenged in this study. Of the three countries, Rwanda had the lowest proportion of youth reporting that they knew what the Internet was: 32% of the 15 to 19-year-olds and 25% of the 20 to 24-year-olds. In Nigeria, the main limitation for non-Internet users was the lack of knowledge of what the Internet is. Some teens and young adults in all country focus groups were of the view that using the Internet to watch pornographic content for example, does nothing to address their challenges.

For young women, a lack of parental or guardian trust, inaccessible public Internet points, limited time due to household chores were cited as limitations to Internet use.

Teenage boys also reported that a lack of trust in them limited their Internet use as well. The lack of time was cited as one of the limitations

to internet use (31% for 15-19 year old internet users and 35 % for 20-24 year old internet users). Safety and privacy concerns also limited Internet use. Participants are aware of the dangers found online, such as scamming, either through duplication of their content or through confidence scams.

In all of the focus groups, there was mention that access to the Internet alone cannot solve all of the challenges faced by young people, especially not the lack of capital. Gendered inequalities stand out as young women in all three countries agreed that Internet access would also not easily be able to shift community perceptions and expectations of girls that they felt constrained them.

Therefore, if access to and use of Internet is to be harnessed to support youth development and to attempt to break the cycles of poverty in many of the African countries, it is vital to ensure that more young people – male and female, and also in remote rural areas – have access to affordable devices that allow them to search for the information they need, in a language that they speak and understand.

While some of this would require dedicated efforts by policymakers in various government line departments - such as education and economic empowerment, but also communications - there is also a need for integrated, transversal approaches that sees the use of the Internet and mobile technologies written into broad policy frameworks for youth development. Such an approach should continue to emphasise the transformative potential of ICT and underlie further efforts to provide cheaper and more reliable access to the Internet. Innovative approaches could be tested, such as free access to information and services provided by the government and a range of well-recognised civil society organisations that support youth well-being in its broad sense.

However, providing access alone will not be sufficient to empower youth to deal with the challenges they face. More effort needs to be made both to offer children and youth training in how to access and use the Internet, and to process or evaluate the information accessed. Better understanding the needs of young people, as this study has sought to do, is also crucial in the development of further tools that are meant to support young people.

Providing content that is relevant to national schooling curricula, and information

on where to gain job experiences or where and how to find support with running or promoting one's own small business via the Internet or with the help of mobile technology would support young people in their wish for empowerment and independence. Dedicated awareness campaigns on where the Internet can be accessed, how to navigate it safely, what kind of information can be accessed and why that can be beneficial to both young men and women and their families are essential too.

"The content on the Internet is mainly in English; maybe if it was in Kinyarwanda I could use it easily and perform different tasks. I wish we had someone to teach us how to use the Internet." — Young adult male, rural Rwanda

BACKGROUND

By 2020, three out of four people in Africa are projected to be 20 years old (African Union, 2018). Africa has the largest share of children and youth of all continents, and its youthful population is expected to continue to expand, bringing a unique opportunity for rapid human-capital development and economic growth.

However, in most African countries, young people face high levels of unemployment and poverty. Without a substantial increase in human capital and employment opportunities, the growth possibilities offered by this 'demographic dividend' will be lost. Globally, the Internet is perceived as one platform that could provide economic and educational opportunities for the youth, thus providing young people with possible pathways out of poverty and offering tools that can drive economic growth (ITU & UN-Habitat, 2012).

However, exactly what the impact of access to the Internet is on African young people's abilities to break the cycle of poverty and to access economic growth opportunities needs to be understood on the basis of evidence gathered across the continent. The 2008 and 2012 Research ICT Africa comparative study on youth between the ages of 15 and 24 shows that there is increased mobile phone ownership and Internet use by African youth. ICT interventions, in particular those providing young people with ICT equipment and Internet connections at schools, have been seen as ways in which to improve ICT skills and capacity for developmental purposes. However, the cost of devices, limited electricity and network coverage and

low levels of digital literacy continue to impede mobile ownership and optimal Internet usage (Deen-Swarray & Chair, 2016).

The starting point of this study is to understand young people's Internet access and use in the context of the challenges that youth within the African continent face. The research teams then explore if and how the Internet is used to address these problems. The study further investigates - from young people's own perspective - whether the Internet *could* be used to address the various issues they face, thus allowing us to formulate a range of proposed policy interventions.

In short: understanding the way in which young people navigate the online space provides insight on how using the Internet can impact on their lives in the light of social and economic challenges faced.

The evidence basis consists of quantitative, nationally-representative household and individual 'After Access'¹ survey data, as well as qualitative data collected through focus group discussions (FGDs), all conducted in Rwanda, Tanzania and Nigeria in 2017. The surveys are part of a broader Global South Survey, focusing on understanding the challenges that extend beyond connectivity and access: 'After Access'. The complementary methodologies highlight not only the levels of access and use of the Internet, but provide more significant granularity on the intersectional factors contributing to digital inequality, as youth see it.

^{1.} Read more on After Access surveys here: https://bit.ly/2DkPdgx.

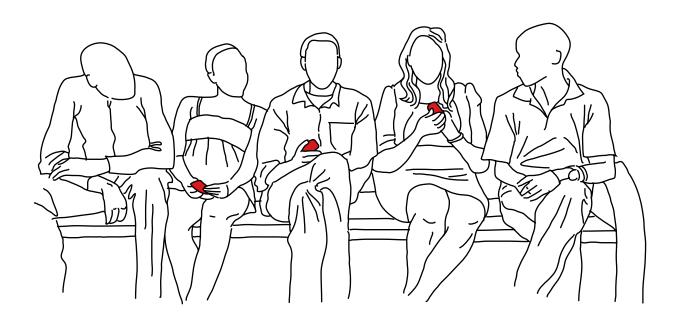
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RESEARCH QUESTION

This research aims to expand on the current understanding of young people's Internet access and usage by exploring in more detail, and from their own perspective, how youth navigate the Internet space, find information, are able to use it to their advantage, or deal with possible

barriers. In particular, the research looks at whether youth make use of the Internet for productive or consumptive aims, and to respond to their everyday needs. The study responds to the following research questions:

- 1. How do young people access information that is available online?
- 2. What are young people doing with the information accessed?
- 3. How, and to what extent, do young people make use of information accessed online to address their social and economic challenges?
- 4. Are young people making use of the Internet for economic and social gains? What activities do young people carry out online?
- 5. What challenges do young people face in accessing the Internet and in optimal Internet use?



METHODOLOGY

An intersectional analysis of evidence is needed to understand the extent to which the Internet may address the challenges that young people face. This intersectional evidence is drawn from complementary quantitative and qualitative methodologies.

The quantitative section of this paper draws on the 2017/18 After Access Household and Individual Survey on ICT Access and Use, conducted by Research ICT Africa (RIA) in seven African countries in 2017.² The only demandside survey of its kind, it provides up-to-date and reliable estimates and insights into not only the levels of access to ICTs, but also the nature of use and the amounts users are spending on ICTs. The survey is part of other surveys conducted in the Global South and builds on nationally-representative ICT access and use

surveys conducted by RIA in 2007 and 2012.³ While the 2012 studies focused on adoption and use of mobile phones, the 2017 survey specifically focuses on the use and access of mobile broadband services. The study provides insights on the level of Internet use, reasons for non-use and affordability.

Because the RIA ICT Survey gathered extensive additional household information, including income and expenditure, through a method that is nationally representative, the findings can be disaggregated into rural and urban settings, gender lines, age categories and between users at the top of the pyramid (ToP) and the base of the pyramid (BoP).⁴ This information is not available from national administrative data or commercially to inform policy makers.⁵

The survey data assists in establishing if

Table 1: RIA After Access Survey Sample

	INDIVIDUAL SAMPLE	YOUTH SAMPLE			
	Total	15-19	%weighted Pop represented	20-24	% weighted Pop represented
Ghana	1200	158	18.4	156	14.9
Kenya	1,208	71	7.7	201	15.9
Mozambique	1,171	182	18.5	183	14.9
Nigeria	1808	235	18.2	224	13.0
Rwanda	1211	196	12.0	140	13.4
South Africa	1815	177	12.8	177	12.9
Tanzania	1200	142	17.3	175	15.5

Source: RIA After Access household, individual and business survey 2017/2018

- 2. Ghana, Kenya, Mozambique, Nigeria, Rwanda, South Africa and Tanzania
- 3. See https://researchictafrica.net/data/ict-surveys/
- 4. The base of the pyramid draws on Roosevelt's notion that economic reconstruction after the Great Depression required using the resources of the "forgotten men" to develop new models of doing business, which see the economic potential of the billions of people worldwide who live in poverty but are nevertheless consumers of goods and services.
- 5. See Research ICT Africa's Survey Handbook for further detail: https://bit.ly/2JOzM3e

Table 2: Qualitative focus group profile across three countries

	TOTAL PARTICIPANTS	MALE PARTICIPANTS	FEMALE PARTICIPANTS	LOCATION
Tanzania	100	50	50	5 Urban Areas 5 Rural Areas
Rwanda	112	55	57	6 Urban Areas 5 Rural Areas
Nigeria	113	63	50	6 Urban 6 Rural
Total participants	325	168	157	17 Urban 16 Rural

youth do or do not do certain things online; how many people do so and the frequency with which activities are done. However, while surveys generally answer 'what' questions and sometimes 'how', they seldom probe the 'why' behind certain behaviours.

To elicit answers to the 'why' questions, focus group discussions (FGDs) were conducted to complement the quantitative findings.

The FGDs were conducted in Rwanda, Tanzania and Nigeria in 2017. FGDs can gather information from a number of different people on why they are doing what it is that is being investigated and can elicit responses that people might not have considered on their own, or might not have come to when simply responding to a closed or semi-structured questionnaire. Thus, focus groups allow dynamic discussions, where the conversations are free flowing, sparking thoughts that may have not crossed participants' minds and prompting debates on differing ideas. When well executed, a focus group creates a safe environment that puts participants at ease, allowing them to answer questions in their own words, clarifying their views and opinions, and adding meaning to their answers.

Using the United Nations Educational, Scientific and Cultural Organisation (UNESCO)'s definition of youth, a total of 33 focus groups with 325 respondents were conducted to capture experiences of youth aged between 15 and 24. Table 2 provides an overview of the focus group discussions' structure. The groups were organised by age range (teens: 15-19 and young adults: 20-24), gender (separate male and female groups, with some mixed groups), and by location (urban and rural) with 8-10 participants in each group. This segmentation allows for the capture of experiences relevant to teens (15-19) and young adults (20-24) without assuming a homogenous youth experience. FGDs were held in local languages to include non-English or non-French speaking users. A similar reasoning underlies the decision to conduct separate groups for young men and young women. However, mixed-gender, rural and urban focus groups, within the same age range, were conducted as pilots. The mixed groups provided rich insights and have therefore been included in the final analysis. In the case of Nigeria, two extra mixed-gender focus groups were conducted that also had mixed age groups.

3.1 APPROACH TO ANALYSIS

3.1.1 Quantitative data

For this report, descriptive statistics were drawn from the survey data to provide an understanding of the type and extent of ICT use among the youth in each of the countries where focus groups were conducted. Data have been disaggregated by age, gender and geography, to provide an initial sense of the variations among the youth within and between countries. Drawn from the census frame of each country, the random selected sample of household and individuals is representative of all adults of 15 years and older. The census divides the country in Enumerator Areas (EAs), each with a household density of around 200. To select the sample, the national census sample frame was split into urban and rural EAs and each was sampled for each stratum, using probability proportional to size (PPS). For each EA, two listings were compiled, one for households and one for businesses. The listings served as a sample frame for the simple random sections of households and businesses. From within each household, including any visitors staying the night, an individual of 15 years or older was then selected, based on simple random sampling for the individual (mobile) survey (see table 1 for the sample size).

3.1.2 Qualitative data

The discussions were recorded and transcribed by the country researchers. These transcripts were translated, where necessary, and then put through a rigorous coding process.

In this study, analysis was conducted by manually developing two-level coding, based on a close read of the transcripts grouped by gender; urban and rural male; urban and rural female; and urban and rural mixed groups. In a first stage, a randomly selected number of transcripts were coded independently by the authors. Descriptive, first-level codes were developed to capture responses to questions asked. More thematic and explanatory second-level coding was then applied, drawing together clusters or hierarchies of meaning in the data. The characteristics of gender and location were coded with the emerging themes. The independently-developed coding lists were then compared and discussed, to develop a comprehensive list that could serve as the basis of analysis for all 33 transcripts, alongside the reports from the facilitators. In addition, care was taken to note specific dynamics in the FGDs' transcripts that would contribute to a richer understanding of the data. This proved especially important in exploring some of the gender trends in the data. Finally, the qualitative findings are then connected to the quantitative findings, where they can be quantitatively supported to the recommendations.

YOUTH AND INTERNET ACCESS: CONSIDERING ITS POTENTIAL AS A TOOL FOR GROWTH IN AFRICA

Africa has the youngest population in the world, with youth between the ages of 15 and 24 accounting for 19% of the continent's population (UNDESA, 2015). This youthful population presents an opportunity for strengthening and growing the continent's economies, but only if youth are supported properly and provided with the tools they need to create sustainable livelihoods.

Economic opportunities are a major concern for young people globally, with youth three times as likely to be unemployed as their adult counterparts. Projections by the International Labour Organisation (ILO) places the global youth unemployment rate at 13%, but large variations exist across continents and regions, with much higher unemployment rates found in, for instance, Northern Africa (ILO, 2016; ILO, 2017). Worldwide, the proportion of unemployed youth is expected to continue to increase, and the same is expected to happen in Africa. Where employment opportunities are available for youth, they are often in the form of insecure, informal or low-income work. This kind of employment does not provide access to legal or social protection and keeps large numbers of young people and their families trapped in 'working poverty', living below the extreme poverty line of USD 1.90 per day (Betcherman & Khan, 2015; ILO, 2016; ILO, 2017). In addition, large numbers of young people in Africa are 'inactive': not in any kind of education, employment or training (NEET). Globally, and on the continent, this rate is higher among young women than young men. Decreasing NEET rates

among youth is "one of the primary targets of the 2030 Agenda for the Sustainable Development Goals" (ILO, 2017, p.13).

Increasing the numbers of young people in employment will depend on providing them with the right kinds of skills for the jobs available and stimulating inclusive economic and employment growth. However, forecasts predict continued increases in youth unemployment globally (ILO, 2017). The dominant growth-sector for young people globally is the service industry while continued decreases in employment in agriculture and manufacturing are expected. In these and other sectors, the rise of technology is expected to continue to replace labour, but technology and ICT simultaneously present new opportunities for employment and self-employment.

The ILO expects that young people who have grown up with a higher exposure to technology will be at a comparative advantage over the older population and will be able to act upon those new opportunities. It does, however, point to the need for increased legal and labour market regulations, to protect youth from exploitation and an increase in insecure employment (ILO, 2017).

Indeed, despite the various challenges facing young people, they are at the forefront of Internet adoption. In 2017, International Telecommunications Union (ITU) estimated that 71% of total Internet users were under the age of 25, while the overall proportion of Internet users globally was estimated to be 48% (ITU, 2017). The proportion of young Internet users

in Africa (40.3%) is higher than the total population on the continent accessing the Internet: 21.8 % (ITU, 2017). The United Nations (UN) considers Internet access and ICTs as crucial for improving academic, social and economic outcomes (ITU & UN Habitat, 2012). Internet access and use can impact educational opportunities, reduce the cost of communication, employment opportunities and youth civic participation (Avis, 2015; Ben-Attar & Campbell, 2013). The UN and ITU place special emphasis on the need to reach young girls and women in order to close the gender gap in these outcomes. It is therefore imperative to ensure that access to the Internet improves, and ICT literacy increases - with a special focus on young women. "Promoting universal, non-discriminatory, equitable and affordable access of youth to ICT is central to ensuring digital and social inclusion" (ITU & UN-Habitat, 2012, p.3).

In addition, the way in which youths use mobile phones and the Internet is crucial for enabling their social and economic development (Mihailidis, 2014). Introduction of lower-end and lower-cost mobile phone devices has driven and increased mobile technology and Internet uptake (Ben-Attar & Campbell, 2013; Stork et al., 2013). Africa is considered the second largest mobile market, with mobile phones and other smart mobile devices gradually replacing computers. Internet access and use through the mobile phone has increased in many countries, and for late adopters, this appears to be the main point of entry to the Internet (Stork et al., 2013). Mobile phones build on already existing modes of communication and are used to maintain and forge social networks that may be leveraged for different purposes (Horst & Miller, 2006). They also have the potential to improve outcomes for youth as they allow them to obtain and access information faster and with greater transparency (Avis, 2015).

It is clear that ICT access and use present a range of opportunities, but that these need to be contextualised, to avoid a 'one size fits all' policy approach. As it is crucial to understand regional dynamics to inform policy design, this study draws on RIA 2008 and 2012 household and individual survey data to better determine the extent of Internet uptake in specific African countries.

An analysis of trends in ICT uptake based on such data found increased mobile and Internet uptake by youth in South Africa, Kenya, Namibia, Mozambique, Botswana, Ghana, Tanzania, Nigeria, Cameroon, Uganda, Ethiopia and Rwanda, between 2008 and 2012 (Deen-Swarray & Chair, 2016). The 2012 survey results showed that mobile phones were the first point of access to the Internet, with the exceptions of Rwanda, Cameroon and Ghana. Mobile phones (73%) and Internet cafes (54%) were the top places of Internet access for youth between 15 and 24, followed by educational institutions (41%).

Ownership of Internet-enabled phones amongst youth was more prevalent in South Africa (60%), with Rwanda having the lowest prevalence (11%).

At the time of the assessment, the reason for this was attributed to cost of devices and affordability of services (Deen-Swarray & Chair, 2016). Increased technological uptake oftentimes shifts intergenerational power dynamics between young people and older people (Porter et al., 2015). In a three-country study in Malawi, South Africa and Ghana, Porter et al. (2015) found young people become hubs of knowledge due to their ability to make use of mobile devices and navigate the Internet. The constant use of the mobile device means young people are easily reachable in situations where

family members are not close by. However, at times, older people may feel undermined by the power this gives young people. This disruption of power dynamics, as a result of the cell phone, is also manifested in intergenerational family conflict related to permission to use devices, battery use, airtime use and time wastage (Porter et al., 2015).

Among the 2012 youth cohort Internet access was low (31%) (Deen-Swarray & Chair, 2016). Young people were found to engage in a range of activities, which included social media, education in general, educational research, entertainment and emails.

This wide range of online activities indicate the potential for the Internet to be used to address challenges young people face: whether through social media platforms, or by integrating ICTs into educational systems (Deen-Swarray & Chair, 2016).

In addition, studies on youth and the Internet have found increased civic engagement by youth based on ICT access. For instance, mobile phones and Internet applications have provided a platform for youth civic participation during the Arab spring (Dahlgren, cited in Mihailidis 2014). Another example is found in Uganda, where youths participated in social monitoring, by gathering evidence on community issues and using it for advocacy (Ben-Attar & Campbell, 2013). Through social media platforms and other means, sharing information on demonstrations and protests can trigger activism in other locations, even countries (World Youth Report, 2016).

In formal education, Internet access is seen to have the potential to enhance pupils' learning opportunities in terms of access to educational material, and in some instances, by giving them the capacity to explore the world. The study in Malawi, Ghana and South Africa highlighted the positive educational value

of mobile phones and of Internet access, by providing access to the educational curriculum and other e-learning opportunities (Porter et al., 2016). In addition, accessing health information via mobile phone or the Internet is identified as crucial in the Malawi, Ghana and South Africa study (Hampshire et al., 2015).

However, when barriers were assessed in 2008 and 2012, the lack of computer and Internet connection is one of the major barriers to Internet use. In spite of high levels of primary and secondary education among youth in the countries studied, digital illiteracy impedes Internet use by youths: 70% of youth who were non-Internet users in 2012 did not know what the Internet is or how to use it (Deen-Swarray & Chair, 2016). The 2008/2012 comparative study also found that the global gender gap in the uptake of the Internet persists, even within the youth age range (Deen-Swarray & Chair, 2016).

However, between 2008 and 2012, young women were driving Internet growth by an increased use: up to 45.5% in 2012 compared to 40.3% in 2008 (Deen-Swarray & Chair, 2016). Gender issues for young women seem largely driven by a lack of trust in young girls with cell phones or Internet access. Parents or guardians are concerned that access to mobile devices that facilitate Internet use may lead to prostitution or girls receiving requests for intimate relations with boys or men (Porter et al., 2015).

Mobile phones and Internet access also have negative consequences. Negative impacts include the pressure on young people to buy a smartphone: opening themselves to bullying, harassment, abuse and time spent on social networks (Porter et al., 2016).

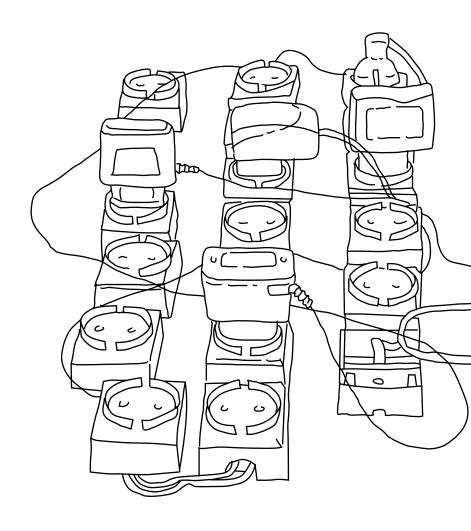
Internet access may leave young people wary of information online, in particular where there is lack of trust in, or uncertainty of, information found.

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For example, searching for health information may provide conflicting advice, which leaves young people anxious and unsure of information accessed (Hampshire et al., 2015). Young people may also be perceived as tethered to their mobile phones, using them for social communication rather than for something more 'constructive' (Mihailidis, 2014). However, criticising social communication as a "mere activity" overlooks the activities beneficial to young people that can be conducted over those platforms. In addition, mobile phone

technology remains inaccessible to marginalised groups and thus runs the risk of entrenching social inequalities (Haider et al. cited in Avis, 2015; ILO, 2017).

A thorough understanding of these inequities and the dynamics driving them is therefore needed to provide well-informed, evidence-based, policy recommendations. This policy paper aims to establish the reach of Internet use by youth within their contexts, understand the remaining challenges, and offer policy recommendations from there.



PROFILE OF YOUTH IN STUDY

Understanding youth perspectives on Internet use within their contexts helps us understand the potential of the Internet on young people's lives. This section provides an overview of the youth cohort in the entire seven-country study, but it will provide greater detail of the young people who took part in the surveys in Rwanda, Tanzania and Nigeria. These are the three countries where RIA also conducted the focus group discussions; allowing for triangulation of the findings and a more nuanced understanding.

In line with overall figures for the African continent, Rwanda, Tanzania and Nigeria all have large youth cohorts. In the nationally representative RIA survey, young people made up 26% of the population surveyed in Tanzania, 20% in Rwanda and 25% in Nigeria (see table 3).

The majority of young participants in Rwanda and Tanzania reside in urban areas (57% in Rwanda and 57% in Tanzania), whilst in Nigeria, more of the young participants (53%) live in rural areas.

5.1 EDUCATION AND ECONOMIC ACTIVITIES

Each of the countries faces significant challenges with levels of education and with youth unemployment. Data on young people's main activities, conducted over the 6 months prior to the survey, provide some insights.

While more than half of younger youth between the ages of 15 to 19-year-old in Nigeria (66%) and Rwanda (57%) are pupils or students, only 43% of Tanzanian teens are. The proportions of teens at school varied by geographical region and by gender. In all three countries, slightly lower numbers of rural youth are in school. In Nigeria and Tanzania, slightly higher proportions of the boys between 15-19 (71% and 49% respectively) than girls between 15-19 are pupils; in Rwanda, the trend was the opposite, with a higher proportion of girls (59%) attending school than boys. Much lower numbers of youth aged 20 to 24 are students: just under 11% of youth in Rwanda and Tanzania, and just under 28% in Nigeria.

Table 3: RIA After Access Survey Sample

YOUTH SAMPLE (15-24)							
Total	% of sample	Male	Female	Urban	Rural		
314	26.2	42.7	57.3	57.0	43.0		
281	23.3	40.2	59.8	65.5	34.5		
365	31.2	45.2	54.8	64.4	35.6		
459	25.4	47.5	52.5	46.6	53.4		
246	20.3	43.5	56.5	57.3	42.7		
354	19.5	51.1	48.9	49.4	50.6		
317	26.4	40.4	59.6	56.5	43.5		
	Total 314 281 365 459 246 354	Total % of sample 314 26.2 281 23.3 365 31.2 459 25.4 246 20.3 354 19.5	Total % of sample Male 314 26.2 42.7 281 23.3 40.2 365 31.2 45.2 459 25.4 47.5 246 20.3 43.5 354 19.5 51.1	Total % of sample Male Female 314 26.2 42.7 57.3 281 23.3 40.2 59.8 365 31.2 45.2 54.8 459 25.4 47.5 52.5 246 20.3 43.5 56.5 354 19.5 51.1 48.9	Total % of sample Male Female Urban 314 26.2 42.7 57.3 57.0 281 23.3 40.2 59.8 65.5 365 31.2 45.2 54.8 64.4 459 25.4 47.5 52.5 46.6 246 20.3 43.5 56.5 57.3 354 19.5 51.1 48.9 49.4		

Source: RIA After Access household, individual and business survey 2017/2018

Table 4: RIA After Access Survey Sample

	YOUTH SAMPLE (15-24)			
		Nigeria	Rwanda	Tanzania
	Student/Pupil	50.0	32.6	28.8
	Unpaid housework	14.4	21.2	27.2
	Unemployed seeking a job	4.4	14.8	9.7
Main activities in the last six months	Unemployed not looking for a job	6.3	2.3	8.2
	Employed	2.7	12.8	11.4
	Self-employed with employees	2.0	0.9	0.2
	Self-employed without employees	20.3	14.0	14.5
	None	23.4	15.3	5.1
Highest level of advection	Primary	25.7	52.9	47.2
Highest level of education	Secondary	41.3	30.9	37.5
	Tertiary (Diploma/Certificate/Bachelors)	9.6	0.9	9.4

Source: RIA After Access household, individual and business survey 2017/2018

An interrogation of the rest of the activity data indicates that significant numbers of youth in this older age bracket are unemployed (see table 4). For instance, in Tanzania, 6% of young people between the ages of 20 and 24 were unemployed, but had been looking for jobs in the past six months. This proportion went up to 9% in Nigeria and to 17% in Rwanda. Moreover, a considerable proportion of youth in this age group perform unpaid housework as their main activity - around 35% of youth in Tanzania for example. These national average data on the kinds of activities in which young people are involved hide stark differences between rural and urban youth, and between young men and young women. Still in Tanzania, the proportion of 20 to 24-year-old women who have performed unpaid housework - 54% in contrast to less than 2% of males in the same age group. These gender differences are corroborated by findings from the focus group discussions, described in detail in section 6.

Finally, at least one out of five youths in these countries is self-employed. In Tanzania,

the gender difference in self-employment was most noticeable, while in Nigeria the proportion of young men (40%) and women (39%) who are self-employed is very similar.

5.2 ACCESS TO AND USE OF TECHNOLOGY

In all countries, and across all ages, ownership and usage of a desktop computer or laptop was low, with well over 90% of young people indicating that they do not own such devices. Slightly more Nigerian youth (compared to their Rwandan and Tanzanian peers) are using a desktop computer or laptop "every now and then": 8% among the young adults, and 10% among the teens.

Mobile phone ownership, on the other hand, was much higher in all three countries — especially so among the older youth – in line with the findings of the focus group discussions. The proportion of 20 to 24-year-old youth who own a phone was highest in Nigeria (64%), followed by Tanzania (58%) and Rwanda (47%). Smartphone

Table 5: RIA After Access Survey Sample

OWNERSHIP AND USE OF ICTS							
	Nigeria		Rwanda		Tanz	ania	
	15-19	20-24	15-19	20-24	15-19	20-24	
Own a personal desktop/laptop	6.4	8.3	0.0	2.3	2.1	6.0	
Own a mobile phone	43.0	64.4	15.4	47.4	25.6	58.2	
Own a smartphone (of those with a mobile phone)	31.9	25.6	8.2	6.6	10.5	33.6	
Use mobile money services	0.9	5.3	8.2	21.1	13.6	49.2	

Source: RIA After Access household, individual and business survey 2017/2018

Table 6: RIA After Access Survey Sample

	MAIN REAS	MAIN REASONS FOR NOT OWNING A MOBILE PHONE							
	Ni	Nigeria		Rwanda		ania			
	15-19	20-24	15-19	20-24	15-19	20-24			
Cannot afford it	68.3	65.2	64.3	81.4	48.2	77.3			
No coverage where I live	16.5	22.8	8.7	20.6	2.4	0.0			
No electricity at home to charge phone	24.1	29.1	41.9	65.0	7.8	1.8			
Don't know how to use a mobile phone	11.0	13.7	0.0	0.0	35.0	3.3			
Not allowed to own one	21.4	2.4	50.4	6.1	0.0	0.0			

Source: RIA After Access household, individual and business survey 2017/2018

ownership was low among teens in Nigeria and Rwanda, with higher smartphone ownership in comparison to young adults (see table 5). In Tanzania and Rwanda, the majority of teens and young adults own a "Basic Phone", while their Nigerian peers had a higher ownership of "Feature Phones" and "Smart Phones". This was especially the case among Nigerian 20 to 24-year-olds, with 31% owning feature phones, and 17% owning smartphones. Tanzanian youth make more use of mobile money in comparison to their counterparts in other countries (see table 5).

In all countries, not being able to afford a mobile phone was the main reason for young people reporting they did not own a device. After not being able to afford the device, the lack of electricity to charge the device was the greatest hinderance to ownership for Nigerian youth and Rwandan young adults (see table 6). For the younger age group (15-19) in Rwanda, not being allowed to own a phone (50%) was the second main limitation to device ownership. While 35% of Tanzania's 15-19 age group cited not knowing how to use a mobile device as their limitation to mobile phone ownership (see table 6).

5.3 THE INTERNET: KNOWLEDGE, ACCESS AND USE

Of the three countries, Rwanda had the lowest proportion of youth who know what the Internet is: 32% of the 15 to 19-year-olds, and 25% of the 20 to 24-year-olds. In Tanzania, 47% of the teens knew what the Internet was, as do just under 62% of the young adults. Among their Nigerian peers, 57% of the teens knew what the Internet was, as did 58% of the 20 to 24-year-olds.

However, among those who replied that they knew what the Internet was, knowledge did not necessarily translate into usage. Nigerian youth clearly engage more with it, with 32% of the 15-19 age group having used the Internet and 42% among the older cohort 20-24 age group. In Tanzania, a much lower proportion of teens (5%)

and young adults (23%) replied positively than in Nigeria and Rwanda. In both Nigeria and Tanzania, the majority of those who use Internet do so by using mobile phones. In contrast, the majority of Rwandan teens and young adults who have used the Internet (9% and nearly 8% respectively) did so initially on a computer (85% and 58% respectively) (see table 7).

In Tanzania and Nigeria, those who do use the Internet spend most of the time on social media. Social media is often the driver of Internet usage across all age groups. Education followed next as the most popular activity (see table 8). Rwanda is not covered in this section as the question was not included in first round of surveys.

Looking at limitations to Internet use, the Internet was considered very expensive in all

Table 7: RIA After Access Survey Sample

KNOWLEDGE, ACCESS AND USE OF THE INTERNET								
	Nig	Nigeria		Rwanda		zania		
	15-19 20-24		15-19	20-24	15-19	20-24		
Know the Internet	57.2	58.1	32.1	24.7	47.2	61.8		
Have used the Internet (of the entire population)	31.6	41.9	9.3	7.7	4.7	22.8		
First used the Internet on a mobile phone (of those who have used the Internet	80.9	81.3	14.9	42.0	65.1	81.0		
First used the Internet on a desktop/laptop (of those who have used the Internet)	19.1	18.7	85.1	58.0	34.9	19.0		

Source: RIA After Access household, individual and business survey 2017/2018

Table 8: RIA After Access Survey Sample

	MOST TIME SPENT ON AN ACTIVITY ONLINE BY INTERNET USERS					
	Nigeria		Tanz	ania		
	15-19	20-24	15-19	20-24		
Social media	67.8	56.5	81.6	64.2		
Education	21.8	35.1	18.4	29.5		
Work	2.9	1.5	-	2.3		
News	5.9	7.0	-	-		
Entertainment	1.6	-	-	3.1		

Source: RIA After Access household, individual and business survey 2017/2018

Table 9: RIA After Access Survey Sample

LIMITATIONS TO INTERNET ACCESS %								
	Nig	Nigeria		Rwanda		zania		
	15-19	20-24	15-19	20-24	15-19	20-24		
Lack of time	10.7	9.1	31.4	35.0	21.4	22.9		
Expensive	35.1	47.5	70.6	50.2	41.3	42.3		
Speed of Internet	9.1	14.5	17.0	6.3	26.8	16.7		
Surveillance/Privacy concerns	4.5	3.4	3.6	5.4		0.9		
Restricted use	2.7	1.3	2.0		7.8			
Find it difficult to use	1.2	1.3		24.0	3.1	5.4		
Lack of local language content			2.0	33.6	11.7	1.5		
No interesting content			5.9	4.1		3.7		

Source: RIA After Access household, individual and business survey 2017/2018

Table 10: RIA After Access survey Sample

MAIN BARRIERS TO INTERNET ACCESS %									
	Nigeria		Rwanda		Tanzania				
	15-19	20-24	15-19	20-24	15-19	20-24			
No access device (computer/smartphone)	24.5	13.9	83.9	65.5	71.2	80.4			
I don't know how to use it	21.3	26.7	7.0	1.8	9.2	7.1			
I don't know what the Internet is	33.8	34.5	5.3			0.7			
Too expensive	2.9	5.5	1.1	31.3	4.0	4.4			
No time, too busy	3.3	1.6	1.4			0.5			
Restricted (parents or spouse)	2.5	0.1	1.3		11.7	0.8			

Source: RIA After Access household, individual and business survey 2017/2018

countries. In Nigeria, the main limitation to Internet use was data costs across the two age groups (see table 9). In Rwanda and Tanzania, multiple choices that limit Internet use were captured. These provide insight into the range of limitations in the two countries. The lack of local language content stood out as a barrier for the 20-24 cohort in Rwanda, with 34% citing it as a limitation. Close to a quarter of Rwandan young adult Internet users found it difficult to use. The lack of time was a limitation for Rwandan and Tanzanian youth (see table 9). In Rwanda specifically, we found a stark male and female difference with regards to lack of time: 94% of the young adult females included

time as a limitation, in contrast to 13% of young adult males.

Table 10 provides insights into the main limitations and their variances for non-Internet users across the three countries. The lack of access to a device stood out in Rwanda and Tanzania. In Rwanda, this was higher for nonuser teens (84%), in contrast to non-user young adults (66%). In Nigeria, the main limitation for non-Internet users was the lack of knowledge of what the Internet was. The lack of access to devices was the second main reason for the 15-19 age cohort (21%); while it was not knowing how to use the internet for the young adults (26%).

6

QUALITATIVE FINDINGS

The following section unpacks the qualitative findings from the focus group discussions. The section provides an overview of young people's lived experiences, and their experience - or lack thereof - with Internet use, all presented from their perspective.

6.1 CONTEXTUAL CHALLENGES FACED BY YOUNG PEOPLE

6.1.1 Community Context

Understanding the challenges that young people face, and the way in which they try to deal with those, helps us understand the potential reach of the Internet to address these. Most participants of our focus group discussions describe living in a state of resource deprivation, with various related challenges. To understand what this looks like, sub-categories of the community challenges were identified and are discussed in this section.

"Poverty makes your parents fail to meet all your needs. Also, at times, it is hard to move forward because your family becomes dependent on you" (young adult male, rural Tanzania).

In all countries, poverty in the family and in the community featured as a significant issue for young people. Poverty is experienced in the form of resource-deprivation that hinders young people's ability to better themselves. In all countries, young people spoke of the lack of capital in the families as a barrier to start entrepreneurial activity: "but...lack capital as families are poor" (young adult male, rural Tanzania). Participants cite that coming from poor families means that they do not have all the provisions they would like, or need. In

addition, youth described the prevalence of so-called 'social ills', such as school dropout or risky behaviour, as caused by, and interconnected with, poverty. Several participants spoke of having to drop out of school as their parents or guardians could no longer afford fees. In Rwanda, an urban teen dropped out of school so that he could work to support his family.

Infrastructural advancement or lack of infrastructure within communities was an additional issue for participants. The infrastructural challenges mentioned included poor road networks, electricity cuts, limited mobile network coverage and water connections. For example, for Rwandan youth in agriculture, infrastructure challenges include a lack of technology to help with farming, lack of electricity in the urban areas and a lack of markets to facilitate trade in agricultural products.

In rural and urban areas, access to nearby water facilities, for instance, was said to impact negatively on young people. Time then becomes an issue for young people as they have to wake up early to join queues to fetch water:

"For instance, water in the village is available only on two days in a week: on Saturday and Wednesday. So, during those days, villagers have to wake up very early to fetch water" (teen male, urban Tanzania).

Unemployment was experienced by most young people, regardless of educational background. This corresponded to the quantitative data findings of youth unemployment. One young woman in Nigeria explained: "but many of us suffer from lack of jobs. Like people that went to the university, they will come outside; they will not see job" (young adult female, rural Nigeria).

Young people, in instances where jobs are available, are not well paid. Women, in particular, are more likely to be engaged in unpaid housework as corroborated by the quantitative data. The lack of jobs was clearly related to the lack of income for the youths themselves, or their families. As a result, the start-up capital for a business for those who want to create their own work was also said to be difficult for young people to acquire:

"The government encourages us to start our own businesses, but they don't think that we do not have capital and our parents don't want to help us get the capital" (young adult female, rural Rwanda).

In addition, and in Rwanda specifically, there was a perception that agriculture could provide economic opportunities, but not owning land was described as limiting the opportunities that could be gained from farming:

"It is difficult for us to have our own land to engage in farming as youth. Sometimes, when you need fertilizer, you have to show your property title in order to get fertilizers" (young adult male, rural Rwanda).

Experiences of young women looking for economic opportunities were marked with sexual vulnerability - that is, they are offered or expected to engage in sexual acts for some economic gain. Their low standard of living made them particularly vulnerable to this.

Transactional sex or prostitution manifests in a context where young women expect some form of economic exchange upon intercourse.

"Men are the real challenge. You have sex with him and [he] offers you nothing...it is better for you to stay with your body" (young adult female, rural Tanzania).

In other instances, young women offered their bodies in return for assistance to better their economic prospects.

"For example, girls may be misled by men who are sometimes married, and this may lead to them getting involved in prostitution or unwanted pregnancies because their families are not providing all the needs for these girls" (young adult female, urban Rwanda).

Female participants from the Tanzanian groups highlighted being taken advantage of, or having to deal with sexual harassment, in their places of work. Those who were employed pointed out that older influential men often sought sexual favours in order to help young women advance their careers. If they reject the proposition, they will lose their jobs. In other instances, women engaged in entrepreneurial activities described having to fend off sexual advances from male customers, which impacts on their livelihood:

"Sometimes we find men who are attracted to come as customers and wonder how a beautiful girl is in businesses of selling vitenge, vikoi, and other stuff. So it's difficult sometimes to tolerate, and you end up using abusive language, and we end up losing customers" (young adult female, urban Tanzania.)

As a result of poverty and residing in low-income communities, young people are either exposed to, or participate in, criminal activities associated with gang membership. Gangs, also known as cults, were described as a community challenge for both young men and women in urban Nigeria. Engagement in gangs was said to be caused by young people having to face difficulties, often on their own and without parental support, or youth seeking a sense of belonging:

"I was like coming to Lagos, going down there, very difficult for me, and I told my mum that I can't cope like that. From there I joined bad gang, all this cult..." (teen male, urban Nigeria).

5.1.2 Family context

The next place where young people experience challenges is with their families. This can be related to, but not limited to, financial deprivation. The limited income and context of poverty mean that parents can only support their children up to the point that does not cause financial strain.

"Our parents are not able to help us deal with challenges we face because they played their part by taking us to school" (young adult female, urban Rwanda).

However, in other instances, the lack of parental or guardian support is related to family structures and related tensions. Some of the study participants, for instance, described staying with extended family and experiencing ill-treatment or a lack of support for their personal growth:

"It was very, very difficult for me. I stayed with my aunt. They don't like me; I don't; I can't; they don't like me sha!" (teen female, rural Nigeria).

In several cases, the lack of family support was closely tied to the expected roles for young women and men:

"Most parents have wrong beliefs that boys are entitled to have a better education than girls, or to achieve a higher education level compared to girls" (young adult male, urban Tanzania).

At a household level, it is young women who are expected to take care of the household, limiting the time they have for other activities:

"Girls are therefore limited by house chores and their parents who oblige them to stay home" (young adult female, urban Rwanda).

Teen girls and young women reported being treated differently to their male counterparts: their movements are restricted; they cannot just leave the house without their movements being accounted for, which is not often the case with young men. Parents fear young girls will be exposed to, or engage in, 'bad (or risky) behaviour'. In Nigeria for example, one participant emphasised that parents would not allow girls to associate with friends or leave the compound to go and socialise:

"So, it's very interesting because I stay with my parents. They don't allow me to go out like that, so I stay indoors, and they don't allow any of my friends to come and visit me" (teen female, rural Nigeria).

In Rwanda, young female adults reported that their parents did not want them to pursue activities that would require them to move out:

"For us girls, when you ask your parents to let you go find a job far from your home, they can't accept it. They tell us that if we leave home, we will go and later become prostitutes" (young adult female, urban Rwanda).

Specific to Tanzania was the perception that it is better to invest in young men than young women. The survey finds that when compared, the highest level of education for young men in the young adult cohort is secondary education (57%) while for women in the same cohort, primary education is the highest level (58%). Rural communities, especially, seem to believe that young women are likely to fall pregnant or get married early, and they are therefore

less worthy of investment in their future. This leads to under-investment in young women's education.

"If a girl fails standard seven exams, the next step is usually getting married. Often there is no discussion on that: no capital or any assistance parent can offer other than forcing girls into marriage" (young adult female, rural Tanzania).

5.1.3 Personal Challenges

For young people, within a context of financial deprivation and often challenging home environments, the challenge is to stay motivated and believe in themselves in order to succeed. Their access to knowledge and information about how to shape their lives is often limited. Participants stated the need for guidance and for positive role models that would come and talk to them about life. In their opinion, having talks, such as these, would help to support them in avoiding negative peer group pressure after completing their education.

"That's why some students join bad peer groups after school, and they end up ruining their lives because they were never told about how to behave or what to do after high school... therefore we would like to hear from our elders, like inviting someone to come and give us a talk about it" (teen male, urban Rwanda).

However, the mind-set with which youths approach life was also seen to be a challenge to their success. Several groups discussed the idea that young people only want to work white collar jobs, which means they miss out on economic opportunities that may come through agricultural or other entrepreneurial activities:

"There is always the possibility of raising money for agricultural activities, but youth don't want to do them; they think that it's for those people who didn't go to school" (young adult male, rural Rwanda).

6.2 INTERNET USE IN ADDRESSING CHALLENGES FACED BY YOUTH.

In this section, we assess the reach of the Internet to address challenges that our participants face. We begin by discussing participants' experiences with Internet access and use. This is then unpacked in analysis, to determine supportive use of the Internet for daily challenges.

6.2.1 Perception of Internet

Most participants consider the Internet as a positive resource while others perceived it as having a negative influence as well. It was described as useful for several activities, such as research, seeking employment, getting information on different topics, as well as communicating with friends and family:

"Internet also helps us to communicate with friends or our ex-classmates; you may send pictures to each other and keep connected because of the Internet" (young adult male, rural Rwanda).

However, some were aware of the dangers of Internet access and highlighted that Internet use does not always lead to positive outcomes:

"Like all this Yahoo Yahoo, people going about duping people for money and the rest, and the like, not showing their true identity truly" (teen male, urban Lagos).

6.2.2 Access

In all of the countries, young people in the focus groups indicated mobile phones are the primary point of Internet usage. Young urban adults were more likely to own their mobile devices, in comparison to urban and rural teens and to young rural adults. Participants who did not own mobile devices themselves would borrow devices from family members or relatives to access the Internet; this was especially the case with smartphones. For those who reported using a laptop or a computer, this was facilitated through Internet cafes, youth centres or schools.

Nigerian and Rwandese teens made more mention of Internet access at schools than Tanzanian teens. In Rwanda, urban youth were more likely to access the Internet through computers at youth centres while those in the rural areas access them through district municipality offices. The use of Internet cafés was described as common in Rwanda and Tanzania, and provides a complementary means of access to, and use of, the Internet.

"For me, I own a basic phone; therefore, I access and use the Internet in a cyber café. I normally go to the cyber cafe on Thursdays, and I pay Rwf400 only" (teen male, urban Rwanda).

Affordability of Internet services is often a limitation to Internet usage. To overcome this, cost-saving strategies, such as using zero-rated services, promotions aimed at youth or shorter, time-length bundles, are adopted.

"There are some Internet packs meant for the youth, for example, Tigo offers Jama pack, which gives more megabytes to youth, and these MBs can be used in any way, either for social purposes, like WhatsApp and Facebook, or visiting other sites like Google and more" (young adult female, urban Rwanda).

Wi-Fi was described as almost entirely accessed through public platforms, such as schools, hospitals or hot-spotting from someone else's mobile device. Young people described becoming "Wi-Fi hunters" with their mobile Wi-Fi switched on, looking for connectivity. However, at times, wireless networks are password protected, limiting access. In Nigeria, urban male and female teens spoke of having found ways to over-ride security settings when they find Wi-Fi. One either hacks the password or knows of someone who is able to give them the password.

"Actually, the last place I worked, there was this company there; there was this something Wi-Fi, understand? So, there was this guy that knows the password. What I do? I just ask him" (teen female, urban Nigeria).

6.2.3 Internet support in daily challenges

Participants were asked whether they thought the Internet could provide a solution to the problems faced by young people. The majority of youth indicated that there are some ways in which Internet can make a difference, especially when it comes to finding information, inspiration and support networks. More entrepreneurial-minded youth spoke about productive uses of the Internet that can support their businesses. This section discusses Internet use by participants in addressing the challenges they face.

Educational support

"The master of university students is Google. It's all about googling, from A to Z" (teen female, urban Tanzania).

In all three countries across all demographics, the participants who were in school or were seeking to advance their education made use of the Internet to conduct research on

CASE 1: EDUCATIONAL USE

The participant, a teenager, responding in a mixed group in urban Rwanda, cited the role the Internet plays to support his education. Often, a teacher will give an introduction to the subject and then ask you to read further. It is at this point that:

"I normally search from Google because it provides enough details, but a text book just provides highlights and main points. That's why I trust the Internet particularly for studies" (urban male teen). Rwanda

opportunities or subject-related information. Young people facing financial challenges, but wanting to further their opportunities, looked for scholarships to support further education.

However, not only Google was used to support educational activities; social media as well. Social media, such as WhatsApp, is used to communicate for school purposes as it is a cheap alternative and allows for group communication. Students use it, for instance, to share schoolwork amongst themselves and to offer help with homework to one another.

"Also, we use WhatsApp groups to forward class notes, so the class representative will forward notes to all students through WhatsApp groups" (young adult female, rural Rwanda).

Entrepreneurial support

"As I told you, I started a small shop. I got this idea on Internet, on YouTube, where they were teaching how someone can join different cooperatives and improve his/her income; for example how you can start farming tomatoes from Rwf100 and get 1 million within a given timeframe" (teen male, urban Rwanda). This research aimed to understand the possibilities of the Internet to support economic opportunities. We were especially interested in understanding productive applications of the Internet. The Internet was either used to enhance or support alreadyexistent money-making activities, or to find ideas and support for entrepreneurial activities. In Tanzania, both male and female participants engaging in their own small business used the Internet to check for marketrelated information on their products, such as price; exchange images when buying and selling; post their music online; burn and resell CDs; and sell jewellery online. These engagements were said to be mainly facilitated through Facebook and WhatsApp. Young people also spoke about running subscription WhatsApp groups where one would subscribe for content, such as porn, or obtain the latest television shows or movies. An urban male participant in Tanzania, for example, stated that there were pornographic content groups run by girls that men would subscribe to. Subscription to social media platforms was, in this research, unique to Tanzania.

"There is a WhatsApp group, which you have to pay 1500 per month to join, for admin to send movies to the group. For instance, within a week, admin can send several movies and seasonal episodes" (young adult male, rural Tanzania).

In Rwanda, across all age groups and locations, the Internet was used to support buying and reselling, finding fashion trends, modelling, posting own products online, downloading Internet software and installing it on people's phones at a price, and finding business ideas. In particular, the installation of online applications and providing third party services is an indication of youth capitalising on their

CASE 2: INTERNET AND ENTREPRENEURIAL ACTIVITIES

Rwanda-Teen Urban Female

The participant is a student, models after school and is interested in fashion. The Internet provides her with information and opportunities to advance her interests. She uses the Internet to learn about fashion trends and modelling opportunities. The participant recently started a modelling agency as well and uses the Internet to advertise her business.

"For example, now that our agency is not yet known, we may set up a page [relating social media platform] where we will be posting our activities so that people can access it and see our work".

Tanzania-Young Adult Urban Male

A young adult, in his undergraduate studies at the time of the research, uses the Internet in his business of buying and reselling. In particular, he uses Instagram to advertise the products he sells.

"Deals, you know. Even on days when you have nothing to do, you can search online for any cheap phone from brokers; then, I post it to my Insta (Instagram) business page to advertise it".

Nigeria- Teen Rural Female

The participant uses the Internet to advertise her skills and gain clients as she is a hairdresser. In this instance, she uses the Internet to support an offline business activity from which she earns income.

"Ma upload awon pics irun mi so ti won ba like e, won ma nikin w aba won se nile, moma nse home service ni gbami [I'll upload the pictures of hairstyles, and anyone that likes one may request that I come to their house to do it for them. I do home service at times]."

digital knowledge. A rural, male, young adult participant in Rwanda helps people register on Irembo, an e-service platform. As he has a smartphone and Internet connection, he saves people the time of travelling to access a registration point. Young people also described how they actively used the Internet to search for the support they were lacking in their immediate environments. For instance, a female, young adult participant shared that by posting her products online, she connected with people who gave her advice on bettering her products and who provided some mentorship.

One teen, urban male in Nigeria identified himself as a DJ and used the Internet to download music for his shows, upload his mixes and enhance his business by staying abreast with music trends. Another participant, a tailor, stated that he is able to post the goods he has made online, as a marketing strategy to gain more customers.

In all of these cases, the Internet ensured that they were reaching clients beyond their physical vicinity, mitigating the impact of, for instance, long distances, and unreliable or expensive transport.

Employment opportunities

The Internet was described as useful in gaining access to information for employment opportunities. Employment opportunities are either found through local platforms, social media groups or networks that share work opportunities they have found online. Examples of online job portals mentioned are Zoomtanzania.com, Jumia⁶ and Ajira zetu⁷ in Tanzania and Umurimo⁸ in Rwanda. Among some participants, there was the perception that applying through the Internet would lead directly to employment:

"But I have seen people applying...Actually, I have witnessed people getting jobs through online applications at my former working station. It is very possible to get a job by applying online" (young adult male, urban Tanzania).

Sharing job opportunities was a common practice mentioned by youths with Internet access. This indicates a sense of community and the understanding that unemployment is an issue for all. A rural, young, adult female in Rwanda stated that as she has access to occasional work, she often shares opportunities through her personal Facebook page or WhatsApp:

"I am a hospitality student. We sometimes do occasional jobs, specifically at weekends; I normally share information about these occasional jobs with my colleagues on Facebook and WhatsApp so that they can also apply" (young adult female, rural Rwanda).

In sum: social media was described as providing a means to communicate and learn about opportunities, reaching even those without Internet connection. This was the case for participants of all ages, both genders and all locations. A teen, male respondent from Tanzania spoke of his friend, who was based in the rural areas, but is now employed, as a result of the former sharing a work opportunity. A rural, young, adult male in Rwanda points out that his friends share with him the opportunities they learn about, despite his lack of Internet access:

"...as I don't have Internet due to the lack of mobile phone, I have to seek assistance from friends that own mobile phones and that have access to the Internet. Yesterday, there was a job vacancy at the city council. It was posted on WhatsApp and I was informed by my friends" (young adult male, rural Rwanda).

Access to information for skills development

In all countries, participants used the Internet in various ways to learn new skills or advance their existing skills. Participants in Rwanda, specifically the rural female and urban male groups, reported on the use of the Internet to learn new skills. One female participant used the Internet to learn new, event-decoration skills as she was in the hospitality industry; another participant described learning how to make jewellery. The urban male group highlighted Internet skills training as a requirement for teens in a particular secondary school. Specifically, the teen males were receiving CISCO⁹ training. Another

- 6. Jumia online marketing site Tanzania Jumia.co.tz
- 7. Ajira Zetu online portal Tanzania onhttps://ajirazetu.com/
- 8. Umurimo online employment portal Rwanda http://umurimo.com/
- 9. Cisco training is an IT training program enabling one to become a network engineer for example: https://learningnetwork.cisco. com/welcome

participant, in the business of repairing mobile and electronic devices, used the Internet to learn how to repair devices:

"As I told you that I repair phones and other electronic devices when I am on holiday, most of the time I use Internet to learn how different electronic devices are repaired because it happens that I am asked to repair a device that I am not familiar with" (teen male, urban Rwanda).

In Nigeria, a teen professional table tennis player stated that he was able to hone his talent by watching professional tennis players online:

"If someone is playing on the table and I'm just watching the game, there are some things that I don't know how to do. If I'm looking at the person's hand that is playing, I can grab what he is doing, and the way he is doing it" (teen male, urban Nigeria).

In Tanzania, rural and urban male participants gave examples of using the Internet for upskilling. These include self-taught music training through YouTube and guides for business planning. A male, urban, teen participant was learning how to post videos on YouTube and make money from these. Indeed, the content platform pays those who post content according to how many followers they generate. The teen's activities indicated an awareness of the gains one would be able to optimise when engaging on a platform, such as YouTube.

"I opened my own channel on YouTube. I learned how to create my own network from YouTube and followed all the steps until I achieved my goal. I have done that like a week ago and right now, I am at the reviewing stage. I heard that you can be paid through YouTube channel by Google if your video has a certain number of viewers" (teen male, urban Tanzania)

Role models/Challenging Narratives/Motivation

"I can show them another girl who did the same through the Internet. Otherwise I can create something new for myself" (teen female, rural Rwanda).

"I can also say the Internet helps us to build self-confidence...Watching such material [via YouTube] you may realise these people began when they were so young, but with persistence and other things..." (teen female, urban Tanzania).

"Internet can therefore be a solution because you can read about other people who were like you but changed their behaviours and are currently successful..." (young adult female, urban Rwanda)

The Internet, in particular for young women, has become a tool for reshaping life narratives, based on finding motivation, role models and inspiration. In societies where local role models are often difficult to find, or where young women are perceived in a negative way, accessing this particular content may provide knowledge and build the necessary confidence for young women to shape their *own* narratives and claim some form of agency in their lives.

6.3 CHALLENGES TO INTERNET USE

The potential positive impact of the Internet only goes as far as what one uses it for and the extent to which the challenges faced require an ICT-related intervention. Indeed, the particular circumstances determine the effect the Internet can have on young peoples' lives. In this section, we highlight challenges to Internet use and perceptions by young people of the inability of the Internet to address their challenges.

6.3.1 Affordability

"You might also have these devices but lack money to buy megabytes because they are costly, and to make matters worse, you might have megabytes but fail to access the Internet because of poor, or slow, Internet connection" (teen female, urban Rwanda).

Cost of services and devices, the lack of access points, quality and speed of network and devices with limited capacity, all limit the scope of access and use. Some participants did not own a device and had to rely on friends and family members to access the Internet. The cost of accessing the Internet, whether through mobile Internet or an Internet café, was also frequently mentioned as limiting optimal use by young people. In some instances, this cost is also related to having to travel to the nearest Internet access point.

6.3.2 Digital skills

Once one has access, certain limitations may remain, such as digital skills, language barriers and information overload, all impacting the way and the extent that those with access use the Internet. Young people described the lack digital skills as ranging from not knowing what the Internet is, to lacking the knowledge of how to use the Internet:

"We also face challenges associated with lack of skills to use the Internet. If one doesn't have someone to help, it becomes difficult to use it. You may see WhatsApp but be unable to use it. This is also a problem. Someone can have a smartphone but lack the skill to use it" (young adult male, rural Rwanda).

6.3.3 Local content

In addition, the lack of content in local languages impacts on effective Internet use. In Rwanda, young people complained about the lack of content in their own local language. One participant pointed out that the fashion trends they follow are from Korea, and they use their own language. More frequently voiced was the complaint that most of the content is provided in English, as one other participant from Rwanda stated:

"The content on the Internet is mainly in English; maybe if it was in Kinyarwanda I could use it easily and perform different tasks. I wish we had someone to teach us how to use the Internet" (young adult male, rural Rwanda).

6.3.4 Restricted use

Young people's community and family context also determines the extent of optimal use and their ability to address the challenges they face. Many, especially teens and young women, described operating in contexts of restricted use by their parents, associated with a lack of trust; all spoke of restricted access at facilities, such as the school, and of discouragement by other people from using the Internet. In Tanzania, rural female participants stated that even when one is able to buy a smartphone, parents do not trust them. In Nigeria, one participant stated that her mother refuses to buy her a phone because "she believes that if she gives it to me, she will spoil me" (young adult female, rural Nigeria). Parental restrictions range from a complete ban on using the Internet to monitored Internet usage. Parents also confiscate devices that give access: "I have (a) phone but my mummy is always seizing my phone" (female teen, rural Nigeria).

Participants in Rwanda specifically mentioned that while they do have Internet access at school, they are not allowed to be on certain sites such as YouTube or Facebook. In other instances, participants stated that when borrowing a device, online activity is monitored, limiting what it is they can do online. As one teen, male, urban participant from Nigeria put it:

"Even if my parents are going to allow me to use their phone, they are going to always time me...I don't get real good access to post whatever I want to post on the Internet" (teen male, urban Nigeria).

Parents are said to discourage their children from going online for fear of the content they will be exposed to. Several of the participants, in all of the countries, shared this concern. 'Bad content' was often described as pornographic or nude pictures, which "corrupt (the) mind of youth" (teen male, urban Nigeria). Participants understand the parental discouragement that is associated with such 'bad content' as it is seen to be tarnishing their minds or wasting their time.

Teens and young adults both remarked that if one is only using the Internet to watch pornographic content, for example, then it does nothing to address their challenges.

It is in this light that some agreed that "most youths access the Internet for useless stuff" (young adult male, urban Tanzania).

6.3.5 Safety and privacy concerns

Safety and privacy concerns also limit Internet use. Participants are aware of the dangers found online, such as scamming, either through duplication of their personal content online, or through confidence scams. Participants in Nigeria gave examples of 419 scams, ¹⁰ or their

passwords being stolen as a security issue one needs to be aware of when using the Internet. Across all three countries, there was also the fear of individuals duplicating online profiles. In Tanzania, a teenager, who owned a SIM card but borrowed a friend's device and kept his SIM card with the friend, discovered this friend had created a profile with all his details:

"During one holiday, I found my friend had already connected me to the Facebook platform and shared my picture. I asked him how my picture got to the Facebook platform He responded that he took my pictures and used my phone number to open an account and communicate with several people. It was surprising that someone shared my picture on Facebook" (teen male, urban Tanzania).

In Rwanda, there was a concern that not knowing what one should or should not post online would lead to posting things that are deemed inappropriate or that could jeopardise one's security:

"Because of the lack of knowledge, you end up posting something in a wrong place that can affect your security. Another thing is that I have heard of many people posting a picture on WhatsApp while they are naked because of lack of knowledge" (young adult female, urban Rwanda).

There were several cases warranting concern for young people's safety in Rwanda. Some participants described meeting up offline with individuals who they had met online, despite being aware of human trafficking risks. One participant travelled to Germany, having connected with someone on social media. Another participant planned on meeting up with a Ugandan at the border but later found out the meeting was not possible as the individual had been arrested.

^{10. 419} scams refer to the Nigerian Criminal Code dealing with fraud, and in this particular case, it refers to online fraud.

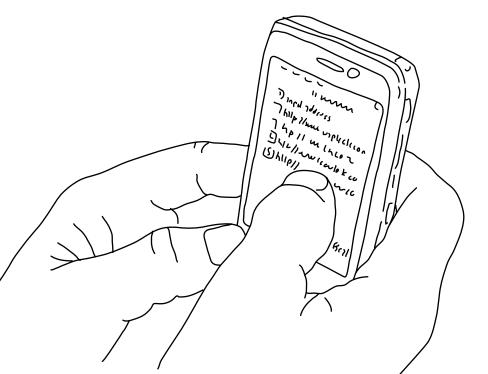
6.3.6 Limitations of the Internet

Finally, there was also the perception that Internet usage is a double-edged sword - where 'good use' easily becomes 'bad use', and where a possible positive impact sits alongside a potentially negative impact on people. As a result, there was the perception that the reach of the Internet is limited in its ability to solve young people's day-to-day problems, and at the same time, it easily distracts young people. Several youth declared that the Internet would not be able to address fundamental infrastructure issues, such as not having electricity or ill-treatment, for instance.

"If they even tell me, then I would disagree because I would be asking them how the Internet would solve my problems, such as maltreating, beating, caning, punishment all the time" (teen female, rural Nigeria).

In addition, the vast majority of participants agreed that a lack of capital to start one's business - an issue of concern for the entrepreneurial participants – cannot be solved by accessing the Internet. Young girls in all countries agreed that Internet access would also not easily be able to shift community perceptions and expectations of girls.

"It is not easy for a girl to leave home and purposely go maybe to a cyber café to access the Internet. This is because girls have responsibilities, like household chores. Well...[some] girls are also not interested in Internet, and some choose to stay home, and those who have some interest don't put in effort to convince their parents about the importance of using the Internet" (young adult female, urban Rwanda).



7 CONC

CONCLUSION

Being drivers of Internet use as young people does not necessarily equate to optimal Internet use, especially within contexts of poverty. The findings arising from the triangulation of quantitative and qualitative data, provide an evidence base for understanding the effect of access to and use of ICTS, specifically the Internet, on young people's opportunities to break cycles of poverty and access opportunities. The findings show that young people experience challenges of poverty, resource deprivation, high levels of unemployment, or employment in precarious work, poor quality education, and missed education. Young women are also exposed to risky sexual behaviour. The Internet is used to address some challenges they face, but its reach is limited by compounding factors, which may be addressed through Internet-related policy solutions. Other needs require cultural shifts. In most African countries, access to ICTs has expanded exponentially. Mobile phones have become a part of many young people's daily lives, and access to computers, network coverage and Wi-Fi are no longer an exception. Despite low levels of device ownership, particularly smartphones, other strategies are used to access and use the Internet.

These include borrowing devices or making use of public access points, such as Internet cafes or district municipality centres. If the device is no longer an issue, young people make use of free or hacked Wi-Fi or promotional packages from network operators, to access service they often cannot afford.

As part of the After Access focus of the survey, understanding the way in which the Internet is used helps us determine its reach in addressing the challenges young people face.

The general perception is that the Internet is a double-edged sword that may be useful in some instances but carries negative consequences.

Google and social media are the main sources of content and communication. Platforms, such as Facebook and Twitter, and tools, such as WhatsApp, facilitate easier communication and source a wide range of information. Youth in the focus group discussions explained that social media and the Internet more broadly are also frequently used to look for information, find educational content or learning support, search for jobs, or promote small businesses. Access and use of the Internet for small business purposes is predominant, given that levels of self-employment are high in all three countries. Internet use enables them to find information to upskill or advance their businesses and communicate with clients beyond the local periphery. Information sharing among young people allows them to connect with their peers, building their networks. This also ensures those who do not use the Internet, as highlighted in the focus groups, have access to online information. The Internet thus has the potential to provide these young people with forms of social (networks) and cultural (knowledge) capital they would otherwise remain deprived of.

Nevertheless, young people also pointed out several challenges that remain with access to, and use of, the Internet and mobile phones or other devices. Most agreed that while ICT opens up a world of information, knowledge and networks, the technology also presents dangers. It is also clear that inequities remain, with more young men than women accessing ICT and owning phones,

and with access to affordable and reliable networks still often limited in the more rural areas. The quantitative data corroborated the focus groups' findings that the cost associated with buying a device or service limits Internet usage. Smartphone ownership is relatively low. Digital literacy, limited local content, safety and privacy concerns limit the extent of Internet usage and deter Internet users. Specifically, gender cultural norms play out, with women's online use hampered by low levels of investment in their education, onerous household responsibilities limiting their time and Internet usage restricted due to a lack of trust. Finally, in all of the focus groups, there was mention made that access to the Internet alone cannot solve all of the challenges faced by young people, especially not the lack of capital and resources experienced by young people and their families.

7.1 POLICY RECOMMENDATIONS

The reach of the Internet is limited by compounding factors that may be addressed through Internet-related policy solutions. Cultural shifts are necessary to deal with other youth challenges to be productively online. Despite these barriers, the potential for Internet to address social challenges for young people based on their uptake exists. If access to and use of Internet and mobile phone technology is to be harnessed to support youth development and to attempt to break the cycle of poverty in many of the African countries, it is vital to ensure that more young people male and female, urban and rural – have access to affordable devices that allow them to search for the information they need, in a language that they speak and understand. While some of this would require dedicated efforts by policy makers in various government-line departments – such as education, economic empowerment, and communications - there is also a need for integrated, transversal approaches that see the use

of the Internet and mobile technology written into broad policy frameworks for youth development. Such an approach should continue to emphasise the transformative power of ICT and underlie further efforts to provide cheaper and more reliable access to the Internet. Innovative approaches could be tested, such as free access to information and services provided by government or a range of well-recognised civil society organisations that support youth well-being in its broad sense.

However, providing access alone will not be sufficient to empower youth to deal with the challenges they face. More effort needs to be made, both to offer children and youth the training they need to access and use the Internet, and to process or evaluate the information accessed. Better understanding the needs of young people, as this study has sought to do, is also crucial in the development of further tools that are meant to support young people.

Providing content that is relevant to the national schooling curricula, information on where to gain job experience, and insight on where and how to find support for running or promoting one's own small business via the Internet or with the help of mobile technology would clearly support young people in their wish for empowerment and independence.

Dedicated awareness and digital literacy campaigns, on where the Internet can be accessed, how to safely navigate it, what kind of information can be accessed and why that can be beneficial to both young men and women and their families. These could enable those who are currently non internet users on how to optimally make use of the internet once they are connected.

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APPENDIX 1

FOCUS GROUP QUESTION GUIDE

HOW DO YOUNG PEOPLE MAKE USE OF THE INTERNET TO ADDRESS THEIR SOCIAL CHALLENGES?

Participants will be asked to talk about:

Life as a young person in their community – what would you say life is like for a young person like you, here in the community? Could you tell us a little bit more about the challenges youth face here?

How do young people try to deal with those challenges? Could you give us some examples?

So, I have heard you say that young men/women in the community here face these xxx issues. You have also mentioned that there are ways/no ways in which young people try to deal with the challenges in their lives. Now, can I invite you to think about this a little more? For instance, when we think about possible solutions to those challenges, some people may say that Internet could help young people, but others may say the Internet is not so useful. How do you all feel about that?

Can we talk in a bit more detail about the Internet now? How do you access the Internet, for example? That is on what devices and from where? E.g. personal mobiles, laptops, computers and from public Wi-Fi points, school or work

What information do you look for when online; why is that information important for you?

And would you say it is easy or difficult to find the information you are looking for? What makes you say that?

Do you find that the information you find on the Internet is always correct? Why/why not/what makes you say that? Can you give us some examples of when the information was correct/incorrect?

Are there things you can do to check whether the information you find is correct or not? Can you give us some examples?

Are there any instances in which you place information online yourself or are you aware of times when people place/post information online? When would that happen? And what information do you put online then? Why?/ or What would be the reasons you don't put things online?

WHAT CHALLENGES DO YOUNG PEOPLE FACE IN ACCESSING AND USING THE INTERNET

Participants will be asked to talk about:

Are there any challenges you face in accessing and using the Internet? (Interviewer can probe on issues of cost, devices, data and quality of service; and navigating information overload);

Are there any activities you would like to do online but cannot? Why is it difficult for you to do those activities? Can you explain that a little more?

We know that some people worry about their privacy, security or safety when they are online? How do you feel about that? Can you explain that a little please?