CONNECTED WOMEN | 2015

ADAPTATION FRAMEWORK FOR THE MOBILE TECHNICAL LITERACY TOOLKIT

Connected Women

GSMA Connected Women works with partners to deliver socio-economic benefits to women and the broader mobile ecosystem through greater inclusion of women across the industry. The programme is focused on increasing women's access to and use of mobile phones and life-enhancing mobile services in developing markets, as well as closing the digital skills gender gap, attracting and retaining female talent, and encouraging female leadership in technology on a global basis.

For more information, please visit the GSMA Connected Women website at www.gsma.com/connectedwomen

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The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and Internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.

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Mobile for Development

Mobile for Development brings together our mobile operator members, the wider mobile industry and the development community to drive commercial mobile services for underserved people in emerging markets. We identify opportunities for social and economic impact and stimulate the development of scalable, life-enhancing mobile services.

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Executive Summary

Not being able to operate a phone is one of the most reported barriers to women adopting and using mobile technology and ultimately accessing life-enhancing mobile services in low- and middle-income markets globally.[1]

Based on research on the mobile landscape in the Pacific region, where low levels of technical literacy were identified as a major barrier to women's adoption of mobile technology, GSMA's Connected Women programme worked with local partners and community groups to develop Mobile Technical Literacy Toolkits for both Papua New Guinea and Fiji. Steeped in local context and knowledge, it quickly became evident that these toolkits could not be replicated in other contexts simply by translating them into other languages—research and an informed design process would be crucial to creating relevant and appropriate resources for communities in different parts of the world and even within the same region.

This document provides a framework for delivering mobile literacy training workshops for women in other communities and regions. By following five sequential steps—Scope, Understand, Design & Create, Test & Deliver, and Evaluate & Refine—you will understand what mobile services women in your community are currently aware of and use, and those that they aspire to use. Crucially, the process also focuses on learning preferences, revealing the diverse ways of explaining and sharing concepts of mobile phone use. The importance of strong, local partnerships to understanding and reaching your core audience cannot be underestimated, and local brands and expertise can generate trust and buy-in.

The Connected Women programme used an iterative design process to create the Mobile Technical Literacy Toolkit to improve Pacific women's awareness and understanding of their mobile phone. This adaptation framework distils and explains this method, and allows MNOs, NGOs, or anyone else interested in improving the uptake of mobile to adapt these resources for use in different parts of the world. It is our hope that this adaptation framework helps our partners build effective and informed resources to improve women's mobile technical literacy and usage of mobile phones in their communities.

1: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries".

Introduction

What is the adaptation framework?

This adaptation framework is a tool for mobile operators, the development community, and other organisations seeking to improve the mobile technical literacy of a particular group. The framework complements the Mobile Skills Toolkit and allows practitioners in any country to deliver contextually specific resources and workshops, and teach communities mobile literacy skills that will improve their lives, such as enabling access to financial tools, health and educational advice, and other resources.

Why and how was it developed?

In 2012 and 2014, the GSMA Connected Women programme conducted research in Papua New Guinea (PNG) that revealed mobile literacy was a key barrier to women using mobile phones and being able to access life-enhancing services of mobile technology. To create an appropriate intervention, the Connected Women programme embarked on an intensive, user-centric design process that included technical competency testing, interviews, and multiple rounds of focus group discussions across rural and urban areas of Fiji and PNG. The results gave the Connected Women team a strong understanding of women's mobile phone usage and their preferred learning styles, as well as priceless insight into the challenges and aspirations of low-income women in these markets. The adaptation framework distils these findings and provides a clear and easily adaptable framework for delivering a mobile technical literacy workshop and resources in any market.

Who can use this adaptation framework?

Any MNO, NGO, savings group, or community organisation with a vested interest in their clients or beneficiaries using mobile phones, and understanding the benefits of improving mobile phone usage amongst the poor, can use this adaptation framework.

How could the adaptation framework help you?

Not being able to operate a phone is one of the most quoted barriers to women using mobile and accessing life-enhancing services.[2] Stakeholders seeking to address this barrier can use the adaptation framework to deliver mobile literacy training workshops that teach women how to operate a mobile phone and its features. Women represent half the potential market for mobile operators, so ensuring they know how to operate a mobile phone is crucial for sustained long-term growth in mobile adoption and usage. Also, ensuring women are comfortable operating a phone and its more advanced features is key to unlocking the life-enhancing opportunities mobile technology can offer.

This adaptation framework focuses on developing content for mobile technical literacy training workshops. However, some of the same principles can be used to develop resources like posters, billboards, and radio shows that can support community learning outside the training workshop.

2: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries".

Defining the problem:
Women and mobile technical literacy

What is mobile technical literacy?

For the purpose of this document, we have defined mobile literacy in two ways.

Basic mobile literacy:
The ability to use a mobile phone to make voice calls.

Mobile technical literacy:
The ability to use a mobile phone and its non-voice and core functions, such as SMS, the calculator, alarm clock, time and date, contact menu and camera, as well as Value Added Services, such as mobile money and disaster alerts.

The aim of the adaptation framework is to build the awareness of mobile users, moving non-users towards basic mobile literacy and basic mobile users towards mobile technical literacy. Beyond this, users will move onto mobile internet literacy, however, this document focuses on the first two steps defined above.

Why does it matter?

The benefits of owning a mobile phone have been extensively documented, with research[3] showing that women value mobile as a tool that significantly enhances their lives. Mobile helps women feel empowered, more autonomous and connected, able to access new opportunities, and save time and money.[4] From an economic perspective, ensuring that women access and use mobile phones could unlock a $170 billion[5] market opportunity for the mobile industry in the next five years, significantly contributing to economic growth (a 10% increase in mobile phone ownership is associated with a 4.2 percentage point increase in total factor productivity[6]).

Why do women have lower levels of mobile technical literacy than men?

Women tend to experience lower levels of mobile technical literacy than men, which can often be attributed to one or more of the following reasons:

• **Lower levels of mobile phone ownership** – Recent research by GSMA Connected Women shows that in low- and middle-income countries, women are 14% less likely to own a phone than their male counterparts.[7] While this is an average number, there are significant geographical differences. For example, women in Niger are 45% less likely to own a phone than men while women in Mexico are overall 2% less likely, but this jumps to 26% in rural areas.

Furthermore, in some countries mobile phone sharing or borrowing is common. Our research indicates that women who borrow phones use them less frequently than owners, and when they do, they predominantly use mobile for calling. As such, they tend to face more mobile technical literacy challenges using more advanced mobile services.

Owning a mobile phone is only the first step in taking advantage of mobile services. Once a woman owns a phone, she needs to be able to use the full range of life-enhancing features and services that mobile offers to reap the full benefits of ownership.

• **Lower literacy or education levels** – Women tend to be less educated than men in developing and emerging markets.[8] Data from the World Bank shows that in low- and middle-income countries only 53% of adult women are literate, compared to 68% of men.[9] As observed in recent research,[10] low literacy levels have a direct impact on one's ability to operate a mobile phone and women experience this more acutely than men.

• **Lower confidence levels** – Recent research[11] defines 'confidence' as the level of self-confidence a person has in being able to use a mobile handset and the services on the handset to full benefit. Although it varies geographically, women in low- and middle-income countries tend to be less confident in their ability to operate a mobile phone than men, especially if they do not yet own a mobile phone.

These barriers, while not unique to women, can affect women's mobile technical literacy levels and make it less likely that they will use mobile to its full benefit.

3: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries".
4: Ibid.
5: Ibid.
6: Deloitte Consulting, GSMA, and Cisco, November 2012, "What is the Impact of Mobile Telephony on Economic Growth?"
    http://www.gsma.com/publicpolicy/wp-content/uploads/2012/11/gsma-deloitte-impact-mobile-telephony-economic-growth.pdf
7: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries".
8: UNESCO, 2012, "World Atlas of Gender Equality in Education", http://www.uis.unesco.org/Education/Documents/unesco-world-atlas-gender-education-2012.pdf.
9: Data is as of 2010. For more information please visit: http://databank.worldbank.org/data/views/reports/tableview.aspx
10: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries."
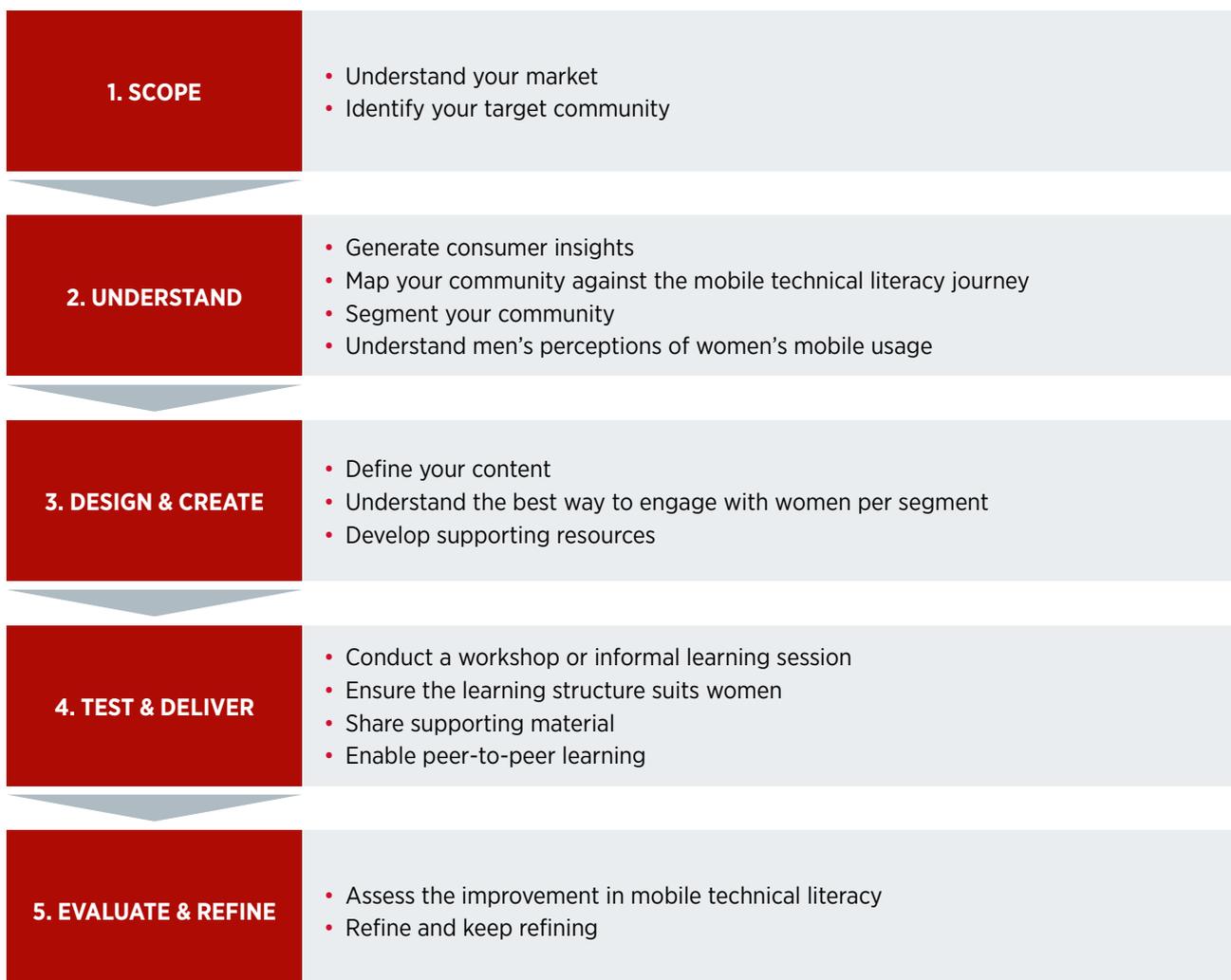11: GSMA Connected Women, 2015, "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-Income Countries."

How to use the adaptation framework

The following pages outline a research and design process that will help you to understand users' needs and then develop resources and a mobile technical skills workshop that meet these needs. Women's lives are very different across cultures, geographies and economic sectors, which means there is no one-size-fits-all approach to learning the functionality of a phone. This framework will help you to develop a tailored, meaningful resource for your unique community. This is a framework for adapting the mobile technical

literacy toolkit originally developed for use in Papua New Guinea. This toolkit uses characters, settings, references, and ideas guided by the preferences and interests of PNG women. These realities are likely to be very different for women in other low- and middle-income countries. It is very important that time is invested in adapting this toolkit for use in different contexts. Without understanding the local context, you may end up with an intervention based on assumptions, not actual user needs.

The adaptation framework consists of five simple steps, each of which describes a specific set of actions and recommendations:

1. SCOPE	• Understand your market • Identify your target community
2. UNDERSTAND	• Generate consumer insights • Map your community against the mobile technical literacy journey • Segment your community • Understand men's perceptions of women's mobile usage
3. DESIGN & CREATE	• Define your content • Understand the best way to engage with women per segment • Develop supporting resources
4. TEST & DELIVER	• Conduct a workshop or informal learning session • Ensure the learning structure suits women • Share supporting material • Enable peer-to-peer learning
5. EVALUATE & REFINE	• Assess the improvement in mobile technical literacy • Refine and keep refining

| SCOPE | UNDERSTAND | DESIGN & CREATE | TEST & DELIVER | EVALUATE & REFINE |

Step 1: Scope

PURPOSE: Understand the context/environment in which you plan to use this toolkit.
OUTCOME: Identify the target community for the mobile technical literacy training.

In this step, the goal is to get an initial sense of the challenges women face in this particular market, as well as assess the learning opportunities already available in the community. To develop a workshop and resources that actually meet women's needs, it is crucial to have a clear understanding of the market and the level of mobile technical literacy within the target community.

Understand your market

Understanding your target market is crucial, and consulting interesting sources like the World Bank and UN websites can help you glean a general understanding of the market. The GSMA Mobile for Development Impact and GSMA Intelligence websites include mobile-related statistics and expert interviews. These figures will give you a high-level view, but are not a substitute for good primary research and analysis.

This market understanding will help you set your priorities and identify the target groups you want to reach. During this stage it is also important to assess the challenges women face in a given market and the cultural context within which women and girls live. It is crucial to conduct primary research and gather first hand experiences; important sources of information include local or international NGOs with a focus on women, women members of parliament, or women who hold positions of power.

SCOPE ➤ UNDERSTAND ➤ DESIGN & CREATE ➤ TEST & DELIVER ➤ EVALUATE & REFINE

Consider researching the following:

Population and population density:
- How many people currently live in the country/city/province?
- Which areas are the most populous relative to size?

Mobile environment:
- Which areas have network coverage?
- How many mobile phone subscribers are there?

Mobile phone ownership:
- Who usually owns or uses a mobile phone in a family or community?

Cost of mobile phone use:
- What is the average cost of a basic mobile phone?
- How much does it cost to send a text message or make a voice call?

Socio-economic factors:
- What are the spoken and unspoken norms and traditions in the community that affect mobile phone access and usage, as well as access to education and training?
- How would you classify the community in terms of income and education levels?
- What are the predominant sources of income of the majority of the population?
- Are there any differences between urban and rural populations?
- What are the most commonly spoken languages?
- What cultural backgrounds do most people identify with?
- What is the percentage of people over 15 years old who can read and write?

Women's roles and barriers:
- What is the traditional role of women in this country? How has this changed in the last 30 years?
- What are some of the challenges women face in your country?
- What level of education do women and girls normally attain? Higher education?
- Are there equal opportunities for women in the labour force? Are there certain jobs that typically attract/are open to women?
- Are there barriers to women owning and using mobile phones? What are they? Are phones shared? If so, how are they shared?
- Are there barriers to women accessing learning opportunities? What are they? How have others sought to address these barriers and what lessons can be learned?

Identify your target community

Once you have gained a clear understanding of your market, including women's roles and the barriers they face in your market, the next natural step is to identify a target group of women you want to offer mobile technical literacy training.

It is important to identify at a high level who to target with this training. For instance, will you focus on women in a particular location, with a particular level of education, or within a specific income bracket or employment sector?

Women are not a homogeneous group; their mobile usage, needs, and interests are affected by factors such as education, age and social norms, and therefore differ by segment. Identifying your target community will enable you to identify who you need to talk to in Step 2, better understand their mobile technical literacy needs, and the opportunities to address them.

One key issue to consider is the literacy levels of the women with whom you are working. This will have a real impact on their learning styles, and determine whether you should use text, illustrations, or even oral resources in the training. Literacy levels can also affect the way women relate to typical classroom learning styles (i.e., some may not feel comfortable in traditional education environments).

Within your target community, you may want to initially target women who are trusted in the community and could be influential in promoting and disseminating the learning. A good example would be leaders of women's savings groups, which tend to be ingrained in the local culture and are accepted and trusted by the rest of the community.

To maximise impact and sustainability, we also recommend identifying a group that could be trained as trainers. Subsequent workshops could, for instance, be conducted through partnerships with NGOs, MNOs, or local community groups.

| SCOPE | **UNDERSTAND** | DESIGN & CREATE | TEST & DELIVER | EVALUATE & REFINE |

Step 2: Understand

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PURPOSE: Understand the mobile technical literacy skills of the target population and their preferred learning styles.

OUTCOME: Identify the specific skills that will become the focus of the workshop and the resource materials.

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Once you have a clear understanding of your market and the cultural dynamics affecting women, the next step is to develop an in-depth understanding of the mobile technical literacy skills of the women you are targeting; how they currently learn to use their phones and their preferred learning styles; the incentives and accelerators that help users improve their mobile technical literacy skills; and the key obstacles and barriers they face as they try to gain these skills.

This will help you identify the specific skills to focus on in your workshop and resource materials.

This can be accomplished by:
- Undertaking a mobile technical literacy competency survey, which will enable you to map members of the target community along the mobile technical literacy journey; and/ or
- Undertaking interviews and focus group discussions.

This section identifies the consumer insights that will be important to collect and the tools you can use to do this.

Note: If you require significant amounts of time from members of the community or intend to involve them in the development of the mobile technical literacy materials on an on-going basis, you may want to consider providing incentives for participation, such as giving them mobile airtime or a t-shirt at the end. Make sure that participants know about the rewards at the beginning of the research to ensure they have an incentive to participate in any repeat sessions.

Generate consumer insights

Some key areas you will want to understand are detailed below.

What do the women in your target community want and need from mobile?

- What are women's most important wants and needs?
- How do women use their mobile phones in their everyday lives?
- Are they aware of the value-added services they can access through their mobile phones?
- What specific challenges do women face when accessing these mobile services?

Women will not increase their mobile phone usage if they do not see the value it could bring to their lives. If they do not know how to use their mobile phones, or if they are unaware of the various features and value-added services available to them, they will miss out on opportunities and services that could transform their lives.

What is the current level of mobile literacy of the target community?

- Where does your target community fit in the "digital literacy journey"? (see page 17)
- How comfortable are they using different phone functionalities?
- What can they do on their own and what do they need help with?

How does the target community prefer to learn?

To deliver training in a way that resonates with the audience, you need to have a strong grasp of the group's learning preferences. Asking questions about learning pace, structure, and style will provide insight into the best way to design and frame your content. Some sample questions include:

- How did you learn to use your phone? On your own, from a family member, from an agent, from a friend?
- How do you prefer to learn and why?
- Do you prefer to learn with a big group, a small group, or on your own?
- Are there other ways that people can learn? How do you feel about each of these options?

People also have different learning styles, and the key is finding out what kinds of teaching methods suit these styles. For instance, in Papua New Guinea, women preferred learning together—they enjoyed talking with other women and hearing the stories of people with whom they could relate. They also liked the sense of belonging they felt from participating in games or storytelling. Find out what kinds of activities the women in your community enjoy. This can help you create a space for women to learn comfortably and effectively.

What other communication channels can be used?

A communication channel is the means by which you deliver your message to your audience, for example, print media, broadcast media (e.g., television or radio), the internet, or mobile phone. To be effective, it is critical to make an informed choice about which communication channels to use. Choose ones that will catch women's attention frequently and accurately. Simple, formative research with your target audience can help you identify the best channels.

Generate consumer insights

Tools:

Expert interviews

Expert interviews are short conversations with a small number of people that explore their perspectives on a particular idea, situation, or programme. It is a relatively cheap and efficient way to understand not only your target audience, but also the potential stakeholders of your programme.

Interviews are often used when you want to provide context for data you have already collected (during Step 1), giving you a more complete picture of what is happening in the community. Speak with people at organisations such as mobile network operators, NGOs,

microfinance institutions or commercial service delivery partners, to find out their thoughts, experiences, and expectations about women's lives and mobile behaviour, their ability to use mobile phones, and how these skills could be improved. This information could offer vital insights for designing your toolkit, making it more relevant to both the women you will be training, and supporting stakeholders.

A sample interview questionnaire is provided in Appendix A.

Interview guide

Even if you plan to have an informal interview, it is still a good idea to have a list of questions on hand to remind you of the questions you want to ask. Consider how to tailor your questions to different interviewees.

The following questions address some areas you may want to cover:

- How will your target audience likely benefit from mobile phones and mobile services (e.g., mobile money)?
- What do you know about the target audience's experiences with mobile phones and their level of mobile phone interactions to date?
- What do you know about how the target community currently learns to use their phones?
- What mobile literacy barriers do women in the target community face when using their mobile phones?

- What do you know about traditional literacy (reading and writing) levels in your target community?
- What are the potential barriers to the target community gaining mobile literacy skills?
- What incentives and accelerators help users learn essential mobile literacy skills?
- How can these mobile literacy barriers be addressed? Are there examples of initiatives that are addressing them effectively? If so, what can be learned from these efforts?
- What do you know about the habits of the people in the community and where they could attend a mobile literacy workshop or access mobile literacy content?
- What other types of training have been available to the target community? What do you know about how this training was delivered, how effective it was, and what lessons can be learned?

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Generate consumer insights

Focus group discussions (FGD)

When building your toolkit, we recommend targeting individuals and groups you think might use it and are already organised into formal or informal groups.

When selecting focus group participants, you may want to consider identifying:

- Groups of women (savings groups, women in the market, microfinance clients);
- Women who have a phone and women without phones;
- Women of different ages; and
- A mix of rural and urban women.

When should you use them?
Focus groups are best suited to the research phase of a project, when you want to get a more intimate profile of a community's realities. In the case of the toolkit, they can be a useful tool for understanding the socio-economic realities and cultural barriers of the targeted community, their levels of mobile technical literacy and attitudes towards technology and, finally, their learning preferences.

How to conduct focus groups?
First, it is important to hold the focus group in a place where attendees will feel comfortable. If they are from a rural setting, for instance, bringing them into an urban office may not put them at ease, and may affect their level of engagement. Building rapport with the group is important and icebreakers can help here. A focus group is a guided conversation, and the more that group members identify with the facilitator the more likely they are to interact and offer their perspectives and insights. Sit in a circle or around a table, where discussion can more easily take place. Standing at the front of a room mimics a classroom environment, which is not appropriate for focus group discussions.

If there are language barriers, it is best to work with a bilingual facilitator, or at least have a translator. Introducing games and movement to the focus groups are a great way to get people more involved and engaged in the process and keep the discussion lively.

Examples of topics you might want to cover include:

- Women's mobile phone experiences and their level of knowledge/awareness about mobile services;
- Women's preferred learning styles and the most appropriate delivery tools; and
- Women's knowledge gaps and pain points in using/ understanding mobile phones.

A focus group discussion guide is included in Appendix B and includes specific themes and questions.

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Generate consumer insights

Mobile Phone Technical Competency Survey

Once you have identified the people you want to reach out to, and understand the cultural dynamics that define their roles and create barriers to technical competency, the next step is measuring their mobile technical literacy levels. The Mobile Phone Technical Competency Survey

can help you assess the mobile technical literacy levels of your target community, and then map the results along the mobile technical literacy journey. This will also allow you to monitor the progress your community has made in improving its mobile technical literacy.

A sample mobile phone technical competency survey is provided in Appendix C.

MOBILE TECHNICAL COMPETENCY SURVEY

What is it?

This survey is designed to assess mobile technical competency by testing the ability of individual mobile users to operate various functions on their mobile phones.

When should you use it?

The mobile phone technical competency survey should be used during the research stage to understand which mobile functions users are able to use, and which functionalities they are interested in learning more about.

How is the survey conducted?

The survey is conducted one-on-one, with the surveyor recording the responses of the interviewee as she works through a list of approximately 20 tasks. The interviewee will need to use a mobile phone for this exercise, either her own, or one the surveyor provides. This phone should have airtime and an active mobile money account on it. It is useful to time this exercise from the first to last task, in order to calculate overall fluency and compare this result across different demographics.

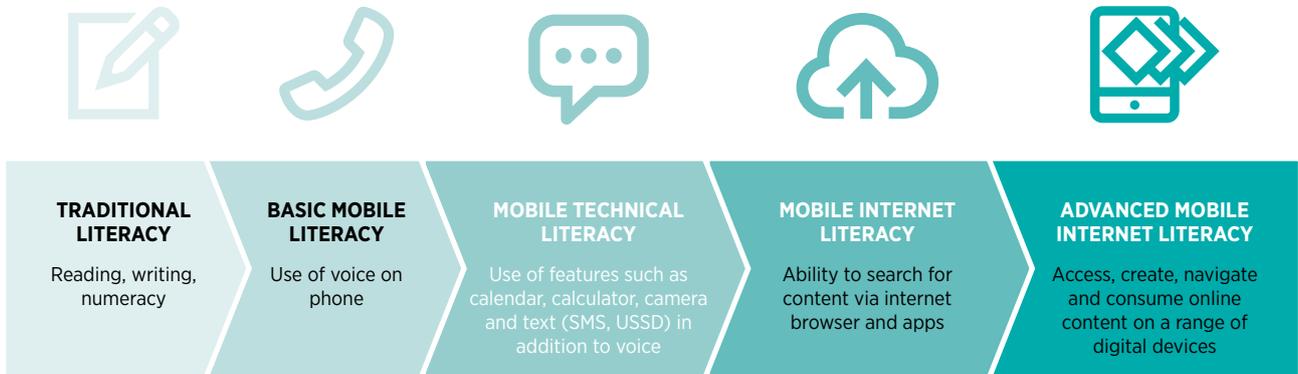| SCOPE	**UNDERSTAND**	DESIGN & CREATE	TEST & DELIVER	EVALUATE & REFINE

Map your community against the Mobile Technical Literacy Journey

Once you have assessed the mobile technical literacy levels of your community with the Mobile Technical Competency Survey, you can use the mobile technical literacy journey as a benchmark for mapping these levels. The mobile technical literacy journey is based on the GSMA Digital Inclusion Digital Literacy Journey[12], which describes the progressive stages of mobile technical literacy. GSMA's Digital Inclusion programme supports the industry in connecting an additional two billion people in developing countries to mobile internet.

Digital literacy journey[13]

TRADITIONAL LITERACY	BASIC MOBILE LITERACY	MOBILE TECHNICAL LITERACY	MOBILE INTERNET LITERACY	ADVANCED MOBILE INTERNET LITERACY
Reading, writing, numeracy	Use of voice on phone	Use of features such as calendar, calculator, camera and text (SMS, USSD) in addition to voice	Ability to search for content via internet browser and apps	Access, create, navigate and consume online content on a range of digital devices

Mobile technical literacy journey

1. VOICE CALLS	2. BASIC MOBILE FUNCTIONS	3. SIMPLE VAS[14] AND INFOTAINMENT	4. MORE ADVANCED VAS	5. HIGH-POWERED VAS
Knows how to make a phone call	Can use basic phone functions, such as a torch, and can also send SMS	Can use the radio and knows how to purchase ring tones	Is aware of VAS like mobile money, mobile agricultural services, and can use them with or without assistance	Uses mobile services regularly through a smartphone or feature phone

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12: GSMA Digital Inclusion, 2014, "Digital Inclusion Report 2014"
13: GSMA Intelligence and the GSMA Digital Inclusion Program
14: VAS is the acronym for Value Added Services

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Segment your community

The value of segmentation

In Step 1 you identified a specific target community for the mobile technical literacy training, but it is also important to understand the diversity within this community. For example, there are likely to be differences in mobile usage, basic literacy and mobile technical literacy skills, which would make a one-size-fits-all approach too simplistic.

Creating personas

Personas generated through qualitative research, such as focus group discussions, can be a valuable tool for understanding the mobile behaviour of women within the targeted community. They can also help shed light on how different groups achieve higher levels of mobile technical literacy and use mobile to its full benefit. Personas can also help to reveal how a mobile phone could meet the various aspirations, desires, and challenges of potential phone users. The personas below represent five different types of mobile phone users.

Ruth

Ruth is a middle-aged rural woman who knows how to receive and make a phone call from her husband's phone. She doesn't know how to operate more advanced phone features, such as sending an SMS or performing a mobile money transaction. Her neighbour showed her how to make her first voice call.

RUTH IS AT STAGE 1 OF THE MOBILE TECHNICAL LITERACY JOURNEY.

Grace

Grace is a middle-aged woman who knows how to use basic mobile phone functions. She uses the torch on her phone on a daily basis to go to the latrine at night, and sends SMS to her friends in neighbouring villages. Her teenage son explained how to send messages with her mobile phone, but he gets annoyed when she asks him to explain other functions, so her use is quite limited.

GRACE IS AT STAGE 2 OF THE MOBILE TECHNICAL LITERACY JOURNEY.

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Tabitha

Tabitha is a young rural woman who masters basic mobile functions and learned through her friends that she can listen to the radio and the news with her phone. She knows she can purchase new ringtones with her mobile, but doesn't do that because she doesn't have much money.

TABITHA IS AT STAGE 3 OF THE MOBILE TECHNICAL LITERACY JOURNEY.

Roselyn

Roselyn is a middle-aged rural woman who is aware of the range of services she can access through her mobile phone. She uses mobile agricultural services that help her keep up-to-date with crop prices and weather information. She has a mobile money account and uses it regularly to receive money from her daughter, who works in a city. Lots of women in Roselyn's savings group were using SMS and mobile money, and they convinced her to purchase a mobile phone and showed her the basics. She always takes her phone to the group meetings, where these women show her how to use new functions.

ROSELYN IS AT STAGE 4 OF THE MOBILE TECHNICAL LITERACY JOURNEY.

Jacinta

Jacinta is a middle-aged urban woman with a well-established shop who owns a smartphone. When Jacinta wants to know something about her phone, she stops by the mobile phone shop in the mall and asks or she looks for an explanation online.

JACINTA IS AT STAGE 5 OF THE MOBILE TECHNICAL LITERACY JOURNEY.

Understand men's perceptions of women's mobile usage

In many markets, men serve as gatekeepers and can hinder women's mobile access and usage, as well as their learning opportunities. Understanding men's perceptions of how and why women use mobile is important to developing and delivering the workshop in a way that men do not perceive it as a threat, and thereby ensure women's participation. You may want to consider holding a separate focus group or interviews with men, to better understand their perceptions.

| SCOPE | UNDERSTAND | **DESIGN & CREATE** | TEST & DELIVER | EVALUATE & REFINE |

Step 3:
Design and create

PURPOSE: Develop the content and supporting materials for the mobile technical literacy workshop.

OUTCOME: Resource materials that people can use to deliver the workshop and promote mobile technical literacy skills.

By now you should have a good understanding of the people you are seeking to train. The next phase is designing and developing the materials you will use to improve their mobile technical literacy. To create meaningful content, it is important to develop it hand-in-hand with your intended audience.

THE ITERATIVE PROCESS USED TO DEVELOP THE MOBILE TECHNICAL LITERACY TOOLKIT

1. Identification of test groups

During the toolkit design process, Connected Women worked with test groups from local communities in PNG to co-create the resources. These are the groups of people you bring together to provide feedback before, during, or after the toolkit is designed. The conversations you have with these communities will determine whether the content you have developed is relevant and meets their needs.

Test groups should include a sample of the community you expect to target with the training content, but may also include other parties, such as men, community leaders, representatives of local organisations, or children. It is worth experimenting with different types of people in the test groups and noting what their presence adds or detracts from the environment. For example, children may support learning and men or community leaders may provide necessary buy-in for the women.

2. Co-creation process

The first step in the co-creation process was to spend time with these groups of women and understand what they wanted to learn about and how they liked to learn (this information was initially gathered through the focus groups and interviews in Step 2).

Once they collected these insights, the Connected Women team created prototypes of the resources the groups preferred—posters, games, pamphlets, and stories—and then brought these test versions back to the groups to get their feedback.

3. Iteration: What is it and why is it important to test content?

To avoid making assumptions and ensure your materials meet the actual wants and needs of your audience, it is imperative to test content.

The iterative process Connected Women used is based on Human Centred Design (HCD), which is an intensive practise of listening to and understanding the realities of end users, and generating outputs based on this understanding. The process of listening and refining usually involves multiple rounds of back-and-forth between the designer and the users, building and testing prototypes as you go along. Even if you already have content, it can be useful to put it through this iterative process and understand how it resonates with your audience, and whether it is having the desired effect. The more rounds of feedback you can get from your test group the better, but of course there will be time and budgetary considerations.

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Define your content

Armed with the information you collected in Step 1 and Step 2, you are now ready to identify the topics to include in your mobile technical literacy training workshop and the materials you will need to deliver your messages most effectively.

When developing the content for your workshop, keep the following questions in mind:

- What mobile phone skills and services are most important to your participants?
- What mobile phone skills would be most useful and relevant to them?
- What mobile phone functions and value-added services do they want to know more about?
- Are there concerns or barriers that can be addressed through the training workshop?
- Who are the best individuals to include in the training workshop, in addition to members of the target community?

Remember: some topics may be too complex or require more time to discuss. Through the technical competency tests and FGDs, you can determine which stage your participants are in the mobile technical literacy journey (stage 1, 2, 3, 4, or 5), and how much time they need to learn new skills and information. Start with very basic mobile phone skills (e.g., sending an SMS), and ensure women are comfortable using their mobile phones before introducing other topics.

> **Iteration: The more times you can get feedback from the test group and incorporate this into your work, the more the content will resonate with your audience.**

How to get feedback

To get relevant feedback, it is important to ask the right questions and frame your discussions in the right way. Interacting with participants and asking questions without assumptions or judgment is key to achieving honest and open input from the group.

TIPS:
- **A diverse audience** can yield different results. Involving different groups of people in the feedback process will provide a strong cross section of opinions. It is also useful to ask participants about their thoughts and experiences with different group combinations.

- **Use non-vocal participation.** Allowing people to express their opinions by casting a physical ballot or drawing on/marking up prototypes is a great way to involve less vocal members of the group.

- **Ask open-ended questions and be patient.** Avoid asking leading questions that encourage the group to answer in a predictable way (e.g., "Everyone uses mobile money, don't they?"). By asking open-ende questions in a neutral tone, you open the floor to a range of responses. With less confident crowds, it is important to wait for responses. If you only give people a few moments to think of an answer and then get up their confidence to speak, you may not hear from them. However, if you ask a question and then sit back—even for a couple of minutes—people will generally start to come forward as they feel ready. If this does not happen, try calling on a few people in the audience and specifically asking them, but be careful not to always call on the same people.

Understand the best way to engage with women in different segments

Using alternative teaching methods, such as role playing, group activities, and storytelling, introduces situations and characters that women can easily relate to, and can be a more effective and fun way to deliver your message. These practical examples can be generated from the focus group discussions and interviews in Step 2 and then tested in the design phase.

Training methods

A range of training methods can be used to deliver workshop content. Two options are outlined below:
- Role plays and stories
- Group activities, such as games and quizzes.

Creating role plays and stories

Role play and storytelling are activities that integrate lessons into stories and typically depict everyday situations that participants can identify with easily.

Role plays and storytelling can be used to explain how mobile phones and value-added services can bring positive change to the everyday lives of women, and how to use them. Our formative research in the Pacific Islands revealed that women prefer to watch or listen to stories. By using stories based on common experiences, women are able to appreciate the value mobile phones could bring to their lives.

1. Develop a storyline
Think of common scenarios your participants can identify with. The data from the focus group discussions and technical competency survey can help you create interesting storylines that reflect the daily realities of women participating in the workshop. Below are some questions to ask yourself as you develop your storyline:

What are some common problems women in the community face:
- Sending money?
- Bill payment?
- Credit used up too quickly?
- The need to contact people urgently?

How can mobile phones address these problems?

2. Create your characters
Create characters with which women in the community can easily relate. Think about the personas you developed earlier. Which of these personas can you use to develop your story?

3. Develop your story
Write a 3 to 5 minute script or story based on the storyline and characters you identified. Picture your character in her everyday surroundings interacting with her friends or family. Imagine her experiencing a dilemma (e.g., she needs to send money or pay bills) and discovering how learning new mobile skills can solve her problem. Keep the script or story short, but interesting. Use local names, places, and contexts that the community can identify with. Finally, make the conversations natural and simple.

Ask for volunteers to read or act out the story. If participants are not keen to participate, the facilitator can read the story and act out the characters.

4. Ask questions
Have a short discussion with each of the small groups. Prepare a set of questions about their opinions and views on the story or whether they can relate with the characters in the story. Write their answers on a whiteboard or flipchart.

Depending on the story, you could ask the following:
- Why are mobile phones important?
- What are the major benefits of using a mobile phone?
- Describe a situation when using a mobile phone has helped you save time.
- Describe a situation when being able to use a mobile has helped you financially.
- Describe a situation when being able to use a mobile has helped you get important information.

A sample story can be found in Appendix D.

Even in environments that seem similar, subtle cultural differences can dramatically change how participants respond to training content. In Fiji, women said they wanted to learn about mobile through drama, and performed as characters in a play to portray the experiences of someone buying or selling credit, or transferring mobile money. However, women in PNG reacted negatively to this approach, saying they did not want to act out the roles themselves and preferred to sit back and watch the role play as entertainment instead. These differences highlight the importance of consumer research and not making decisions based on assumptions.

Understand the best way to engage with women in different segments

Group activities

Group activities are collaborative training techniques that promote participation and group learning. Making your workshop interesting will help your participants learn and remember new information and skills better. Connected Women has used a variety of workshop activities; among women in PNG, the most effective were those that encouraged participation and group interaction.

When should you use group activities?
Learning something new can be intimidating. Making the workshop lively and entertaining can help participants feel at ease and help them remember vital information. Group activities combine training, communication, team building, problem solving, and entertainment.

In PNG, formative research has revealed that women enjoy learning in groups and prefer a more relaxed learning environment. If participants just sit passively and are not given interesting tasks, they can lose focus and interest quickly and the workshop will be dull and unproductive.

What kinds of group activities should you use?
There are a number of engaging group activities you can introduce at the workshop. Some successful activities from past workshops include:

Games and quizzes
Games and quizzes can be used to introduce some fun competition between groups and make the learning process interesting. Games are a great way to introduce a concept at the beginning or during a learning session, and pairing or grouping participants together allows them to approach a challenge collaboratively.

Quizzes can also be used to measure understanding and progress either during or near the end of a learning session, and help participants to learn and remember concepts as they go along. Quizzes should be easy and simple, emphasising practical lessons.

Depending on the literacy level of the group, you could use trivia or maths quizzes. Maths quizzes require minimal knowledge of reading and writing, just basic numeracy. This can be a better option for audiences with low literacy levels.

Participants with more advanced mobile phone skills can be called on to assist those who are just beginning to learn to use their mobile phones, providing a comfortable learning experience for those who are feeling less confident.

Samples of games and quizzes can be found in Appendix E.

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Develop supporting resources

As you develop the content for your mobile technical literacy workshop, think about the visual aids and resources you will need. Creative and simple visual aids and materials can help participants learn new skills and concepts quickly. Make sure to consider your audience when preparing your workshop materials. What will be useful to them both during and after the workshop?

Some materials that have been useful in previous workshops are:

1. Hand-outs. Convert your presentation into simple and easy-to-read hand-outs for participants. Modify your hand-outs according to the audience's literacy level. Participants will find the hand-outs useful both during the workshop and for later reference when they want to share what they've learned with other women.

2. Visual aids. Visual tools are useful for conveying new concepts and skills. They not only promote awareness about mobile phones, but also deepen women's understanding of life-enhancing mobile functions. In previous mobile technical literacy workshops in the Pacific Islands, posters, stickers, and pamphlets have been used to both complement the workshop discussion and raise awareness in the community.

3. Community outreach
If you have the financial resources to reach out to the wider community, create visual aids you can easily adapt to a broader audience. However, keep the following tips in mind:

4. Posters
- Hang them in locations where women tend to gather or visit often, and which have a 'captive audience', such as markets, community billboards, and church.
- Ensure they are printed clearly and are easy to read from a distance.
- If placing outdoors, waterproof the posters.
- Use self-explanatory icons and simple words to convey your message.
- Use images that women can easily identify with.
- Posters can be resized for use as billboards or hand-outs.

5. Stickers
- Stickers can be given to participants to raise awareness and foster a sense of community among workshop participants.
- Ideally, stickers should be about 7 cm (height) x 3 cm (width), to fit onto the back of most mobile phones.

6. Pamphlets or flyers
- Distribute in locations where women tend to spend time or congregate.
- Make content simple and concise.
- Use clear, self-explanatory icons.

Samples of these visual aids can be found in Appendix F.

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Develop supporting resources

What worked for us

When you want to reach the wider community, consider using a multi-channel approach. Aside from visual aids, other more traditional communication channels, such as radio, can disseminate information about mobile technology to a broader audience.

Short radio dramas or talk shows can be an effective way to use radio. Choose actors with which women can relate.

Remember: When you translate materials into another language, the length of the text can increase dramatically, so allow extra design time to ensure everything fits.

Photos and illustrations should resonate with your audience. Here are some pointers for creating effective images:

Staging.

When taking photos for the training materials, look at the storyline/situation you are trying to illustrate and make a list of the photos you need to capture. If you are working with people who speak a different language, it can be helpful to print images of people with the expressions you want subjects to act out (confused, explanatory, finally understanding, etc.). Try to take photos in natural light, and use a location/setting that fits well with the local context; taking photos in an empty room does not add anything to the story.
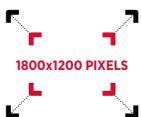
Resolution.

Your photos should be a minimum of 1800x1200 pixels to allow you to scale them to a full-page width if necessary.

Language.

Since low literacy is often a barrier to mobile phone use, it is important to keep the text in the materials as simple as possible, to use as few words as possible, and to use an appropriate, locally-understood language. Images, numbers, and other easily identifiable references all help to promote understanding. Not all games need to be adapted to the local language; for example, maths games can be used in any language. Quizzes, however, should be amended with questions that are appropriate to the local context.

Women consistently said they wanted pictures of women that looked like them, and explanations from people that sounded like them. Make sure to test images and language with your audience during the iterative phase.

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Step 4: Test and deliver

PURPOSE: Deliver a learning session that meets the needs of your intended audience.
OUTCOME: Your audience uses the resources to improve their usage of mobile technology.

You've done the research and developed the resources. Now, you need to deliver them effectively.

Once you have researched the lives and mobile usage of women in your target community and developed appropriate resources to improve mobile technical literacy, you now need to decide how to disseminate this information most effectively. This may be through a training of trainers (ToT) workshop, an informal group learning session (e.g., at a marketplace), radio, women's groups (such as savings groups), or something completely different. Your research findings should give you a good idea of how your community likes to learn. Below we have detailed a number of delivery options.

In PNG, Connected Women used a training of trainers workshop, marketplace trainings, radio, and visual resources to teach mobile technical literacy. The research undertaken in the scoping stage was instrumental in understanding that these were the most suitable forms of communication for women in PNG.

Conduct a workshop or informal learning session

It is understandable to want to reach as many people as possible, but time and resources are often limited. Take advantage of opportunities to work with partners and use the resources you already have. Get together with your team and set a realistic time frame and objectives. Some basic questions to help you organise your workshop include:

- Who do you want your workshop to reach out to? How many people?
- Are you training people directly, or are you facilitating a training of trainers (ToT)?
- What is your budget for the workshop?
- How long will your workshop be?
- What resources will be required (venue, workshop facilitator, etc.)?

> **It can be very helpful to have a mix of skill sets in the room. In India, where Connected Women's SEWA grant funded mobile skills training for women, workshop groups included at least a few women in every session who were 'early adopters' of new technology. These women inspired other women in the training and it also kept the lessons more lively.**

Make sure to hold your workshop/learning session at a time and place women find convenient. When and where will they be the most attentive and engaged? How much time can they commit? For instance, holding the workshop in a place where women regularly frequent might help them feel more at ease. If you are trying to work with market vendors, look into having the learning session in the market, but also consider what times are most appropriate. Do not plan events at times when women are likely to be busy (setting up their stall, dinner time); instead, consider when the quieter times in the day will be, and when women can engage in learning most effectively. For example, it may be appropriate to hold your workshop on a weekday while the women's

children are in school. It is also important to be aware of your target audience's changing schedules. For example, agricultural communities will have considerably less free time during planting or harvesting seasons.

> **In Connected Women's Swadhaar project, research found that women sometimes brought their children to the training, which was effective for on-going learning as it was the children who helped their mothers once the training was over.**

To encourage active engagement in the workshop, it is advisable to have a ratio of one trainer for every 10 participants. Our experience shows that keeping the group to a maximum of 25 participants works well.

It may be helpful to welcome men to attend and/or observe the workshop if they like. In some communities, men serve as gatekeepers, and having their buy-in is crucial to ensuring they will not prevent women from attending the workshop or keep them from using a mobile phone.

Consider using ice breakers at the beginning of the workshop to help participants get to know each other and become more comfortable. Ice breakers can be repeated during the workshop as needed, as they help keep energy levels high between different stages of the workshop.

We suggest bringing thank you gifts to the workshop and ensuring that you communicate this in advance, as it will likely be an incentive for women to attend. Examples of thank you gifts are food items or airtime top-ups.

Finally, we strongly suggest you choose a woman to facilitate your workshop, especially if you are holding the workshop in countries where there are cultural constraints around women interacting with men they do not know.

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Share supporting materials

It can be easy to forget the content of a workshop if one does not tend to use a mobile phone or does not use mobile services for some time. To avoid this, consider disseminating materials that remind women how to operate a mobile phone, such as posters, stickers, or leaflets. We recommend hanging posters in places most frequented by women, such as schools, markets, and corner shops. Stickers, on the other hand, can be handed out at the end of the workshop and given to corner shops to distribute. As they can be designed to fit on the back of any basic or feature phone (which tend to be used most in developing markets, especially in rural areas), they are an easy and convenient reminder of how to operate a mobile phone.

If you have a larger budget, you may want to consider creating an illustrative billboard in a community hub, such as a market, town square, or bus stop. Billboards are a great way to visually communicate the value and functionality of mobile services, using step-by-step instructions.

Radio can be a very effective and low-cost way to disseminate information over a large and/or dispersed population. It is particularly useful for addressing audiences with low literacy levels, or audiences who are likely to be listening for much of the day, such as women at home.

When developing your radio programming, it is important to have a test audience listen to the voices before recording. Different voices can have a very different effect on audiences, and you want to ensure that your radio programme appeals to as many people as possible. Sound effects and professional recording are also important in setting the scene and creating a convincing and enjoyable audio experience.

> **Working with the National Broadcasting Program (NBC) in PNG, Connected Women developed three 15-minute radio vignettes about mobile security, SMS, and mobile money. Each vignette had three parts. The first was a story about a local character who had an experience with the topic, such as 'Martha and Mobile Money'. This was followed by a debate between two characters—in this case, one person who loved using mobile money and another person who did not value/know much about it. In the final part, key messages were reiterated, such as "Mobile money is secure because you have a PIN. If someone steals your phone, they can't take your mobile money." These mini radio programmes were played on alternating days on high rotation over a three-month period. This approach supported women's stated preference for learning where they felt comfortable (at home) and hearing things more than once.**

Enable peer-to-peer learning

After the workshop, it is important to identify one or two women who have significantly increased their mobile technical literacy levels as a result of the workshop, and who are easily approachable by other women in the community. These women can be appointed as 'Mobile Technical Literacy Specialists', who will help the rest of the community to use mobile services as needs arise.

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Step 5:
Evaluate and refine

PURPOSE: Understand the efficacy of the toolkit and make final adjustments.
OUTCOME: An improved Mobile Technical Literacy Toolkit for delivering workshops.

Assess the improvement in mobile technical literacy

At this stage, it is important to assess whether the women who have attended your workshop have improved their mobile technical literacy. One way to effectively measure this improvement would be to use the Mobile Phone Technical Competency Survey, which you used to assess their technical literacy level before the workshop. The Mobile Phone Technical Competency Survey can be found in Appendix C. When doing this test, it would also be interesting to include some qualitative assessment. For example, it would be useful to understand whether participants changed their behaviours after the training, or what they found the most or least useful about the training.

Refine and keep refining

Remember to keep engaging with your audience, seeking their feedback, and taking it into account.

Lives are not static, and needs and activities change over time.

Appendices

The following resources are examples from Connected Women's work in the Pacific, and should be adapted to ensure relevance for deployments in other geographies.

A. Sample interview questions for key stakeholders

B. Sample focus group discussion guide

C. Mobile Phone Technical Competency Survey

D. Sample story

E. Sample quiz

F. Sample visual aids

A. Sample interview questions for key stakeholders

In order to gain a clear understanding of the market dynamics in the geography you are deploying your Mobile Technical Literacy toolkit, it is helpful/valuable to hold interviews with potential local stakeholders, such as MNOs, NGOs, banks, woman's groups, and savings groups. These stakeholders/groups can help you understand audience interest and knowledge levels, ecosystem opportunities and barriers, and also to identify the nuances of mobile phone use. These key informant interviews will provide input to the focus group discussion topics and questions and could offer vital insights for designing your toolkit, making it more relevant to both the women you will be training and supporting stakeholders.

Following are sample interview questions:

General Questions (for all stakeholders)
- What are your priorities for the technical literacy toolkit content?
- What are the potential barriers to the access, ownership and use of mobile phones by women in low income communities?
- How do these audiences typically use mobile phones (calling, texting etc?)
- Are there specific places where these different groups could be a captive audience?
- What do you know of your target audiences habits and behaviors?
- What role do men play in women's mobile phone use and learnings?
- Have you encountered or been part of rolling out a similar service/education piece?

Questions for MNOs
- What Value Added Services (VAS) are currently offered to subscribers? What services may be introduced in the next 12-18 months?
- What is currently the most popular (i.e. used) service?
- Do you currently conduct gender segmentation on services?
- What do MNOs perceive to be the level of mobile phone technical literacy that women need to be able to use their VAS?
- What is the approximate gender breakdown of your subscriber base?
- Have you done any consumer education in the area

- What are your current marketing efforts for VAS? How do you currently target women specifically?
- What is the breakdown of smartphone/ basic phone usage
- Is network coverage complete? Are there areas experiencing weaker/ non-continuous coverage?

Questions for Mobile Money agents
- What are your experiences with rural communities and women using mobile money services?
- What are your experiences with urban communities and women using mobile money services?
- What are the core challenges facing agents?
- How well do audiences grasp the concept of mobile money?
- How do new clients usually find their way to you?
- How do most people manage their money? Informally or using formal / semi-formal banking services?
- How do you currently educate or train your agent networks?
- What incentives do you offer your agent networks?

Questions for NGOs
- How comfortable are your clients using mobile phones?
- Have you encountered a gender gap in mobile phone ownership and usage in the communities where you work?
- Are there social barriers to women's mobile phone use?
- Have you used mobile to reach and engage with your audience? If so, how has it worked? What challenges or barriers have you encountered?
- What is the most popular service your clients use?
- How do your clients find out about VAS?
- How are mobile operators perceived in your geography? Positively?
- Do you feel mobile network operator marketing campaigns influence your clients?

Questions for Government
- How does the regulatory environment support operators expansion/ work in last mile communities?
- How are literacy levels? Could they impact mobile technical literacy levels?
- Is access to power an issue for parts of the population?

B. Sample focus group discussion guide

A. Identify women's mobile phone experiences, and level of knowledge/awareness about mobile services	
1. Experience, reasons, and key benefits	• Why do you use mobile phones? • What parts of your life do mobile phones help with? (e.g., security, job, income generation, financial management, social life) • What do you normally use a mobile phone for? • What are the benefits of using mobile phones? How do they help?
2. Awareness and use of core/generic mobile phone functions (including reasons for use/non-use)	Which of these mobile phone functions are actually used and how difficult do they perceive each one to use: • Calculator • SMS • Add contact • Make/receive phone call • Set alarm clock
3. Awareness and use of Value-added Services (VAS) for mobile phones	• What VAS functions have been used? • What services have been the most important/useful? • Do you know about mobile money? Where did you first discover or learn about mobile money? • Are you using any services to receive regular information or advice?
4. Social benefits around mobile use	• How does using a mobile phone make you feel? • What things in your life have changed as a result of having access to a mobile phone? • How do you feel when you don't have your mobile phone with you?
B. Identify preferred learning styles and the most appropriate delivery tools	
5. What motivates women? **What are their core priorities?**	• How motivated are you to improve your understanding and knowledge of mobile phone functions? • How could we increase your motivation to learn? • What services or functions are you most motivated to learn? Why? • What are your main priorities in your life? (e.g., education, sustenance, food security)
6. Effective methods for teaching and engaging women	• How have you learned in the past? • How have you learned (or been taught) to use mobile services? • Have you ever used a computer? How did you learn to use it? • What kinds of posters do you like to look at? Do you remember the information from them? • Examples of a previous learning method that was successful. • How do you like to learn (be taught or engaged) about technical skills, such as using a mobile phone? (e.g., In-person, interactive, in a group, individually, reading, viewing, listening, etc.)
7. Language	• What language do you usually prefer to speak? • What languages can you learn in?
8. Communication methods	• How do you hear about the news? (e.g., radio, TV, newspaper, word-of-mouth) • How often do you use a TV/radio/newspaper? • What radio/TV channels do you listen to? How regularly? What is your favourite time to listen to the radio or watch TV?

B. Sample focus group discussion guide

9. Women's habits and opportunities for engagement where they may be a captive audience for learning	• Where do you hang out socially? • What events do you look forward to? • What do you leave your house or property to do regularly? • Are there any groups where a lot of women get together in your community? • What radio stations and radio shows are most popular with you and your friends? • Do you visit: church/hospital/health centres/markets? • What sports/games are women involved in? Is there a place where you all get together to play sports/games?
C. Identify knowledge gaps and pain points in using/understanding mobile phones	
10. Constraints/challenges/barriers to <u>using</u> and <u>owning</u> a mobile phone	**Individual-level constraints** • What discourages you from using mobile phones? (e.g., age, eyesight, literacy, income) **Household-level constraints** • Is there any resistance from men in your life who do not want you to use a mobile phone? • Is there any resistance from family who do not want you to use a mobile phone? • If yes, how do you think this can be resolved? • Is the fear of losing your phone a hindrance to owning one? • Have you experienced any problems arising from mobile phone credits? **Community-level constraints** • Resistance from community social structures? (e.g., church) **Country/MNO-level constraints** • What does your mobile operator charge you to use your mobile? • Have costs changed how you use your mobile? • Do you feel you can continue to use a mobile with these increased costs? • Do MNOs spam you with text message advertising? Does this change how you think about messages you receive from MNOs? **Infrastructural and geographical constraints** • What are your experiences with electricity access? • Can you easily charge your mobile phone? • Does it cost you to charge your mobile phone? • What is network access like? **Cultural constraints** • What beliefs, local myths, and rumours are there about mobile phones? • How do these influence how you use a mobile phone?

C. Mobile Phone Technical Competency Survey

GSMA Connected Women – Mobile Phone Technical Competency Survey	
Demographics:	
Name:	
Location:	
Date:	
Mobile phone number:	
Age (Refer to card):	
Ethnicity:	
Married:	☐ Yes ☐ No ☐ Divorced/Separated
Number of dependents:	☐ 0 ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7+
Education (highest level) (Refer to card):	
Dependent on the country's standards:	
Language(s) & literacy:	Language 1: ☐ Speak ☐ Read ☐ Write Language 2: ☐ Speak ☐ Read ☐ Write Language 3: ☐ Speak ☐ Read ☐ Write Other: _____ ☐ Speak ☐ Read ☐ Write
What is your main form of personal income?	☐ Working/Employed ☐ Full-time ☐ Part-time ☐ Working/Self-employed ☐ Full-time ☐ Part-time ☐ Unemployed/Subsistence ☐ Unemployed/No Income
Personal income per week (Refer to card):	
Family income per week (Refer to card):	
Other sources of income (Check all that apply):	☐ Husband ☐ Other family members ☐ Friends ☐ Remittance from family members ☐ Social welfare ☐ Others (specify):
Personal bank account?	☐ Yes ☐ No
Using services of microfinance or savings group?	☐ Yes ☐ No
Member of any provident funds?	☐ Yes ☐ No

C. Mobile Phone Technical Competency Survey

Technical competencies:	
Core functions, Stage 1	**Achieved**
Put SIM in phone (Turn off phone, take out SIM, put SIM back in phone)	☐ Yes ☐ No
Turn phone on	☐ Yes ☐ No
Top-up phone (with top-up card provided by researcher)	☐ Yes ☐ No
Answer phone (Researcher to call participant's number, provided above)	☐ Yes ☐ No
Add a new contact to phone (Participant adds researcher's number)	☐ Yes ☐ No
Make call (Participant calls researcher)	☐ Yes ☐ No
If the participant has scored 4 or more 'Yes', she has passed STAGE 1 of the mobile technical literacy journey	
Core functions, Stage 2	**Achieved**
Open SMS (Researcher sends SMS, participant opens, '_____')	☐ Yes ☐ No
Respond to/write SMS (Participant sends back SMS to researcher, '_____')	☐ Yes ☐ No
Torch (Participant opens and closes torch in front of researcher)	☐ Yes ☐ No
If the participant has scored all 'Yes', she has passed STAGE 2 of the mobile technical literacy journey	
Simple VAS and infotainment, Stage 3	**Achieved**
Listen to the radio (Participant turns on radio in front of researcher)	☐ Yes ☐ No
Ringtones (Participant demonstrates ability to switch between ringtones)	☐ Yes ☐ No
Calculator (Participant opens calculator, completes equation 2+3)	☐ Yes ☐ No
If the participant has scored all 'Yes', she has passed STAGE 3 of the mobile technical literacy journey	
Value-added functions, Stage 4 & 5	**Achieved**
Are you familiar with mobile money? If yes, where did you learn about it?	☐ Yes ☐ No
Do you use mobile money? If yes, what for?	☐ Yes ☐ No ☐ Send ☐ Receive ☐ Both
If receiving: Described process: ☐ Yes ☐ No Describe the process. Where do you get the cash out? (name the mobile money agent)	
If sending: Log on and send $1 to researcher Achieved:	☐ Yes ☐ No

Bill payment: Have you paid a bill with your mobile?
 	
    If yes, for what services? (Specify types): _____
    If no, why not? (Answer):
	☐ Yes ☐ No

Subscription services: Have you paid for or subscribed to a paid information service? If yes, specify types:	☐ Yes ☐ No
Have you subscribed to any free services? If yes, for what services? (Specify types):	☐ Yes ☐ No
Have you paid for a ringtone?	☐ Yes ☐ No
If the participant has scored <3 'Yes', she is at Stage 4 of the mobile technical literacy journey. If the participant scored 4+ 'Yes', she is at Stage 5 of the mobile technical literacy journey.	

C. Mobile Phone Technical Competency Survey

Connected Women used the below card when asking demographic questions where there was the potential for confusion (e.g. definition of education class years) or sensitivity around speaking aloud an answer (i.e. income levels). Interview subjects were asked to point to the correct answer.

Competence/demographic card			
Age:			
☐16-20 years ☐21-30 years ☐31-40 years ☐41-50 years ☐51-60 years ☐61+ years			
What is your highest level of education (choose one)?:			
None	**Primary school** Class/year	**Secondary/high school** Class/year	**University**
0 ☐ (did not go to school)	1 ☐ (age 6) 2 ☐ (age 7) 3 ☐ (age 8) 4 ☐ (age 9) 5 ☐ (age 10) 6 ☐ (age 11) 7 ☐ (age 12)	8 ☐ (age 13) 9 ☐ (age 14) 10 ☐ (age 15) 11 ☐ (age 16) 12 ☐ (age 17) 13 ☐ (age 18)	☐Yes ☐No
What is your weekly individual income (Choose one)?			
Average income per week ($)			
☐0 ☐1-10 ☐11-50 ☐51-100 ☐101-150 ☐151-300 ☐301-600 ☐601-1000 ☐1001+			

D. Sample story

The following is an actual story Connected Women used at a workshop in Papua New Guinea. As discussed on page 23, if you use storytelling as a training method, you should incorporate scenarios and characters relevant to your target community.

ANNA LEARNS SMS

Anna has been working hard all morning picking coffee beans on the farm near her village, and is now counting down the last hour until lunch break. She pulls another handful of coffee cherries from the tree she has been harvesting. Her mind is occupied with thoughts of the things that still need to be done at home this afternoon: cooking, washing, and getting the children to finish their homework.

"Please," she thinks, "I hope it's only a half day of work today." Just then she spots her uncle walking towards her and her cousin, Lori. "Looks like overtime..." says Lori, working on the tree next to her.

"Ladies," he says, hands in the air, "The truck's coming tomorrow morning and I need it to pick up a full load of coffee beans or I'll just be wasting money paying for a truck that's only half full."

Anna groans to herself, this is the third full day she has worked in a row. She feels bad when she is not able to meet her children after school, and there is so much that needs to be done at home. But a full day of work also means more money and Anna knows she can't say no.

"Ok uncle," she says, "May I take a small break to call my family?" Her uncle nods as he walks away, "Five minutes!" he calls over his shoulder.

Anna takes her phone from her bag. She presses the address book button, and calls Peter her eldest son's number. Peter picks up almost instantly and Anna can hear the voices of other children laughing in the background.

"Hi Mum," Peter answers, "Working all day again?"

"Yes," replies Anna, "I won't be able to meet you and your brothers to walk home from school again today. Can you please make sure to take them home with you this afternoon and help them with their homework?"

"Sure thing Mum, we'll see you at home." "Ok, I better go. I need to call your father to let him know." "Ok mum, bye!" says Peter hanging up the phone.

Anna calls her husband Makalai to let him know she will be home late, but halfway through the call her phone goes dead. "No credit! Again!" Anna complains. This is the second time this week she has run out of credit, and she knows Makalai is going to be upset with her for spending money on credit.

After finishing work, Anna walks home tired. On her way, she pays for more credit for her phone and crumples the flex card into her bag.

That evening after Anna has prepared dinner, Makalai walks into the kitchen. He is holding the top-up card from Anna's bag.

"Anna," he says, "This is the second time this week you have topped up! What do you do all day? Talk on the phone to your friends? This is too much money!"

"No! I just call you and the kids to let you know if I'm working late, but the credit is used so fast," Anna replies.
"Well, it's no good!" exclaims Makalai, "This is the last top-up this week so make it last!"

In the morning Anna returns to the coffee plantation. Lori is already there picking cherries. "Good morning Anna, are you ok? You look worried," says Lori. "Oh no, it's nothing," answers Anna. "I argued with Makalai last night, that's all." Lori nods. The two women work in silence for a while.

During the morning break, Anna tells Lori about Makalai and the phone credit.

"All I use the phone for is calling my family!" complains Anna. "I just don't know why it costs so much, it's not as if I use it all day long!"

"Hey," replies Lori, "You know you can use the phone to send an SMS message right? Instead of calling, you type a message and you can send it to your children and Makalai at once. It's faster and much cheaper than calling."

"No, I've never done that, I don't know how. Is it hard?" Anna asks. "Well, it takes a little bit of practice," replies Lori, "but then it's as easy as picking coffee! At lunch I'll show you how!"

During lunch break, Lori shows Anna how to compose a text message. Anna finds it hard at first to find the right letters and it takes her a long time to write just one word.

Lori laughs, "It will get easier I promise, but you have to practice every day!" Just then their uncle appears out of a row of coffee trees, and walks towards them.

"Oh–looks like we are working a full day again ... here's the perfect chance to practice!" says Lori.
That afternoon, Anna texts her family to say she is working the full day again. She does the same every day that week, and every day the following week.

"Wow!" Lori jokes, "Look at your fingers flying on that phone! I told you you'd get the hang of it!" Anna smiles in response. She hasn't topped up her phone since she and Makalai argued, even though she has worked full days every day since then.

That afternoon as her uncle approaches, Lori sighs, "Another full day." "Not for me," replies Anna laughing, "I've saved so much money using text messages, I think I will have an early finish!"

E. Sample quiz

Overview:

Groups are sent simple trivia or maths questions through SMS, and members take turns sending the answers through SMS. Every time a correct answer is received, the facilitator sends through the next question, and groups compete against each other to complete the exercise in the shortest amount of time.

Some examples of trivia questions are:
- What is the country's highest mountain?
- What is the country's capital?
- Who is the main actor/actress of a popular TV soap opera?

Resources required:

Mobile phones
- One mobile phone for the facilitator
- One mobile phone for each group
  (4 groups = 4 mobile phones)

Phone credit
- For the facilitator's phone
- For each group's nominated phone

Preparation:

- Write down each group's mobile phone number in the table below.
- Save the mobile phone numbers to your phone's address book as 'Group 1', 'Group 2', 'Group 3', 'Group 4'.
- Clearly explain the instructions and what they need to do.
- Encourage the women to sit close together.
- Encourage a minor competitive element to the game—it is a race!

Instructions:

- Send the first math question to each group's phone.
- The groups will then need to send their answers back to your mobile phone via SMS. If the answer is correct, send the group the next question. Tick off the answered question in the table below.
- Make sure the participants take turns sending SMS.
- After a question is answered, the mobile phone must be passed on to the next person in the group.
- Encourage advanced-level participants to help the beginner-level users.

Questions:

Use this table to tick off the questions that each group has answered:

WRITE MOBILE PHONE NUMBERS HERE ◢		GROUP 1	GROUP 2	GROUP 3	GROUP 4
QUESTION	**ANSWER**	PH	PH	PH	PH
1. **7 + 19**	**[= 28]**				
2. **12 + 7**	**[= 19]**				
3. **100 - 82**	**[= 18]**				
4. **33 + 45**	**[= 78]**				
5. **11 + 26**	**[= 37]**				
6. **23 - 13**	**[= 10]**				
7. **10 x 10**	**[= 100]**				
8. **86 - 65**	**[= 21]**				

F. Sample visual aids

Poster example

Sticker examples

Pamphlet example

MOBILE SKILLS

A GUIDE TO SMS SHORT, FAST & EASY!

What! No credit again! I spend so much money calling my family.

Why don't you send an SMS instead? You can write one message and send it to all your family at once.

It's easy. Here I'll show you.

1 Open a new message by selecting NEW MESSAGE.

MESSAGING
New Message
Inbox
Drafts
Sent
Settings
OK   BACK

2 Write your message; look at your keypad to find the letters you need. When finished, select OPTIONS.

NEW MESSAGE
Hi Aunty. I will be home at 4pm...|
OPTIONS   BACK

3 Select SEND TO or CONTACTS.

CONTACTS
Send to (Contacts)
Insert
Save Message
Sending Options
OK   BACK

4 Select the person/ people you want to send the message to and press OK.

CONTACTS
Amy
Aunty B
Ben
Dad
Kalo
OK   BACK

5 When completed, your phone will tell you it has sent.

Sent!

A GUIDE TO MiCash MARKET BILL PAY

Need to pay your market stall fee?

Use you phone to make payment

1 Dial *678# and press CALL.

PHONE
*678#
OPTIONS   CLEAR

2 Note that PAY BILLS is number 4. Press ANSWER and enter number 4. Press SEND/OK.

MiCash
1. Transfer Money
2. Deposit-Withdrawal
3. Digicel Topup
4. Pay Bills
5. My Account
6. Balance Check
ANSWER/REPLY

3 Select ANSWER/ REPLY and enter number 4 (NCDC K2). Presss OK/ SEND.

PAY BILLS
1. easiPAY
2. Pay Postpaid
3. My Account
4. NCDC K2
ANSWER/REPLY

4 Press ANSWER. Enter your secret PIN. Press SEND/OK.

Enter PIN
****
ANSWER/REPLY

5 Press ANSWER, enter number 1 CONFIRM. Press SEND/OK.

Please confirm NCDC Payment of K2.00
1. Confirm
2. Cancel
ANSWER   BACK

6 Finished. Your market bill is now paid.

Your NCDC Payment of K2.00 was successful your balance is now K22.41
BACK

A GUIDE TO MiCash MONEY TRANSFER

1 Dial *678# into your phone and press CALL.

Phone
*678#
OPTIONS   CLEAR

2 Note that 'Transfer Money' is number 1. Presss ANSWER.

MiCash
1. Transfer Money
2. Deposit-Withdrawal
3. Digicel Topup
4. Pay Bills
5. My Account
6. Balance Check
ANSWER/REPLY

3 Press 1. Press SEND.

Answer
1
SEND   CLEAR

4 Press ANSWER. Enter recipents phone number. Press SEND/OK.

Enter Recipient Mobile
71577777
ANSWER   CLEAR

5 Press ANSWER. Enter amount to send in toea. Press SEND/OK.

Enter Amount in toea
1000
ANSWER   CLEAR

6 Press ANSWER. Enter your secret PIN. Press SEND/OK.

Enter PIN
****
ANSWER   BACK

7 Press ANSWER. Enter 1 CONFIRM.

Please confirm money transfer
1. Confirm
2. Cancel
ANSWER   BACK

8 The money transfer is complete.

Thank you for using MiCASH
ANSWER   BACK