



**WORLD BANK GROUP**



**G2Px**

Payments  
That Empower



# What Works to Advance Women's Digital Literacy?

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# Abbreviations

3G	Third generation of broadband cellular network technology, succeeding 2G and preceding 4G
App	Application, a software program downloaded by a user to a mobile device
DigComp	The Digital Competence Framework for Citizens
GSMA	Global System for Mobile Communications Association
ICT(s)	Information and Communication Technolog(y/ies)
ITU	International Telecommunications Union
IVR	Interactive Voice Response
OECD	Organisation for Economic Co-operation and Development
RUDI	Rural Distribution Network, program in India
SEWA	Self-Employed Women's Association of India
SIM	Subscriber Identity Module
SMS	Short Messaging Service
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development



# Part I: Setting the Scene





# Context



Digital technologies have transformed lives globally, yet many people, especially women, still lack access to essential digital tools and skills.

Women face greater challenges than men in accessing mobile internet and digital services, with 265–310 million fewer women using mobile internet worldwide. This disparity reflects deep structural and cultural inequalities, particularly in the least developed countries, where the digital gender gap is most significant.

This document provides insights into the key barriers and promising approaches related to women's digital literacy and digital financial capability.

It is a practical guide to operational teams, program designers and policy-makers for developing basic digital literacy programs for women in low- and middle-income countries. This guide was developed alongside the *What Works to Advance Women's Digital Literacy* report which can be found [here](#).

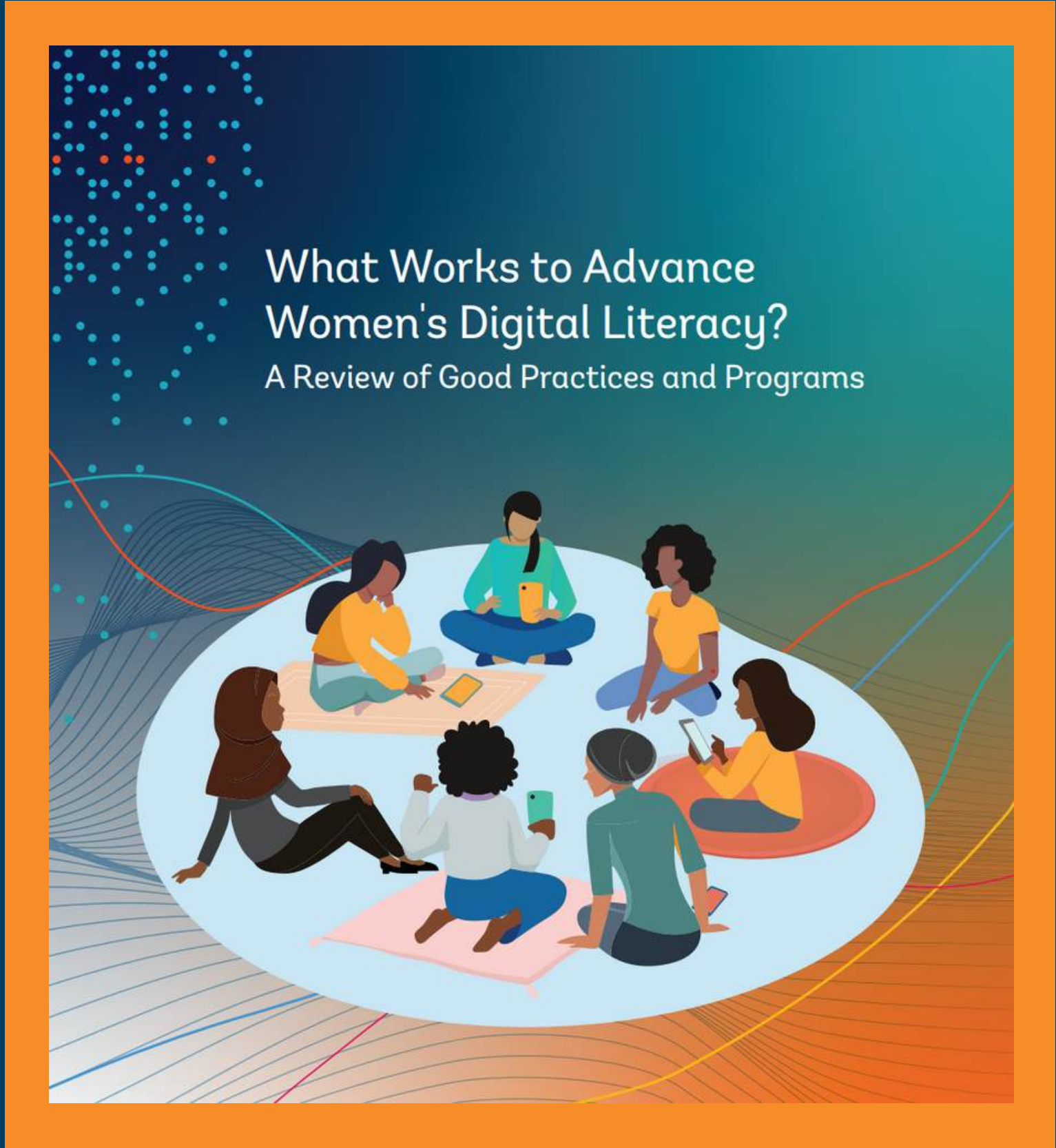


# G2Px

## Payments That Empower

The *What Works to Advance Women's Digital Literacy* report is an output of the G2Px Initiative of the World Bank Group.

The G2Px initiative brings global knowledge and expertise across sectors to contribute to the broader agenda of improving government-to-person (G2P) payments through digitization in ways such that it accelerates critical development outcomes such as financial inclusion and women's economic empowerment.



Click to read the report in full.





# i. Key Concepts and Definitions



# i. Key Concepts and Definitions

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## Digital Literacy

[Digital literacy is]...“the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship. It includes competences that are variously referred to as computer literacy, Information and Communication Technology (ICT) literacy, information literacy and media literacy.” - United Nations Educational, Scientific and Cultural Organization ([UNESCO](#)), 2018

Researchers and various organizations have tried to define “digital literacy” since the late 1990s. We have selected key definitions below.

The term “digital literacy” is often used interchangeably with “digital competence”.

“Digital competence” involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking” - [European Commission](#), 2018

# i. Key Concepts and Definitions

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While there is no standardized definition of digital financial literacy, prior research has underscored that digital financial literacy is specifically focused on the use and application of digital technology for financial services and products, and risks ([Morgan et al. 2019](#)).

## Digital Financial Literacy

Digital financial literacy is “a combination of financial awareness, knowledge, skills, attitudes and behaviors necessary to make sound financial decisions and ultimately achieve individual financial well-being”

- [OECD 2022](#)

[Lyons and Kass-Hanna \(2021\)](#) developed a multidimensional framework that identifies five core dimensions for digital financial literacy:

- (1) Basic financial knowledge and skills;
- (2) Awareness of available digital financial services;
- (3) Practical know-how of how to use and operate digital financial services applications;
- (4) Ability to make appropriate financial decisions within the digital context; and
- (5) Self-protection from online scams and frauds



## ii. Relevant Frameworks



## ii. Relevant Frameworks

### The European Union's Digital Competence Framework for Citizens (DigComp) 2.0

This is the most comprehensive, best-known and widely-used digital literacy framework. The framework describes which competencies are needed by citizens to use digital technologies in a confident, critical, collaborative and creative way to achieve goals related to work, learning, leisure, inclusion and participation in digital society.

# DigComp 2.0 (EU)

## i. Information and data literacy



- 1.1 Browsing, searching and filtering data, information, and digital content
- 1.2 Evaluating data, information, and digital content
- 1.3 Managing data, information, and digital content

## ii. Communication and collaboration



- 2.1 Interacting through digital technologies
- 2.2 Sharing information and content through digital technologies
- 2.3 Engaging in citizenship through digital technologies
- 2.4 Collaborating through digital technologies
- 2.5 Netiquette (internet etiquette)
- 2.6 Managing digital identity

## iii. Digital content creation



- 3.1 Developing digital content
- 3.2 Integrating and re-elaborating digital content
- 3.3 Copyright and licenses
- 3.4 Programming

## iv. Safety



- 4.1 Protecting devices
- 4.2 Protecting personal data and privacy
- 4.3 Protecting health and well-being
- 4.4 Protecting the environment

## v. Problem Solving



- 5.1 Solving technical problems
- 5.2 Identifying needs and technological responses
- 5.3 Creatively using digital technologies
- 5.4 Identifying digital competence gaps

## ii. Relevant Frameworks

### UNESCO Digital Literacy Global Framework

UNESCO's Institute of Statistics refined the EU DigComp to make it more appropriate for low and middle-income countries and developed the Digital Literacy Global Framework.

The Framework added two areas: (i) fundamentals of familiarity with hardware and software and (ii) career-related competencies.

# Digital Literacy Global Framework (UNESCO)

The UNESCO Framework is identical to the DigComp in the competence areas 1 to 5; however, it has added two critical areas:

(i) fundamentals of hardware and software (level zero) and (ii) career-related competencies (level six):

0. Fundamentals of hardware and software



0.1 Basic knowledge of hardware such as turning on/off as well as charging and locking devices

0.2 Basic knowledge of software such as user accounts, password management, logins, and how to adjust privacy settings

vi. Career-related competences



6.1 Career-related competences refer to the knowledge and skills required to operate specialized hardware/software for a particular field, such as engineering design software and hardware tools, or the use of learning management systems to deliver fully online or blended courses.

## ii. Relevant Frameworks

### A Multidimensional Framework for Digital Financial Literacy

Lyons and Kass-Hanna's multidimensional framework attempts to provide a more comprehensive understanding of the relationship and intersection between financial literacy, digital literacy, and digital financial literacy.

The framework identifies five core dimensions for digital financial literacy:

- (1) basic financial knowledge and skills;
- (2) awareness of available digital financial services;
- (3) practical know-how of how to use and operate digital financial services applications;
- (4) ability to make appropriate financial decisions within the digital context; and
- (5) self-protection from online scams and fraud.

# A Multidimensional Framework for Digital Financial Literacy

Dimension	Financial literacy	Digital literacy	Digital financial literacy	Indicators
1) Basic knowledge and skills	Basic financial concepts (numeracy, compound interest, inflation, risk diversification)	Basic digital skills (knowledge of digital devices –computer, tablet, mobile phone, and the Internet)	<u>Basic financial and digital knowledge</u>	<p>Basic financial knowledge: numeracy; compound interest; inflation; risk diversification</p> <p>Basic digital knowledge:</p> <ul style="list-style-type: none"> <li>• Basic knowledge of hardware: mobile phone, computer and tablet use, including turning on/off, charging and locking devices</li> <li>• Basic knowledge of software: creating user accounts and logging in, managing passwords, and using privacy settings</li> </ul>
2) Awareness	<p>Awareness of financial products (payments, deposits, savings, credit etc)</p> <p>Awareness of positive financial attitudes and behaviors (budgeting, saving, responsible borrowing, preparing for emergencies, and retirement)</p>	Awareness of digital solutions and applications (apps) (online entertainment, e-shopping, virtual education, telemedicine etc)	<p>Awareness of digital financial services (mobile money and digital wallets, online banking, peer-to-peer lending, and remittance services)</p> <p><u>Awareness of positive financial attitudes and behaviors</u></p>	<p>Awareness of available digital financial services</p> <ul style="list-style-type: none"> <li>• Knowing about existing digital financial services providers</li> <li>• Knowing about the specific purposes of available digital financial services</li> <li>• Knowing about the risk of borrowing (e.g., over indebtedness, abusive and predatory lending practices)</li> <li>• Knowing about certain financial behaviors, such as budgeting, saving, preparing for emergencies and retirement)</li> </ul> <p>Awareness of available digital solutions</p> <ul style="list-style-type: none"> <li>• Knowing about existing digital solutions</li> <li>• Knowing about the specific purposes of digital solutions (e.g., communication, productivity, leisure)</li> <li>• Knowing about the risks of using digital solutions (safety and privacy)</li> </ul>

# A Multidimensional Framework for Digital Financial Literacy

Dimension	Financial literacy	Digital literacy	Digital financial literacy	Indicators
3) Practical know-how	Ability to use financial services (know how to make payments, how to open a bank account, etc.)	Ability to use digital apps, platforms, and software (know how to search for information online, use email, social media and networking, learn, shop online, etc.)	Ability to make digital financial transactions (know how to use mobile money applications, navigate menus, make and cancel transactions, correct transaction errors, access peer-to-peer lending, use online banking, etc.)	<p>Practical know-how of operating digital financial services applications</p> <ul style="list-style-type: none"> <li>• Knowing how to open an account on digital financial services</li> <li>• Knowing how to navigate a digital financial services menu</li> <li>• Knowing how to initiate and complete transactions</li> <li>• Knowing how to correct errors and cancel a transaction</li> </ul> <p>Practical know-how of operating other digital applications</p> <ul style="list-style-type: none"> <li>• Know how to open a web browser and search for information</li> <li>• Knowing how to create an email account and password</li> <li>• Knowing how to log-in to an email account and draft an email</li> <li>• Knowing how to log-into a social media account</li> </ul>
4) Decision-making (attitudes and behaviors)	Ability to make appropriate financial decisions (decide to put money aside and choose reliable deposit and savings services, borrow responsibly etc)	Ability to make appropriate digital decisions (decide to use digital tools to improve knowledge, skills, and communication, take advantage of new opportunities, etc.)	<u>Ability to make appropriate financial decisions reflective of attitudes and behaviors using digital financial services</u> (decide to put money aside and choose reliable digital financial services, send remittances safely using said services, rely on peer-to-peer lending, etc.)	<p>Positive financial attitudes</p> <ul style="list-style-type: none"> <li>• Managing day-to-day finances while setting future goals</li> <li>• Preparing for emergencies and retirement</li> <li>• Deciding to put money aside and save</li> <li>• Making prudent and responsible borrowing decisions</li> <li>• Sending remittances through reliable challenges</li> <li>• Ability to select appropriate digital financial services for specific purposes (e.g., savings, remittances and borrowing)</li> <li>• Ability to select reliable digital financial services providers</li> </ul>

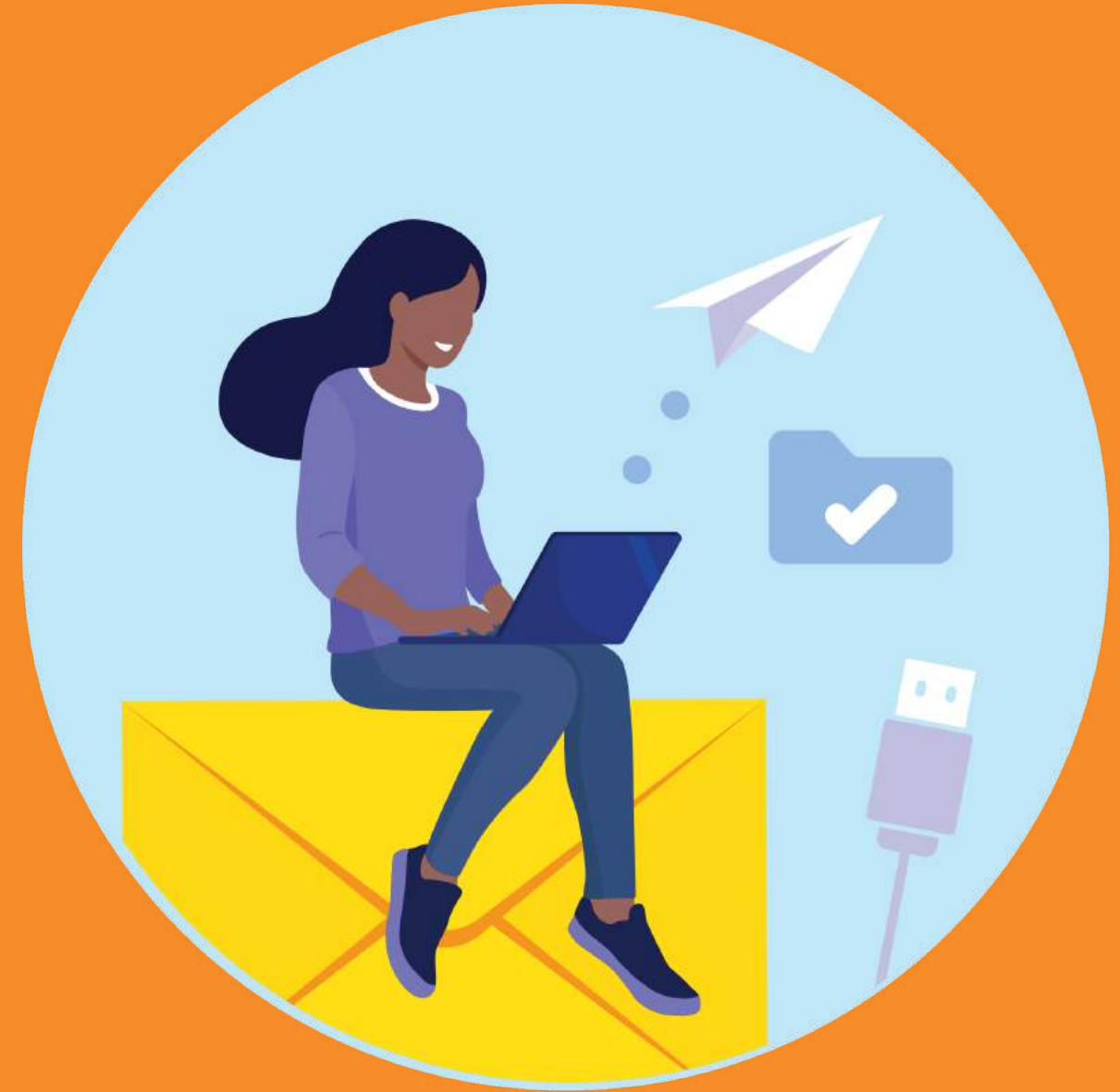
# A Multidimensional Framework for Digital Financial Literacy

Dimension	Financial literacy	Digital literacy	Digital financial literacy	Indicators
5) Self-protection	Ability to avoid misleading financial information and advice, abusive practices, and fraud	Ability to protect devices, personal data, and privacy (avoiding identity and data theft, hacking attacks etc.)	Ability to detect and avoid online scams and frauds associated with digital financial services	<p>Self-protection from online scams and fraud</p> <ul style="list-style-type: none"> <li>• Ability to understand the terms of conditions related to digital financial services and avoid deceptive practices (e.g., unclear or unfair disclosure of fees, overcharging, subscription traps)</li> <li>• Ability to detect and avoid scams and frauds associated with digital financial services (e.g., identity and credentials theft, malware, phishing attacks)</li> <li>• Ability to keep Personal Identification Number (PIN) confidential if getting help from an agent for a digital financial services transaction</li> </ul> <p>Self-protection related to digital devices</p> <ul style="list-style-type: none"> <li>• Ability to set a password on a device</li> <li>• Ability to change privacy settings on a device</li> <li>• Ability to keep passwords confidential</li> <li>• Knowledge to develop complex and different passwords for each account</li> </ul>

Note: Those areas that are underlined and highlighted in bold indicate areas that overlap with at least one of the other two areas (Financial Literacy and/or Digital Literacy).



### iii. State of Women's Digital Literacy



# State of Women's Digital Literacy

Available data from the International Telecommunications Union (ITU)/ UN Women indicate notable advancements in achieving gender parity in digital skills, although there remains much work ahead.

The following figures illustrate the basic digital literacy of women and men in various countries, specifically their ability to move or copy a file; send emails with attachments; connect and install devices (e.g. modem, camera, printer); and send/receive digital payments.

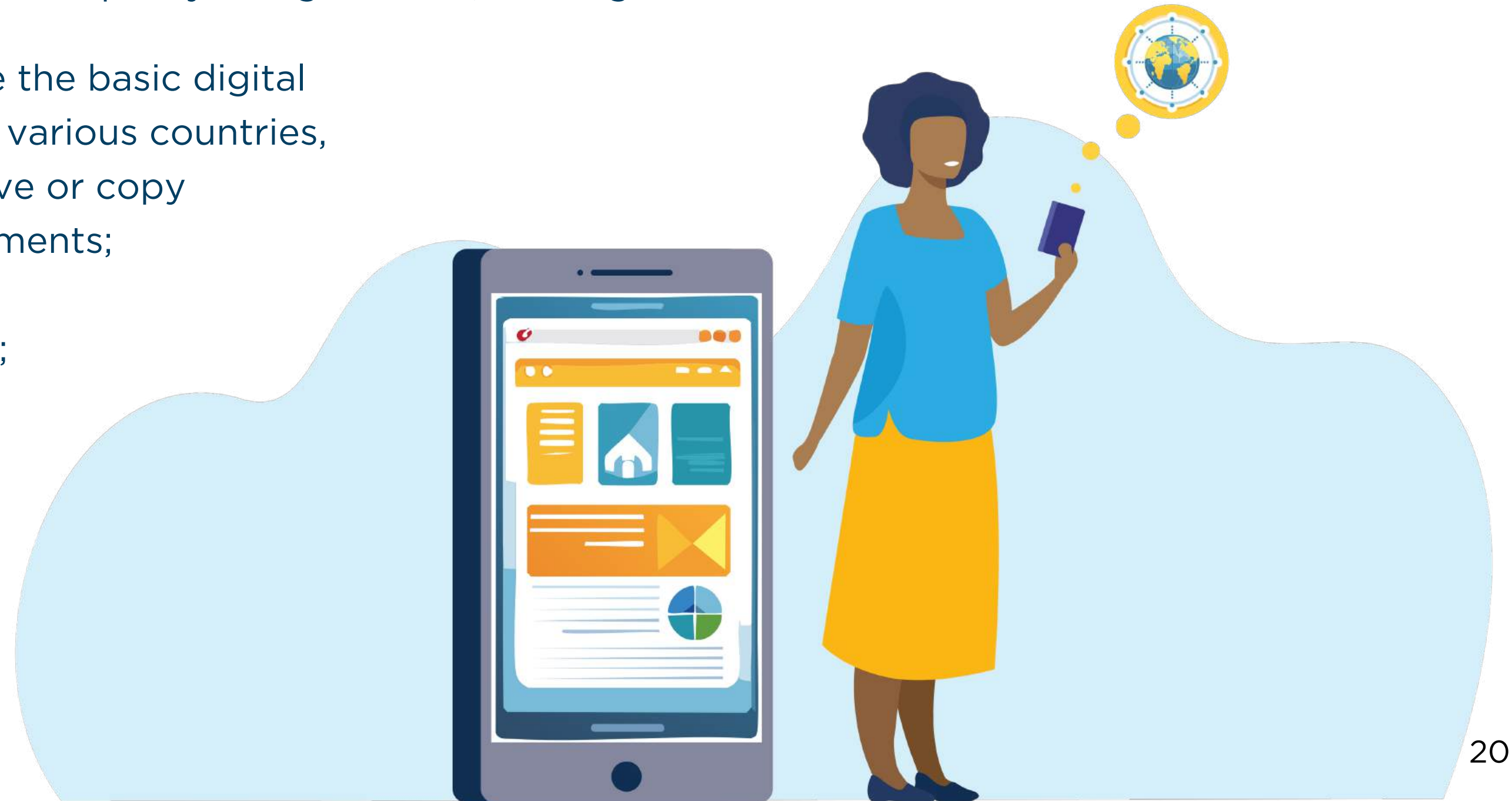
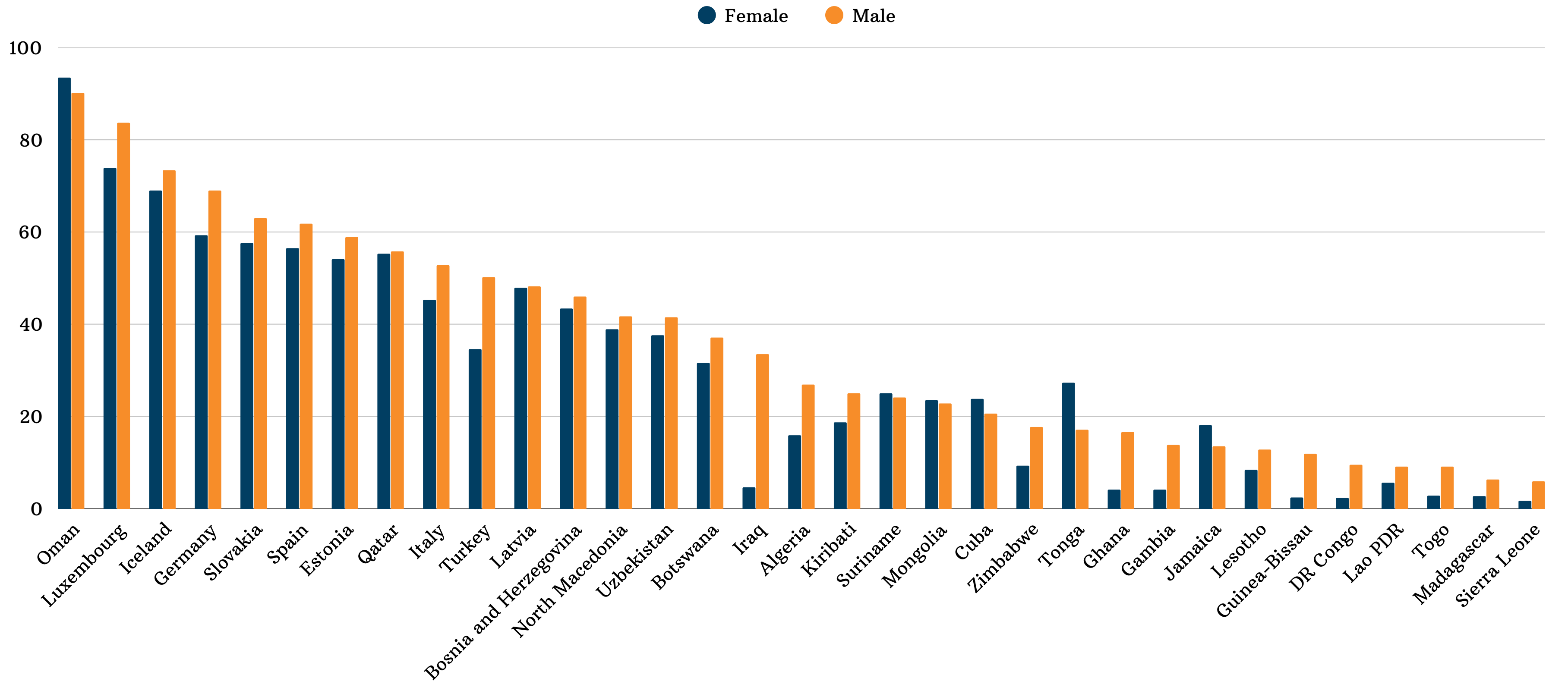
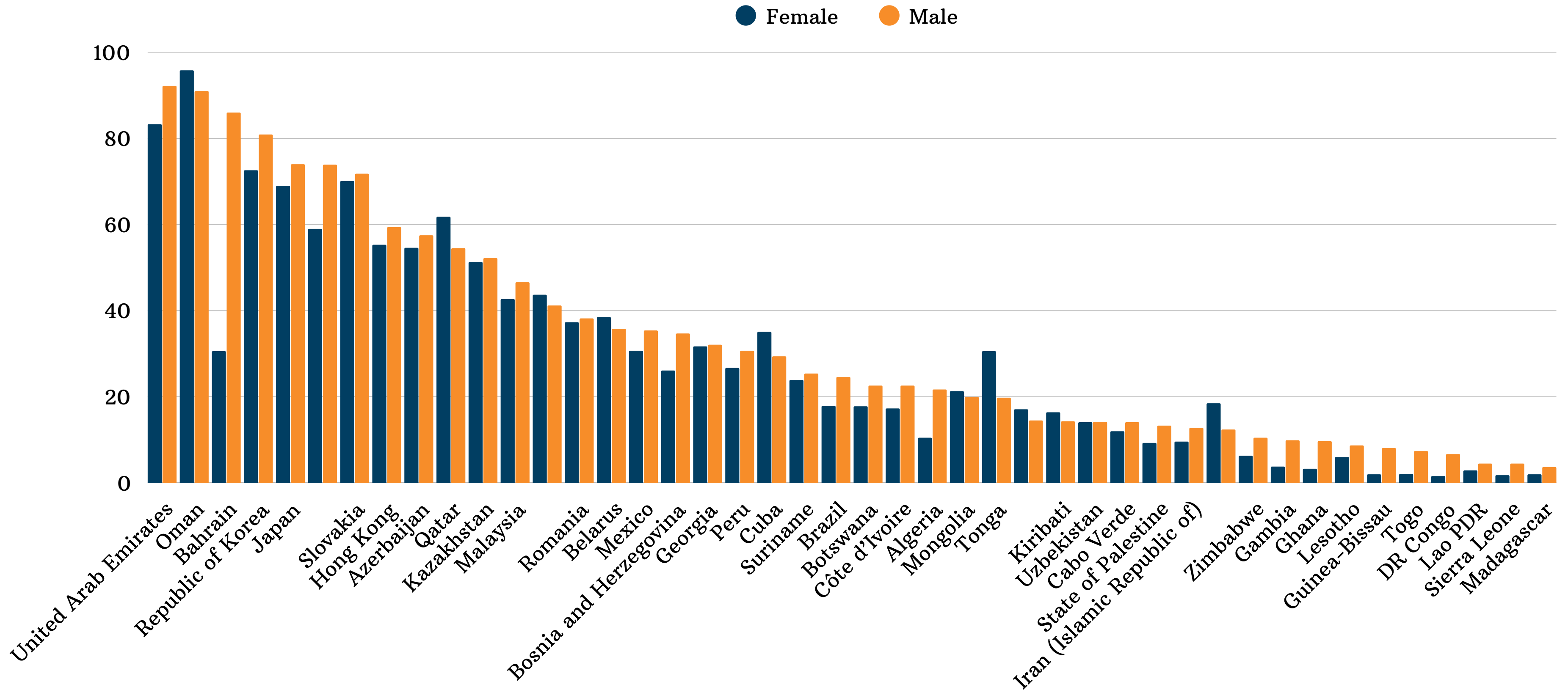


Figure 1: Youth and adults who can copy or move a file or folder, by sex (%)



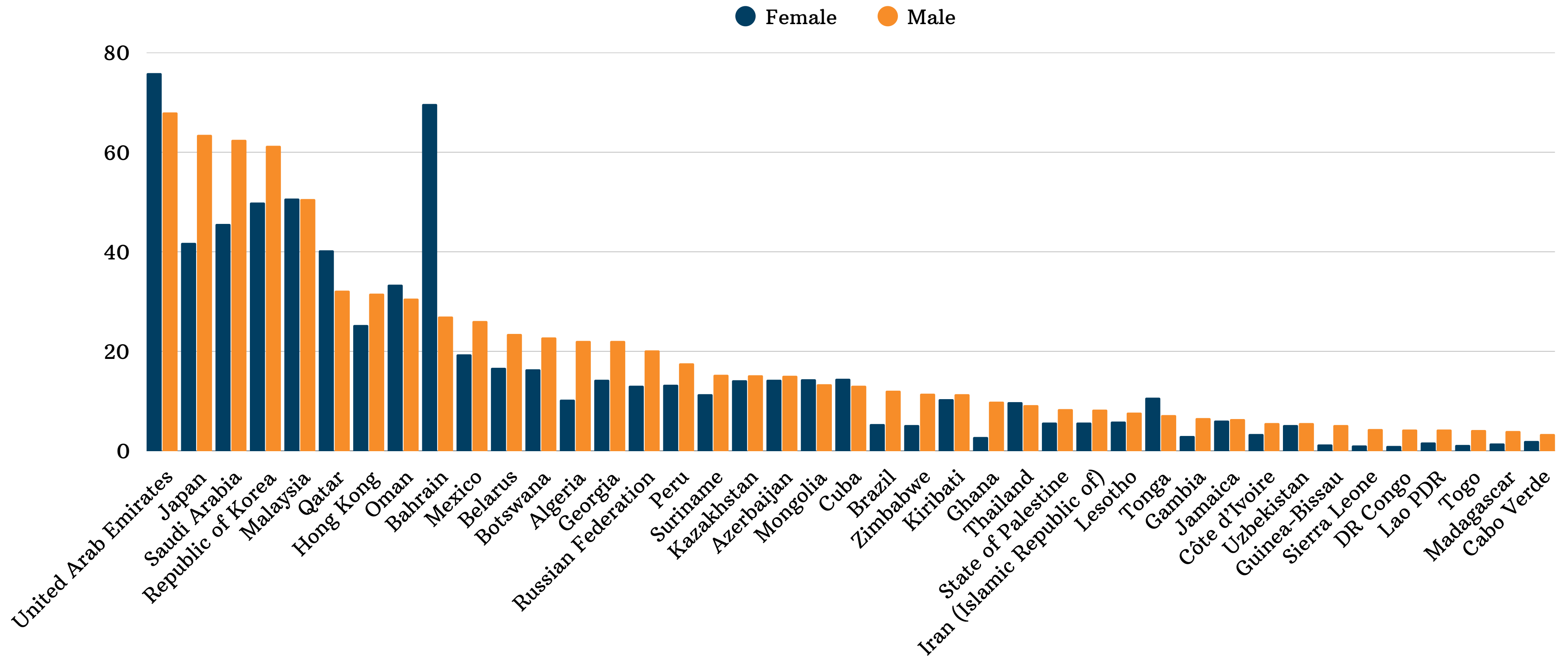
Source: ITU/UN Women Sustainable Development Goals Indicator Dashboard

Figure 2: Proportion of youth and adults who can send emails with attached files, by sex (%)



Source: ITU/UN Women Sustainable Development Goals Indicator Dashboard

Figure 3: Proportion of youth and adults who can connect and install devices, by sex (%) (e.g. modem, camera, printer)



Source: ITU/UN Women Sustainable Development Goals Indicator Dashboard



# Part II: Overcoming Obstacles to Women's Digital Literacy





# Key Barriers to Women's Digital Literacy



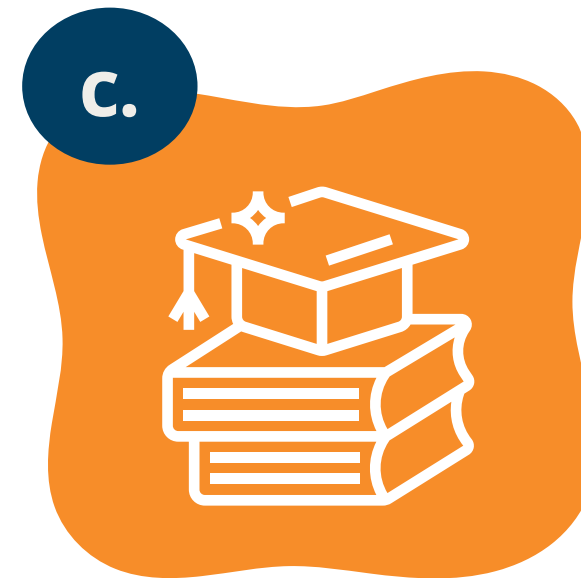
# Key Barriers to Women's Digital Literacy



Insufficient broadband connectivity



Affordability constraints



Low levels of education



Restrictive social norms



Limited awareness and low levels of digital confidence



Lack of appropriate design and relevant content



Limited online safety and security



## Insufficient Digital Connectivity

Women are 15 percent less likely than men to use mobile internet in low-and middle-income countries, and women are 8 percent less likely to own a smartphone (GSMA, 2024).

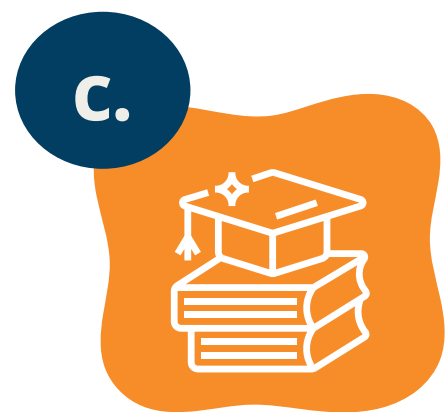
- The lack of network connectivity, end-user devices, and reliable electricity severely limits women's access to digital services, exacerbating the digital gender divide.
- Even in areas where digital infrastructure is available, actual usage by women is often low, especially in conflict-prone, rural, and isolated regions, which further restricts their digital participation.
- Poor connectivity experience, due to the prevalence of 3G-only handsets, is often more of a barrier to increased mobile Internet use than to initial adoption.
- Network performance also plays a role; while network quality has improved globally, a significant gap remains between high-income countries and low- and middle-income countries.



## Affordability Constraints

Limited financial resources pose a significant challenge to women's access and utilization of mobile Internet, particularly for those living in rural areas or low-income households, ultimately hindering digital inclusion.

- Limited financial resources significantly hinder women's access to mobile Internet, especially in rural areas and low-income households.
- Globally, women have both lower labor force participation and a higher likelihood of engaging in low-productivity activities or informal employment, resulting in less disposable income for purchasing mobile phones.
- The cost of handsets, up to 54 percent of the monthly income for the poorest 20 percent of people, and high costs associated with data, SIM cards, and digital services, further restrict women's access to and use of digital technology.
- Women often have to opt for less sophisticated devices, or access mobile Internet through someone else's device, limiting their ability to fully utilize mobile Internet services.



## Low Levels of Education

Worldwide, 119 million girls are out of school.

In low-income countries, only 38% of girls complete lower secondary school compared to 43% of boys.

- The lack of access to education, driven by barriers like poverty, early marriage, and safety concerns, especially in conflict-affected areas, contributes to higher illiteracy rates, hindering girls from developing digital literacy and skills.
- Limited access to formal education and lower levels of basic skills, like reading, writing, and mathematics, leave girls at a disadvantage in developing the digital skills necessary for engaging with technology.
- Gender disparities in education translate into adult literacy gaps between women and men, making it more challenging for women to acquire digital skills and fully participate in the digital world.
- Studies have shown that women with higher levels of education are significantly more likely to be online. Without access to education, women are further excluded from digital opportunities and the digital workforce.

d.



## Restrictive Social Norms

Social norms can restrict women's access to and proficiency in using mobile technology. This can impede their participation in the digital age and their ability to utilize digital services to their full potential.

- In many societies, women face restrictions on how they can use technology. In societies with particularly restrictive social norms, women may only be allowed to use smartphones for communication with family members, while men freely use them for socializing, work, and entertainment.
- Social norms often stigmatize women's use of mobile devices and the Internet, associating it with negative behavior. This causes women to internalize the belief that these technologies are inappropriate, unsafe or socially isolating.
- In some regions, men act as gatekeepers, controlling women's access to technology by forbidding or restricting their use of mobile phones and the Internet. Lack of family approval is a significant barrier to mobile ownership for women in many countries.



## Limited Awareness and Low Levels of Digital Confidence

Limited awareness and perceived lack of relevance of technology among women constitute major obstacles to their access and use of mobile phones. Women's low levels of digital confidence also inhibits their use of digital devices.

- Women often have a lower understanding of the potential benefits of the Internet, leading to a perceived lack of value and reduced motivation to access digital technologies and acquire digital skills.
- Social norms contribute to women perceiving the Internet and its content as irrelevant to their lives. Combined with a lack of confidence in using mobile phones, this limits their digital engagement.
- Women with limited digital skills tend to restrict their use of mobile applications, sticking to familiar ones due to difficulty in transferring skills to new apps. Concerns about security, privacy, and harassment also deter them from using technology.
- For women micro-entrepreneurs, limited digital literacy and confidence pose significant barriers to using mobile services like mobile Internet and mobile money. They are often unsure of how these tools could benefit their businesses or fearful of making mistakes.



## Lack of Appropriate Design and Relevant Content

Inappropriate design, irrelevant content, and limited local language options on end-user devices hinder women from engaging with technology. Limited access to advanced mobile phones and different usage preferences further restrict women's ability to understand and interact with content.

- Limited access to advanced mobile phones, poorly designed handsets, irrelevant content, and the lack of diverse local languages on end-user devices and in content create significant barriers for women.
- Studies indicate that women tend to use mobiles and the Internet differently than men, often relying on less sophisticated devices and using a narrower range of digital services, primarily voice and Short Messaging Service (SMS) functions.
- Women use digital services less frequently and less intensively than men, with lower Internet access rates.
- Research by Arifu found that women generally spend more time completing digital learning modules and revisiting content than men, highlighting the need for better-designed, more relevant digital materials to enhance women's digital skills.



## Limited Online Safety and Security

Women and girls face higher safety and security risks than men associated with online and mobile access. These concerns hinder women's and girls' use of technology.

- Women face higher safety and security risks than men online. A 2017 study in Pakistan revealed that 40% of women encountered various forms of online harassment. This is compounded by under-reporting, lack of awareness about online rights, and not taking harassment seriously.
- Social media is a major platform for abuse, with 68% of online harassment against women occurring there. The risk is particularly high in regions with strict gender norms.
- 59 percent of young women who experienced online abuse say that it has affected their well-being and their relationships, reduced their confidence in using the Internet, and made them less capable than others.
- Since many women have lower levels of literacy, a smaller social circle and less access to external information sources than men, they often face an increased risk of misinformation when online.



# What Works?



# What Works ?

## i. Expand Inclusive Digital Connectivity

- a. Public Internet Access Points**
- b. End-user equipment and device access**
- c. Improve affordability**



## ii. Implement Gender-Smart Digital Skills Training Programs

- a. Provide relevant content**
- b. Engage gatekeepers**
- c. Combat restrictive social norms**
- d. Facilitate access to role models and mentors**
- e. Provide extra support (e.g. transportation, childcare, meals)**
- f. Prioritize mobile literacy**
- g. Improve online safety and security**



# What Works?

## i. Expanding Inclusive Digital Connectivity

### a. Increase Access to Public Internet Access Points

- Public Internet Access Points are essential in many countries to reduce financial barriers to Internet access, with over 53% of countries offering free Internet in public spaces as of 2022.
- These points introduce people to digital technologies, which can later lead to Internet use at home. However, challenges exist, particularly for women in rural areas who may view community telecenters as spaces for “others”, not for them.
- To address this, it is important to design gender-sensitive spaces that consider women’s needs, such as those seen in India’s Aadhaar enrollment centers, which offer female staff and privacy accommodations. Proper operational design, including suitable opening hours and staffing, is crucial for making these access points more accessible and comfortable for women.

### b. Enable Access to End-user Equipment and Devices

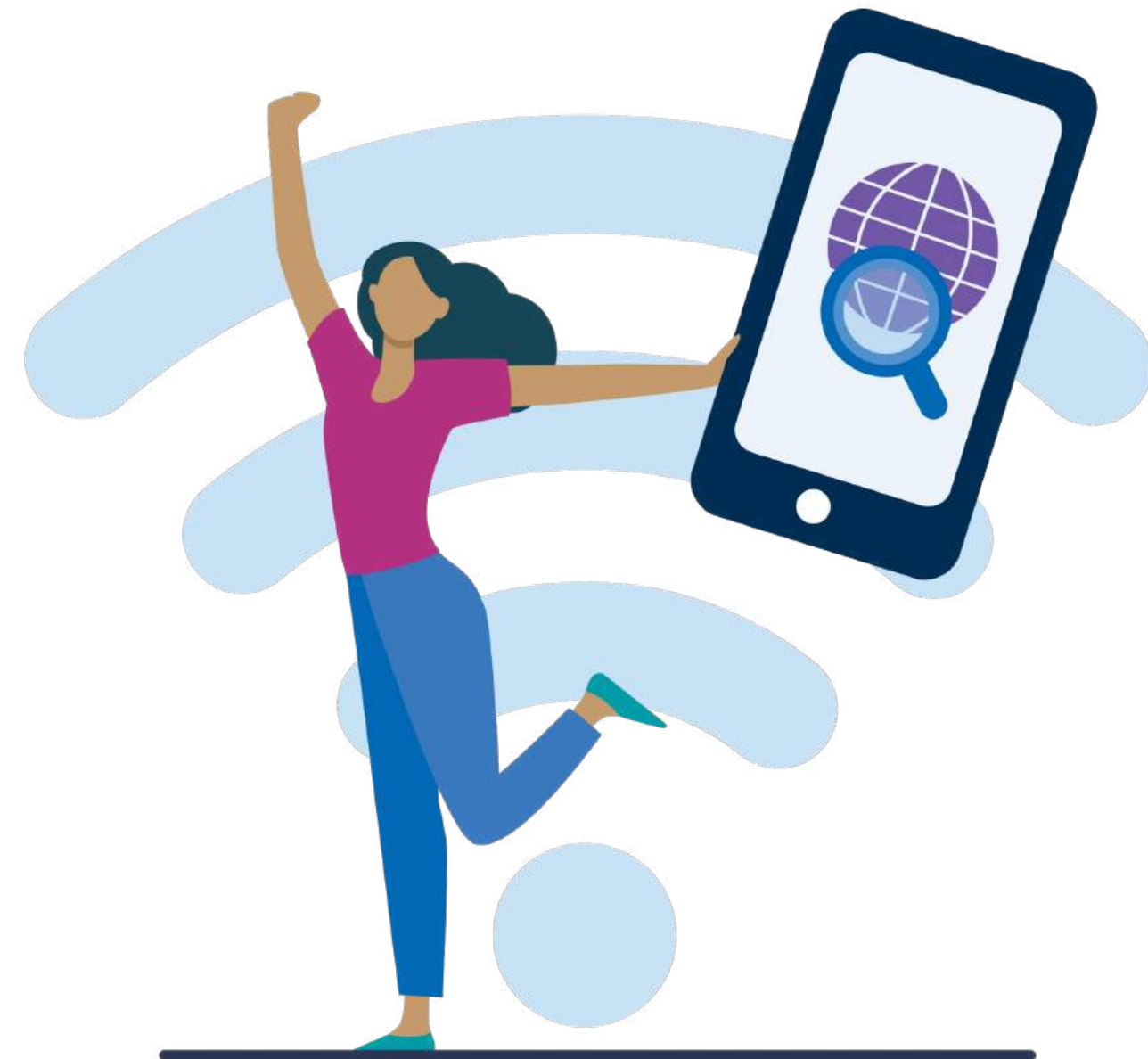
- Access to the Internet in low- and middle-income countries is primarily through mobile phones due to affordability, making these devices crucial for digital connectivity.
- Providing free devices, such as laptops, tablet computers, or phones, in developing countries has been a common approach in several projects aiming to bridge the digital divide and increase affordability. However, past projects show mixed results.
- A study in Ghana found that existing gender norms and differences in leisure time can exacerbate the digital gender divide, particularly in urban areas where boys had more opportunities to gain ICT skills compared to girls.

# What Works?

## i. Expanding Inclusive Digital Connectivity

### c. Improve Affordability through Demand-and Supply-side Measures

- Improved data collection has highlighted global ICT affordability issues, leading to efforts to reduce mobile broadband costs. Many countries aim to make 1GB of data cost 2% or less of average monthly income, particularly benefiting rural users and women.
- In countries like Colombia, Nigeria, Pakistan, and Rwanda, consumers prefer using personal savings for major purchases like smartphones due to a lack of trust in financing options, which are seen as unfamiliar and potentially unstable.
- The Pay-as-you-go financing model, which offers flexible payments and lower interest rates, is a suitable and affordable option for low-income individuals. It is most effective when implemented alongside policy recommendations including tax exemptions and direct financing interventions to enhance device affordability.



# What Works?

## ii. Implement Gender-Smart Digital Skills Training Programs

### a. Provide Information and Develop Content Relevant to Women's Lives

- Digital skills training for women should be tailored to their specific needs, focusing on how they use and want to use digital services, while addressing challenges like safety and security.
- Linking technology adoption to health information, such as in Mexico's Prospera Digital program, can effectively motivate women to learn digital skills.
- Collaborating with women's organizations and gathering feedback through surveys and workshops when designing ICT training programs ensures that they align with local women's learning preferences.

### b. Engage Gatekeepers

- Digital skills initiatives should include men and boys in efforts to close the gender gap, as male involvement is crucial for long-term success and avoiding backlash.
- Using innovative product concepts that encourage men to support women in owning mobile devices can increase the uptake of women's mobile phone usage. In India, Uninor's Project Sampark introduced a paired SIM concept for couples to be used by women and their partners, which allowed free calls between the paired SIMs. The project increased the number of women with mobile phones.
- This approach also helps mitigate the risk of intrahousehold conflict and gender-based violence that may arise from women's smartphone ownership and usage.

# What Works?

## ii. Implement Gender-Smart Digital Skills Training Programs

### c. Combat Restrictive Gender Stereotypes and Social Norms

- Gender stereotypes and roles linking men to strong digital skills and women to reliance on men can negatively impact women's self-perception of their ability. This is seen in studies from Spain, Taiwan, and Jordan, where women were viewed as less competent in ICT than men.
- Linked to gender stereotypes, social norms and gendered roles can prevent women from acquiring digital skills and limit women's access to technology.
- Countering stereotypes can be achieved by linking digital skills to feminine or neutrally stereotyped fields, like creativity. It is also important to reinforce the belief that skills can be developed rather than being innate, which has been shown to improve women's performance in tech-related areas.

### d. Facilitate Access to Role Models and Mentors

- Sociocultural stereotypes affecting girls can be mitigated when positive role models such as mothers and female family members set positive examples of technology use and encourage girls to engage in tech-related studies and activities.
- Competent female teachers and trainers enhance girls' self-confidence in digital skills and inspire tech careers. Studies show that female educators and professors significantly boost female students' interest and performance in science, technology, engineering, and mathematics subjects.
- Mentorship Programs: ICT mentorship programs provide young women with role models and support networks in the tech industry. Additionally, peer-led mentorship boosts girls' confidence and interest in computing.

# What Works?

## ii. Implement Gender-Smart Digital Skills Training Programs

### e. Provide Transportation, Childcare, Meals, and Flexible Schedules

- Programs tailored for women often consider location, transportation, and social norms, with women-only classes and female trainers important to encourage participation.
- Avoid adding a double burden of domestic and caregiving responsibilities by considering women's time constraints when designing programs. Offer training in bite-sized chunks.
- Scheduling is crucial. For example, classes for stay-at-home mothers should be during school hours and accommodate children or offer childcare.

### f. Prioritize Mobile Literacy

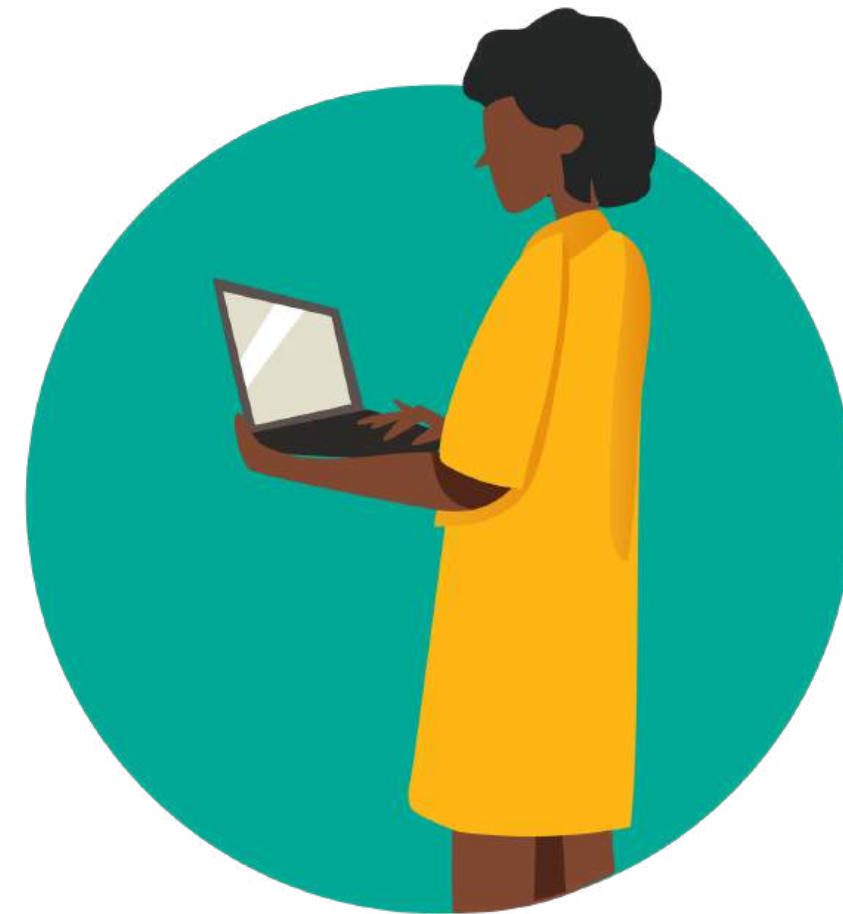
- Most digital skills programs overlook mobile training, despite it being the primary means of Internet access. Emphasizing mobile skills training could enhance digital access for women.
- The widespread belief that “the Internet is not for me” can be addressed by offering customers skills training and supporting them to identify why being online might be useful.
- Skills trainings, particularly those that teach accessibility features of mobile devices, can also have a ripple effect, where learners teach other people what they've learned. This can increase the learners' learning retention and help them support their networks of more low-income women and people with disabilities.

# What Works?

## ii. Implement Gender-Smart Digital Skills Training Programs

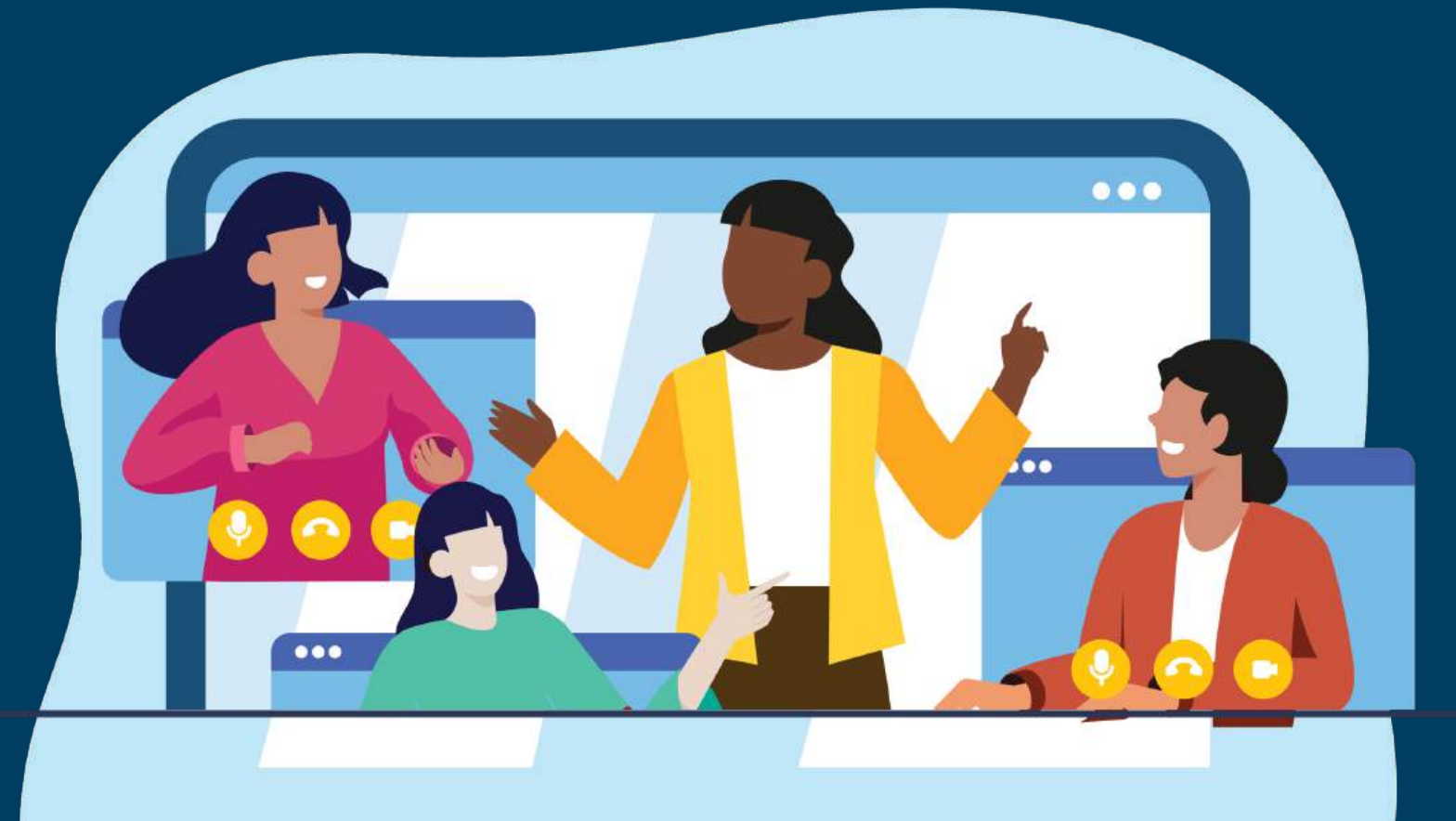
### g. Improve Online Safety and Security

- Online violence against women and girls reflects gender stereotypes and patriarchal norms in society. Women and girls are increasingly targeted by threats through social media, harassment, abuse, cyberbullying and revenge-porn.
- Women and girls face greater risks online due to lower digital literacy making them more susceptible to cyberattacks and privacy breaches. This can cause them to hesitate about using digital technologies.
- Enhancing digital and financial literacy, alongside implementing safety measures and risk mitigation strategies, can help reduce online risks for women. Additionally, addressing gender inequalities and engaging gatekeepers, household members, and policymakers is essential for improving safety both online and offline.





# Part III: Designing Women's Digital Literacy Programs





## ii. Design Framework

A structured framework to guide those designing digital literacy programs for women.

- Analysis of 100+ digital and financial literacy programs being delivered to women.
- Through analysis, “design categories” have been identified, to detail the effectiveness of different program features.
- Each design category explores the global evidence supporting it, as well as good practices and promising approaches currently being implemented across the globe.

# A Design Framework for Digital Literacy Programs

DIGITAL LITERACY					DIGITAL FINANCIAL CAPABILITY PROGRAMS (SUPPLEMENTAL)	
DESIGN CATEGORY	1. DELIVERY CHANNELS  The different channels through which content or learning experiences are delivered to learners.	2. INSTRUCTIONAL APPROACHES  The manner by which instructors and learners interact with one another to enhance the learning process.	3. LEARNING MODELS  The types of pedagogical methods and strategies that facilitate the actual learning process.	4. WRAPAROUND FEATURES  The holistic program design features and logistical mechanisms that support and facilitate the learning process.	5. SECTOR-SPECIFIC USE CASES	6. GENDER-INCLUSIVE DIGITAL FINANCIAL SERVICES
PROGRAM FEATURES	<ul style="list-style-type: none"> <li>• Print Media (books, articles, handouts, flyers, newspapers)</li> <li>• Broadcast Channels (television or radio)</li> <li>• Digital Channels (web, video, interactive voice response (IVR), multimedia, mobile applications, SMS)</li> </ul>	<ul style="list-style-type: none"> <li>• Classroom-Based</li> <li>• Group-Based</li> <li>• Peer-Based</li> <li>• Training-of-Trainers</li> </ul>	<ul style="list-style-type: none"> <li>• Learning-by-Doing</li> <li>• Bite-Size Learning</li> <li>• Gamification and Edutainment</li> <li>• Personalized Content</li> <li>• Nudges and Behavioral approaches</li> </ul>	<ul style="list-style-type: none"> <li>• Mentoring</li> <li>• Community-Based Interventions</li> <li>• Engaging Gatekeepers</li> <li>• Providing Transportation, Childcare, and Meals</li> </ul>	<ul style="list-style-type: none"> <li>• Entrepreneurship and Business Skills Development Programs</li> <li>• Social Assistance Programs</li> </ul>	<ul style="list-style-type: none"> <li>• Women-centered Product and Service Design</li> <li>• Women Agents</li> </ul>



1

# Delivery Channels

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The different channels through which content or learning experiences are delivered to learners.



## Delivery channels include:

- Print media, including books, articles, handouts, flyers, or newspapers;
- Broadcast channels, including television or radio; and
- Digital channels, including websites, videos, interactive voice response (IVR), multimedia, SMS, and mobile applications.

## Global evidence on delivery channels

- Large-scale randomized controlled trial conducted in Kenya assessed the effectiveness of automated SMS-based business training as part of the ARIFU SMS-based learning platform (Fuchs et al. 2022).
- Further research is needed to better understand if and how digital delivery channels can effectively support women in their basic digital literacy learning journeys.

# Delivery Channels

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## Print Media

- Toolkits, manuals, and training curricula for instructors predominantly adopt a textual format, which the instructors then utilize in training programs.
- Presenting content solely in text-based formats poses challenges for women with lower levels of digital literacy or who are illiterate.

## Web

- Website-based platforms offer a flexible learning environment with access to diverse materials, collaboration opportunities, and interactive features.
- They can empower learners to engage at their own pace while fostering interaction with peers and instructors.

## Video

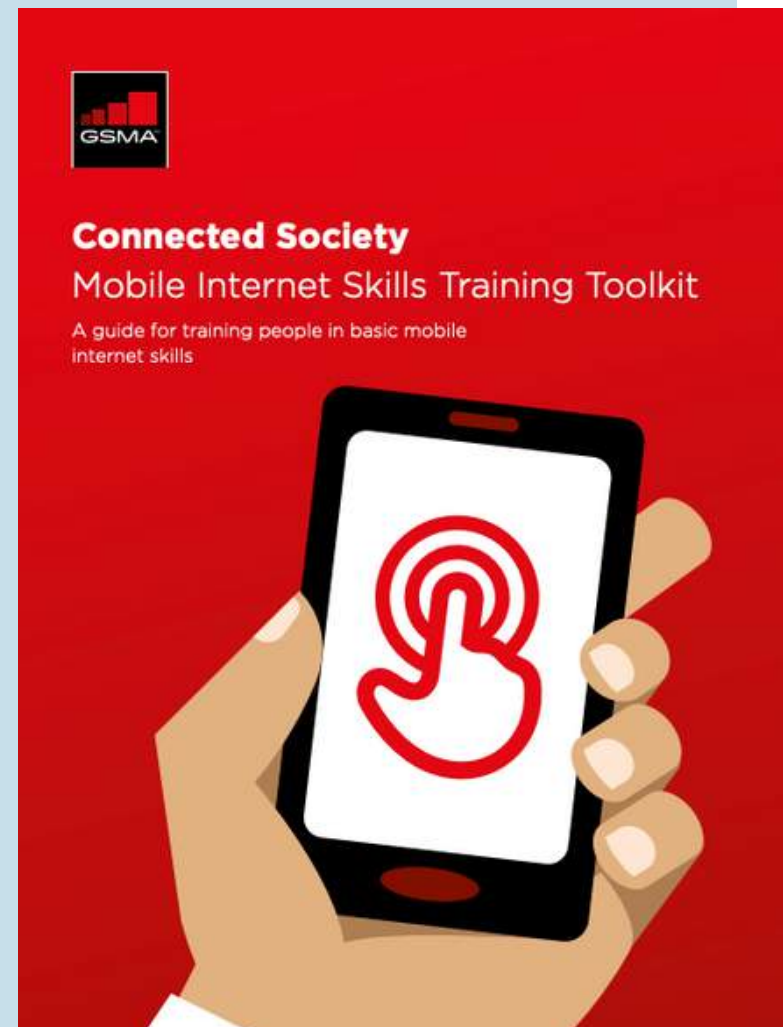
- Audiovisual content covering diverse training topics utilizes visual demonstrations and engaging storytelling to enhance learning, accessible online or through various platforms.
- This approach captures learners' attention and makes the learning process enjoyable, facilitating better comprehension and retention of information.



## Delivery Channels: Print Media










The GSMA Mobile Internet Skills Training Toolkit is a set of free resources for trainers to teach people the basic skills to access and use mobile internet.

It uses a 'train the trainer' approach and consists of short lessons available in Portable Document Format and video format that can be easily adapted to local needs and languages.



## Training session checklist

Before each training session make sure you give yourself plenty of time to prepare. Ensure you leave enough time to set up the mobile phones. It can take longer than you think!

	Check that you have all the materials that you will need for your session (see the material needed on the overview page of each module)		Understand your training content
	Make sure that all of the phones are charged		Activate the mobile internet on all of the phones with a mobile network provider (remember that this can take a number of days)
	Download and set up all of the services you plan to use onto the phones.		Name your phones. Stick a label on the back of each phone with its name and mobile number so you can identify it during the training
	Make sure all of the mobile numbers you are going to use are stored on all the mobiles that will be used in training.		Check your connectivity - if using Mi-Fi/Wi-Fi, check that these are working and that all of the phones are signed in
	Clear all personal data (e.g. photos, messages, etc.) before handing it over to the participants		Load mobile internet data onto all of the phones

# Delivery Channels

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## Web

- Website-based platforms offer a flexible learning environment with access to diverse materials, collaboration opportunities, and interactive features.
- They can empower learners to engage at their own pace while fostering interaction with peers and instructors.

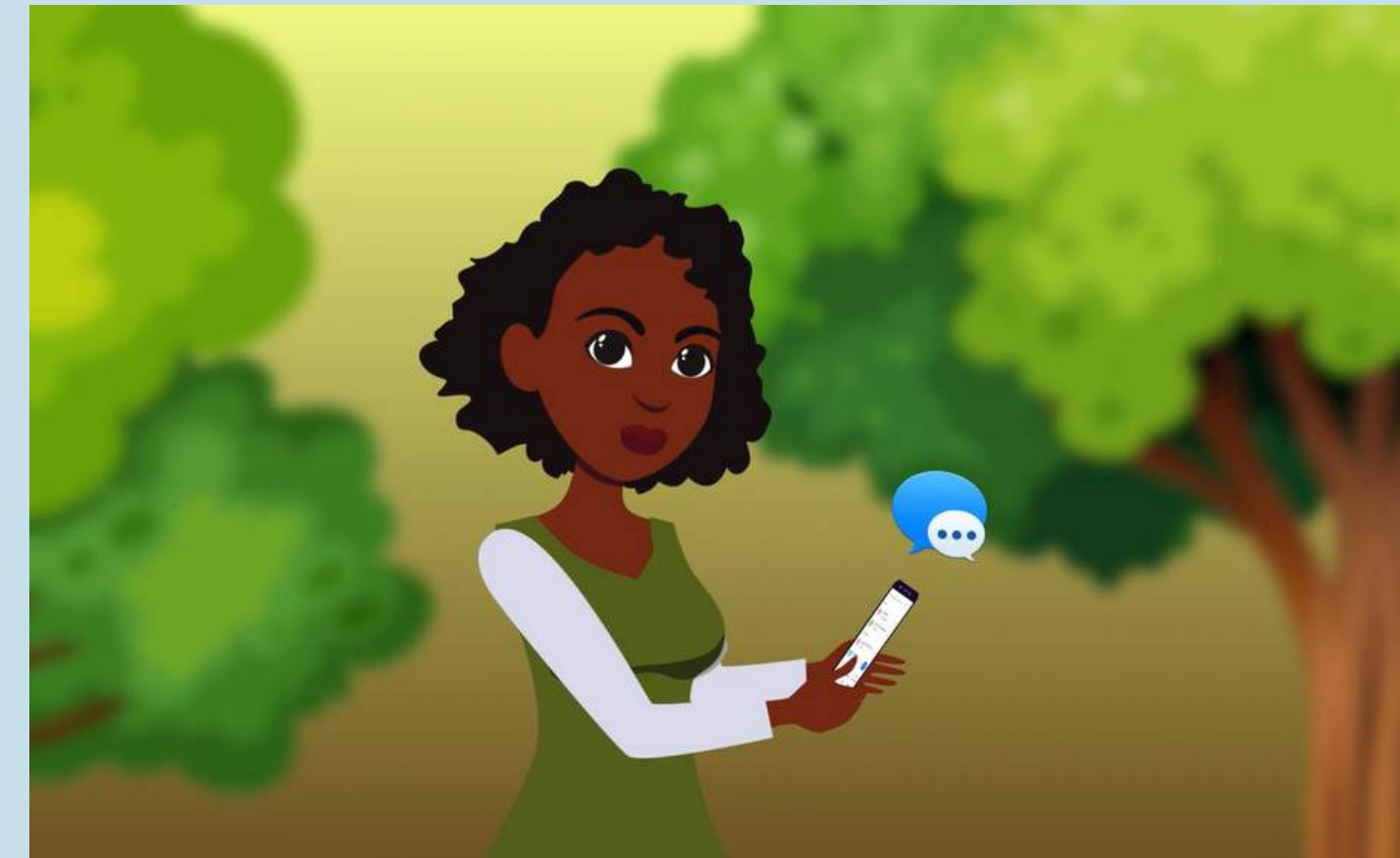
## Video

- Audiovisual content covering diverse training topics utilizes visual demonstrations and engaging storytelling to enhance learning, accessible online or through various platforms.
- This approach captures learners' attention and makes the learning process enjoyable, facilitating better comprehension and retention of information.



## Delivery Channels: Video

- A collaboration between the World Bank, EQUALS Global Partnership, and GSMA conducted a small-scale impact evaluation in Uganda, focusing on a basic digital literacy training program for vulnerable women from host and refugee communities.
- The program tested two training delivery approaches: one using animation videos only on distributed smartphones, and the other supplementing the videos with hands-on support from trained facilitators.
- The results showed promising outcomes, with 30 percent of participants from the group receiving hands-on facilitation in addition to the videos demonstrating basic smartphone functions post-training, compared to only 5 percent before the program. This was nearly double the success rate of the group who learned with animated videos alone (16.5 percent).
- The findings suggest that different learning approaches, particularly those incorporating video elements and hands-on support, can meaningfully improve digital literacy among women.



Please click on the link  
and scroll down to access  
the videos.

# Delivery Channels

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## Interactive

- Interactive elements promote active participation and practical learning, enriching the educational experience.
- Quizzes, games, and simulations actively engage learners, assessing knowledge, offering challenges, and immersing them in real-life scenarios.

## Interactive Voice Response (IVR)

- IVR facilitates interactive communication through voice commands and responses.
- The system's structure ensures that learners can select topics tailored to their personal needs regardless of their literacy level.
- Despite significant benefits, precautions must be taken to address potential safety risks associated with gatekeepers assuming learners receive calls from strangers.



## Delivery Channels: Interactive Voice Response


- Hey Sister! Show me the Mobile Money implemented by USAID and Strategic Impact Advisors, this IVR campaign empowers women in Ghana, Uganda, Malawi, Rwanda, Kenya, and Tanzania with digital financial skills.
- Featuring 25 interactive voice recordings, the campaign covers various mobile money topics, offering informative and visually appealing content.
- The audios, available in 16 local languages, showcase everyday scenarios and transactions, enhancing women's confidence in using mobile money services.
- The campaign effectively engages women through relatable storytelling, making digital financial services accessible and empowering. The video content and audio is available in 16 local languages.

### LESSONS

#### Hey Sister! Show Me the Mobile Money!

On this page, you will find available resources you may use and adapt, to train clients, members of a program, family members, friends, colleagues, etc.

The audio files are available to download for free, in the following languages: English, French, Ga, Twi, Dagbani, Hausa, Ewe, Kassem, Runyakitara, Ateso, Luganda, Lugbara, Luo, Chichewa, Kinyarwanda and Swahili.



ENG >

▶ Lesson 2: How do I set up a mobile money account? 0:58 / 3:36 Download



# Delivery Channels

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## Broadcast

- As well as for delivering digital literacy training, broadcast channels like television and radio can also be utilized for educational or edutainment purposes, such as radio programs aimed at educating children or adults.
- These delivery channels are mainly used in relation to program outreach and promotion efforts.

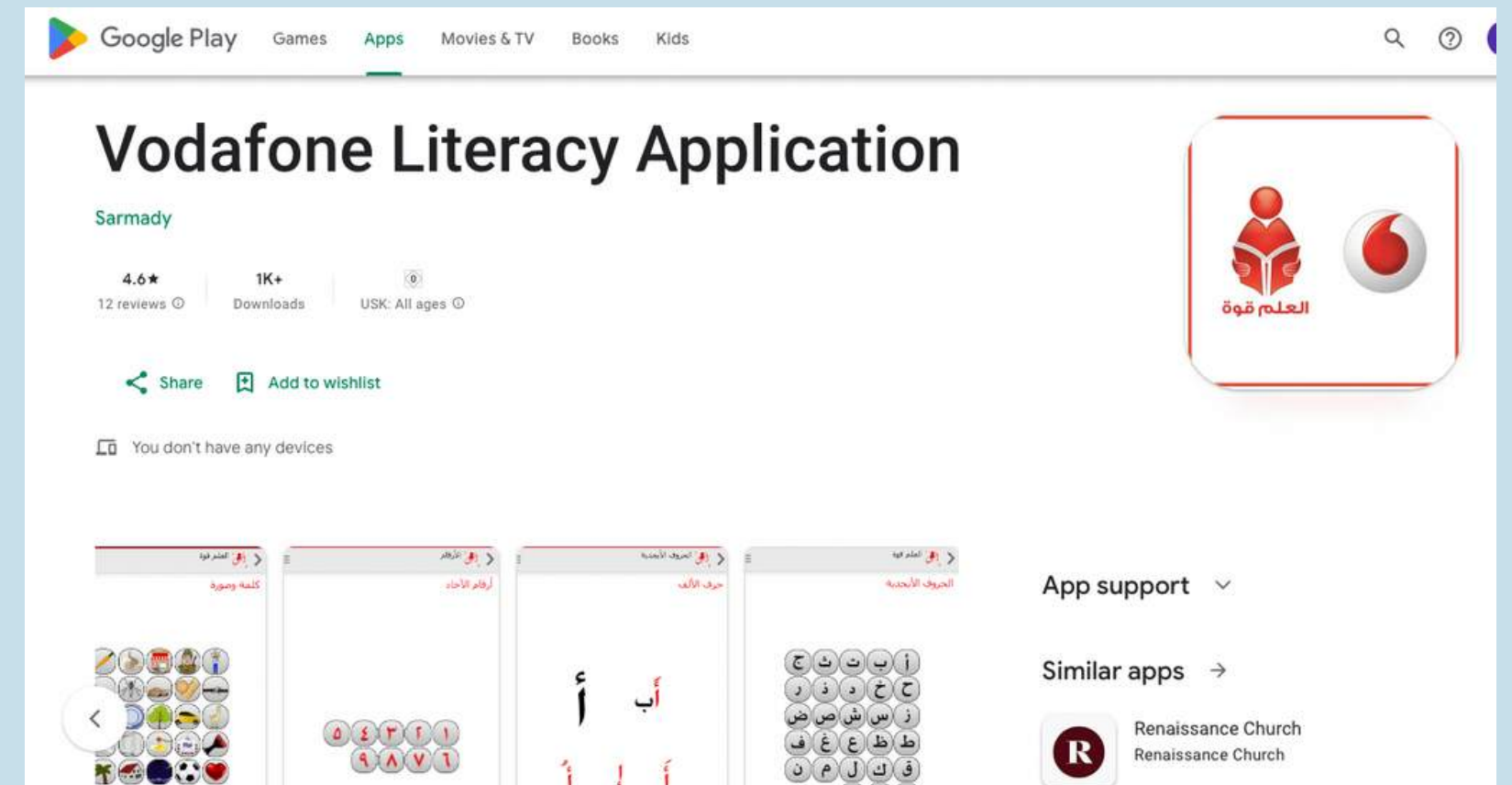
## Applications (Apps)

- Mobile apps, a common online channel, provide user-friendly access to training content on smartphones or tablets.
- Learners can easily navigate, engage with modules, and participate in activities through these apps.
- Learners often need to download and install apps for access, though many smartphones come with pre-installed apps.



## Delivery Channels: Mobile Applications

- The Knowledge is Power Initiative by the Vodafone Egypt Foundation aims to enhance literacy in Egypt, providing mobile and classroom learning opportunities.
- The initiative's Mobile Literacy App, available on various devices, enables women to learn flexibly, complemented by classroom sessions in community locations.
- Since its launch in 2012, the program has empowered over 360,000 people, with 70 percent being women, offering improved literacy for individual empowerment and economic participation.



# Delivery Channels

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## Online

- Online channels use websites or internet platforms for access to training program content.
- This offers flexibility and convenience, allowing learners to engage at their pace and location.
- Online channels often include features like quizzes, forums, and video integration, enabling administrators to monitor learner progress.

## Short Message Service (SMS)

- SMS, a widely used online channel, delivers training content and reminders to participants' mobile phones.
- It's effective for providing bite-sized information, engaging learners interactively.
- Push notifications further enhance engagement, serving as reminders or updates on program objectives, events, or deadlines.



## Delivery Channels: SMS

- The Self-Employed Women's Association (SEWA) Rural Distribution Network 'RUDI' program, launched in 2007, empowers local saleswomen, known as "RUDI bens," to distribute agricultural products in rural India.
- To overcome mobile literacy challenges, SEWA developed an SMS-based mobile application, involving RUDI bens in the tool development process.
- The application, optimized for feature phones, considered literacy levels, using multiple-choice questions for ease of use. Through workshops, manuals, and training, SEWA enhanced the women's skills, fostering effective communication and business management.
- In the pilot of 2,500 RUDI bens, 97% experienced customer growth, demonstrating the program's success in leveraging SMS technology to enhance women's livelihoods across seven districts.





2

# Instructional Approaches

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The manner by which instructors and learners interact with one another to enhance the learning process.



Instructional approaches include:

- Classroom-based
- Group-based
- Peer-based
- Training-of-Trainers (ToT)

## Global evidence on instructional approaches

- A group-based approach, where digital training content was supplemented by face-to-face support from a facilitator, doubled positive outcomes in device ownership, skills, confidence, and employment opportunities (Mboob et al. 2022).
- Peer-based learning is supported by an experimental study in India, where women who attended a program with a friend had enhanced outcomes.

# Instructional Approaches

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## Classroom-Based

- Classroom-based delivery implies a learning setting similar to schools or training centers. It occurs in dedicated physical spaces during a set time with an instructor and students.
- Instructors or trainers deliver content in a lecture-style, teaching through presentations.
- Participants actively engage by attending lectures, participating in discussions, completing assignments, and applying knowledge and skills.

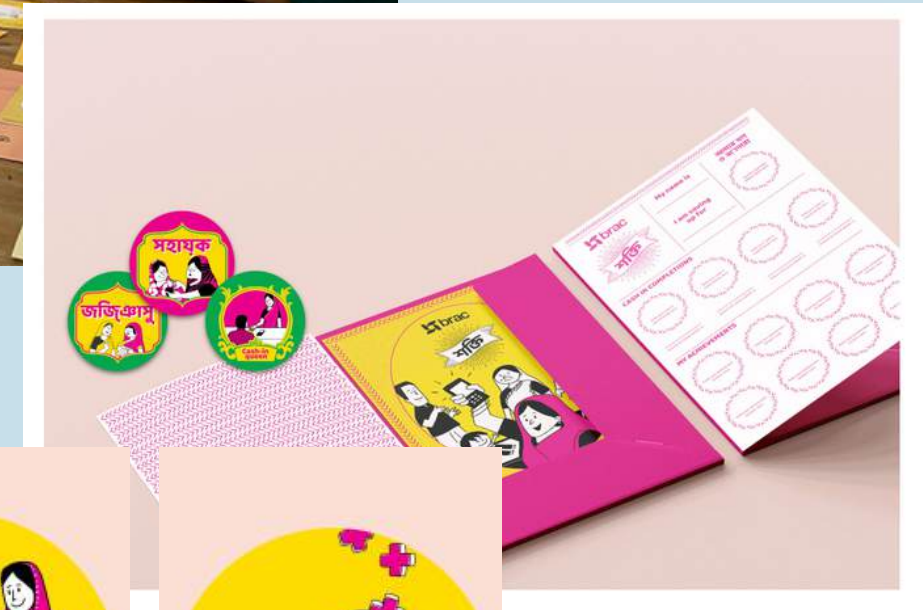
## Group-Based Approaches

- Group-based approaches are a collaborative learning approach often combined with a delivery channel.
- A group is defined by both their shared activities and their collective intention to form a unit.
- Group-based approaches foster interaction among participants and encourage collaborative learning through activities.
- Trainers facilitate discussions and exercises, guiding the groups by structuring the program.



## Instructional Approaches: Group-Based Approaches

- In 2020, the BRAC Shakti program began in rural Bangladesh to empower women through digital financial services.
- It employed a gamification learning approach. Group learning was found to be effective, leading to the formation of supportive groups where women learned together, shared experiences, and built camaraderie.
- These groups held regular discussions on saving habits and household finances.
- The pilot phase, running for six months, reached 5,000 rural women in the Hoar region. Seeing positive outcomes, the program plans to expand to more regions.



# Instructional Approaches

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## Peer-Based

- Peers with advanced digital literacy skills serve as effective role models and mentors in this approach utilizing the knowledge, experiences, and expertise of their community peers to facilitate learning and skill development.
- Women may find it more comfortable to interact and learn alongside peers who share similar backgrounds and challenges. This approach fosters a supportive environment.

## Training-of-Trainers Model

- ToT employs a cascade approach, training master trainers teaching techniques and how to effectively convey content. Trainers then pass on their learning to the target audience, fostering engaging and effective learning experiences.
- The cost-effectiveness of this method explains its widespread use in training and teaching.
- The risk of the declining quality of training along the the delivery cascade should be assessed.



## Instructional Approaches: Peer-Based

- In Bangladesh, the (formerly Herfinance) RISE Digital Wages program, led by BSR, Women's World Banking, the Bill & Melinda Gates Foundation, and three implementing partners, empowered women garment factory workers to make person-to-person transfers using mobile phones.
- Emphasizing peer learning, the program utilized hands-on sessions during lunch and breaks on the factory floor, facilitated by peer ambassadors.
- These ambassadors were trained and provide guidance and ongoing support to their peers, fostering camaraderie and trust among participants.
- By prioritizing peer learning, the program created an empowering environment where women could learn from each other's experiences and effectively utilize digital financial tools.





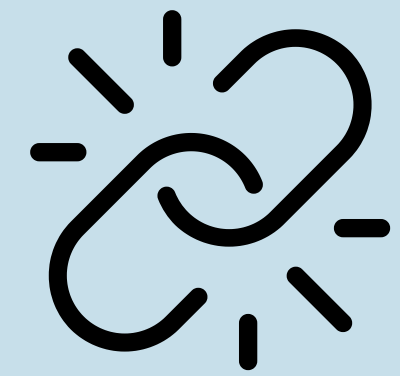
## Instructional Approaches: Training-of-Trainers Model

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- The Gina Mata, Gina Al-Umma program, a World Bank initiative in collaboration with the Digital Development Partnership (DDP) and the Human Rights, Inclusion and Empowerment Umbrella (HRIE) Trust Fund (TF), aims to promote digital inclusivity and skills among disadvantaged young women across six States in Northern Nigeria.
- A key part of this activity is also to create a cadre of female trainers who can also serve as role models within the community and ecosystem.
- Trainers received specialized training to deliver this curriculum effectively, empowering young women with digital skills and rights awareness for economic empowerment and safer online experiences.
- Partnering with private sectors, mobile operators, Nigeria's Universal Service Fund, and local Non Governmental Organizations, the program integrates a rights-based curriculum, addressing digital skills alongside women's and child rights, online safety, and social norms training.



## Instructional Approaches: Training-of-Trainers Model



Please reach out to receive access to the video highlighting the Training of Trainers Program 'Gina Mata: Gina Al-Umma'



3

# Learning Models

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The types of pedagogical methods and strategies that facilitate the actual learning process.



## Learning models include:

- Learning-by-Doing
- Bite-Size Learning
- Gamification and Edutainment
- Personalized Content
- Nudges and Behavioral approaches

## Global evidence on learning models

- Edutainment was proven an effective learning model by a study in South Africa, which found viewers of a soap opera with financial messages had improved financial literacy.
- SMS campaigns with behaviorally informed language were shown to increase the likelihood of recipients engaging in healthy financial habits in a World Bank study in East Africa.
- In Pakistan, an intervention sending customized, encouraging SMS messages to encourage users to invite women resulted in a 64 percent increase in new female customers.

# Learning Models

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## Bite-Size Learning

- Bite-sized learning breaks down training program content into small, digestible pieces.
- Information is structured into simple and understandable messages for easy comprehension and retention.
- Learners focus on one concept at a time, gradually building understanding and skills.
- This method reduces cognitive overload, enhancing learning effectiveness and the overall experience.

## Personalized Content

- Tailoring content to women's needs enhances reception and engagement, particularly when targeting women as the intended audience.
- Incorporating relevant details like characters, environments, and languages that resonate with women's lives.
- Customization ensures training content aligns with women's experiences and needs in digital and financial domains, making the training content more relatable and meaningful.



# Learning Models: Bite-Sized Learning

- The GSMA Tiga Rwanda Pilot for the Mobile Internet Skills Training Toolkit trained sales agents who delivered digital skills trainings to customers at the point of sale.
- The number of times that the sales agent trained each customer varied, as some customers came back multiple times to learn new information or recap on previous lessons.
- The learning content was delivered in several sessions and varied depending on the existing digital literacy levels of customers.
- Customers ask for ongoing training from sales agents on a wide range of platforms and functions. Customers often return to the sales agents to learn more about the Internet after the basic training.

**BITESIZE - INTRODUCTION TO THE INTERNET**

**How does it work?**

**“There are two kinds of mobile phone which you can use to access the internet”**

**1. A smartphone:** these phones are like mini computers. Normally you control them by touching the screen rather than using buttons. They can take photos, play music and videos and have ‘apps’ that can quickly take you to an internet service.

**2. A feature phone:** these have less features than a smart phone. They don’t have a screen you can touch but you can play music and take photos. You can access the internet on a browser to use the online services you want.

**Data Costs**

“To access the internet via your mobile phone, you can either use a mobile data connection or a Wi-Fi connection.”  
**Show the ‘Data Poster’** (p.174).

“Normally, when you use the internet on your phone, you are using mobile data. You will need to buy this from your local mobile network agent or a shop that sells phone credit. Some things you do on the internet, like watching videos or listening to music, use more data, so will cost you more money.”

**GSMA**

**Mobile Internet Skills Training Toolkit**  
Tigo Rwanda Pilot Evaluation  
December 2017



## Learning Models: Personalized Content

- This IVR campaign features the four different global archetypes of women based on the findings of the “Women and Money” program by IDEO.org and the Gates Foundation.
- Personalizing the content allows listeners to fully immerse in the stories, while identifying and engaging with the learnings.
- The IVR series follows the story of Annette, who is expecting her first child with her husband Kingsley. Kingsley is the primary breadwinner in their household.
- Annette has periodic work as a cleaning lady, which she does when her family’s financial situation demands it. While Kingsley makes decisions in their home, he supports Annette’s interest in learning about digital financial literacy. Annette is a member of a savings group, has access to a feature phone, but is unbanked and hasn’t used mobile money yet.

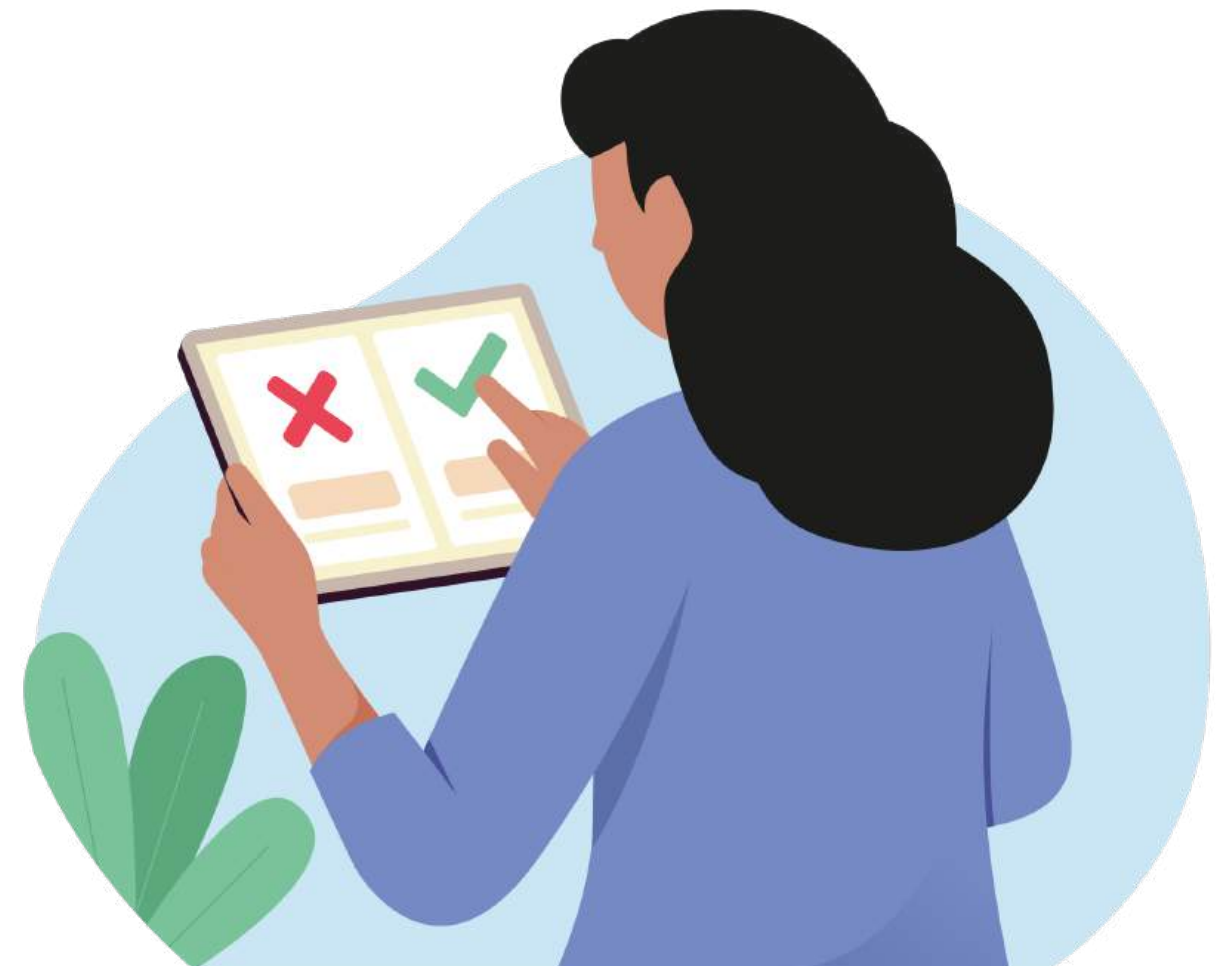


# Learning Models

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## Learning-by-Doing

- Instead of passively receiving information, learners are encouraged to apply their knowledge through hands-on exercises, simulations, or real-world scenarios.
- Direct experience enhances understanding and problem-solving.
- Active engagement improves retention of information.
- Develops critical thinking skills for real-life application.





## Learning Models: Learning-by-Doing

- The RISE Digital Wages program in Bangladesh, led by BSR, Women's World Banking, and the Gates Foundation, empowered women garment workers to make independent person-to-person transfers using mobile phones.
- The learning-by-doing approach emphasized the convenience of digital transfers, with trainings conducted at appropriate times in workers' salary payment schedule.
- Targeting women who withdrew their full salary, the program aimed for recurring engagement. It instilled confidence in women to perform transfers independently, achieving comfort within just two transactions.
- To address limited digital literacy, visual aids were used, and peer ambassadors provided hands-on guidance.

**हर कोई बचत कर सकता है, आज ही बचत करना शुरू करें!**

**बचत क्यों जरूरी है**

- अपने लक्ष्यों तक पहुंचने के लिए
- आपातकालीन परिस्थितियों के लिए

**बचत कैसे करें**

- तब करें कि इसे कितनी बचत करने हैं और इस निर्णय पर बने रहें
- केवल उतने ही पैसे बैंक खाते से निकालें जितने की आपको आवश्यकता हो, और बाकी पैसे आप खाते में सुरक्षित रहने दें

**बचत(पैसे) की सुरक्षा**

**जिम्मेदार**

- उधार/ऋण लेने करके बचत करना
- यदि आपको वाप आवश्यकता है तो बैंक से ही लें
- यदि आप ऋण लेते हैं तो आपको और अ पढ़ना
- पता करें कि ऋण शुल्क क्या है

**मेरा सपना है कि मैं अपनी बेटी को कॉलेज भेजूं और अपने इस सपने को पूरा करने के लिए मैं अपने बैंक खाते में हर महीने 1000 रुपये की बचत कर रही हूँ।**

**Enter (b) Amount**  
टांकस परिमाण प्रवेश करून b

**Enter Pin and Get SMS Confirmation**  
पिन लिखून एवम् एसएमएस एर माध्यमे लिखित हउन

**Dial to access your Rocket Account**  
रॉकेट अकाउंट डालू करुते डायल करून

**RISE**

# Learning Models

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## Edutainment & Gamification

- This approach incorporates storytelling forms like comics or telenovelas to deliver content in a fresh format.
- The objective is to enhance attention, recall, and learning outcomes by making information delivery entertaining and captivating.
- Gamification utilizes game design principles to make learning interactive and enjoyable.
- Challenges, rewards, and competitions motivate learners and enhance their participation.

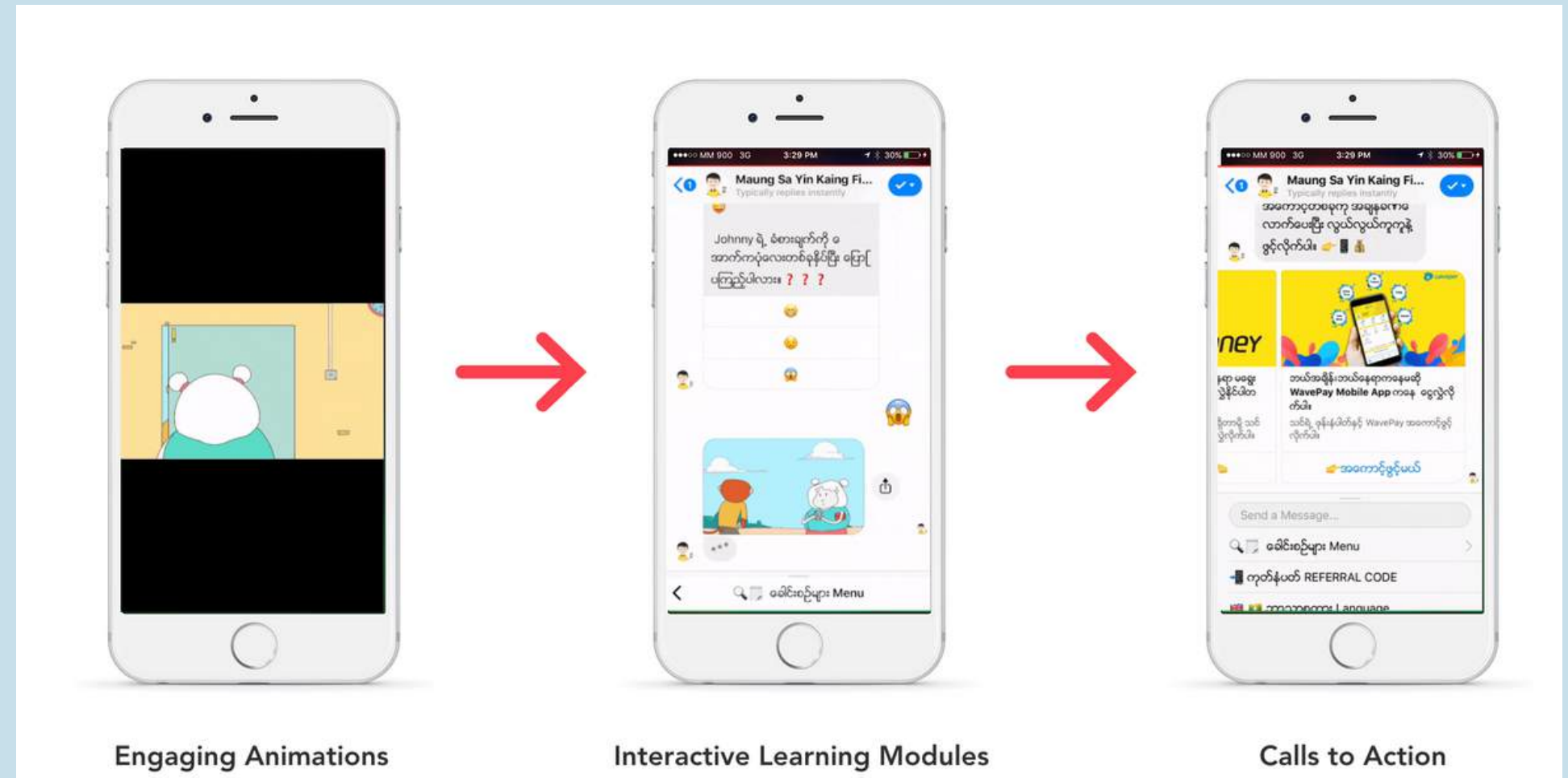
## Nudges and Behavioral Approaches

- Behavioral design aims to make desired actions appear the obvious and preferred choice.
- Methods like SMS messaging, reminders, and default options guide individuals towards beneficial decisions.
- Behavioral design is cost-effective, enabling scalability and reaching a large user base.
- Clear communication is crucial for successful implementation, as unclear messaging may cause confusion and erode trust.



# Learning Models: Edutainment and Gamification

- Edutainment refers to the combination of educational content with elements of entertainment, creating an enjoyable and engaging experience for users.
- ONOW Myanmar's program supports learners to engage with digital financial services and increase their confidence through its chatbot and animated learning series.
- After watching the video series, learners are connected to the digital app to test the learned content. The test is designed to be completed in 45 seconds and covers topics raised in the animation.



Please follow the link to access the short animated video is shared on the website

# 4

## Wraparound Features

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The holistic program design features and logistical mechanisms that support and facilitate the learning process.



### Wraparound features include:

- Mentoring and Role Models
- Community-Based Interventions
- Engaging Gatekeepers
- Providing Transportation, Childcare, Meals, and Flexible Schedules

### Global evidence on wraparound features

- A study examined showed that exposure to same-sex STEM experts significantly improved women's self-concept, attitudes, and motivation toward STEM careers.
- Programs targeting gatekeepers also show promise. The Bandedereho intervention for couples in Rwanda led to improved shared caregiving and communication.
- World Bank interventions providing women entrepreneurs with services such as childcare and transportation in Pakistan and Nigeria resulted in stronger business success.

# Wraparound Features

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## Community-Based Interventions

- Involving community members and influential individuals in planning, implementation, and evaluation ensures program relevance and responsiveness to community needs. This approach recognizes the value of community knowledge and experiences.
- This approach fosters ownership and participation, empowering community members in decision-making. It aligns the program with cultural norms and values, addressing social barriers hindering women's participation.

## Engaging Gatekeepers

- Gatekeepers refer to individuals (family, leaders, religious figures) who have authority or influence over women's decisions and access to resources.
- Gaining their endorsement is vital in overcoming barriers that might hinder women's involvement in digital literacy programs.
- By addressing their concerns and showcasing the program's advantages, we can strive towards breaking down gender norms and fostering an inclusive environment that empowers women.

# Wraparound Features

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## Mentoring and Role Models

- Mentors can play a crucial role in boosting women's interest, confidence, and intention to pursue various fields of study or professional development opportunities.
- Mentorship programs that are specifically designed for women can have a considerable impact in improving women's learning outcomes.
- Role models can inspire women to explore and pursue training in areas traditionally dominated by men.

## Providing Transportation, Childcare, Meals, and Flexible Schedules

- When designing training programs, it is crucial to consider the physical and logistical barriers that may prevent women from fully participating.
- Women often face additional responsibilities, such as caregiving, and incorporating support mechanisms into programs ensures equitable access.
- These elements help alleviate the logistical burdens that women might face, enabling them to focus on learning.



## Wraparound Features: Mentoring

- In Rwanda, the Digital Opportunities Trust and EQUALS' Digital Skills for Business program recruited Digital Champions, who acted as mentors for young female entrepreneurs.
- By placing young women at the center of the digital transformation in their communities, the program aimed to highlight their potential as innovators, leaders, and mentors, showcasing the transformative power of their leadership.
- During the pilot young women reported feeling more comfortable learning how to use technology when the training was conducted in group settings with other women who have similar backgrounds, educational levels, and familiarity with technology, making it easier for them to relate to one other.



# Digital Financial Capability Programs (Supplement)

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DIGITAL FINANCIAL CAPABILITY PROGRAMS (SUPPLEMENTAL)	
5. SECTOR-SPECIFIC USE CASES	6. DIGITAL FINANCIAL SERVICES DESIGN FEATURES
<ul style="list-style-type: none"><li>• Entrepreneurship and Business Skills Development Programs</li><li>• Social Assistance Programs</li></ul>	<ul style="list-style-type: none"><li>• Women-centered Product and Service Design</li><li>• Women Agents</li></ul>



5

## Sector-Specific Use Cases

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Sector-specific digital financial capability programs primarily target women through entrepreneurship and business skills trainings, or as components of social protection programs.

These examples leverage relevant use cases, in which the skills or knowledge being taught have direct applicability and benefits for the participants.

# Sector-Specific Use Cases

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## **Entrepreneurship and Business Skills Programs**

- Participants can unlock growth and sustainability opportunities by leveraging digital platforms effectively.
- Business and entrepreneurship programs are essential for building digital financial capability.
- They provide comprehensive training on various digital finance aspects like mobile banking and online payment systems.
- Digital tools enhance financial literacy and streamline business operations.

## **Social Assistance Programs**

- Social assistance programs frequently integrate digital financial capability training into their support packages.
- Some programs offer financial assistance, like cash transfers, alongside specialized women's digital financial skills training.
- With these initiatives, women learn to manage finances using digital platforms.
- These programs aim to improve financial literacy, decision-making, and overall financial well-being among women.



## Sector-Specific Use Case: Business Skills Programs

- Pro Mujer in Nicaragua provides financial literacy training via a mobile app for female entrepreneurs.
- Initially, many lacked email accounts to access the app, prompting Pro Mujer to launch campaigns promoting digital literacy and email creation.
- The aim is to empower women by improving their internet skills for business opportunities, though many had limited computer proficiency.
- To address this, Pro Mujer started with basic digital training before advancing to more complex modules. They offer Internet access and digital skills training in their centers, but faced challenges with smartphone sharing among women.
- To solve this, Pro Mujer introduced a loan product to finance cell phone purchases for clients.





## Sector -Specific Use Case: Social Assistance Programs

- In 2017, the BOMA pilot project in Kenya aimed to lift ultra-poor households out of extreme poverty through interventions including cash transfers, business and digital financial literacy training, health and savings support, mentoring, and life skills training. The project was integrated into the government's social protection systems.
- A total of 1,526 women graduated from the program, utilizing SMS financial literacy training. Among 1,600 participants, 1,350 were part of group businesses, while 250 operated solo. Participants 'graduated' from the program when they met specific criteria including self-sufficiency and resilience.
- Local mentors and community-based trainers provided technical and life skills training, utilizing voice recordings of trusted mentors. This approach significantly increased mobile money usage, doubling its adoption rate and demonstrating the program's potential to lift households out of extreme poverty.



### Government Adoption

**The REAP model began in Kenya, and BOMA is now working with the Government of Kenya and other partners to achieve government adoption of our model. For the BOMA model to be truly sustainable, it must be incorporated into government social safety nets.**



6

# Gender-Inclusive Digital Financial Services

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By introducing women-centered services and products and training female agents to cater specifically to women, digital financial service providers aim to increase women's access to and utilization of digital financial services.

Digital financial service providers have recognized the need to bridge the gender gap in digital financial usage and have taken proactive steps to develop targeted digital financial capability programs for women.

# Gender-Inclusive Digital Financial Services

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## Women Centered Products and Services

- Mobile operators address low digital literacy, aiming to bridge the digital divide and empower individuals, especially women.
- Efforts include designing and launching products and services tailored for women to enable them to fully participate in the digital economy.
- Tailored offerings feature affordable data plans, user-friendly mobile apps, and accessible value-added services.

## Women Agents

- Women agents play a key role in serving underserved customers as they tend to reach more marginalized communities than male agents, particularly in rural areas.
- Several studies show that women agents can outperform their male counterparts on key performance indicators, provided that their challenges are addressed with appropriate support from both public and private sectors.
- Customers are shown to prefer an agent of their own gender, with female customers being 7.5 percentage points more likely to transact with a female agent than a male one.



## Gender-Inclusive Digital Financial Services: Women-Centered Products and Services

- The Vodafone Idea's Sakhi is a mobile-based safety service that addresses gender-based safety concerns and removes some obstacles that women in India face in owning and using mobile phones.
- Features include an emergency alert that informs pre-saved contacts about the user's last location and a private recharge option that blocks mobile agents from obtaining the phone number.
- The research showed community leaders and gatekeepers seemed to approve and appreciate the service, once made aware of the service and the convincing narrative of the importance and shared responsibility of women's safety. This approval also extended to supporting women's ownership and use of mobile phones.





## Gender-Inclusive Digital Financial Services: Women Agents

- UN Women, with The Orange Foundation and the National Peace Hut Women of Liberia, launched a program (2022-2023) to empower women through digital innovations, promoting gender equality.
- A key aspect of the program was a six-month in-person digital literacy training program. Rural women benefit, by attending classes at two dedicated digital centers, enabling access to information and markets.
- Following the training, over 70 women secured jobs with Orange as agents and through the offered capacity trainings an additional of 700 women were trained and learned how to manage mobile money accounts.



Rebecca Droben, Town Chief of Edina City, Grand Bassa County, Liberia. © UN Women Liberia

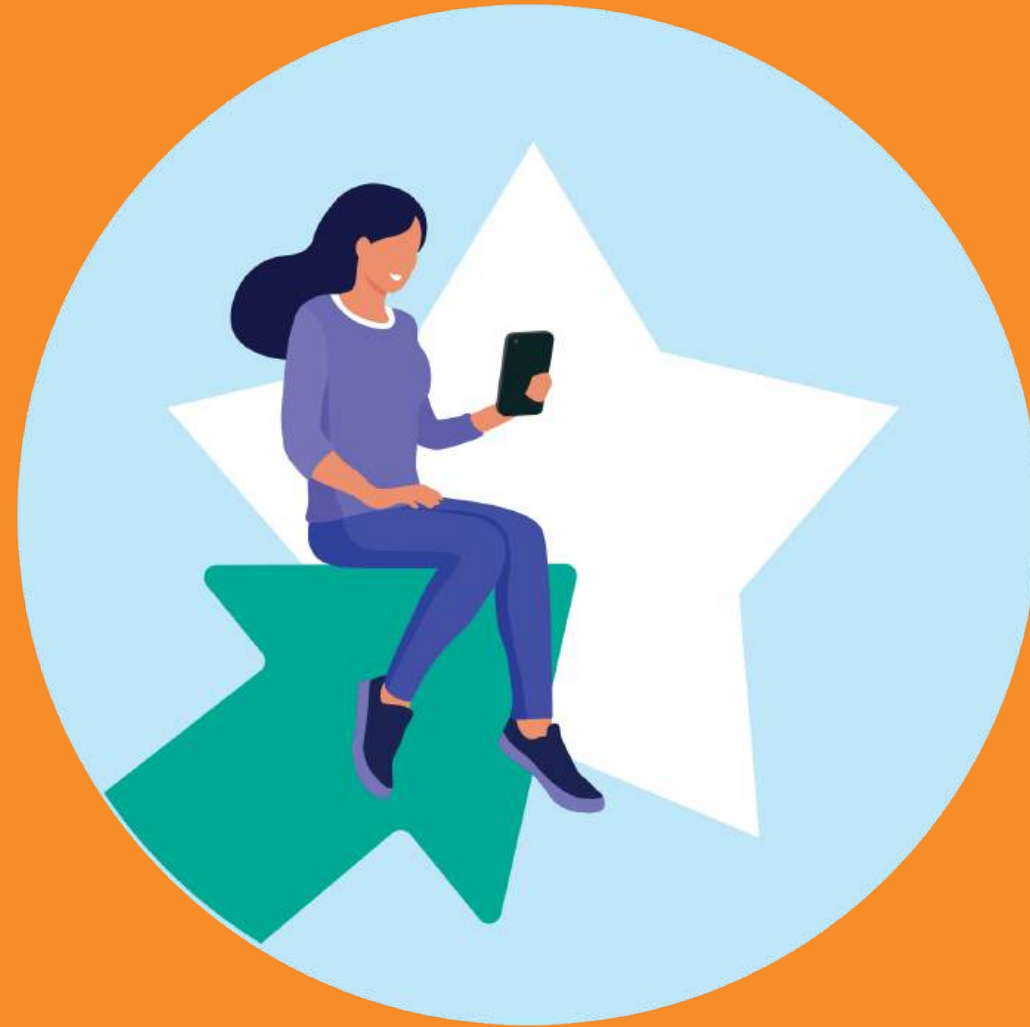


# Part IV: Additional Resources





# Curricula Examples



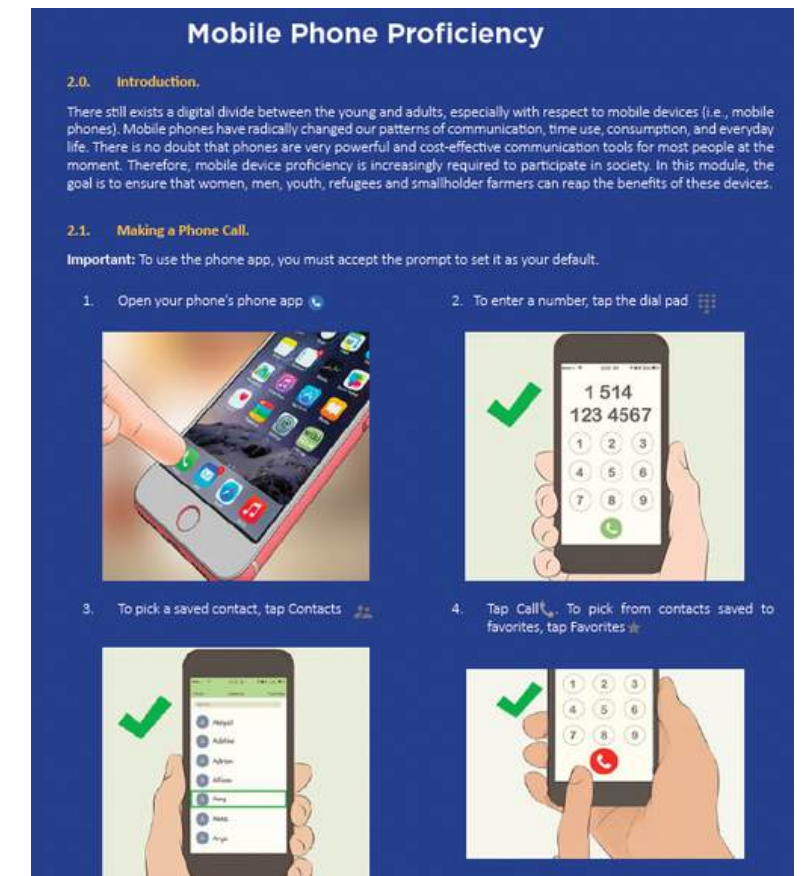
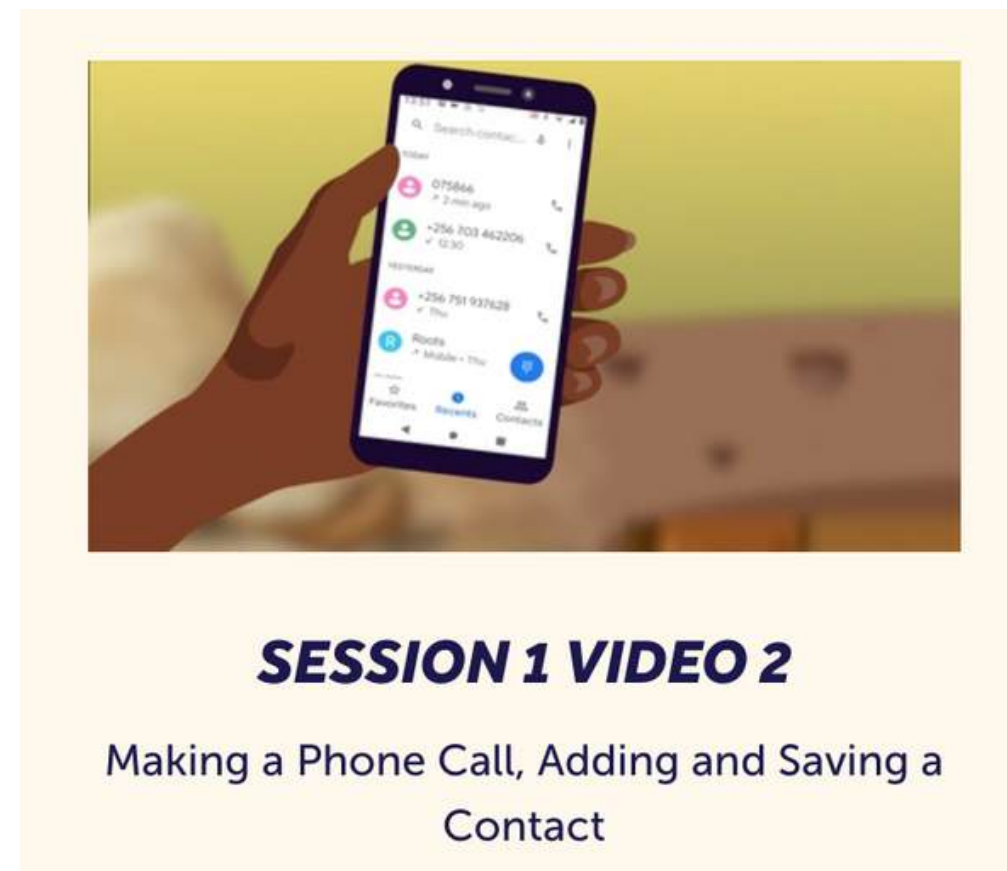
# A Design Category Framework for Digital Literacy Programs

CURRICULA					
DESIGN CATEGORY	1. TECHNICAL SET-UP	2. APPLICATIONS & SERVICES	3. MOBILE MONEY	4. SAFETY & SECURITY	5. RESEARCH DESIGN
LEADING USE CASES	<ul style="list-style-type: none"> <li>• Understanding phone features</li> <li>• Setting up the SIM Card and PIN Code</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the Internet</li> <li>• Installing and navigating Apps (Messenger etc.)</li> <li>• Sending &amp; Receiving Phone Calls</li> <li>• Sending &amp; Receiving SMS</li> <li>• Sending voice messages</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Education</li> <li>• Understanding Mobile Money</li> <li>• Installing your Mobile Money Application</li> <li>• Interacting with Mobile Money Agents and Services</li> </ul>	<ul style="list-style-type: none"> <li>• Phone and PIN Safety</li> <li>• Safety and Privacy Settings</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the Internet</li> <li>• Installing and navigating Apps (Messenger etc.)</li> <li>• Sending &amp; Receiving Phone Calls</li> <li>• Sending &amp; Receiving SMS</li> <li>• Sending voice messages</li> </ul>

# 2

## Applications and Services

- How to make and receive phone calls?
- How to use video calls on Whatsapp?
- How to install apps and understand their benefits ?



- The video format allows learners to pause, conduct the activities or continue at a more convenient time.
- This video is part of the GSMA Mobile Internet Skills Training Toolkit, and provides animated set-by-step instructions on how to use video calls on WhatsApp.

- Using short animated videos to explain how to make a phone call, and how to add and save a contact.
- This allows learners to focus on the voice and animation to learn the task.

- This UN Capital Development Fund toolkit provides a step-by-step guide for facilitators and explains, with illustrations, how to make a phone call, send messages and set up voice recording.

# 3

## Mobile Money

- How to teach (digital) financial education ?



### Manuals

- Financial education curricula can be taught by using manuals, step-by-step guided instructions with trainers or through mobile applications.
- However, it is important to align the resources and materials with the financial capability levels of learners.

Module 02

#### What are savings? Session 1

Ask the groups what savings are. Encourage them to share their answers aloud. Supplement their suggestions with the following answers:

- Money that is put away in the present for use in the future
- Investments in animals or land that can be sold when cash is needed
- A way of building assets
- A fundamental part of money management

Ask:  
What are the main reasons why people save? Allow the participants to share their answers aloud. Supplement their suggestions with the answers below:



Group work  
Tell participants to form groups of 2 or 3

Each group then makes a list of some good spending and saving practices. Allow participants to do this for 5-10 minutes.

Ask the groups to share their answers aloud. Supplement their suggestions with the following answers:

- Make a budget for the coming week or month. This means that you list the expected money coming in and going out, and that you plan what you will do with the money. Plan how much you will save every day, week or month
- Stick to your saving plan!

### Videos & Animations

- Mobilizing Myanmar uses video-based animations to educate learners on their journey to use Mobile Money.



# 3

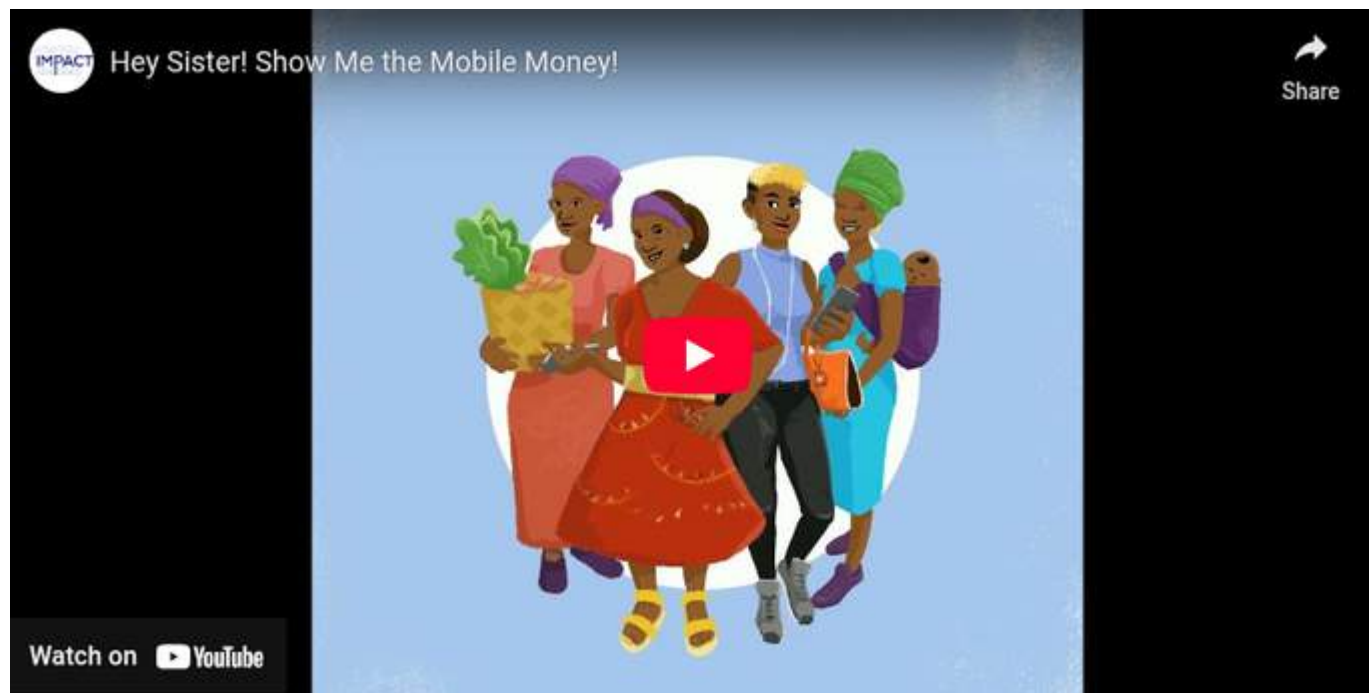
## Mobile Money

- How to teach (digital) financial education ?



### Audio & IVR

- Using IVR supports learners to listen to the audio content and engage with the learning activities at their own pace and when convenient.
- The highlighted IVR solution (Hey Sister! Show me the Mobile Money!) provides learning content as audio files in several languages that can be downloaded for free.

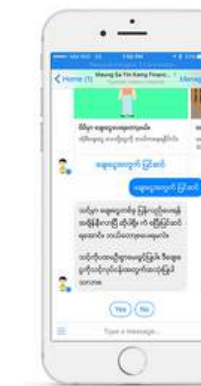


### Chatbots

- Mr Finance is a Chatbot via Facebook Messenger to teach users about financial management. In the gamified novel users follow the journey of a women starting her business.



**A Gamified Novel**  
Help a woman along her business journey. Learn financial management along the way.



**Business Troubleshooting**  
Simple business advice and practical steps to improve your financial situation.



**Timely Reminders**  
Actionable and memorable. Delivered at the right time to trigger smart decisions!

# 3

## Mobile Money

- How to install Mobile Money Applications?
- How to interact with Mobile Money Agents and Services?



### Videos & Animations

- This video is part of the GSMA Mobile Internet Skills Training Toolkit, and provides a video explaining how to open a Mobile Money Account.
- Using short, comprehensive and engaging videos, with animations, allows learners to better understand the content and apply the lessons on their own phones.



### Short Assessments

- Conducting a short assessment after each session can help learners to retain the new knowledge and support trainers in identifying areas of difficulties for learners.



# 4

## Safety & Security



- How to keep your Mobile Money account safe and protected?

### Training Exercises

- During training sessions, main concerns related to the dangers and mistakes of mobile money use must be addressed and appropriate safety measures shared.
- The International Organization for Migration Toolkit provides learning content (including a comic series and activity cards) on teaching and conveying digital protection and safety measurements.

**SECURITY TIPS FOR MEANS OF PAYMENT**

- Use your means of payment carefully, always thinking about your budget.
- Keep your card, checkbook, wallet and mobile phone in a safe place.
- Never lend your credit card or checkbook to anyone.
- Never sign a blank check (without putting the amount).
- Do not write your confidential code on your bank card or ledger.
- Never send your confidential information by e-mail, SMS, or social media.
- Pay attention when performing a transaction on the Internet: the security of the web site you are using (the web address begins with "https", there should be a padlock symbol in the right of the screen...).
- Check your bank statements carefully and regularly.
- Report immediately to your bank of any sum debited from your account which you cannot explain.

**TRAINING AID G.4.1**

**SOLUTION CASE STUDY #1**  
Is Mary's father entitled to a refund? Why?  
Mary's father is not entitled to a refund, because the purpose of his health insurance is to protect against a risk. Even if no one in his family falls ill or needs to see a doctor, his premiums will not be refunded.

**SOLUTION CASE STUDY #2**  
Will Meshak's insurance cover the costs of her cousin's health care? Why?  
No, Meshak's policy clearly does not cover his cousin. A policy of this kind typically covers only the immediate family (husband, wife and their children). The only exception would be if Meshak had paid an additional premium to insure his cousin when they took out the policy.

**SOLUTION CASE STUDY #3**  
Can Jane purchase an insurance policy for just three months? Why?

### Testing learning

- After watching the video series, learners are connected to the digital app to test their learning. The test is meant to be completed in 45 seconds and covers topics raised in the animation.

**Question 1:**

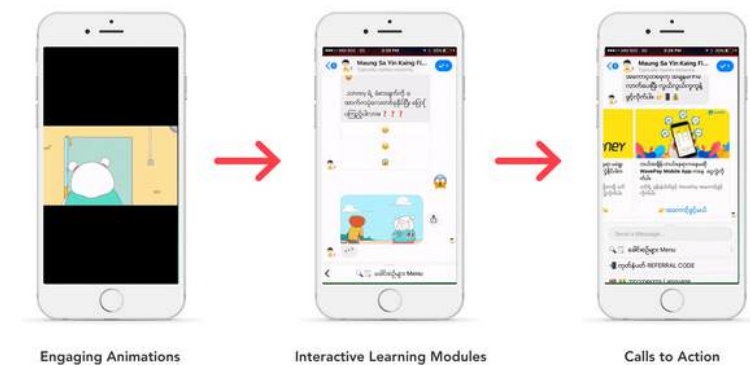
If you lose your ATM card is your money safe?

Answer Option 1: Yes, it's still in the bank

Answer Option 2: No, it's lost

Correct Answer response: ✓ That's right! Call them right away, so the bank can help you get a new card, and you can access your money again.

Incorrect Answer response: ✗ Actually, your card may be gone, but your money is safe with the bank. Call the bank to get a new card!



**Question 2:**

True or False: It is safe to give your friends your ATM PIN.

Answer Option 1: True, it is SAFE

Answer Option 2: False, it is DANGEROUS

Correct Answer response: ✓ Exactly. It is not safe to give your friends your PIN. Your PIN is your password to your ATM card. It is like the key that opens a safe. You should not share it with others.

Incorrect Answer response: ✗ Sorry, incorrect. It is not safe to give your friends your PIN or password. Your PIN is your password to your ATM card. It is like the key that opens a safe. You should not share it with others.



# Program Dashboard



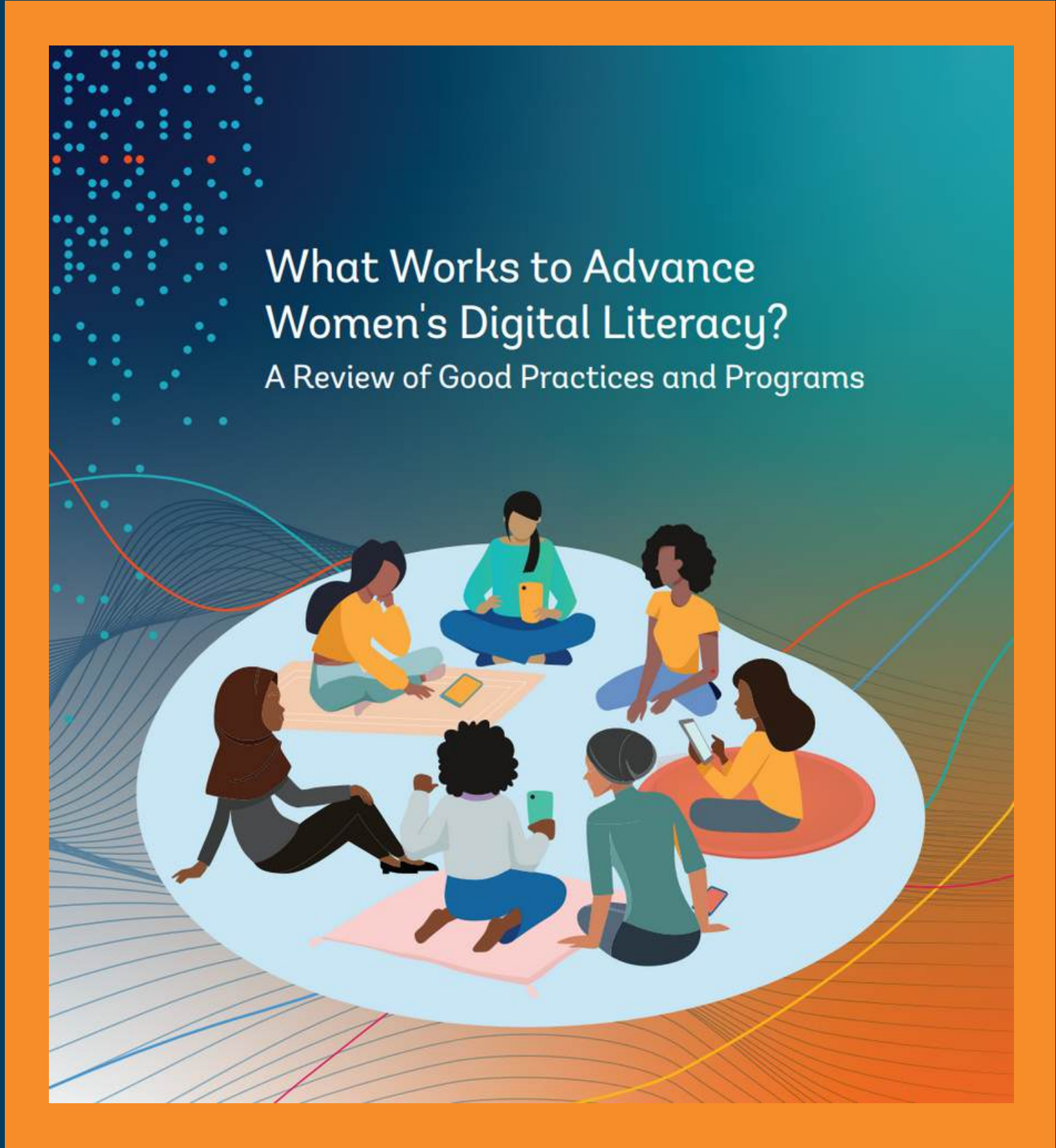
# Appendix A: Global Mapping of Programs

Table with summaries of 150+ digital and financial literacy programs.



Africa Region				
Country	Organization(s) responsible	Program name	Timeframe	Description
Dr Congo	The Orange Foundation, AfricaTik	The Digital School Program	2019–	Since 2019, the Orange Foundation has deployed its digital schools program to introduce children to digital technology in underprivileged areas with a direct impact on nearly 5,000 primary school students and the exposure of more than 10,000 students to applications. This program is available in French and in 4 national languages.
Liberia	UN Women, The Orange Foundation, the National Peace Hut Women of Liberia	N/A	2022–2023	The program aims to empower women economically and socially through digital innovations and technology to promote gender equality.
Niger	Catholic Relief Services, Tufts University, Oxford University, UC-Davis	Alphabétisation de Base par Cellulaire: Mobiles 4 Literacy	2009–2012	The program is a collaborative initiative that uses mobile phones as tools in promoting adult literacy and numeracy in Niger. The program was designed to assess the impact of mobile phone use on adults' learning and socio-economic outcomes. It integrated phone-based literacy and numeracy modules into a conventional adult literacy course, attended by 50 learners (25 men and 25 women) in each of the 113 villages selected in the Dosso and Zinder regions of Niger. All students followed a regular adult education program. However, in half the villages (the "ABC villages") participants also learned how to use a mobile phone.
Nigeria	World Bank, Natview Technology	Gina Mata Gina Mata, Gina Al-Umma	2023–2024	The Digital Development Global Practice within the World Bank, with support from the Digital Development Partnership and the Human Rights, Inclusion and Empowerment Umbrella Trust Fund, launched "Gina Mata, Gina Al-Umma", an Inclusive Digital Technologies and Digital Skills pilot in Northern Nigeria.  Through Gina Mata, Gina Al-Umma—which translates from Hausa to mean "Build up women, Build the community"—disadvantaged girls and unemployed women in Northern Nigeria are empowered through digital skills and soft skills training and provided with access to Internet and digital tools to break their cycle of unemployment and vulnerability to gender-based violence.

Africa Region				
Country	Organization(s) responsible	Program name	Timeframe	Description
Nigeria	EQUALS Global Partnership, World Bank, The Rockefeller Foundation's Digital Jobs Africa Initiative, Natview Technology	FASAHA 4.0	2022	The program aimed to integrate more women into the digital economy and improve girls and women's economic participation in the digital space.
Nigeria	Tech4Dev, United Kingdom Foreign Commonwealth and Development Office	The Basic Digital Literacy for Rural Clusters in Northern Nigeria program	2021	The Basic Digital Education Initiative was an experiential learning computer education and STEM program that aimed to introduce learners in underserved communities to the world of digital literacy and equip them with the basic digital knowledge that is required to succeed in the 21st century world and workplace.
Nigeria	Tech4Dev	The Genesis House	-	The Genesis House digital literacy program was a 4 week training program designed to equip women and girls in the Genesis house program with basic digital literacy competence that enables for adequate participation in the future of work.
Rwanda	EQUALS Global Partnership, Digital Opportunity Trust	Digital Skills for Business	2021	Under this program, the World Bank sought to equip women with digital skills and close digital gender gaps.
Uganda	Trickle Up, AVSI Foundation, World Bank	EQUALS Digital Literacy Project	2021	The objective of this pilot was to improve women's digital literacy and inclusion by increasing their agency, ownership, and usage of smartphones for economic and social inclusion to support improving women's digital literacy and inclusion among refugee and host community participants who had recently completed an economic development and inclusion activity in Kamwenge District, Uganda.  The pilot then tested two training delivery approaches: (1) animation video only, which provided video training via the distributed smartphones; and (2) animation video plus, which supplemented the video training with hands-on support from a trained facilitator using a structured paper-based curriculum.  Results in the animated video plus group were almost twice as high as in the animated video only group, in which 16.5



Click to read the report in full.



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Would you like to share promising approaches to advance women's digital literacy & digital financial capabilities?

Or do you have any questions?

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