The safe, wise and secure use of digital tech: advice for women and girl migrants in South Africa with little experience of digital tech

Crafted by the ICT4D Collective with migrants and relevant organisations in Southern Africa. To be used in conjunction with associated guidance notes.

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https://ict4d.org.uk

Overall aim of this training deck

Source: Tim Unwin

To provide female migrants who have little experience of digital tech with a basic introduction to its safe, wise and secure use, so that they can avoid the harms and benefit appropriately from the use of digital tech.

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Key message: be careful how you use digital tech

It has huge potential, but can also be used to do much harm

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Digital technologies?

- Devices and systems powered by electricity that are used to store and share information
- Many different types of hardware
  - Radios
    - One way transmission of information
  - Basic mobile phones
    - To make phone calls and share messages
  - Internet
    - A globally connected system of information (data)
  - "Smart-phones"
    - Phones that can be used to connect to the Internet
  - Tablets and Computers (Laptops and Desktops)
    - More powerful and bigger devices for storing and sharing more information (data) on bigger screens
- Software and applications (apps)
  - The programmes that run within the hardware

Source: Tim Unwin

Digital tech has much positive potential

- Socially
  - Helping us to connect with family
  - Sharing useful information with friends
- Gaining access to services (such as health and welfare) provided by
  - Governments
  - Civil Society Organisations
- In emergencies
  - For when we are in trouble: rescue and repatriation
- Economically and for employment
  - Getting jobs
  - Managing our money and sending some of it home
- Making life easier
  - Learning languages and translation
  - Finding out where we are
- And much more…
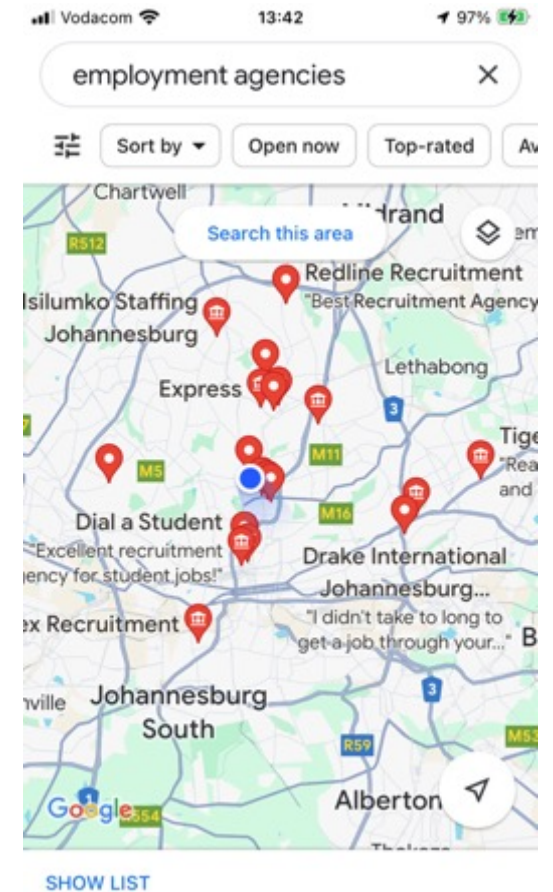
But to take advantage of all this, it is essential to use digital tech safely, wisely, and securely – all linked together

Source: Tim Unwin

Remember that digital tech can also be used deliberately or accidentally to cause many harms – especially for women and girls

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The positives of digital tech can only be realised if…

- Users have basic "digital literacy"
  - Knowing how to use digital tech

- And using digital tech:
  - Safely
    - Ensuring safe practices are used
  - Wisely
    - Using digital tech for appropriate purposes
  - Securely and privately
    - Making sure use of digital tech is as secure and private as possible

Source: Tim Unwin

1. Need to begin with basic use of digital tech

Source: Tim Unwin

Using the full functionality of your devices and apps

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Using a basic mobile phone

- Phones enable you to connect by voice or text to family and friends
  - And take pictures
- But remember that everything you use a phone for can be traced
  - So use it wisely and carefully
- It requires electricity, so remember to charge it up
  - There are many ways of doing this
- You need to be connected to a network
  - Having an account (with a SIM card) and a supplier
  - Ensure you are within coverage area of your supplier

Source: Tim Unwin

Need to connect to a Network: SIM Cards

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- SIM cards
  - Enable you to connect to a network
- Different companies and networks
  - Charge different amounts
  - Offer different services
- Payment
  - Prepaid (pay in advance as needed)
  - Contract (usually monthly charged to a bank account)
- Need to choose company that will best suit your needs

SIM cards
Source: Tim Unwin

(Note: SIM means Subscriber Identity Module)

Using smart-phones

- Smart-phones enable you to be connected to the Internet
  - As long as you are within the network coverage area of your supplier
  - But they are more expensive to buy and use
- Can still be used for basic calls and text
- Also can have many apps (applications) that run on them to do things
  - Some free, but many need to be paid for
- Typical apps and platforms
  - Social media and messaging (such as WhatsApp, Facebook, Viber, TikTok)
    - For communicating and sharing text, images, audio and video
  - Games
  - Watching films
 - Making payments
  - Accessing platforms and apps

Smartphone
Source: Tim Unwin

Connecting to the Internet

- What is the Internet (or Net)?
  - The global system of connected computers that you can access when you are "online"
- What is the World Wide Web (or Web)?
  - The pages and information you see when you connect to the Internet
- Connectivity through mobile networks and WiFi
  - Mobile data package
  - Using WiFi (but remember data security issues)
    - Public (sometimes free as in airports or government buildings) and private WiFi networks
- Searching the web using Browsers
  - Popular such as Chrome (Google), Safari, Firefox, DuckDuckGo
- Interacting: using voice, text, video through applications (apps)
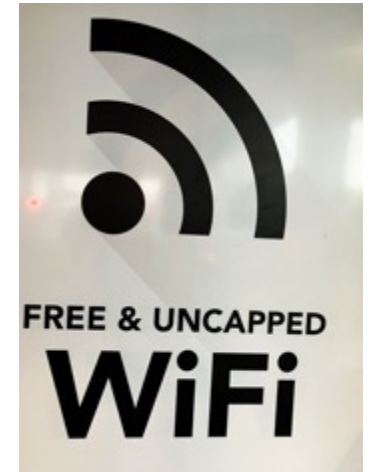
Source: Tim Unwin
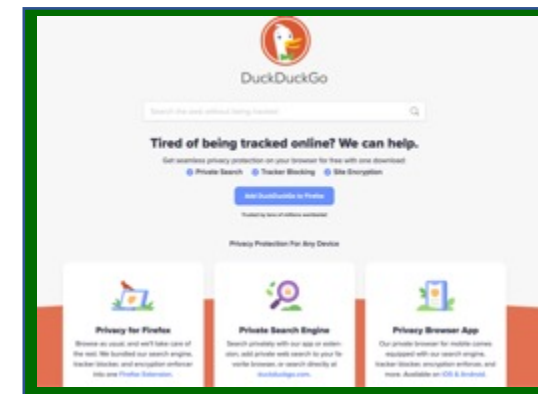
Digital literacy and information literacy

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- Digital literacy: ask someone you trust to help you learn
  - Knowing how to use devices effectively
    - The full potential of a phone
    - Screens
    - Keyboards
    - Other uses – such as a torch or compass
  - Using software appropriately
    - Learning how to use different apps
      - Understanding and changing the settings
    - Learn how to use social media (Facebook, X/Twitter) and messaging apps (WhatsApp, Signal) safely and securely

- Information literacy:
  - Learn how to know if information is true or not
  - Is the information genuine and authentic?
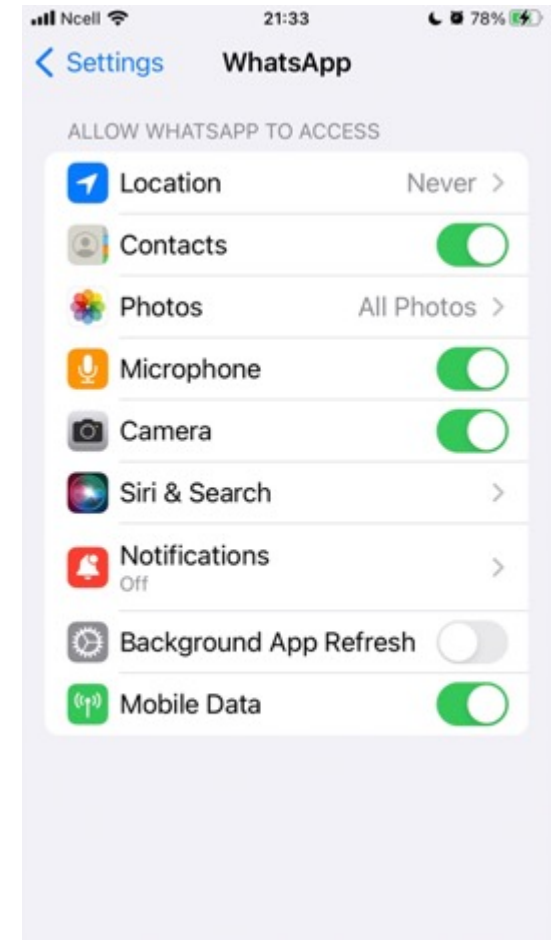
Discussion

Use this opportunity to ask questions and ensure you know the **basics** of using digital tech

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2. The safe use of digital technologies

Source: Tim Unwin

"Using digital tech so you are not at risk of harm - or of harming others"

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Online sexual abuse and harassment of women and children is widespread

Key elements to remaining safe: knowing the potential harms

- Knowing the potential harms
  - Being tracked
  - Online abuse and harassment (especially sexual)
  - Bullying
  - Scams and losing money or documents
  - What we give to companies by using digital tech
  - If it seems too good to be true, it probably is...

- But don't be too afraid of them
  - Act wisely, safely and securely
    - So that you can avoid the harms and benefit from digital tech

https://www.oceanpointins.com/ri-business-insurance/cyber-liability-insurance/8-common-hacking-techniques/

Key elements to remaining safe online: behaving safely

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What to do ✓

- Learn about the tech and apps you want to use

- Keep your digital identity safe

- Protect the most vulnerable (e.g. children and elderly)
  - Use parental controls on apps

- Use multiple different passwords

- Treat the digital world as you would the real world

What not to do ✗ Don't...

- Share anything that could harm you or others

- Write or say something online that you would not say to someone's face

- Join an app/platform if you don't want to, or are unsure about

- Click on a website link you aren't sure about

- Use geo-location on social media

- Beware of "deep fakes": they are not what they appear to be

Key elements to remaining safe: technical

- Always report (to app owners and police/authorities) as soon as you can:
  - Phishing: tricking you to do something wrong
    - Never click a link you are unsure of
  - Hacking: compromising a digital system
  - Scams: many varieties of fraud – often to access your money, documents or identity
    - Watch out for scams using QR (Quick Response) codes
- Do a factory reset on any second-hand device
- Authentication
  - Passwords (keep them complex and unique for each app)
    - Longer than 10 characters and using numbers, symbols, and upper- and lower-case letters
  - Biometric authentication (fingerprints, face)
  - Multi-factor (several pieces of evidence)
  - Device recognition (securing your devices from malicious actors)
  - Be sure you know who you are really interacting with online or on social media

TIME IT TAKES A HACKER TO BRUTE FORCE YOUR PASSWORD IN 2023

Number of Characters	Numbers Only	Lowercase Letters	Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters, Symbols
4	Instantly	Instantly	Instantly	Instantly	Instantly
5	Instantly	Instantly	Instantly	Instantly	Instantly
6	Instantly	Instantly	Instantly	Instantly	Instantly
7	Instantly	Instantly	1 sec	2 secs	4 secs
8	Instantly	Instantly	28 secs	2 mins	5 mins
9	Instantly	3 secs	24 mins	2 hours	6 hours
10	Instantly	1 min	21 hours	5 days	2 weeks
11	Instantly	32 mins	1 month	10 months	3 years
12	1 sec	14 hours	6 years	53 years	226 years
13	5 secs	2 weeks	332 years	3k years	15k years
14	52 secs	1 year	17k years	202k years	1m years
15	9 mins	27 years	898k years	12m years	77m years
16	1 hour	713 years	46m years	779m years	5bn years
17	14 hours	18k years	2bn years	48bn years	380bn years
18	6 days	481k years	126bn years	2tn years	26tn years

HIVE SYSTEMS › Learn how we made this table at hivesystems.io/password

Remember the cultural contexts where you use digital tech

- Know the local cultural and legal contexts where you are living as a migrant

- In some countries it is wise not to take photos of:
  - Government buildings and military sites
  - Aircraft or airports
  - Incidents such as accidents

- Remember to respect other people's privacy and don't take photos of them without permission
  - Especially women and families

- Keep your selfies to yourself

- Don't share pictures of your children publicly

Source: https://genderlinks.org.za

Discussion

Use this opportunity to ask questions and ensure you know about the **safe** use of digital tech

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3. Using digital tech wisely

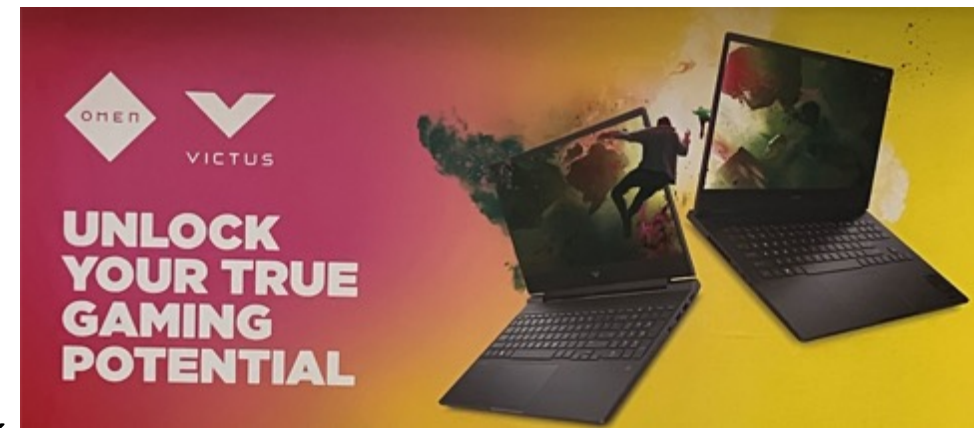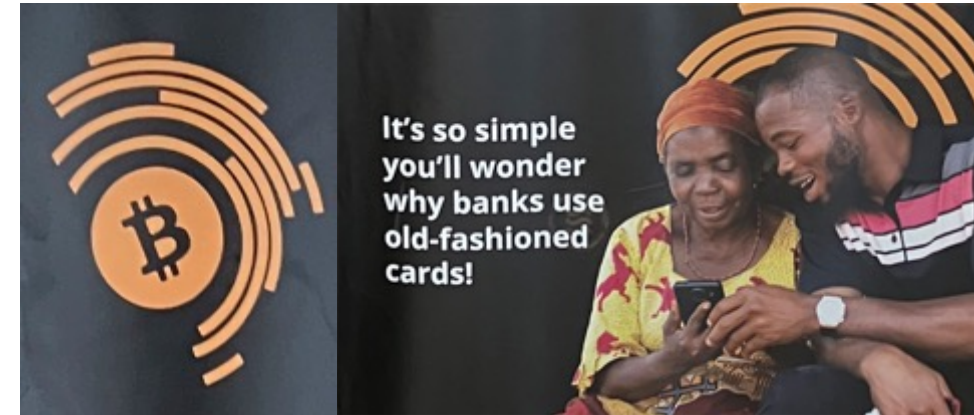*"Using digital tech with good judgement and knowledge"*

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Key elements to wise use of digital tech: what to do

- Do use it productively for what you want to use it for
  - and not for what companies or governments want you to use it for
- Do be very careful about what you post online
- Do learn properly how to use the tech and apps you have
  - Read the terms and conditions
  - Adjust the settings (remember parental controls)
- Do remember that everything "posted" remains online somewhere for ever
- Do be thoughtful and polite on social media
- Do take time away from digital tech
- Do think about creating multiple identities/e-mails (with a separate one for purchases)
  - And keep a "clean" basic phone for emergencies

Key elements to wise use of digital tech: what not to do

- ❌ Don't post anything you would not want everyone to see
  - Who can see what you post?
  - Check privacy settings
  - Never post when you are upset or distressed
- ❌ Don't ever respond to messages/links you do not trust
  - Especially those pretending to be from a finance company
- ❌ Don't waste too much time on
  - Social media
  - Gaming online
  - Online gambling
  - Digital violence
- ❌ Don't waste money
  - As with TikTok gifting
- ❌ Don't take risks through using digital tech
  - As with crypto currency investments
- ❌ Don't respond to provocation if you suffer a "troll" attack
  - It will only make it worse

It's so simple you'll wonder why banks use old-fashioned cards!

OMEN V VICTUS
UNLOCK YOUR TRUE GAMING POTENTIAL

Source: Tim Unwin

Think twice about sharing images of yourself and your children

- What kind of image do you wish to portray of yourself?
  - What will others think of you?
  - Who is watching you?
- Remember that anything you post online is likely to be there for ever
  - Consider using private and secure social networks
  - Or have settings so only your family can see
- Do you know who is following you online?
- Be very careful if you post images of children
  - Paedophilia and child sexual abuse are very real threats
- Think about your own safety and security
- Do use parental controls

Source: https://www.end-violence.org

Discussion

Use this opportunity to ask questions and ensure you know about the **wise** use of digital tech

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4. The secure use of digital technologies

"Using digital tech securely and with privacy"

https://ict4d.org.uk

See also video at
https://www.facebook.com/scmp/videos/246038106344865/?t=34

Key elements to secure use of digital tech – social behaviours

- Being private online
  - Remember that what you post on the Internet is there forever
  - Only post if you are sure that you and related others are happy with this
  - Never share your passwords with anyone
    - Don't ever share a One-Time Password (OTP) with anyone
  - Whenever possible reject all cookies when visiting websites.
- Secure and private from whom?
  - Governments
    - Remember mobile devices can be used for surveillance
  - Companies
    - Remember that most social media companies make their money from the data you give them for free!
  - Other people
    - Some are eager to exploit you through digital tech

Source: Tim Unwin

Key elements to secure use of digital tech: practical matters

- Keep your software as up-to-date as possible
  - The latest versions of apps usually improve security

- Know how to use your device's settings
  - To make your phone work as you want it to

- Turn off as many cookies (permissions) as possible
  - Only accept necessary cookies (or reject all)
    - So that you don't share all you do online with organisations that you don't want to

- Thing about using free Virtual Private Networks (VPNs) to access the Internet
  - These help to hide a user's digital location and identity and makes them anonymous
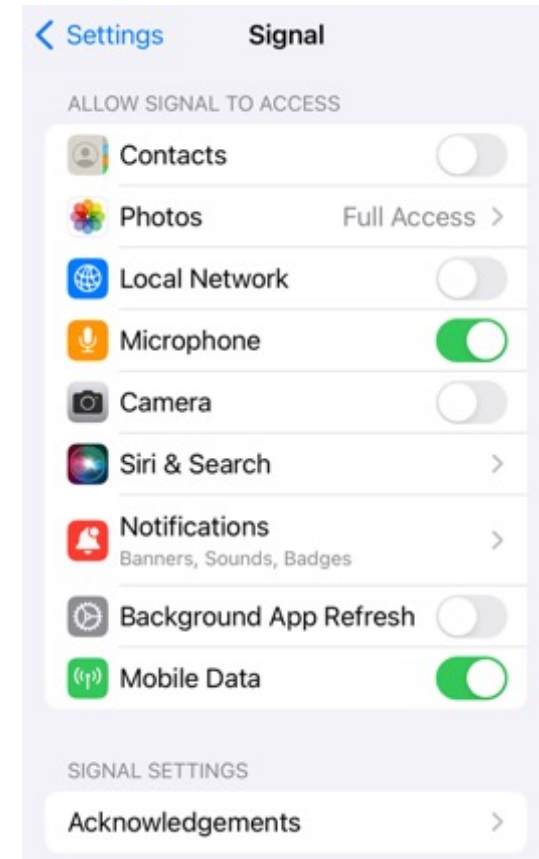
Discussion

Use this opportunity to ask questions and ensure you know about the **secure and private** use of digital tech

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Conclusions: think about

Source: Tim Unwin

Is it safe? Is it wise? Is it secure?

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Final reminders: being safe, wise and secure

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What to do ✅

- Learn about how to use your digital tech
- Create robust passwords
- Use multi-factor authentication
- Regularly update your apps and operating systems
- Be thoughtful and polite on social media
- Take time away from digital tech

What not to do ❌

- Don't share your passwords
- Don't become addicted to digital tech
- Don't respond to messages you do not trust
- Don't waste money you can't afford on digital tech and social media
- Don't send money or documents online to someone you don't know
- Don't share anything online you would not want everyone to see

Origins of this training resource

2024

Developed collaboratively with many organisations originally in Nepal as part of Work Package 9 of the MIDEQ Hub

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This training deck builds in part on research-practice in Nepal by the UNESCO Chair in ICT4D at Royal Holloway University of London (2019-2023) as part of the MIDEQ Hub funded by UKRI GCRF, supplemented by the activities of the ICT4D Collective with migrants, migrant organisations and others in South Africa in 2024.

Useful links

- Equality Now (2021) *Ending Online Sexual Exploitation and Abuse of Women and Girls: A Call for International Standards*, Equality Now.

- ICT4D Collective (2023) Technology, Inequality and Migration, ICT4D Collective (incudes links to the Collective's many resources (see especially work in Nepal that formed the origin of these training decks)

- Manyane, A., Minnar, I., Dube, H. and Iyer, I. (eds) (2022) *Understanding Online Gender Based Violence in Southern Africa*, Centre for Human Rights, University of Pretoria

- ECPAT, INTERPOL, and UNICEF (2022) *Disrupting Harm in South Africa: Evidence on Online Child Sexual Exploitation and Abuse*, Global Partnership to End Violence against Children