

# Delivering digital skills training for impact:

Learnings and insights  
from Sierra Leone



The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

We invite you to find out more at [www.gsma.com](http://www.gsma.com)

Follow the GSMA on Twitter/X: [@GSMA](https://twitter.com/GSMA)



Basis is an international insight consultancy firm, fusing a range of approaches – quantitative and qualitative primary research, AI and big data, behavioural sciences, cultural insights and semiotics, creative illustration and design – to drive growth and disruption for our clients.

<https://www.basisresearch.com/>



This document has been financed by the Swedish International Development Cooperation Agency (Sida). Sida does not necessarily share the views expressed in this material. Responsibility for its contents rests entirely with the author.



This material has been funded by UK Aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government's official policies.

## GSMA Connected Society

The Connected Society programme works with the mobile industry, technology companies, the development community and governments to increase access to and adoption of the mobile internet, focusing on underserved population groups in developing markets.

For more information, please visit [www.gsma.com/connected-society](http://www.gsma.com/connected-society)

To get in touch with the Connected Society team, please email [connectedsociety@gsma.com](mailto:connectedsociety@gsma.com)

The GSMA would like to thank the following organisations and individuals for their input:



**Orange Sierra Leone** for collaborating with the GSMA to address the digital skills barrier. This included delivering a digital skills training initiative with customers and supporting the evaluation of the training.

**Basis Research Ltd** which designed and conducted the evaluation of the digital skills initiative.

**QCA Consulting** for supporting with field work across selected locations in Sierra Leone.

The findings and conclusions expressed in this report are those of the GSMA, and do not necessarily represent the views of the organisations and individuals who were involved in this project.

**Author:** Joshua Omoju

**Contributors:** Abi Gleek, Melle Tiel Groenestege, Matt Shanahan, Claire Sibthorpe, Claire Louise Sterngold

Published: September 2024

# Contents

<b>Executive summary</b>	<b>2</b>
<b>1. Introduction</b>	<b>4</b>
<b>2. Overview of MISTT and its implementation in Sierra Leone</b>	<b>5</b>
What is MISTT?	6
Orange-GSMA MISTT implementation in Sierra Leone	7
<b>3. Learnings from evaluating the MISTT digital skills initiative in Sierra Leone</b>	<b>8</b>
Effectiveness of the MISTT training for improving the digital skills of the underserved	10
Effectiveness of the MISTT training to better reach the underserved	12
The socio-economic impact of the training	15
<b>4. Key lessons and recommendations from the MISTT evaluation in Sierra Leone</b>	<b>18</b>
<b>Appendix</b>	<b>28</b>





# Executive summary

Mobile networks are the primary – and often only – channel for people to connect to the internet, especially in low-and-middle income countries (LMICs).<sup>1</sup> Despite the rapid growth in mobile internet adoption in recent years, there remains a significant usage gap in LMICs: 48% of the population across LMICs still do not use the mobile internet. Of this group, 42% live within the footprint of a mobile broadband network but are not using the internet – this is known as the ‘usage gap’. In Sierra Leone, the usage gap is significantly higher at 77%. Among people in this group, a lack of digital skills is one of the most significant barriers preventing them from adopting the mobile internet.

To address the digital skills barrier, the GSMA developed the Mobile Internet Skills Training Toolkit (MISTT), a free-to-use set of resources covering the fundamentals of the mobile internet, popular apps and use cases. In order to gather evidence on the efficacy of the MISTT and identify potential areas for further improvements, the GSMA evaluated a digital skills training campaign conducted by Orange Sierra Leone, using MISTT.<sup>2</sup> Specifically, the evaluation aimed to understand how effectively the MISTT delivers improved digital skills, what the socioeconomic impact is on trainees, and what improvements are needed to better reach the underserved.

<sup>1</sup> GSMA (2024) [The Mobile Gender Gap Report](#).

<sup>2</sup> [GSMA Mobile Internet Skills Training Toolkit](#).

## Key Findings

**MISTT improved digital skills for the majority of trainees interviewed in Sierra Leone**, by reducing the functional barriers to mobile internet use, boosting learners' self-confidence and sense of independence and increasing the frequency of internet use by the trainees.

**There are indications that MISTT has had a positive socio-economic impact in Sierra Leone.** This was visible in two main ways: enhancing trainees' potential to conduct business online has improved their prospects and income; and trainees have acquired greater knowledge and education across diverse topics.

**The impact of MISTT training on business was most observable for women**, as they experienced the greatest changes to their digital skills confidence levels, as well as day-to-day life benefits, including being able to do business online while at home. Women were also more likely to enjoy the spill-over effects of the training, as their spouses passed on what they had learned.

**Incentives are a critical part of digital skills training – both for potential customers and trainers.** The effectiveness of digital skills training can be greatly enhanced by providing appropriate incentives to potential trainees and their trainers. For trainers, this might involve providing financial incentives for the delivery of training that drives digital inclusion. For customers, this involves emphasising how the mobile internet can be valuable to their lives and making them aware of any incentives, such as free mobile data and lunch, that are available to reward participation at in-person training events.

**Face-to-face training provides numerous advantages for the underserved.** Face-to-face or in-person training allows a more tailored learning experience with opportunities for practical application by learners. For example, in-person training enabled trainers to spend time answering trainees' questions and providing tailored support on some of the challenges that they encounter. This is most important for learners with lower literacy and education levels, as well as those in rural areas. However, while effective, in-person training may be more costly for implementers and more difficult to scale.

**Digital skills training needs to consider the specific barriers that underserved users face.**

Issues, such as lower levels of education and a lack of basic digital skills and confidence, can impact on people's ability to access and participate in training activities. The evaluation also highlights the importance of adopting a gender lens to the delivery and expansion of digital skills training to ensure it is reaching women. There is a need to consider who might be excluded or disadvantaged from the proposed delivery approach, as well as ensuring the location, timing and content of the training, for instance, will meet their needs.

**To enhance the scalability and viability of MISTT digital skills training, implementers can explore other approaches to delivering digital skills beyond in-person channels to understand their effectiveness.** Remote channels, for example videos, voice messaging and radio broadcasts, may provide an effective way for delivering digital skills training and/or improving training awareness in a cost-effective manner. Both in-person and remote channels have relative advantages and disadvantages. While in-person channels may be more effective at reaching certain population segments, remote channels provide unique benefits to implementers as they are easier to scale and can be iterated or updated more easily than face-to-face channels. Depending on the training objectives, both digital and in-person channels can be used simultaneously to complement the other.

**Combining digital skills training with other events or product pitches can extend the reach of digital skills training for the underserved and offer benefits to implementers.** Delivering digital skills training alongside other activities, such as entertainment events or with the sale of a product or service, can encourage wider participation by reaching people who may be reluctant to attend a formal training event, for example, or linking it to something that is seen as relevant to them. Nonetheless, it's important to bear in mind the needs of underserved groups while designing these activities. For example, for women, the idea of 'standing in the street watching entertainment' may not feel culturally appropriate, as many are worried about theft or appearing to be lazy people who have nothing important to do.

# 1. Introduction

Mobile internet usage has continued to grow worldwide in recent years, driven largely by adoption in low- and middle-income countries (LMICs), where mobile is the primary channel for people to connect to the internet.<sup>3</sup> At the end of 2022, 57% of the world's population used mobile internet, equating to 4.6 billion users.<sup>4</sup> However, there remains a large usage gap, with an estimated three billion people living in areas covered by a mobile broadband network, but not using the mobile internet.<sup>5</sup> A lack of digital skills is one of the top barriers to mobile internet adoption among people who are aware of the internet, but do not use it. Persons who fall in this category are typically “the underserved”, and are disproportionately poorer, less educated, rural and women.

To address the digital skills barrier, the GSMA Connected Society team created the [GSMA Mobile Internet Skills Training Toolkit \(MISTT\)](#), a set of free-to-use resources to support mobile operators and other stakeholders to implement basic digital skills initiatives to reach the underserved. The toolkit has been used by mobile operators and other partners to successfully drive increased mobile internet adoption across multiple countries. Previous MISTT evaluations have highlighted that it can deliver a significant return on investment for mobile operators.<sup>6</sup>

In 2023-24, Orange Sierra Leone implemented a digital skills training initiative for its customers, leveraging the MISTT. The training sought to improve the digital literacy of individuals, who were not regular mobile internet users and provide them with the skills to access digital services, including those from Orange, and to harness the overall benefits of using the mobile internet and devices.

In March and April 2024, the GSMA conducted an evaluation of Orange Sierra Leone's digital skills initiative to better understand how effectively the MISTT delivers improved digital skills, what the socioeconomic impact is on trainees and what improvements are needed to better reach the underserved.

## The focus of this report

This report highlights the key learnings from the evaluation of the MISTT digital skills training initiative implemented by Orange Sierra Leone. It provides key insights on the effectiveness of MISTT in improving digital skills acquisition among different underserved groups, as well as the socio-economic impact of the training. The report also identifies considerations for improving the effectiveness of digital skills training in reaching underserved groups. However, the insights and recommendations in this report do not represent our comprehensive view of how to implement MISTT. Rather, they are recommendations specifically arising from this evaluation, and can be a basis for further research and trial. This complements our existing research on digital skills and evaluation of MISTT implementations.<sup>7</sup>

## Methodology

The evaluation findings presented in this report are based on primary field research in Sierra Leone. Field research was conducted in two cities: Freetown and Bo. The primary research involved a range of qualitative field activities, including focus groups with untrained people in the target audience for the training and interviews with digital skills trainees, trainers and an implementer (see appendix for full details of sample approach and research participants).

<sup>3</sup> More than 3.7 billion people in LMICs now access the internet on a mobile phone, accounting for 84% of broadband connections in these countries in 2023. From: International Telecommunications Union (ITU) and GSMA Intelligence estimates for 2023.

<sup>4</sup> GSMA (2023) [The State of Mobile Internet Connectivity 2023](#).

<sup>5</sup> GSMA (2023) [The State of Mobile Internet Connectivity 2023](#).

<sup>6</sup> For example, in Bangladesh, Banglalink trained over 117,000 customers using MISTT over three months, which led to a 143% growth in data revenue among customers who were trained, 83% revenue growth, and increased traffic to Banglalink's self-care app. See, GSMA (2019) [Driving digital skills in Bangladesh: Banglalink case study](#). In Cameroon, where MTN implemented a MISTT pilot over three months in 2019, the monthly data ARPU of trained customers increased significantly, from CFA 99 to CFA 172 (74% increase) for trainees, and from CFA 103 to CFA 269 (161% increase) for trainees with smartphones. See GSMA (2021) [MTN Data Smart increasing mobile internet access and use through digital skills training](#).

<sup>7</sup> For example, see GSMA (2024) [A needs-based approach to mobile digital skills training: Learnings from India and Ghana](#); GSMA (2021) [Multiplying the Impact of Mobile Internet Skills Training: Four Key Insights from the MTN Uganda MISTT Pilot](#); GSMA (2021) [MTN Data Smart increasing mobile internet access and use through digital skills training](#); GSMA (2019) [Driving digital skills in Bangladesh: Banglalink case study](#); GSMA (2017) [Mobile Internet Skills Training Toolkit: Tigo Rwanda Pilot Evaluation](#); GSMA (2016) [Telenor's mobile internet training projects in India: raising awareness of the benefits from getting online](#).



---

# 2.

## Overview of MISTT and its implementation in Sierra Leone



# What is MISTT?

First developed in 2016, the [GSMA Mobile Internet Skills Training Toolkit \(MISTT\)](#) has been used to train over 70 million people in more than 40 countries on basic mobile digital skills. The MISTT uses a “train the trainer” approach and its

19 modules are available in more than 30 languages and a variety of formats to support partners to implement digital skills training, leveraging both digital and in-person approaches.

**Figure 1: Screenshot of a bitesize MISTT module on internet fundamentals**

 Bitesize Training:  
**Introduction to the Internet**

This page is designed to help trainers answer more general questions that trainees may have about the mobile internet. It gives simple explanations to some questions that people often ask about the internet. It might be helpful to print this sheet off. You will also find these examples embedded within the modules of this toolkit.

 **What is it?**

**Show the 'Introduction to the internet' poster.**  
**Explain:** “The internet is a network of millions of computers around the world connected to each other with phone lines, satellites and cables. It gives you access to a huge range of information and services and it is growing all the time. The internet is for everybody. There are no restrictions on who can use it. You just need a computer, mobile phone or tablet and a data connection.”


 **What can you use it for?**

“The internet will help you to do many things. For example, you will be able to send messages or speak with friends and family, send photos, watch videos, listen to music, buy and sell things, and transfer money. It will also help you find information on nearly any subject, including news, weather, entertainment, transport timetables, religion or sport. It can also help you if you are looking for a job, need health advice or want to learn a new skill.”

Trainer to include their own personal examples of how the internet has helped them.

**Make it relevant** to the trainee: Discuss how it can be beneficial in the trainee's own life.

 9 / 17


 Bitesize Training:  
**Introduction to the Internet**


 **How does it work?**

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

**Smartphones:** “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.”

**Feature phones:** “These have fewer features than a smartphone. 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 costs' poster.**

“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.”

 10 / 17

MISTT covers several fundamental topics (e.g. introduction to the internet, mobile money and online safety), popular applications (e.g. YouTube) and is delivered via a variety of in-depth and bite-size modules. As this report shows, MISTT digital skills training, when delivered effectively, can improve the digital skills of the underserved and create lasting socio-economic impact.

Many different stakeholders have used the MISTT to increase digital skills, supported by the GSMA in a variety of ways. This has included advice on strategy; sharing best practices, including on reaching women; support on monitoring and evaluation; troubleshooting during a training campaign; training of trainers; promotion of impact and more.

GSMA

6 / 30



# Orange-GSMA MISTT implementation in Sierra Leone

Orange employed MISTT in early 2024 to train customers across different cities and towns in Sierra Leone, including Freetown and Bo.

Orange implemented the MISTT training using its agents as trainers. Agents were utilised in two broad ways:

- Orange agents were deployed in a variety of large public areas, such as streets and markets. Digital skills training was not always positioned as the primary purpose of engagement with potential customers. Rather, Orange's strategy was to position digital skills training as part of a wider customer acquisition initiative or promotional campaign. For example, customers attended 4G activation events or training on the use of Orange Money, which were then accompanied by digital skills training. To raise awareness about the engagements, Orange used a variety of approaches including 'town criers'<sup>8</sup> in remote locations, Orange contact centres, local radio notifications and WhatsApp messaging.
- Orange agents travelled door-to-door to engage with prospective customers at their home or place of work. As with the training in public areas, the digital skills training was not always positioned as the primary purpose of the door-to-door engagement.

Training for each individual lasted between 5 and 60 minutes, although 5 to 30 minutes was the most common duration. Across both indoor and public engagements, training was typically delivered one-to-one, which ensured that trainers could provide individual demonstrations of training content and their application, tailored to meet the learner's needs.

To promote scalability and wider reach, Orange incorporated bite-size videos, with small file sizes, which can be used to disseminate specific digital skills instructions easily on WhatsApp groups. They also used voice messaging to connect with mobile users, especially in remote communities. Orange's trainers stayed in contact with trainees by frequently sharing helpful video content. The value and impact of the MISTT delivery was also enhanced through mechanisms such as using branded t-shirts, to enhance perception among individuals in public places that the training is "real" and genuine.

**Figure 2: The MISTT implementation underway in Sierra Leone**



<sup>8</sup> An historical practice, in which a person is employed to make public announcements in the streets of a town.

---

# 3. Learnings from evaluating the MISTT digital skills initiative in Sierra Leone





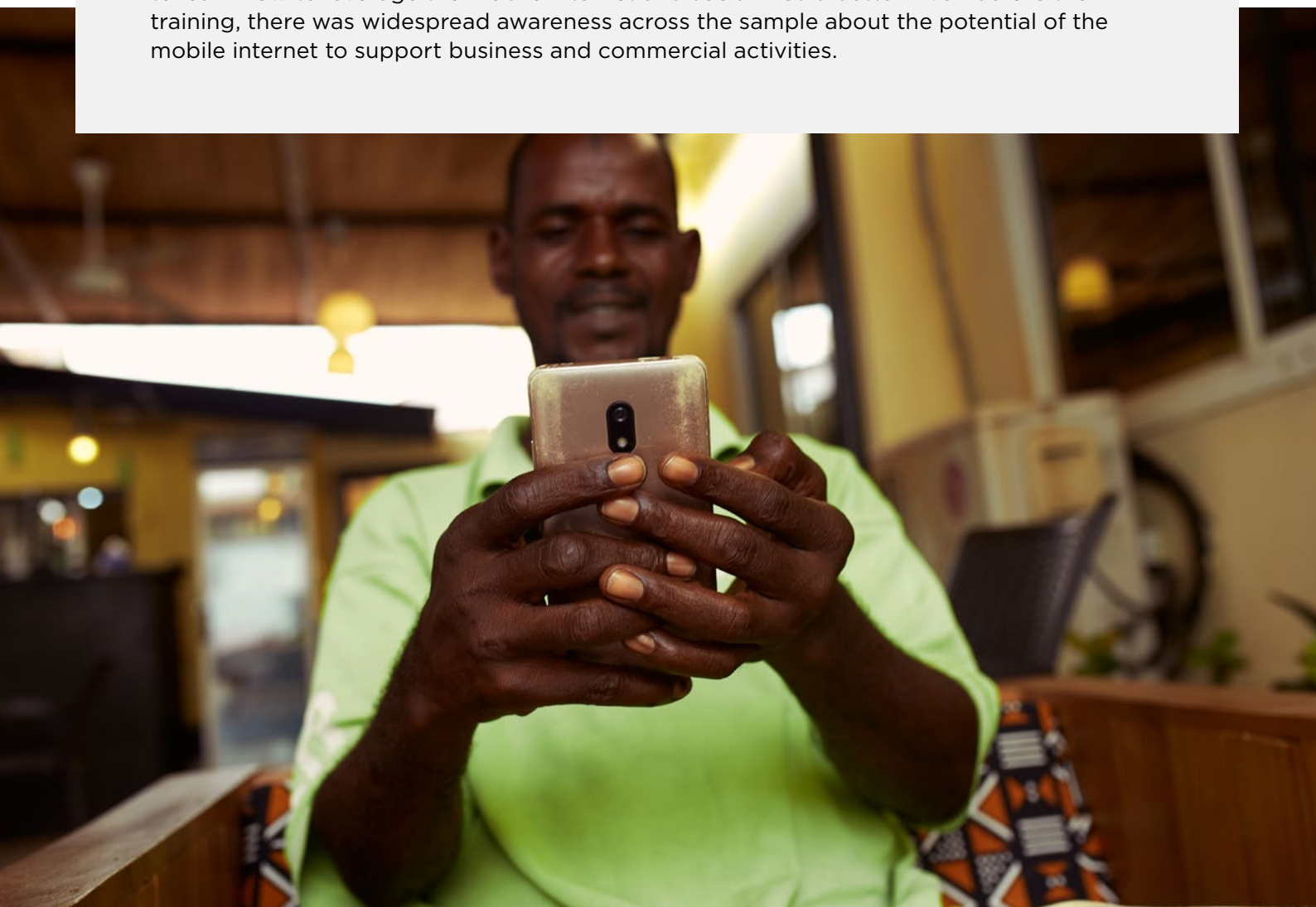
In this section, we present learnings from evaluating the MISTT digital skills initiative in Sierra Leone, specifically focusing on key research questions aimed at better understanding the overall effectiveness of the training, its delivery and its subsequent impact.

### **Box 1**

#### **Learner needs and characteristics**

Learners' pre-existing knowledge and digital skills varied by demographic group and gender, with men and younger people generally having broader pre-existing exposure to the internet and confidence to use a wider range of apps (e.g. YouTube, games, Telegram) than women and older populations. Moreover, prior to training, many older people in the sample often relied on their children, grandchildren or other relations for support in using mobile internet apps and services. This group were intent on using the training to learn more about how to use their devices and become confident in their individual ability to use the mobile internet and mobile applications on their smartphone.

Overall, learners across the sample valued the digital skills training and were motivated to learn how to leverage the mobile internet and social media better. Even before their training, there was widespread awareness across the sample about the potential of the mobile internet to support business and commercial activities.





# Effectiveness of the MISTT training for improving the digital skills of the underserved

During the evaluation, respondents reported that the digital skills training using MISTT was well aligned with their needs. This was mainly related to the use of popular applications, such as WhatsApp and Facebook, and gaining overall proficiency and confidence in the use of smartphones and the mobile internet. Trainees attributed their new proficiency in areas, such as digital marketing, use of Google and YouTube for search, apps installation and online purchases of mobile data, to the MISTT training.

“I was expecting him to teach me how to go about things [on my device]. And Facebook, how it won't burn your data. He also taught me how to use WhatsApp... so all of these things, they are for people who do not go to school. We won't know how to operate a phone unless they tell us.”

– Male trainee, urban Bo



Overall, the evidence shows that the MISTT digital skills training improved learners' digital skills in at least three ways:

## 1 It addressed barriers to mobile internet use among trainees

by equipping them with basic mobile digital skills, through hands-on practice. For example, trainers downloaded apps for learners and then showed them how to download and use them. This was especially useful among semi-literate users and the elderly.

"I was struggling before I took the training; I didn't understand and had no one to teach me how to use [apps]."

- Female trainee, rural Freetown

## 2 It increased awareness of new mobile internet use cases

by helping trainees to understand how the mobile internet could help them achieve their goals, such as meeting their learning aspirations or discovering different ways to use familiar applications. For example, trainees were taught how to post status updates with pictures or share information to groups, which many learners considered a valuable skill for marketing their business. Another trainee expressed delight to learn about Vidmate, a video download and management app, which can help them learn new things and manage their child's schoolwork.

## 3 It improved trainees' digital confidence.

Prior to training, many trainees, particularly women, older people and less-educated trainees in the sample often relied on other people for support in using mobile internet apps and services. Digital skills training gave this group greater confidence and independence in using handsets and mobile apps. Moreover, the evaluation showed that, as women generally had lower prior exposure to the mobile internet than men, the perceived degree of skills improvement was higher with women: more women reported improvements in their digital skills and confidence levels.

"All those things I mentioned earlier [apps download, YouTube search], I normally do it now for myself."

- Female trainee, urban Freetown

"I can confidently say that my knowledge of using the phone is largely due to the training I received from Orange."

- Female trainee, rural Bo

The improvement in digital skills levels is also evident in participants' reports of increased mobile internet data usage following the training. Within the six weeks following training, participants reported that they had increased their mobile internet usage as a result of the skills learned, e.g. use of different platforms for marketing a business.

Interestingly, trainees did not report using what they had learnt to proactively diversify their mobile internet usage beyond the skills on which they had been trained. It is possible that with more time, learners may diversify their usage, but that would require further study.





## Effectiveness of the MISTT training to better reach the underserved

The MISTT digital skills training in Sierra Leone was delivered with consideration for the specific characteristics and context of the underserved. For example, it incorporated demonstrations and one-to-one delivery, including going door-to-door in rural areas, to provide tailored support to individuals who did not already use the mobile internet, and those who have additional support needs, such as a lack of formal education. Orange also used radio 'jingles' to raise awareness of the training and engaged radio hosts for on-air slots to share information. These supportive approaches help trainees learn quickly and develop trust with trainers.

**"I am not educated so I cannot understand all that they are saying. So, the best way for me is to do the one-on-one with me... I need somebody to explain to me again and again."**

**- Female trainee, urban Bo**

But there were challenges with the MISTT digital skills initiative in Sierra Leone which likely impeded the reach and effectiveness of the intervention. Most of these challenges related to the training activities in busy, public spaces. For instance, some learners noted that the trainings occurred with limited promotion and short advance notice, which meant that many trainees and potential trainees were not fully aware of the training or any incentives to attend. This likely limited attendance at training events or prevented trainees from staying until the end of events.

Orange's strategy to position digital skills training as part of a wider initiative or promotional campaign helped to increase participation, but such an approach can also raise challenges in terms of unmet desires of participants. During the evaluation, it became clear that having at least equal emphasis on digital skills content versus other elements would be beneficial, especially if the session is advertised as involving digital skills training or training on the use of the internet. Otherwise, trainees can be left unhappy that they were not able to fully explore their digital skills curiosities and questions.



Some barriers related to digital skills training are more prominent among certain demographic groups. Firstly, the evaluation revealed that in some cases, women and less affluent individuals, especially those in rural areas, lacked appropriate handsets (many only had basic phones) to access the internet and develop digital skills. Moreover, in some areas, electricity was only available to end users at weekends, which meant they were unable to bring charged phones to training. Secondly, women, in particular, are disadvantaged by acute structural inequities, such as lower education and income, and restrictive social norms,<sup>9</sup> giving rise to the perception that such training is not for women. The evaluation showed that women tend to be busier with home chores at certain times than men, while some have a need to prioritise income-generating activities over digital skills training. Lastly, women expressed concerns about safety and perceptions of them during public training events. Such concerns are compounded at outdoor events that attract large crowds in urban areas, as women feel exposed and worried about being socially judged, especially by males.

“Where we are presently, many people are farmers. Maybe he or she has gone to work in her farm, and this type of training arises. Definitely the individual will not stop his work to attend the training.”

- Female, unaware of the training, rural Freetown

“I will not go and stand in the sun, as a mature woman like me, I will not do such a thing. Because if those who know me see me in the streets standing in public during sensitisation, how do you think they will take me?”

- Female trainee, urban Bo

“I will not be ashamed to speak, but if it is in public, I will be ashamed to ask questions because I don't want fingers to be pointed at me. I am interested in browsing and going to Facebook and WhatsApp, but I feel ashamed to go in public for training.”

- Female trainee, urban Bo

The evaluation identified the need to design and adapt digital skills training initiatives and content specifically to the needs and requirements of women. This can include taking a tailored approach to target and engage women. For example, scheduling events in advance and in well-organised settings, such as a community centre, with clear endorsement by community leaders, provides comfort to many women and helps ease their fears about theft or being perceived as ill-informed. Moreover, organising small-group training events, which are led by female agents or include only female trainees, can increase women's participation as they were shown to create a safe space for women to engage, increase trust and provide women with a structured environment to receive training. Women can also be encouraged to participate in digital skills training by providing additional targeted offerings, for example, combining digital skills training with other products and services that are relevant to women's needs. However, practical challenges were also identified, such as the difficulty in attracting adequate number of female agents mainly due to long working hours and challenges related to travel and safety.

“If they have a designated place for the training. I will be happier to go there and receive the training.”

- Female trainee, urban Bo

“Orange has a particular product called Orange Osusu. We know generally women are interested in Osusu savings. So, if they include that particular aspect, that they will teach them how to attain benefits from the Orange Osusu platform, then they will be encouraged to attend.”

- Male, unaware of the training, rural Bo

9 GSMA (2024) [The Mobile Gender Gap Report](#).

The evaluation also indicated that one-to-one delivery or in-home approaches, which can be an effective way to provide tailored support to learners, could be expanded to cover more audiences. Some learners in the sample also highlighted the importance of image-based ‘takeaways’, posters or videos, as these can help accelerate learning or even serve as awareness-driving materials to reach other lower-literacy audiences. In addition, follow-up calls with trainees are important to extend the relationship with learners to help consolidate their learning. Overall, the findings indicate that better customisation of training time slots can be helpful as, for example, learners with little education tend to require much longer training times.

“I like the face-to-face direction in learning where, for example, the person teaching you will give you direction by saying click here and you do it.”

- Female trainee, rural Freetown

“The issues about Internet and the usage on phones for people like us who are illiterate is very complex. It will have to take a lot of time and concentration to be able to do that.”

- Male trainee, rural Bo

The evaluation also revealed the role that incentives could play in improving attendance at digital skills training. Several of the interviewees, including one who was aware of the training, but had not attended, suggested that an incentive for attendance would encourage more participation, especially since digital skills training could also provide commercial benefits to Orange (e.g. via increased data sales).

“For those in this type of community, if they hear that there is going to be food or refreshments in a session like this, there will be a lot of people who will make it a point of duty to attend.”

- Female, unaware of the training, rural Freetown

“If you go to the village and tell them that there will be free data or airtime for them for the training and also tell them that people can now go online freely, people will be interested.”

- Female, unaware of the training, urban Bo



## The socio-economic impact of the training

The evaluation showed that digital skills training positively influenced participants' lives in business and education, social connection, entertainment, and perceived esteem, as well as increasing their general knowledge of the mobile internet. However, majority highlighted the positive impact on their businesses and finance. For example, over half of the participants interviewed mentioned that the mobile internet had given them an improvement in financial and business sales prospects. In some cases, trainees highlighted the training's impact on expanding their own business, mainly through the ability to promote their offerings on social media platforms, such as WhatsApp, and selling online. This created numerous benefits, particularly enhancing the business' reach to more clients across a wider geographical area, which ultimately translates to potentially quicker sales and more money.

“Before, I was only using my data to make calls to family and friends. But now I make use of my data to also do business.”

- Female trainee, rural Freetown

“I’m getting more customers and my business is going fast, as I’m telling you. At first, it took two months for my goods to finish, but now, after two weeks or less, they’re finished. I get a lot of customers now, and I’m growing faster financially.”

- Female trainee, rural Freetown

The evaluation also highlighted the efficiency benefits derived by participants, evident mainly in two ways. First, the mobile internet helped trainees to search for valuable information quickly at lower cost, benefitting their work and employment prospects. This is primarily related to search skills on Google or YouTube. For example, following the training, one solar panel business owner began using YouTube to search for videos on solar installation techniques which they can apply to their own installation approach. Second, doing business online created efficiencies by reducing the time and effort it took business owners to advertise in physical market areas. This impact has the potential to significantly improve the day-to-day business operations of trainees who attended the training.



“Before this time, I left home and go to the market and use megaphone to advertise my business for the rest of the day, but now it looks easier for me to advertise my products on the social media platforms.”

- Female trainee, rural Freetown

The evaluation also shed light on the training’s spillover effects<sup>10</sup> on those who engaged with trainees. For example, trainees who felt confident in their new skills extended and shared this knowledge to other household members and friends. The evidence from this evaluation showed that the secondary beneficiaries are likely to be women and children. For example, female trainees are using Google and YouTube to help with assignments for children, while male trainees are going on to share their learnings with their wives thereby increasing their spouses’ digital skills. Some trainees were already foreseeing that, once they got more competent in mobile internet use, they could train others for a fee. This underscores the impact of the digital skills training on learners’ socio-economic prospects.

“Like for Google... I sometimes use it to do assignments for my child and even for myself.”

- Female trainee, rural Bo

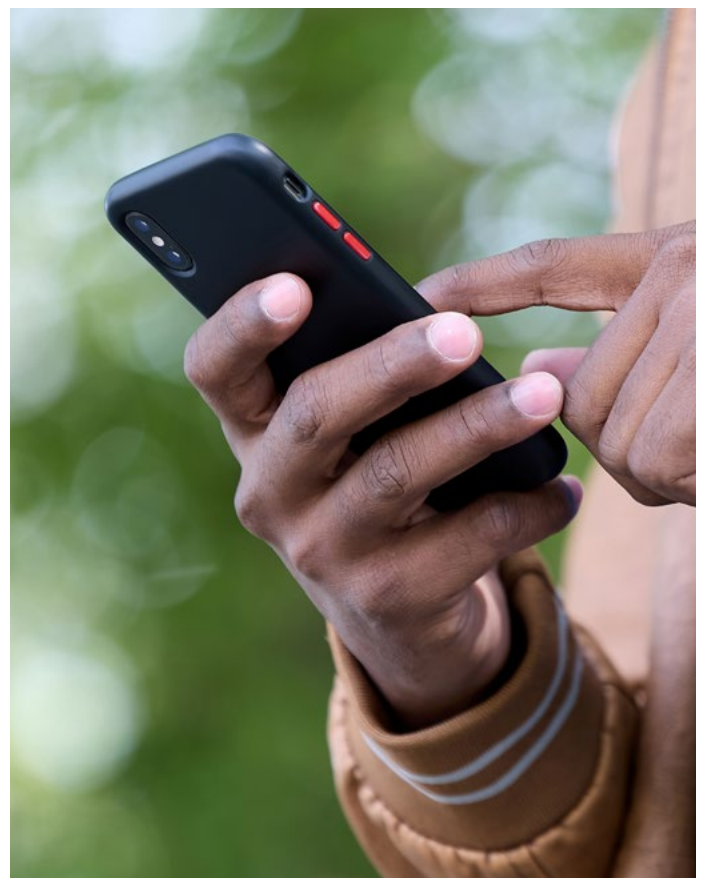
“I already teach others. Young people who do not know how to use the internet come to me for help, and I am always willing to assist them. I feel proud and satisfied knowing that I can help others learn something new and useful. It is rewarding to see people succeed with my assistance.”

- Female trainee, urban Bo

“If my colleague says come and do something for them regarding the use of the internet, I will charge them a little sum for it.”

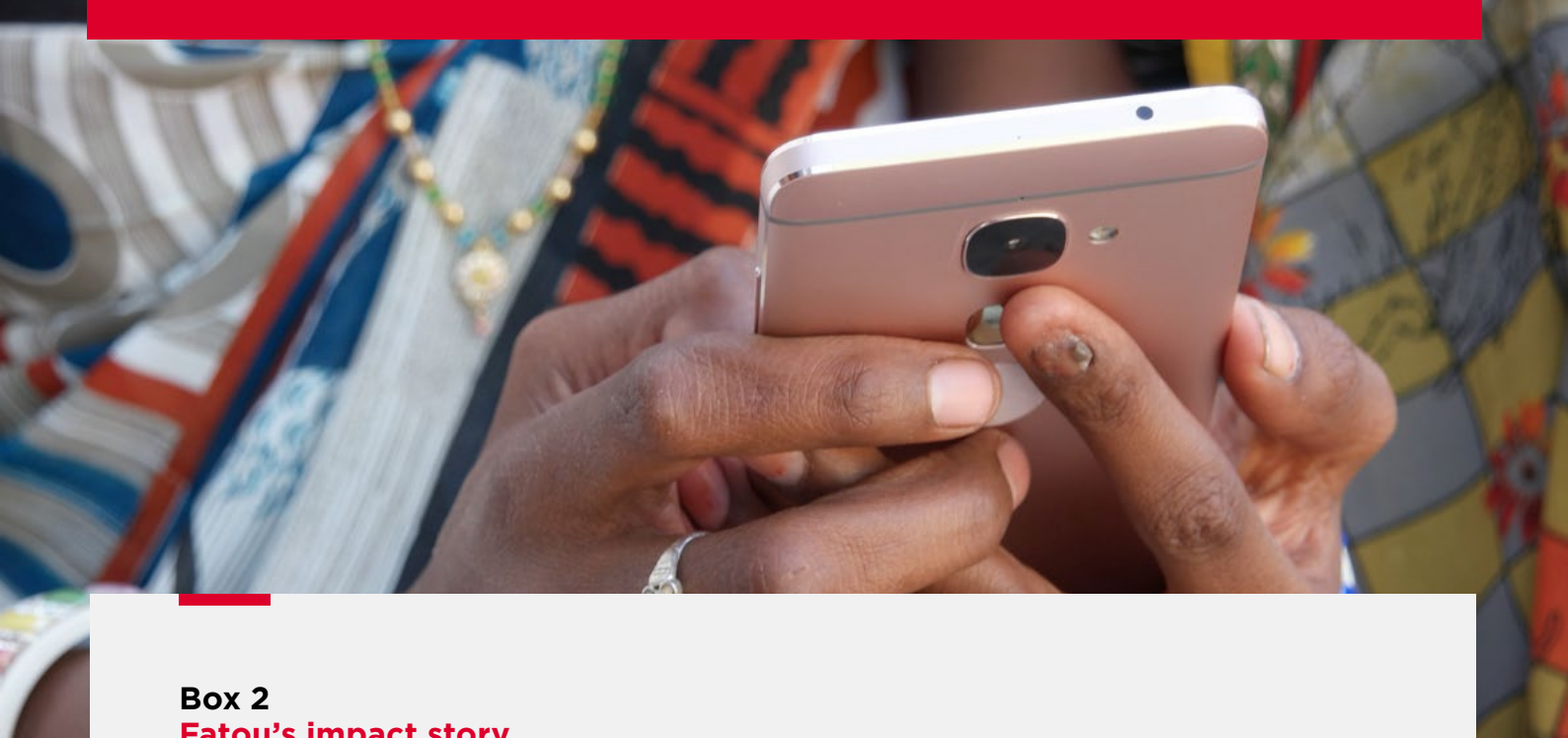
- Female trainee, urban Freetown

While the digital skills initiative positively impacted both men and women, the realised benefits appeared to be greater for women, especially through the knock-on effects of developing online business skills. This was especially true for women in the sample for whom the ability to do business online meant they can spend more time at home with their children and do household chores without needing to go out to earn money. Furthermore, many rural women in the sample expressed frustration that they often had to travel regularly to customer locations, sometimes with heavy goods at hand, despite having no guarantees that they would record a sale. Moving more of their business online could reduce this burden. These findings are in line with other research on the benefits of increased mobile internet use for women. For instance, a GSMA Connected Women study<sup>11</sup> found that in Bangladesh, female users of mobile internet in low-income groups have six percent higher levels of wellbeing compared to all other comparison groups in the study.



<sup>10</sup> See also our earlier report on the potential multiplier effects of MISTT digital skills training: GSMA (2021) [Multiplying the Impact of Mobile Internet Skills Training](#)

<sup>11</sup> GSMA (2022) [Mobile Internet, Well-being and Gender: Understanding the Links](#).



## Box 2

### Fatou's impact story

Fatou<sup>12</sup> is a 45-year-old resident of rural Freetown. She sells handicrafts and dresses for a living. Prior to the Orange training, Fatou was already using a Samsung device, given to her by her husband. She had used the internet for WhatsApp calls and voice notes, and occasionally would watch videos on TikTok or send chat messages on Facebook. She never tried much else as she was afraid of making mistakes or breaking her handset.

#### Impact of training for Fatou

- Fatou has been able to develop a more 'online' business by advertising her wares and communicating with customers about them through WhatsApp and Facebook (rather than being dependent on people coming to her store).
- She is now able to work from home and see her children after school.
- Outside of work, she's now using YouTube to listen to songs for entertainment, so is buying fewer CDs.

#### What did Fatou find most useful?

- Learning how to buy mobile data; it had always been an obstacle previously.
- Posting status updates and YouTube videos to advertise her products.

“They taught me how to do business. Like before, when I have no custom, I just go to bed and sleep. But now that Orange have taught me how to do this online business, customers will check through my status and see the business... there has been a lot of improvement.”

- Fatou

<sup>12</sup> Not real name. Participant's name not used for confidentiality reasons.

---

# 4.

## **Key lessons and recommendations from the MISTT evaluation in Sierra Leone**

This section highlights some key takeaways based on the learnings from the evaluation of MISTT digital skills training in Sierra Leone. It particularly focuses on practical suggestions for improving the effectiveness and reach of digital skills training for the underserved, as well as the sustainability and commercial viability of digital skills training to overcome scaling challenges.





# Improving the reach of digital skills training and engagement among the underserved

## Lesson 1

**Promote and market digital skills training activities well in advance through a mix of marketing channels and activities to drive awareness.**

### Insights:

This evaluation revealed that implementing training without sufficient prior engagement risks limiting effectiveness and participation. A lack of awareness of the training was a barrier to all types of audiences, but this challenge was accentuated for particular groups, especially those whose functional literacy rate is limited.

### Recommendations:

- Build sufficient awareness in advance of the training and what it will cover to set user expectations.
- Use a mix of physical (e.g. community-based), traditional (such as radio broadcasts) and digital marketing approaches. This will help reach a greater number of people across different demographics and communities.
- Focus on relevant use cases for the underserved in awareness efforts and promotional content and include messages to boost users' confidence, including reaching out to rural populations using local languages.
- Don't rely exclusively on text-based messaging, such as posters, flyers or text messages, to raise awareness, as this risks further exclusion of those with low functional literacy rates. Consider using radio broadcasts and TV advertising to reach these individuals.
- Use champions to help promote the training and how it is relevant to help attract attendees.
- Include digital skills training when promoting relevant products and services, ensuring that it also highlights how this product can help meet their needs.
- Combine digital skills training with other events to extend the reach of digital skills training. For instance, combining it with entertainment shows featuring popular local artists can potentially attract a larger audience.

## Lesson 2

# Design and implement digital skills training that addresses the specific barriers that underserved users face, including women.

### Insights:

Delivering digital skills training to the underserved is challenging because this group typically faces several barriers that limit their ability to access and participate in training activities. These barriers include a lack of confidence in their ability to acquire new skills, as well as an inability to afford internet-enabled devices to access the internet and use new skills. These factors can drive the perception that digital skills are not for “people like me.”

Moreover, our previous research shows that women, in particular, face certain barriers that affect their digital inclusion disproportionately.<sup>13</sup> For example, they can be affected by negative preconceptions of digital skills training from gatekeepers or influential family members.<sup>14</sup> Potential learners in rural areas may also be reluctant to attend if training events are held in locations that are too far away and women may be discouraged to learn in locations considered inappropriate for them. To reach the underserved with their training efforts, digital skills initiatives must explicitly consider how they will address these barriers.

### Recommendations:

- Schedule events in well-organised accessible locations that are appropriate for underserved groups to attend (e.g. those in rural areas, women and persons with disabilities).
- Increase confidence in using the mobile internet by highlighting how it can meet the specific needs of those who are being trained and addressing fears or negative perceptions they have about mobile internet use. Influencers, such as local ambassadors or local community group leaders, can also be engaged to help raise awareness of the relevance of mobile internet.
- Where possible, deploy female agents to reach other women in settings where women and their gatekeepers feel more comfortable interacting with other women.<sup>15</sup> If male agents are employed, sensitise them on the need to be conscious of female’s safety concerns.
- Consider introducing women-only training groups to assuage any potential concerns about undertaking training with male learners, including fears about looking less knowledgeable in front of male learners.
- Consider how to deliver the skills training in ways that are engaging for those who may have shame or reluctance to participate in training. For example, entertainment events can mask the core objectives of attending a skills training for those who fear being perceived as uneducated.
- Make some devices available for learners to trial their skills and to equip first-time mobile internet users with basic digital skills to use their new devices.
- Consider combining digital skills training with other initiatives that address other key barriers for the underserved (e.g. device financing schemes for those who don’t have a device).

<sup>13</sup> GSMA (2024) *The Mobile Gender Gap Report*.

<sup>14</sup> See GSMA (2023). *Driving mobile internet use in low- and middle-income countries*.

<sup>15</sup> This recommendation is in line with other research on the benefits that women agents bring to underserved customers. For instance, a CGAP report highlights that women agents are perceived as being more approachable and trustworthy, and that they generally yield higher customer satisfaction. See [https://www.cgap.org/sites/default/files/publications/WorkingPaper\\_Women%20Agents\\_Final.pdf](https://www.cgap.org/sites/default/files/publications/WorkingPaper_Women%20Agents_Final.pdf)



### Lesson 3

## Emphasise the incentives and potential outcomes of participating in digital skills training.

#### Insights:

A lack of awareness of the mobile internet is a major barrier to mobile internet adoption in LMICs.<sup>16</sup> Even when they are aware of the mobile internet, some underserved may not be fully aware of the potential benefits of digital skills training or how it is relevant to them, and so may be reluctant to attend without incentives.

#### Recommendations:

- Emphasise the value of the mobile internet to potential participants by focusing on the potential outcomes of participation and the mobile internet use cases that can add value to them. For example, feature trainee profiles in marketing materials, such as flyers or social posts, that highlight how the featured individual benefited. Highlighting female profiles and the mobile internet use cases that were most relevant to them, for instance, can help promote reach among women.
- Make potential trainees aware of any incentives (e.g. free mobile data, lunch, any available offers or other perks) that are available to reward participation at physical training events.

<sup>16</sup> GSMA (2023) [The State of Mobile Internet Connectivity 2023](#).





# Improving the effectiveness of digital skills training for the underserved

## Lesson 4

### Address the fundamentals for developing practical skills and using the mobile internet.

#### Insights:

Making the transition from beginner to competent mobile internet user is often not straightforward. Learners might need support on basic concepts and skills before going into the specific focus areas of the training. Such basic skills might include an understanding of how to download an app, loading or renewing mobile data, or conserving battery life on a smartphone etc. Although these competencies may not directly correspond to using a particular mobile application, they are the foundation upon which other digital skills are built and can affect the learner's overall mobile internet experience.

#### Recommendation:

- Don't assume that trainees have basic digital skills – ask questions to ascertain their digital skills level.
- Trainers should prioritise the fundamentals that trainees need to know, such as how to load mobile data and download apps, especially at the beginning of training. These fundamentals can also include familiarity with the features of their devices, e.g. how to conserve battery life.

## Lesson 5

# Consider how and where the training is delivered.

### Insights:

The evaluation in Sierra Leone highlighted several important considerations about the timing and structure of digital skills training activities.

First, structuring activities to accommodate large numbers of participants can be ineffective, especially for learners with lower education levels or limited pre-existing digital skills who may require more time to understand and fully digest the training content. Having very large training groups can make the process for one-to-one engagement with learners cumbersome, lengthy or difficult to manage.

Second, many trainees, especially women, may be worried that going for digital skills training will take their time away from 'more important things', such as work to raise money and home chores.

Third, deploying agents for training in market areas can be uncondusive to learning and considered inappropriate by learners, especially women. In this evaluation, some women were wary of allowing unknown males access to their device.

### Recommendations:

- Provide training to small or medium-sized groups of people with low levels of digital skills and confidence and need more support developing the required knowledge or skills, or who may have concerns about large group events. If a large training event is the only option, ensure that an adequate number of trainers are available who can speak to participants either one-to-one or in smaller groups to support them to acquire the necessary skills.
- Where costs permit, consider expanding one-to-one delivery or in-home approaches to provide tailored support to learners.
- Consider who might be excluded from the proposed delivery approach and take steps to ensure they are included. For instance, women may not feel comfortable with being trained in public outdoor locations since it may not be considered acceptable. While women can be reached in market areas, it could be helpful to arrange a follow-up for training them at a more convenient time and location.
- Ensure that the training meets the specific needs of the target population (e.g. using images and videos for those with lower levels of literacy and ensuring there is sufficient time to deliver the training to those with lower levels of digital skills and confidence).
- Understand what times and locations are best suited to offer training to different learners, including women who often have to manage both domestic and work responsibilities. Related to this, it is important that promotional efforts specify upfront key details of the digital skills training, such as the expected duration.
- Trainers should use their own devices to demonstrate, rather than handling learners' devices, to enhance trust and avoid any unintended discomfort.

## Lesson 6

# Consider practical ways to aid learning during and after training.

### Insights:

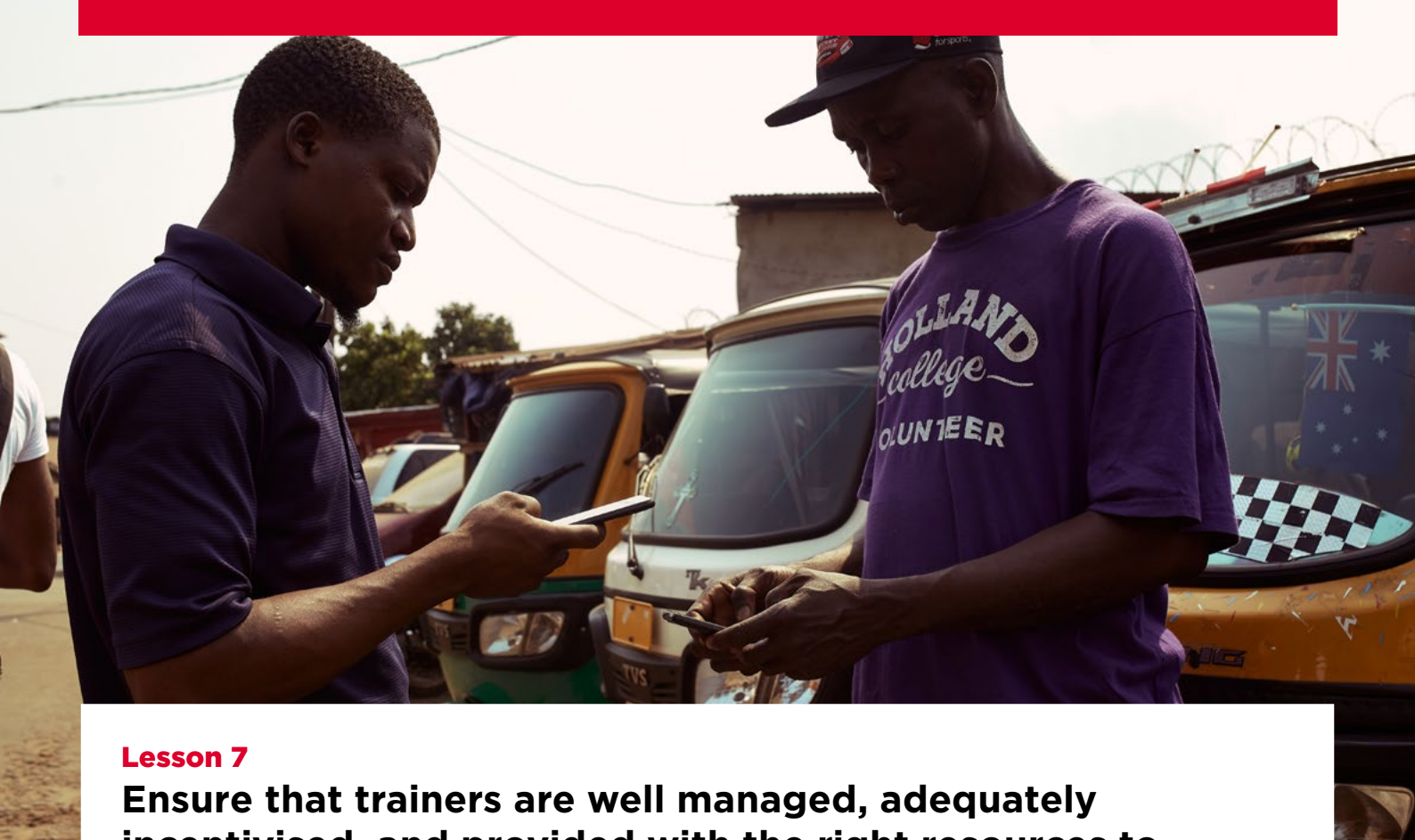
Ensuring that learners fully digest the training content is challenging and takes time, especially for those with lower levels of education, digital skills or confidence. Such learners typically benefit from things being repeated and demonstrated a few times.

### Recommendations:

- Ensure trainers are ready and encouraged to spend sufficient time with participants, especially first-time mobile internet users.
- Demonstrate to trainees how to apply specific skills or mobile internet use cases.
- Give participants opportunities to replicate and practice new skills themselves; make space for trial and error.
- Use visual resources or cues during training to make the training easier to follow and give participants a way to visualise what is being said.
- Introduce follow-ups with those who have been trained where necessary to allow learners to continue to build up their confidence.
- Provide handouts or video resources after in-person activities so learners can independently continue their learning journey after the initial training is complete.
- Consider running multi-day sessions if the planned training session is long or those being trained have low levels of digital skills or confidence and need additional support.







## Lesson 7

# Ensure that trainers are well managed, adequately incentivised, and provided with the right resources to enhance their effectiveness.

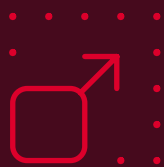
### Insights:

Agents' effectiveness in delivering digital skills training can be compromised if certain potential barriers are not adequately addressed. These barriers include a lack of appropriate or adequate incentives, unclear communication around approaches or guidance on how to address difficult questions, inadequate resources and a lack of effective monitoring.<sup>17</sup>

### Recommendations:

- Recognise trainers who provide quality training and match trainer incentives with the time and efforts spent to train customers.
- Provide the right resources or technology needed for trainers to do their job well, for example, by equipping them with sufficient mobile data and other tools they need.
- Provide a clear structure and directions to agents on how to tackle challenges that arise during the campaign.
- Monitor and regularly evaluate the training to identify what works or may need improvement, as well as how to address trainer challenges and improve performance.
- Provide opportunity for peer-to-peer learning, for example, through WhatsApp group chats, for trainers to share learnings with each other.

<sup>17</sup> Previous GSMA research documents some barriers to effectiveness of agent schemes. See, for instance, [GSMA \(2024\) A needs-based approach to mobile digital skills training: Learnings from India and Ghana](#). See also, Sterngold, C.L. (2023) [Insights from Orange Sierra Leone: Approaches for implementing a successful agent-based digital skills training programme](#).



# Improving the scalability and sustainability of digital skills training

## Lesson 8

### Use digital channels to complement in-person activities and expand the reach of training.

#### Insights:

Face-to-face training is effective for delivering tailored digital skills training to underserved populations. However, in-person training can be limited in reach and cost-intensive to deliver at scale due to logistics, such as travel for agents, accommodation and the need for community engagement.

#### Recommendations:

- Use digital channels as a complement, not an alternative, to in-person training, particularly for those with lower levels of digital skills. Digital channels are less interactive than in-person instruction, and more detailed learnings and skills can be harder to communicate. Nevertheless, they can be helpful when used as a complement for in-person training channels to overcome some of the cost and logistical challenges of face-to-face training.
- Use digital channels in a variety of ways. For example, embed videos on a zero-rated website and share the links to customers, or add trainees to WhatsApp groups for additional support and sharing of video training content. Also, consider using and sharing voice recordings and voice notes (e.g. across user WhatsApp groups), which can be helpful in expanding the reach of training or conveying instructions. However, in the absence of supporting visuals, voice recordings may be better for simpler, singular instructions.



## Lesson 9

# Leverage partner organisations' competencies and resources to promote legitimacy and expand the reach of training.

### Insights:

Digital skills training initiatives require extensive resources, networks and local know-how to effectively engage marginalised and hard-to-reach communities.

### Recommendations:

- Leverage existing competencies, know-how and customer insights to enhance the scale of digital skills training. For example, mobile operators can use their wide and extensive sales and distribution networks to deliver training across different communities, as well as employing existing customer insights to help identify who might be able to benefit from the training.
- Collaborate with local organisations who already have a local presence and are trusted by hard-to-reach groups. Such collaborations can also help boost end user perceptions of the training initiatives or enhance legitimacy through, for example, joint branded t-shirts and logos for agents.
- Seek partnerships which can offer relevant training materials and insights on best practices to maximise the chances of success.



# Appendix 1:

# Methodology

Qualitative interviews were conducted to evaluate the MISTT implementation by Orange Sierra Leone. The research aimed to understand the extent to which the training is effective in improving digital skills, its overall socio-economic impact and how to improve the effectiveness of training. It also considered the sustainability and scalability of the training. The interviews took place in-person (except one interview that was conducted over Zoom) by a local partner in March and April 2024.

## Sampling

Orange provided the evaluation team with a timetable of the activities planned so the team could attend sessions as they happened. The evaluation team met and interviewed trainees who were willing to participate in the research. The sample selection was restricted to participants between the ages of 18 and 60 years. Tables 1-5 below outline the sample selection by gender, locality, age and location.

## Demographics of qualitative research respondents

This evaluation canvassed the views of a total of 60 people, including 40 interviewees and four focus groups consisting of five participants each. The evaluation encompassed both urban and rural respondents, and was conducted in the local English-based Krio language, and across Freetown and Bo. The interviewees were selected after the training and the majority interviewed immediately after training. Trainees were also screened to identify who had observed any form of early impact from the training, and 10 of them were interviewed approximately six weeks after training to understand the kind of impact they were seeing.<sup>18</sup>

The 60 samples consisted of:

- **24x immediate interviews:** One-to-one in-person sessions with learners who had just undergone Orange MISTT training (conducted in the hours directly after their training).
- **4x untrained focus groups:** In-person group sessions with potential learners who had not undergone Orange MISTT training, but matched the profile of the target audience.
- **5x trainer interviews:** One-to-one in-person sessions with Orange agents responsible for Orange MISTT training.
- **10x impact interviews:** One-to-one sessions in late April (six weeks after training) with learners who had undergone Orange MISTT training in early March, and who had perceived an impact on their life from the training.
- **1x implementer interview:** Conducted with a member of the Orange Business Intelligence team.

<sup>18</sup> The purposive sampling of training participants who had experienced impact meant that the 10 impact interviews were not conducted to measure if there had been impact, but instead to understand what the impact had been.

**Table 1: Total**

	Total female		Total male	
	Rural	Urban	Rural	Urban
18-34 years	7	5	1	2
35-60 years	10	8	4	1

NB: Table excludes 1 implementer and 5 trainers whose ages are not specified.

**Table 2: Immediate**

	Urban	Rural
Male	2	3
Female	8	11
Total	10	14

**Table 3: Impact**

	Freetown		Bo	
	Urban	Rural	Urban	Rural
Male	0	1	1	0
Female	2	2	1	3
Total	2	3	2	3

**Table 4: Untrained**

	Freetown		Bo	
	Urban	Rural	Urban	Rural
Male	0	0	0	5 (in 1 focus group)
Female	5 (in 1 focus group)	5 (in 1 focus group)	5 (in 1 focus group)	0
Total	5	5	5	5

**Table 5: Trainer**

	Urban	Rural
Male	2	2
Female	0	1
Total	2	3

**GSMA Head Office**

1 Angel Lane  
London  
EC4R 3AB  
United Kingdom  
Tel: +44 (0)20 7356 0600

