Assessing the UNCDF IDE Programme in Uganda

Barriers and Opportunities for Women in Digital Technologies

Acknowledgements

Executive Summary

In 2019, UNCDF globally launched the five-year 'Leaving No One Behind in the Digital Era (LNOB)' strategy which aims at equipping millions of people to use innovative digital services that will empower them in their daily lives and contribute to achieving the Sustainable Development Goals (SDGs). This programme is being implemented in the West Nile, Acholi, and Lango sub-regions of Uganda with the support of the Swedish International Development Cooperation Agency (SIDA).

The Inclusive Digital Economies (IDE) programme, UNCDF's flagship initiative for LNOB in Uganda, covers four (4) workstreams of Policy and Regulation, Digital Infrastructure, Inclusive Innovation and Skills. To implement the LNOB, UNCDF has partnered with companies to roll out digital innovations in health, education, agriculture, clean energy, and finance in Northern Uganda.

In September 2022, UNCDF contracted ASIGMA to undertake a comprehensive gender assessment of the IDE programme in Uganda. Undertaken from September 2022 to February 2023, the assessment aimed at providing a means for better understanding the critical gender dynamics (enablers, impediments, institutions, frameworks) which impact women's participation in their communities, ability to make decisions free of coercion at both household and community level), access to/usability of digital products, and agency in the digital economy.

The two-pronged assessment involved a survey to establish the constraints to women's participation in the digital economy aligned to the four workstreams, and a study of social norms to get a deeper understanding of the social and cultural influences to these. The study also considered the environmental as well as demand and supply factors.

The study design was informed by UNCDF's Participation of Women in the Economy Realised (PoWER) framework, the women's inclusiveness score within the UNCDF's Inclusive Digital Economy Scorecard (IDES), and The World Bank Consultative Group to Assist the Poor (CGAP) Social Norms Diagnostic Guidance.

It involved a desk review to identify norms in the communities of interest which were then explored and validated through Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) in the preliminary stages of data collection. Thereafter, a social norms questionnaire was incorporated into the survey to determine the norms for prioritization at the deep dive stage. A total of 774 respondents were polled and 10 FGDs undertaken for the deep dive.

Two social norms concerning permission over ownership of digital technologies and supervision of use of digital technologies were prioritized for the deep dive. These were validated and investigated further through a series of Human Centered Design (HCD) community validation workshops.

From the HCD workshops, the underlying drivers of these norms were established including household power dynamics (control), traditional gender roles and time use profiles of men and women, and cultural and traditional beliefs among others. In addition, female personas in the communities were identified and profiled to be able to craft relevant solutions to close the digital gender gaps in these communities.

The data analysed was collected from a random sample of 1,363 project beneficiaries and non-beneficiaries in the refugee and host communities of Yumbe and Kiryandongo Districts, and the rural community of Lira

District; 24 FGDs for men and women; and 16 KIIs.

Overall, phone access stood at 97% and phone ownership at 77% indicating that a considerable number of people in the programme areas did not own phones but accessed phone services from family, friends, or other sources. Access and ownership of phones was significantly higher among men compared to women across all communities. The widest gender gap in phone ownership was observed among the refugee community where 85.5% of men owned phones compared to 57.5% of women interviewed, representing a 28% gap. The main constraint to both access and ownership of digital devices was affordability which was especially pronounced in the refugee community.

Whereas nine out of every ten people interviewed could make and receive phone calls by themselves indicating the ability to operate the basic functions of a phone without assistance, only four out of every ten men and one out of every ten women could browse the internet. Out of a list that included social media and email use, browsing the internet was the most common advanced digital skill in the communities. In general, findings indicated that women trailed behind men in advanced digital skills.

The usage of UNCDF-supported digital platforms was less visible in the refugee community where only three out of ten respondents had used at least one of the platforms. In the host and rural Lira communities, more than half of the respondents had used at least one of the platforms. Digital innovations in agriculture were the most utilized at 33%, while clean energy digital innovations were the least utilized at only 14%. Women trailed behind men in the use of these digital platforms, especially within the refugee community.

Within the policy and regulation workstream, findings show that whereas the government has fully mainstreamed the SDGs into its planning framework in the National Development Plan III, and put in place laws and policies regulating digital communications in an effort to ensure that no one is left behind, key laws and policies aimed at digital inclusion are still gender blind.

→ Key recommendations

» Deliberately promote awareness of digital opportunities and developments to ensure that all sections of the population are equitably empowered with information and tools they need to participate in the digital economy.

» Support development of interventions that respond to diverse livelihoods and needs of men and women.

» Promote the adoption of gender intentional design parameters and measures embedded in the implementation of any digital project/ service.

» Incentivised behavioural change interventions focusing on motivating and convincing men and other norms influencers of the benefits of women participation in the digital economy.

» Identify and leverage role models and opinion leaders as spokespersons to sensitise communities to transform negative social norms against women's use of digital technologies.

» Empower women and girls in rural communities with relevant education and digital skills.

» Use of appropriate outreach programmes to expose women to digital products and services.

Introduction

Background

UNCDF is the United Nations' flagship catalytic financing entity for the world's 46 Least Developed Countries (LDCs). With its unique capital mandate and focus on the LDCs, UNCDF works to invest and catalyse capital to support these countries in achieving the sustainable growth and inclusiveness envisioned by the 2030 Agenda for Sustainable Development and the Doha Programme of Action for the least developed countries, 2022–2031.

In 2019, UNCDF globally launched the five-year 'Leaving No One Behind in the Digital Era (LNOB)' strategy under the Inclusive Digital Economies (IDE) programme which aims at equipping millions of people to use innovative digital services that will empower them in their daily lives and contribute to achieving the SDGs.

In Uganda, UNCDF launched the LNOB strategy in the West Nile, Acholi, and Lango sub-regions, and Kiryandongo District with the support of the Swedish development agency (SIDA). The IDE programme is implemented under four workstreams, namely:

- » Policy and Regulation
- » Digital Infrastructure
- » Inclusive Innovation
- » Skills

In line with these workstreams, different interventions within the sectors of agriculture, education, health, clean energy, and finance were rolled out by UNCDF through its partners.

ASIGMA was contracted to undertake a comprehensive gender assessment study of the IDE programme to determine the factors affecting women's adoption, usage, and agency of these digital solutions. The assessment was executed in a modular form starting with an individual survey to clearly capture the prevalence of the impediments to the adoption of digital technologies by women. This was followed by a social norms study to deeper understand the strength of the influence of cultural and religious norms that limit the active participation of women in the digital economy.

Methodology

A mixed method approach was adopted for the study. This comprised of both qualitative and quantitative methods which were guided by the UNCDF PoWER framework, the women's inclusiveness score of UNCDF's Inclusive Digital Economy Scorecard, as well as the World Bank's CGAP Social and Cultural Norms diagnostic tool.

The study also followed a modular and collaborative approach which involved three phases.

Phase 1 involved establishing the level of women's inclusiveness within the four IDE programme workstreams. In line with this, a desk study of existing literature was carried out to investigate the extent of the digital gender gap as well as identify key market constraints to women's participation in the digital economy. The desk study was complimented by primary data collected through an individual survey, KIIs, and FGDs.

Phase 2 involved an in-depth analysis of prevalent social norms influencing women's adoption and usage of digital technologies.

Phase 3 involved going back to the field for human centered design community workshops that sought to verify the highlighted norms from the target group, refine the female personas, and obtain community generated solutions to the digital gender gap.

General Characteristics of Respondents

Age group	Male	Female
Greater than 64	6%	3%
55 - 64	7%	6%
45 - 54	18%	11%
35 - 44	23%	23% 36%
25 - 34	29%	36%
16 - 24	18%	20%

■ Male ■ Female

Age of the Respondents
Most of the respondents were youth with 47% aged between 16 and 34 years.
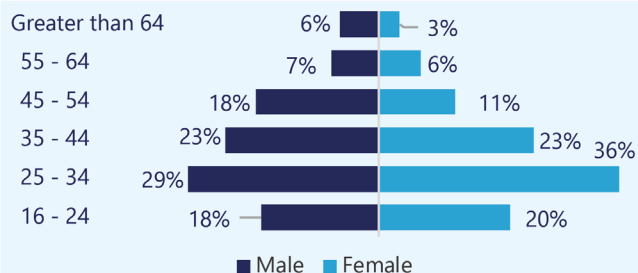
Marital Status
72% of the respondents were married.

Main Energy Source
Wood fuels (charcoal or firewood) stood out as the main source of energy for cooking used by 99.8% of the respondents while solar was the main source of energy for lighting.

Main Occupation
Subsistence farming accounted for for 59% of the respondents' occupations. Wage-based employement was largely dominated by the men.

Income	Female	Male
Above 250,000	13.5%	22.8%
50,000 – 250,000	44.0%	45.2%
Less than 50,000	38.7%	31.2%

♀ Female ♂ Male
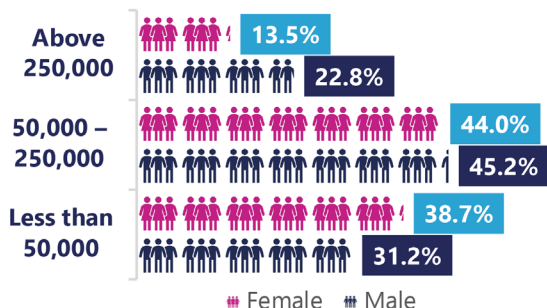
Average Income
Income levels within these communities were low with 35% of the respondents earning less than UGX 50,000 or US$ 14 a month.

Subsistence farming was the primary source of income for 52% of the respondents.

Education level
Overall, there was a low educational attainment with 56% of the respondents not having progressed beyond primary school level. Men were recorded to have attained higher education levels compared to women.

Yumbe
Refugee community (Bidibidi)
Host Community

Lira
Local Community

Kiryandongo
Refugee community
Host Community
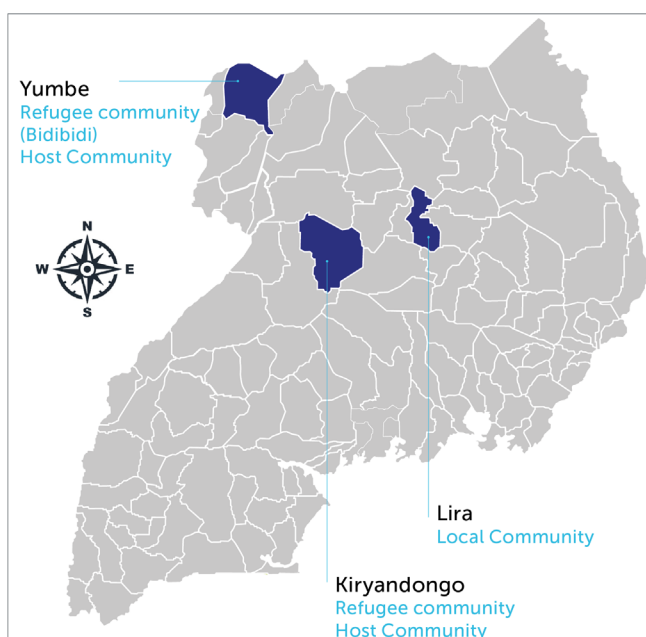
Map of Uganda showing the location of respondents interviewed

Digital Infrastructure

Access and Ownership of Digital Devices

Access and Ownership of Phones

	Refugee Community		Host Community		Rural Community		Overall	
	Male	Female	Male	Female	Male	Female	Male	Female
Phone Access	100.0%	93.9%	98.7%	93.7%	100.0%	96.1%	99.5%	94.6%
Phone Ownership	85.5%	57.5%	89.3%	64.6%	93.1%	69.2%	89.3%	63.7%

■ Phone Access ■ Phone Ownership
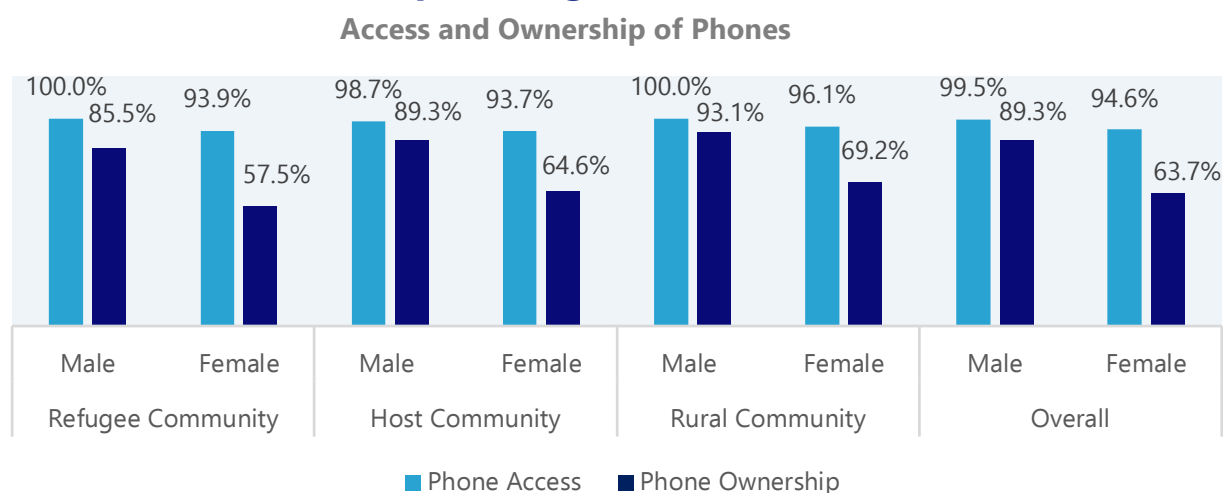
Overall, phones were the main channel used to access digital services by the respondents. Nearly all the respondents had access to a phone (in the last two months) across all communities visited. Phone access stood at 97.1% (99.5% among men and 94.6% among women) while phone ownership was 76.6% (89.3 among men and 63.7% among women). Phone access and ownership is significantly higher than the national levels (57.9% according to GSMA's Intelligence 2022) because the study was mainly conducted within UNCDF project implementation areas.

Internet Access and Connectivity

Access to the Internet Across Communities

	Refugee Community (n=385)		Host Community (n=385)		Rural Community (n=385)	
	Yes	No	Yes	No	Yes	No
Male	52.6%	47.5%	39.5%	60.5%	47.7%	52.3%
Female	15.4%	84.6%	13.0%	87.0%	24.2%	75.8%

■ Male ■ Female
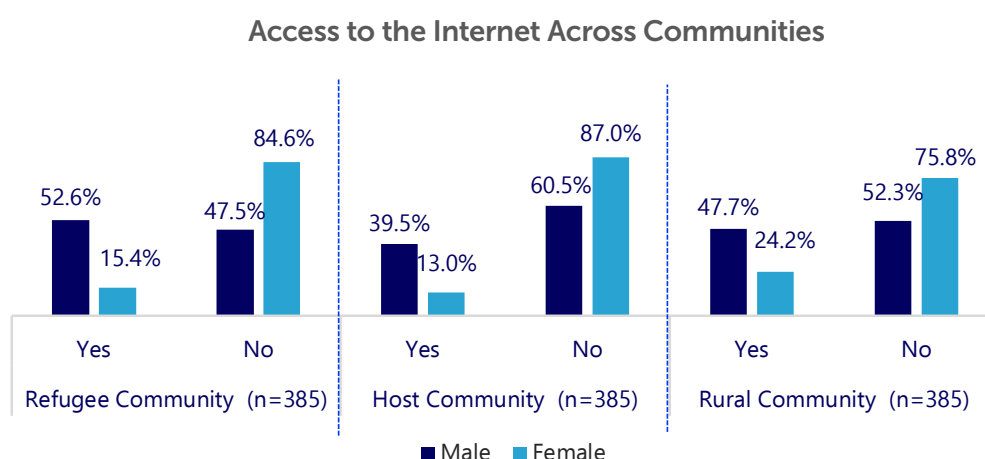
There was limited access to the internet across all communities with less than 40% of the respondents able to access the internet. This was particularly evident among women. Limited access to internet is attributed to the fact that most of the people within these communities use basic phones as the cost of purchasing internet-enabled phones is high.

Phone Usage

98%
of the respondents use their phones to place calls

The most utilized phone function within all three communities was making calls. It accounts for 97.9% of phone usage in the refugee community, 99.4% in the host community and 97.6% in the rural community.

Only 2.3%, 8.7%, and 10.7% of women within the refugee community, host community, and local community respectively used phones to access digital products and services. This was owed to the fact that internet-enabled phones are too expensive for women to afford. Women are also usually overwhelmed with household duties and therefore have no time to use phones.

Agency over Digital Devices

84%
of women who own phones made an independent decision to buy the phone

Across all communities, findings show that men had more decision-making power over which digital device to use compared to women.

The widest gender gap was registered in the host community (13%) followed by the refugee community (9.6%) and rural community (7.8%).

This could be attributed to less restrictions on movement of men beyond their households compared to women which exposes them to a variety of digital solutions on the market. On the other hand, most women in the study communities usually require permission from their husbands to leave their homes. They also spend less time away since they have to attend to the household duties.

Constraints to Access & Ownership of Digital Devices

The main factor limiting access to, and ownership of digital devices was their cost. This was highlighted more within the refugee community with 76.8% of respondents who did not own digital devices stating affordability as the main constraint.

Within the rural community, women earned less than their male counterparts and spent most of their income on household expenses which limited their ability to own digital devices.

Within the rural community, women stated that they could not make independent decisions on what digital solutions to use. This was tied to existing social and cultural norms within their communities. These norms revolve around the fear of men losing control of their wives or their wives getting involved in extra-marital affairs, and phones causing moral decadence among the young girls.

A lack of the knowledge to operate a phone and other digital devices was another factor limiting their ownership. This was mainly prevalent within the refugee community.

Access to internet

<40%
Of the respondents have access to the internet

<25%
Of women across all communities accessed the internet

96% of the respondents used mobile phones to access the internet

The internet was mainly used to access social media platforms (average of 71%)

Digital Skills

Basic Skills

Refugee Community (n=385): Make or Receive a Call 98.5% / 92.3%; Send or Receive SMS 10.6% / 43.6%; Use Mobile Money 48.2% / 26.1%; Listen to the Radio 57.9% / 41.5%; Play Games 36.5% / 24.8%

Host Community (n=385): Make or Receive a Call 100.0% / 97.6%; Send or Receive SMS 79.1% / 46.3%; Use Mobile Money 71.4% / 48.8%; Listen to the Radio 60.0% / 51.1%; Play Games 49.1% / 34.4%

Rural Community (n=385): Make or Receive a Call 96.6% / 92.8%; Send or Receive SMS 85.2% / 58.5%; Use Mobile Money 60.5% / 41.8%; Listen to the Radio 70.3% / 59.6%; Play Games 34.6% / 30.1%

Over 90% of respondents across all communities, were comfortable performing the basic function of making and receiving calls without assistance. Women were still observed to lag behind the men across all communities in both basic and advanced skills.

Advanced Skills

Refugee Community (n=385): Use of the Internet 43.0% / 9.3%; Use of social media 28.5% / 8.5%; Send an E-mail 17.4% / 2.7%

Host Community (n=385): Use of the Internet 36.7% / 9.9%; Use of social media 27.7% / 9.3%; Send an E-mail 21.4% / 4.1%

Rural Community (n=385): Use of the Internet 38.9% / 18.3%; Use of social media 29.6% / 15.1%; Send an E-mail 15.7% / 7.0%

■ Male ■ Female
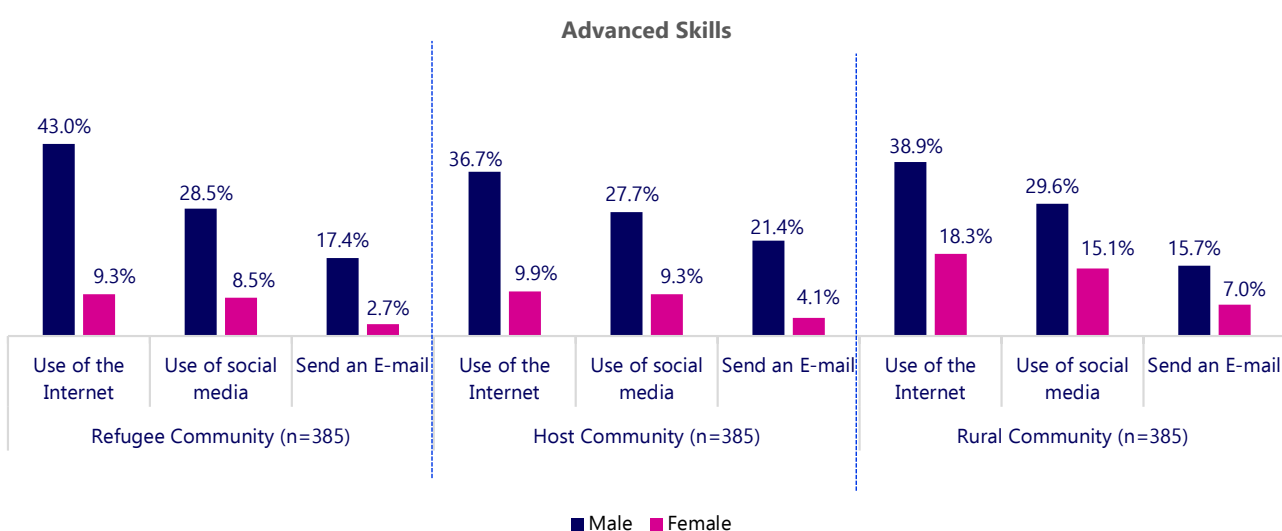
Using the internet was the most advanced skill held within the communities. Women were generally observed to lag behind men in terms of the advanced digital skills with the largest gender gap (33.86%) recorded within the refugee community.

Across the communities, sending an email was the least possessed skill. This was most pronounced among the female refugees where only 3 in every 100 refugee women were able to send an email.

Training in Digital and Financial Literacy

Received Training in Digital Literacy

Rural Community (n=385)
- Female: 31.2%
- Male: 43.6%

Host Community (n=385)
- Female: 36.8%
- Male: 47.8%

Refugees (n=385)
- Female: 20.9%
- Male: 29.4%

■ Female ■ Male
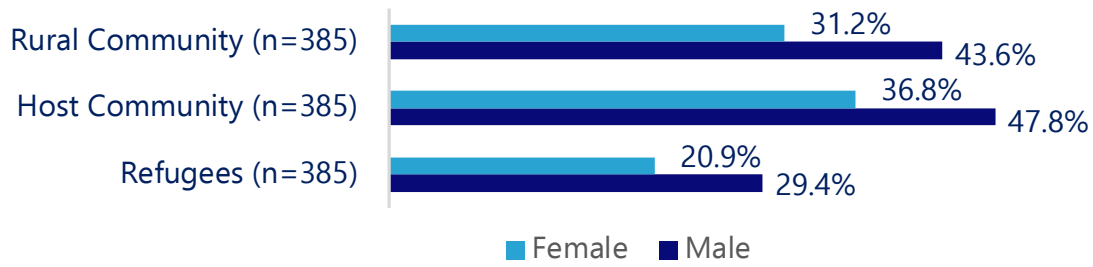
Received Training in Financial Literacy

Rural Community (n=385)
- Female: 14.1%
- Male: 19.1%

Host Community (n=385)
- Female: 31.3%
- Male: 32.7%

Refugees (n=385)
- Female: 24.9%
- Male: 26.3%

■ Female ■ Male
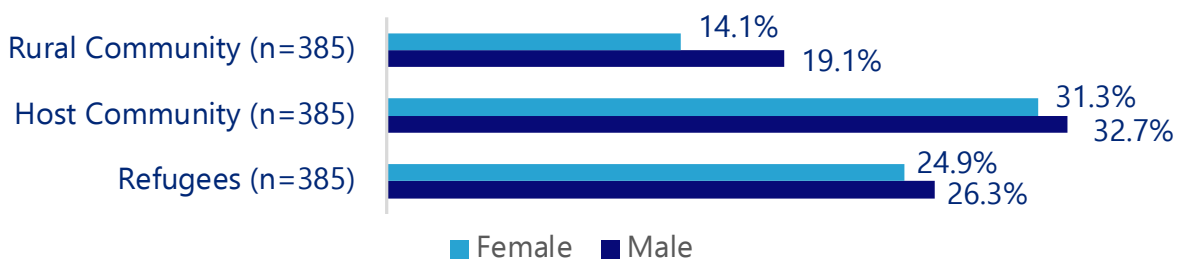
Less than half of the respondents had received training in digital and financial literacy. More men than women had received digital literacy and financial literacy training across all communities. The classroom method was the most utilized training method.

Inclusive Innovation

General Usage of the Digital Platforms

Population that has Used the Digital Platforms

Rural Community (n=385)
- Female: 56.6%
- Male: 50.3%

Host Community (n=385)
- Female: 55.3%
- Male: 67.1%

Refugees (n=385)
- Female: 29.4%
- Male: 46.5%

■ Female ■ Male

Over half of the respondents in the rural and host communities had used at least one of the services offered across the digital platforms supported by UNCDF with agricultural services being the most utilised. This can be explained by the fact that most of the members of these communities were heavily reliant on subsistence farming as their main source of income and needed to access inputs, markets and extension services. The women still lag behind in the usage of the digital platforms with the widest gap of 17.1% recorded in the refugee community.

Digital Platform Usage Across Communities
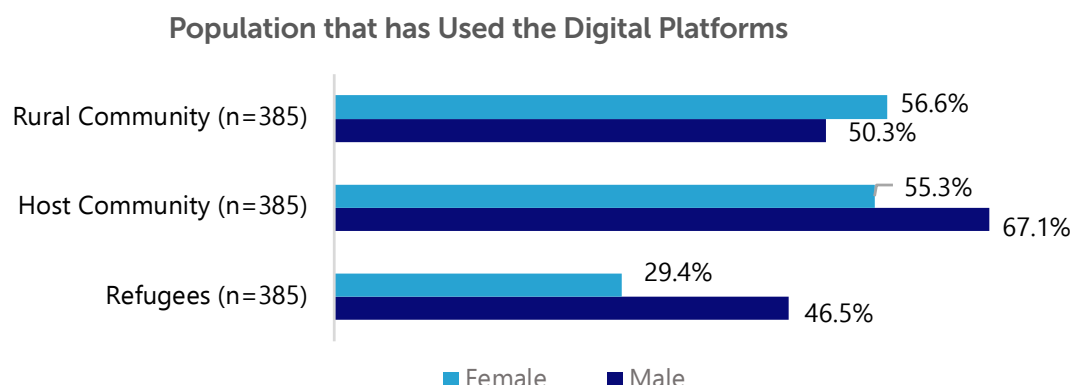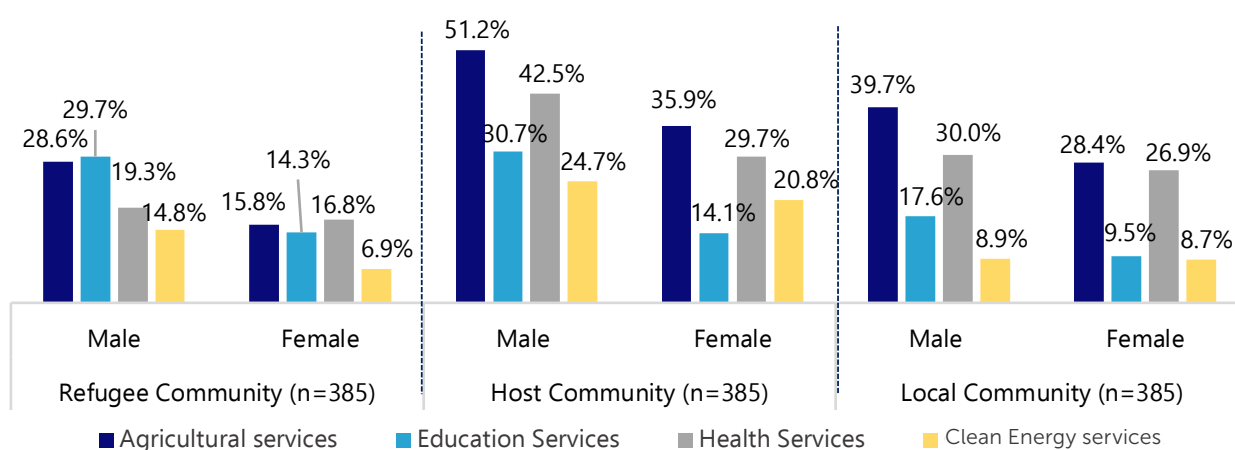
Refugee Community (n=385)
- Male: Agricultural services 28.6%, Education Services 29.7%, Health Services 19.3%, Clean Energy services 14.8%
- Female: Agricultural services 15.8%, Education Services 14.3%, Health Services 16.8%, Clean Energy services 6.9%

Host Community (n=385)
- Male: Agricultural services 51.2%, Education Services 30.7%, Health Services 42.5%, Clean Energy services 24.7%
- Female: Agricultural services 35.9%, Education Services 14.1%, Health Services 29.7%, Clean Energy services 20.8%

Local Community (n=385)
- Male: Agricultural services 39.7%, Education Services 17.6%, Health Services 30.0%, Clean Energy services 8.9%
- Female: Agricultural services 28.4%, Education Services 9.5%, Health Services 26.9%, Clean Energy services 8.7%

■ Agricultural services ■ Education Services ■ Health Services ■ Clean Energy services

There was low usage of digital innovations across all communities. This owed to the fact that most of the solutions, particularly those in the agriculture, health, and education sectors, were introduced in organized groups such as farmer groups, Village Savings and Loans Associations (VSLAs), village health teams, and schools. Of the digital innovations accessed, agricultural services accounted for the most used solutions while clean energy accounted for the least used at an average 13.5%.

Policy & Regulation

The policy and regulatory frameworks were considered as having "No Gap" if provisions for promotion of gender equality and digital technologies, respectively, were explicitly documented. If the provisions were only implied, then a "Small Gap" existed. Where no such provisions existed, a "Wide Gap" was considered to exist.

Framework	Gender Component	Digital Component	Digital Gender Gap
Equal Opportunities Commission Act (2007)	It provides for women representation.	The Act is not specific to digital technologies and offers no insight into women representation on access and usage of digital technologies.	Small
National Development Plan III (2020-2025)	The NDP III highlights the need to achieve a Gender Inequality Index of 0.50 by FY 2024/2025 against a baseline of 0.523 in FY 2017/18. It also provides for a framework for gender mainstreaming, equity, and human rights in a bid to reduce vulnerability and gender inequality.	The need for government digitalizing and rolling out e-services in all sectors (e-health, e-education, e-extension services) is recognized. However, there is no specific consideration of the constraints that hinder women from accessing digital technologies.	Small
Digital Vision for Uganda 2040 (2013)	Over a period of 30 years, efforts are to be made to ensure gender responsive policies. Government aims to encourage innovation to harness the full potential of the digital economy, and technology innovation programmes and actions.	Deliberate effort will be made to enable women to equally participate in ICT, education and skills development, business, agriculture, and industry as well as their equal political representation at all levels.	Small
Computer Misuse Act (2011)	No special consideration was given to women.	The Act addresses some of the issues in line with computer abuse.	Small
E-Government Framework Policy (2010)	N/A	The application or usage of e-Government infrastructure is still limited, with more men than women involved.	Wide

Regulators within the Digital Economy

Regulator	Role
Ministry of ICT and National Guidance	Has a mandate of providing strategic and technical leadership, overall coordination, support and advocacy on all matters of policy, laws, regulations and strategy for the ICT sector.
Ministry of Gender, Labour, and Social Development	The ministry's mandate is to mobilize and empower communities to harness their potential while protecting the rights of vulnerable population groups.
Uganda Communications Commission	Has a principal goal of developing a modern communications infrastructure in Uganda, in conformity with the operationalization of the telecommunications policy.
National Information Technology Authority-Uganda	An autonomous statutory body established under the NITAU Act 2009, to coordinate and regulate Information Technology services in Uganda.

Gender Mainstreaming in IDE

Capacity for Gender Transformative Programming

The capacity of UNCDF's implementing partners to integrate gender considerations in their operations was assessed across four (4) components from the identification of the problem to monitoring and evaluation.
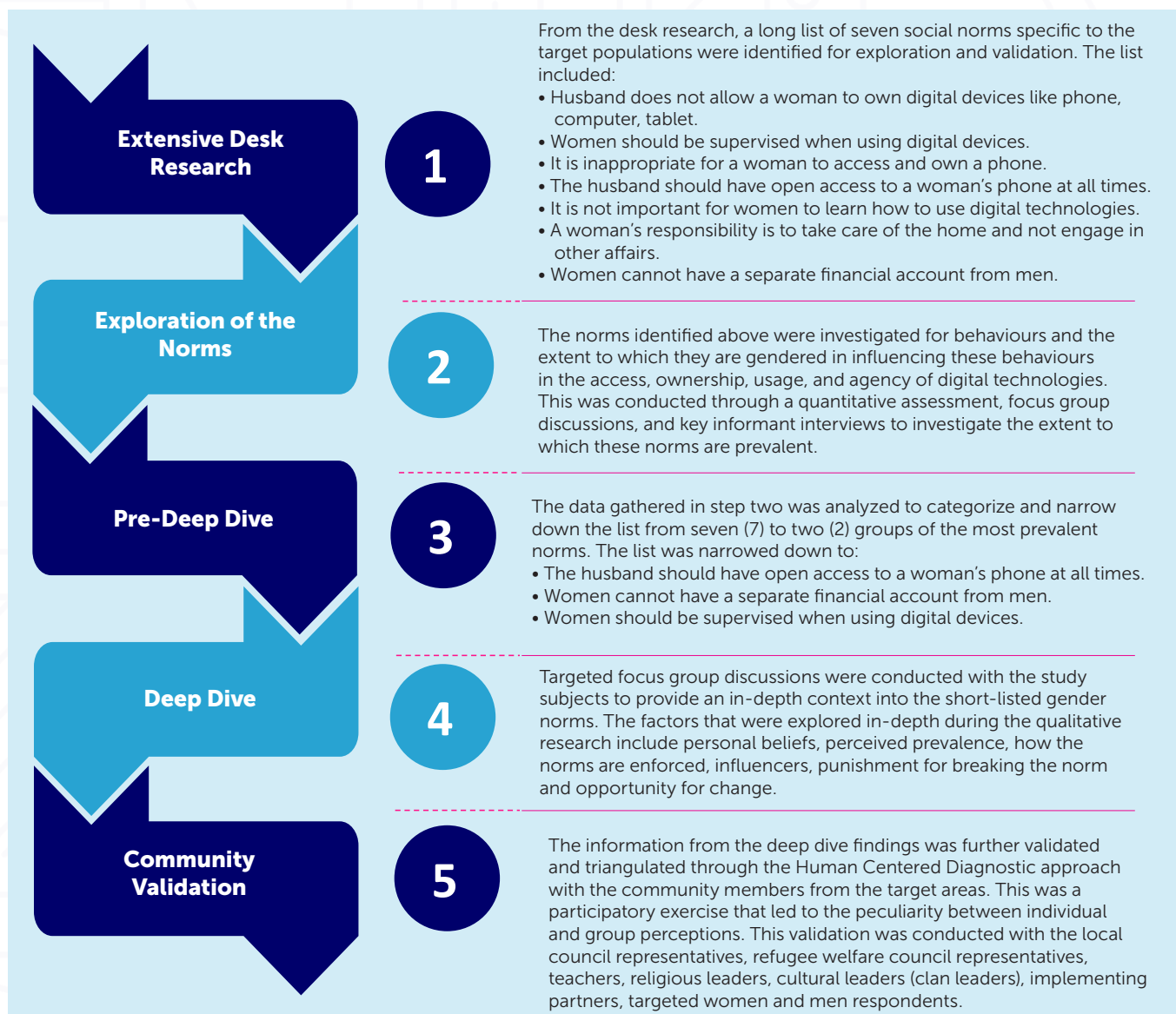
	Partner 1	Partner 2	Partner 3	Partner 4	Partner 5	Partner 6	Partner 7	Partner 8	Score (%)
Problem Identification									**37.5%**
Needs Assessment Conducted				1					12.5%
Aware of Gender Specific Constraints	1	1	1	1	1	1	1	1	100.0%
Gender Specific Objectives									0.0%
Design and Planning									**16.7%**
Gender Specific Strategies		1		1					25.0%
Separate Budget Line to Facilitate Women Participation									0.0%
Gender Considerations in Product Design		1				1			25.0%
Implementation									**52.5%**
Existence of Personnel Trained on Gender Mainstreaming		1							12.5%
Opportunities for both Men and Women to Participate in Management Positions		1		1		1	1	1	62.5%
Gender Considerations in Training	1	1	1	1	1	1			75.0%
Gender Considerations in Staffing		1				1			25.0%
Gender Considerations in Service Delivery	1	1	1	1	1	1		1	87.5%
Evaluation and Monitoring									**43.8%**
Consistent Collection of Sex Disaggregated Data		1	1	1	1	1	1	1	87.5%
Gender Specific Monitoring and Evaluation Indicators									0.0%

From the table above, the partners were most successful in integrating gender into the implementation component of their programming, achieving a collective score of 52.5%. Design and planning was the least represented component at 16.7%. Although most of the partners are aware of the gender-specific constraints that limit women's participation in the digital economy, this has not translated into the development of gender-specific strategies in the design and planning stage among all the partners. Only three (3) partners were recorded to at least have gender-specific strategies in their program designs. All partners had at least one (1) gender sub-component considered during implementation. This is mainly through trainings where most partners deliberately target women representation. Additionally, some partners allow mothers of children below five (5) to attend trainings with their helpers.

Social Norms

Social norms are behaviours adopted by people because of society expectations even when they have different personal preferences. Essentially, these become informal rules that people follow and accept.

When these rules are broken, there are repercussions or sanctions imposed by communities. Gender norms are a subset of social norms that govern beliefs, behaviours and expectations particular to gender lines in the respective community. In the exploration of the barriers that affect women's meaningful participation, access, ownership, and usage of digital technologies, it is important to investigate the extent to which social and gender norms contribute to the identified barriers. As such, a rapid assessment of social and gender norms was conducted in alignment to the World Bank CGAP framework as illustrated below.

Extensive Desk Research

1

From the desk research, a long list of seven social norms specific to the target populations were identified for exploration and validation. The list included:
- Husband does not allow a woman to own digital devices like phone, computer, tablet.
- Women should be supervised when using digital devices.
- It is inappropriate for a woman to access and own a phone.
- The husband should have open access to a woman's phone at all times.
- It is not important for women to learn how to use digital technologies.
- A woman's responsibility is to take care of the home and not engage in other affairs.
- Women cannot have a separate financial account from men.

Exploration of the Norms

2

The norms identified above were investigated for behaviours and the extent to which they are gendered in influencing these behaviours in the access, ownership, usage, and agency of digital technologies. This was conducted through a quantitative assessment, focus group discussions, and key informant interviews to investigate the extent to which these norms are prevalent.

Pre-Deep Dive

3

The data gathered in step two was analyzed to categorize and narrow down the list from seven (7) to two (2) groups of the most prevalent norms. The list was narrowed down to:
- The husband should have open access to a woman's phone at all times.
- Women cannot have a separate financial account from men.
- Women should be supervised when using digital devices.

Deep Dive

4

Targeted focus group discussions were conducted with the study subjects to provide an in-depth context into the short-listed gender norms. The factors that were explored in-depth during the qualitative research include personal beliefs, perceived prevalence, how the norms are enforced, influencers, punishment for breaking the norm and opportunity for change.

Community Validation

5

The information from the deep dive findings was further validated and triangulated through the Human Centered Diagnostic approach with the community members from the target areas. This was a participatory exercise that led to the peculiarity between individual and group perceptions. This validation was conducted with the local council representatives, refugee welfare council representatives, teachers, religious leaders, cultural leaders (clan leaders), implementing partners, targeted women and men respondents.
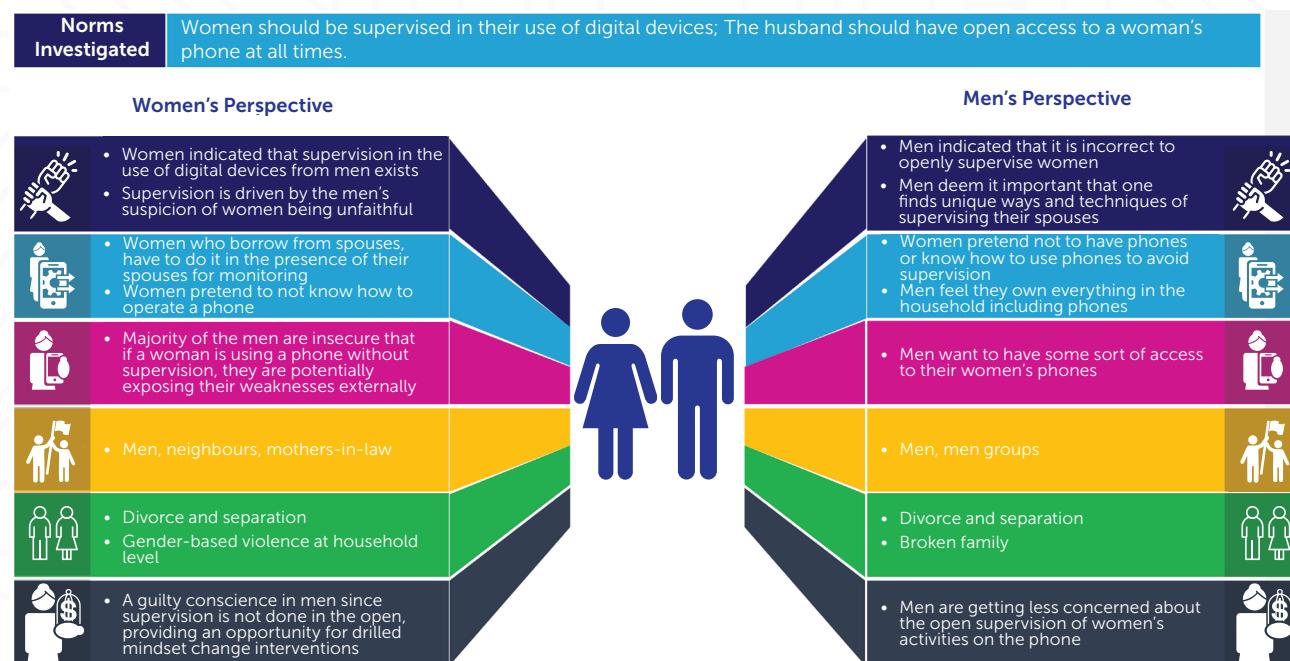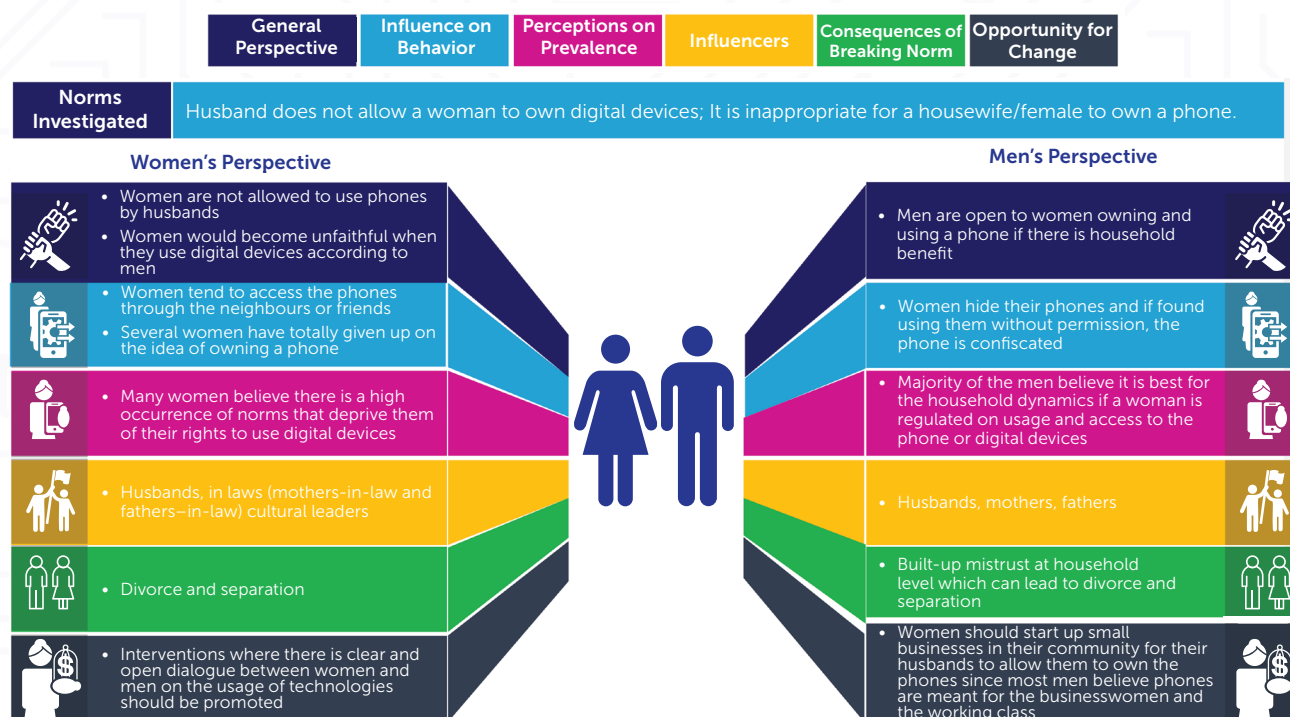
Norms' Influence on Behavior

The most prevalent norms limiting women's adoption, usage, and agency of digital technologies were broadly categorised into two (2) major groups:

1.   Engendered Social Norms – Permission Over Digital Technology
2.   Engendered Social Norms – Supervision Over Digital Technology

The two (2) groups of social norms were unpacked following the CGAP methodology with respect to aspects that define the perceptions to prevalence, behaviours and coping mechanisms, influencers and drivers of the norms, sanctions and punishments for breaking the norms, and opportunities for change among others. The following illustration shows how the two groups of norms were unpacked.

1. Engendered Social Norms – Permission Over Digital Technology

General Perspective	Influence on Behavior	Perceptions on Prevalence	Influencers	Consequences of Breaking Norm	Opportunity for Change

Norms Investigated: Husband does not allow a woman to own digital devices; It is inappropriate for a housewife/female to own a phone.

Women's Perspective

- Women are not allowed to use phones by husbands
- Women would become unfaithful when they use digital devices according to men
- Women tend to access the phones through the neighbours or friends
- Several women have totally given up on the idea of owning a phone
- Many women believe there is a high occurrence of norms that deprive them of their rights to use digital devices
- Husbands, in laws (mothers-in-law and fathers–in-law) cultural leaders
- Divorce and separation
- Interventions where there is clear and open dialogue between women and men on the usage of technologies should be promoted

Men's Perspective

- Men are open to women owning and using a phone if there is household benefit
- Women hide their phones and if found using them without permission, the phone is confiscated
- Majority of the men believe it is best for the household dynamics if a woman is regulated on usage and access to the phone or digital devices
- Husbands, mothers, fathers
- Built-up mistrust at household level which can lead to divorce and separation
- Women should start up small businesses in their community for their husbands to allow them to own the phones since most men believe phones are meant for the businesswomen and the working class

Norms Investigated: Women should be supervised in their use of digital devices; The husband should have open access to a woman's phone at all times.

Women's Perspective

- Women indicated that supervision in the use of digital devices from men exists
- Supervision is driven by the men's suspicion of women being unfaithful
- Women who borrow from spouses, have to do it in the presence of their spouses for monitoring
- Women pretend to not know how to operate a phone
- Majority of the men are insecure that if a woman is using a phone without supervision, they are potentially exposing their weaknesses externally
- Men, neighbours, mothers-in-law
- Divorce and separation
- Gender-based violence at household level
- A guilty conscience in men since supervision is not done in the open, providing an opportunity for drilled mindset change interventions

Men's Perspective

- Men indicated that it is incorrect to openly supervise women
- Men deem it important that one finds unique ways and techniques of supervising their spouses
- Women pretend not to have phones or know how to use phones to avoid supervision
- Men feel they own everything in the household including phones
- Men want to have some sort of access to their women's phones
- Men, men groups
- Divorce and separation
- Broken family
- Men are getting less concerned about the open supervision of women's activities on the phone

Women Personas Circumventing the Gender Norms

In addition to knowing what the gendered norms that affect women's participation in the digital economy are and their prevalence, it is important to understand the type of woman in society who has the ability to circumvent such norms. It is critical to understand these dynamics as they can impact how interventions are designed, who is targeted, and when.

This section presents the perspectives of both men and women in the local, host and refugee communities on the types of women who are not held back by social norms and are free to participate in the digital economy. Respondents were asked if certain statements regarding different women personas were true.

Local Community Context (Lira)

In the local community of Lira the majority of female (85%) and male (78%) respondents indicated that women with some sort of formal employment easily have access to digital technologies compared to those informally employed such as peasant farmers. A majority of female (81%) and male (75%) respondents state that it is more acceptable for girls in secondary school to use digital technologies than those in primary school.

The results from the respondent interviews also indicate that women with businesses and those with bank accounts are better placed to use digital technologies.

Host Community and Refugee Context (Yumbe and Kiryandongo)
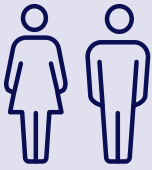
In the host communities in both Yumbe and Kiryandongo, more than 90% of both males and females agree to the fact that girls who have attained secondary education are more likely to have more freedom to use digital technologies than those who have only attained a primary school education. This could be attributed to the fact that the internet is more utilized as a tool for education and the introduction to Information Technology (IT) related subjects at secondary school level.

In both districts, more than 75% of both males and females indicate that women in groups such as VSLAs and those who own bank accounts or businesses are better placed to use digital technologies. A similar trend is observed among the refugees.

The following infographic shows the different women personas for whom concessions were made regarding the different gendered norms around the usage of digital technologies.

Girl Below 18 but is in School	Woman Above 18 Years	Woman Not Living with Partner in Same Household	Professionally Employed Woman
Girls below 18 years of age and are in school, are allowed by their parents to have access to digital devices like phones and computers if they are required for schoolwork. However, these should only be accessed at school and not at home. This is because parents believe that when these devices are used at home by girls below 18 years, there are high chances of unwanted pregnancies.	Girls over 18 years of age, are allowed to have phones and use digital devices without exemption if they can afford them. This is because such girls are considered mature enough to understand the positives and negatives of using phones, and as such will not misuse them.	Women with partners but do not primarily live within the same households with them are often allowed to use phones. This is because a phone is considered a necessity, by their partners, to keep in contact and transact using mobile money. Most women who live with their partners within the same household are often affected by the gender norms that affect adoption of digital technologies.	Women employed under formal professions such as teachers and nurses are exempt from the social and gender norms affecting women's adoption and use of digital technologies. This is because most people in the community including the enforcers of the social norms believe that such women have a justifiable reason for owning such devices as they are important for their work.

Underlying Drivers of Gender Norms

Underlying issues/ drivers	Resulting social norm or practice	Effect on women involvement in the digital economy
Cultural and religious beliefs	It is culturally inappropriate for women to own phones. Elders enforce the norm.	Women have to obtain elders' approval to own or use phones. Men who allow their women to own phones are considered weak.
	The man is the de-facto head of a household.	Women have limited agency over access, ownership, and use of digital devices.
Gender roles and time use	Compared to men, women barely have free time away from domestic work.	Women do not have time to explore beyond the basic phone functions of making calls and other practical functions
		Women who are in professional employment and have phones are considered prone to promiscuity because they have time away from home without male supervision.
	Women mostly spend their day in their homes and the garden whereas men usually set aside time to interact with their friends in the trading centres .	Women have limited exposure and knowledge of new digital innovations compared to men.
Negative or wrong perceptions about women (phone owners)	Female phone owners are viewed as promiscuous by the communities.	Women do not own phones hoping to avoid negative labels. Exceptions can be made if: • The influencers stand to gain benefit from women phone owners such as mothers-in-law receiving money from their daughters-in-law. • The phone is essential to the woman's work such as mobile money agents, community workers, or professionals. • The phone is used for education purposes provided it is not misused by the students.
	Women are careless and prone to losing phones and therefore cannot be trusted with expensive phones.	Women are only allowed to own cheap phones with limited functionality.

Underlying issues/ drivers	Resulting social norm or practice	Effect on women involvement in the digital economy
Household power dynamics and control	Men confiscate women's phones to cut them off from channels through which they can access support in case of GBV or other forms of mistreatment.	If the wife buys a better phone with more functions than that of her husband, the husband exchanges it with his which limits women's ability to reap the benefits of the digital experience.
Lack of trust in relationships among partners	Supervision of female phone users by men.	Women have limited freedom and agency over the use of phones and are sometimes denied certain benefits of digital technologies such as receiving mobile money or communicating with parties that the husband is suspicious of.
	It is more socially acceptable for men to be unfaithful in relationships compared to women.	
Limited knowledge and education	Women with little or no education are regarded as being of low status in society.	Such women are more prone to control by their husbands. A woman that falls under a more traditional role is less likely to have time and the freedom to access and use a phone.

Community Validation of Gender Norms

Gender norms regarding permission and supervision of use of digital devices were further validated following the HCD methodology. This entailed conducting validation workshops to confirm findings from the social norms diagnosis and provide additional perspective that could be used to further unpack the norms. This was necessary to provide a deeper understanding of how the norms evolve within refugee, host, and local communities; the drivers of the norms and their boundaries; and how gendered social norms impact women's access, usage, and benefit from digital technologies. Additionally, the workshops facilitated the establishment of community generated solutions to bridge the digital gender divide in the UNCDF IDE programme locations.

Activities undertaken at the workshops included daily time-use investigation, practical digital skills assessment using digital skills cards, contradicting statements to identify exceptions and boundaries of social norms, influence cards and positive deviance inquiry to identify role models in the respective communities and how they've been able to overcome the barriers to access, ownership, and usage of digital technologies.

The following insights were drawn from the community validation workshops:

» Access to phones, poor network, lack of skills and high costs were all verified barriers that contributed to low access and usage.

» Several norms are linked to using a phone as a tool to control women, which changes for the better or worse, depending on the gender dynamics and levels of gender equality in a relationship and community.

» Gender Based Violence (GBV) was further uncovered during the workshops which proved that there was need to educate people on such topics and change behaviours towards women where GBV has been a problem.

» GBV is also another form of controlling women, undermining and blocking them from accessing and using phones - which often are tools for connecting with family and peers, empowerment, and freedom.

From the community validation workshops, the following impacts of social norms on women's access and usage of digital technologies were identified:

» Married women who are tied to traditional housewife roles, have little to no free time, which means they will not use a phone much even if they had access to one.

» Phones are used as a tool of control, heavily guided by varying levels of cultural beliefs of how women should behave, what is expected of them and their role in their family and communities.

» The only way a woman experiences phone access and digital freedom is if she is considered valuable enough; if she is educated and has a higher status in her relationship and financially contributes to the household, or if she is a single, educated woman - although she may encounter judgment from her community.

» Parents of teenagers or young children see the advantages of giving young girls and boys access to phones as it may advance their ability to study, but their own lack of knowledge on the subject means that they do not know how to teach and educate their kids to manage phone usage, let alone trust them to navigate the digital web in a safe manner that does not expose them to harmful online content.

Every woman's story is different, and there is no general solution to the different personas encountered during these exercises. One thing however, is crystal clear, behavioural change and education on topics of digital technologies, and their effect on empowering women dreaming big for a better future, and gender equality are critical.

Personas Affected by the Norms

Respondents were asked to identify the different personas likely to be affected by the social norms using a community scorecard. The following personas stood out:

»   **A futuristic teenager** who wants a different future for herself but has no role models in her community and battles with parents that do not want her to waste time with a phone as it takes up the time she should be using to do what is expected of her at home.

»   **An unmarried professional woman** in her twenties, who is seen by her peers and students as a role model, but struggles with judgment from her community elders as she is not following the traditional cultural norms expected of especially her age group.

»   **A refugee woman** who struggles to get proper medical advice when her kids fall ill and spends a lot of time and money going from one place to another. Mobile network issues are a constant struggle, and she finds little time to focus on starting her own business as her husband is not supportive with childcare and house chores.

»   **An illiterate housewife** who is punished and beaten by her husband for using a phone until she starts receiving funds from her daughter who works in Kampala. The daughter only trusts her mum to receive the funds, as she knows the father will waste the money if he is the recipient.

»   **A mother** who has big dreams for her teenage son/daughter but is nervous about her child accessing adult content. How can she guide her child in the right direction to make the right choices?

»   **An elderly woman** who only uses her phone to make and receive calls, or as a torch for finding her way in the dark, or listening to the radio while she is in the garden.

Potential Solutions

»   **Incentivised behavioural change** with interventions focusing on motivating and convincing men and other norms influencers of the benefits of women participation in the digital economy at household, community, and macro levels.

»   **Address practical needs of the communities** by developing customized solutions that fit their context.

»   **Identify role models to champion the case of digital inclusiveness** at community level.

»   **Leverage opinion leaders (religious and clan elders)** as spokespeople for sensitizing communities.

»   **Use of appropriate outreach programmes to expose women to digital products** and services considering the time use challenges of women.

»   **Parents and young adults need to be educated on gender equality** and digital skills, if they are to educate their children on the same topics.

Note: These solutions are not unique to one persona. They may be applicable across various personas presented.

Conclusion

From the assessment, structural barriers including cost, connectivity and digital skills play a leading role in widening the digital gender gap within the communities of West Nile, Acholi and Lango. The structural barriers are however reinforced by underlying social cultural norms within these communities. This is further compounded by gender blind policies as well as the limited capacity of implementing partners to mainstream gender into the planning, design, implementation, and monitoring and evaluation of projects aimed at closing the digital gender gap within these communities.

However, opportunities exist to close the digital gender gap if a multi-pronged approach that has at its core last mile client engagement and community advocacy for women inclusiveness in the digital economy is adopted.

Policy and Regulations	This gender assessment uncovered gaps in some of the key laws and policies aimed at promoting gender equality and digital inclusion. Recommendations to combat these gaps are indicated below. • Supporting line ministries to ensure that their policies do not promote gender gaps in the population. • Supporting the implementation of the National Gender Policy (2007) action plan specifically on the strategies that are aligned with digital transformation. The National Gender Policy action plan mainly provides guidance on gender mainstreaming across all sectors of government. • Working and supporting the agencies that advocate for a change in policy geared towards women inclusiveness in technology.
Digital Infrastructure	The assessment found a disparity in gender in terms of access and ownership of digital technologies with men having a significant advantage over women in accessing and owning digital devices. Whereas structural drivers such as connectivity, availability, affordability, and accessibility are the apparent barriers to ownership and accessibility of digital products and services, these structural barriers are reinforced by prevalent social-cultural norms in the societies. **The study therefore recommends the following:** • There is need to explicitly account for the unique needs of women in the project areas and in the design of interventions. • Enhancement of gender responsive monitoring and documentation as well as gender responsive budgeting.

Inclusive Innovations	UNCDF in collaboration with implementing partners rolled out a number of digital solutions in the target communities. However, their penetration in rural areas has been low owing to a number of challenges including skills gaps among beneficiaries, structural barriers including network connectivity and low demand to make the solutions commercially viable particularly in rural areas. Therefore, to improve the adoption of digital solutions as well as narrow the gender gap in their use, the following are recommended: • The unique needs of women should be identified and aligned with the proposed digital solution. • The product design and pricing should not disproportionately impact women's access to, and usage of digital technologies compared to men. • Employment of specific marketing tools, channels and promotion approaches that deliberately reach out to women.
Skills	The programme's focus under this workstream was to develop soft and hard skills among the targeted communities using a combination of digital and non-digital services to accelerate economic inclusion. Skills for operating the basic functions of a phone were noticeably lower among women compared to their male counterparts across all communities. Additionally, women lagged behind in all the advanced digital skills assessed across all the three communities. **To narrow this gap, the study recommends:** • Before rollout, project activities should always include a digital skills assessment of the target areas and incorporate strategies for addressing any gaps in project planning, design, and implementation with special emphasis on ensuring that women are not disproportionately affected by the interventions.

What Next for the IDE Programme in Uganda?

The findings from the study provide insights into the unceasingly widening digital gender divide amplified by the digital revolution, which contributes to gender inequality in Uganda. This study helps us to identify and prioritize strategies and interventions to address constraints that limit women's involvement in the digital economy and build on the opportunities to accelerate access to digital innovations by women.

Notably, the assessment reveals various opportunities for stakeholders in the digital space to close the digital gender gap. Findings from the assessment reveal a need for digital programmes to redefine implementation processes informed by approaches customized to suit and or address specific challenges that hamper women's access to technologies. UNCDF and partners are working to ensure that interventions recognize gender intersectionality. Women are not a homogenous group, and their lives vary depending on their social class, occupation, religion, ethnic origin, age, and marital status. Reaching the most vulnerable women and girls identified will require a more deliberate approach to address the structural and internal drivers of women's access, usage, and agency of digital solutions.

UNCDF and partners are also working to ensure soundness towards the customer demands, product price affordability for women, user-friendliness of the technology solutions, product marketability targeting women, and after-sales services for women using these products. In addition, digital programmes should harness the influence of opinion leaders (religious and clan elders) as spokespersons for sensitizing communities and role models to champion digital inclusion at the community level.

Given the different levels of education among women, the assessment further recommends the need for a combined skilling approach using customized content such as simplified digital training materials mainly consisting of pictures. This should be hinged on increasing women's economic opportunities, such as access to financial and market opportunities, to address cost-related expenses in accessing digital services (internet, airtime etc.).

To transform results from the assessment into actionable plans/interventions, UNCDF has developed a women's economic empowerment strategy, including gender mainstream guidelines to be used by UNCDF staff, implementing partners and other stakeholders working toward fostering women's active participation in the digital economy.

LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital financial inclusion in Africa, Asia, and the Pacific. UNCDF leverages digital finance in support of the Sustainable Development Goals (SDGs) to achieve the vision of promoting digital economies that leave no one behind. The goal of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the SDGs. To achieve this vision, UNCDF uses a market development approach and continuously seeks to address underlying market dysfunctions that exclude people living in the last mile.

THE UN CAPITAL DEVELOPMENT FUND

The United Nations Capital Development Fund (UNCDF) is the United Nations' flagship catalytic financing entity for the world's 46 Least Developed Countries (LDCs). With its unique capital mandate and focus on the LDCs, UNCDF works to invest and catalyse capital to support these countries in achieving the sustainable growth and inclusiveness envisioned by the 2030 Agenda for Sustainable Development and the Doha Programme of Action for the least developed countries, 2022–2031.

UNCDF builds partnerships with other UN organizations, as well as private and public sector actors, to achieve greater impact in development; specifically by unlocking additional resources and strengthening financing mechanisms and systems contributing to transformation pathways, focusing on such development themes as green economy, digitalization, urbanization, inclusive economies, gender equality and women's economic empowerment.

A hybrid development finance institution and development agency, UNCDF uses a combination of capital instruments (deployment, financial & business advisory and catalysation) and development instruments (technical assistance, capacity development, policy advice, advocacy, thought leadership, and market analysis and scoping) which are applied across five priority areas (inclusive digital economies, local transformative finance, women's economic empowerment, climate, energy & biodiversity finance, and sustainable food systems finance).

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