A lack of mobile digital skills is one of the key barriers to mobile internet adoption across low- and middle-income countries (LMICs).1 To become active participants in the digital economy and reap the full socio-economic benefits of mobile, people need to not only understand the relevance of mobile internet in their own lives, but also have the necessary digital skills to seize the opportunities. To tackle the digital skills challenge, the GSMA developed the Mobile Internet Skills Training Toolkit (MISTT).2 Free to access, the toolkit provides basic training on how to use some of the most popular apps, how data consumption works, and how to control data costs and stay safe online. The GSMA is supporting the implementation of the MISTT in several countries, which has so far reached over 21 million mobile users with basic mobile digital skills training.

The toolkit has been used by many mobile network operators (MNOs) and organisations seeking to increase digital inclusion in their markets. After several deployments of the MISTT, a recurring theme has emerged: the challenge of scaling digital skills training in harder to reach communities. However, a promising solution for these underserved communities is transferring knowledge and skills from one person to another. Previous research suggests that some users who received mobile internet skills training shared what they learned with their family members or friends. Several users even encouraged their friends and family to visit a trained mobile agent to learn how to use mobile internet, thereby increasing the impact of the initial MISTT training.3

This case study explores how this skill sharing or multiplier effect occurs, using evidence from a mobile internet skills training pilot by MTN Uganda. We outline the key forces driving whether and under what conditions people share what they learn with others and provide recommendations for disseminating mobile digital skills more widely and increasing digital inclusion.

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2. The GSMA Mobile Internet Training Toolkit (MISTT). 
3. See, for example, GSMA. (2018). *Driving Digital Inclusion in Rwanda: Tigo Case Study*. 

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**What is a digital skills multiplier effect?**

A digital skills multiplier effect occurs when a person shares new knowledge or a skill with another person, thereby influencing and changing the other person’s knowledge or skill level. In this case study, “digital skills multiplier effect” refers to the changes in knowledge and skills of a person who has acquired them directly from a customer who received the MISTT training.

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**Key findings**

<table>
<thead>
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<th>Data impact:</th>
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<tr>
<td>3x increase in average data usage following mobile-related digital skills training.</td>
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<table>
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<tr>
<th>Digital skills multiplier effect:</th>
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<td>For every customer trained, 1.1 additional persons benefited from new mobile internet knowledge and skills.</td>
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<table>
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<tr>
<th>What is shared?</th>
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<tr>
<td>Knowledge and skills that are relevant to customers’ daily lives are shared most frequently, but there are barriers to effective learning and sharing.</td>
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<th>When does sharing occur?</th>
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<td>The feel-good factor can trigger a multiplier effect.</td>
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</table>
Piloting a mobile digital skills training programme to increase mobile internet use among urban customers

In Uganda, 70 per cent of the population live within the footprint of a mobile broadband network, but only 23 per cent used mobile internet services\(^4\) in 2019. Limited awareness and a lack of digital skills are substantial barriers for Ugandans to explore all the opportunities of mobile internet. To help address these barriers, MTN Uganda piloted a mobile-related digital skills training programme as part of MTN’s Data Smart programme.\(^5\) The pilot was conducted between April and December 2019 in Kampala, Uganda’s capital city, and aimed at increasing mobile internet use among customers living in an urban area. The training focused on teaching customers to use apps that are common in Uganda, as well as building general mobile phone skills.\(^6\) MTN sales agents and data ambassadors were trained to show customers how to perform new tasks and encourage them to try them out on their own handset. Customers received 100 MB of free data after completing the training and agents received a financial incentive for providing the training.

Research methodology

To learn more about how the skills learned during the MTN MISTT pilot were shared, we surveyed a random sample of customers who received the training and then conducted in-depth interviews. MTN transactional data was also analysed to assess the impact of the training on mobile internet adoption and use.

Profile of respondents

<table>
<thead>
<tr>
<th>GENDER</th>
<th>AGE</th>
<th>LOCATION</th>
<th>EDUCATION</th>
<th>LITERACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>59% male</td>
<td>80% between 18 and 34</td>
<td>73% urban or peri-urban</td>
<td>~10% primary</td>
<td>89% claimed to be able to read and write</td>
</tr>
<tr>
<td>41% female</td>
<td></td>
<td></td>
<td>40% secondary</td>
<td></td>
</tr>
<tr>
<td>50% higher</td>
<td></td>
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Based on a random sample of MTN customers who recalled receiving digital skills training between July and November 2019 (n=396)\(^7\)

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5. For more information on the MTN Data Smart programme, see \textit{MTN’s 2020 sustainability report}, p. 50.
6. The pilot used the GSMA Mobile Internet Skills Training Toolkit, training users on Facebook, WhatsApp, Google, YouTube, data costs and safety tips. MTN introduced in-house content, such as downloading apps, buying data via short code, and VPN versus OTT usage.
7. Note: Of the total of customers called, 2% remembered receiving the training. For the remaining 78% who did not recall receiving the training this could be because they forgot about the training received, or they perceived the word “training” to have connotations of formality, or it might be that some customers were incorrectly tagged as having received the training.
Finding 1: Mobile-related digital skills training boosts customers’ data usage

Analysis of MTN transactional data showed a significant increase in data usage among those who received in-person mobile internet training. It seems that customers began to apply their new knowledge and skills, as their average monthly data consumption increased from approximately 200 MB before the training to approximately 600 MB three months after the training (Figure 1).

Finding 2: For every customer trained, 1.1 additional persons benefited from new mobile internet knowledge and skills

For every customer trained during the pilot, an estimated 1.1 others benefited directly with some new knowledge and skills. This means that digital skills training of this kind has the potential to more than double its reach and achieve scale.

We asked customers who received the training how many people they had shared their skills with and used modelling to factor for over-claim. This provided a more conservative estimate of the digital skills multiplier effect.8 Most learners reported that they had showed several friends or family members how to perform new tasks using mobile internet. There was no evidence that some socio-demographic groups were more likely to share information than others. However, it is important to note that these results are not immediately generalisable to other settings as this sample was primarily urban and literate. Those who are less literate may not disseminate knowledge in the same way, and we do not know what the multiplier effect would be in rural areas. Further research is needed to assess the digital skills multiplier in rural and/or low-literacy contexts.

8. For more information on the modelling, please contact connectedsociety@gsma.com
Finding 3: Customers are more likely to share knowledge and skills that are relevant to their daily lives, but there are still barriers to effective learning and sharing

Customers tended to acquire and share the skills that were most compelling and of greatest interest to them, such as communicating with others for work or making social connections. The study found that the skills they shared most were how to use WhatsApp and Facebook, and that they primarily shared them with friends and family (Figure 2).

Figure 2
Trained customers mostly share tips about how to use WhatsApp and Facebook

<table>
<thead>
<tr>
<th>Platform</th>
<th>Share Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WhatsApp</td>
<td>74%</td>
</tr>
<tr>
<td>Facebook</td>
<td>70%</td>
</tr>
<tr>
<td>YouTube</td>
<td>41%</td>
</tr>
<tr>
<td>Google Search</td>
<td>35%</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>10%</td>
</tr>
</tbody>
</table>

Base: all customers who reported sharing information (n=162)

However, certain factors prevent or reduce the likelihood of sharing. Through our research we have identified four barriers to sharing knowledge and skills and increasing the digital skills multiplier effect:

1. **Knowledge retention:** Customer Information retention after the training was a key barrier to skills acquisition. Limited, if any, visual support materials were provided for customers to take away. This was a key barrier to sharing since customers can only share knowledge they have fully retained.

2. **Self-efficacy:** Customers were not certain they would be able to demonstrate to others how to perform a particular task or activity, especially when it was more complex.

3. **Social power dynamics:** Customers felt that sharing their skills with those who were outside their immediate social circle or those who were not “like them” may be seen as inappropriate. They felt that those in a higher social position or in a work situation may not appreciate being shown how to use mobile internet. Conversely, customers found it easier to share skills with people who were closer to them, such as partners, as well as family members of a similar age or co-workers of a similar level.

4. **Perceptions of affordability:** Customers felt that those they do not know as well, or friends and family in rural areas, may not have an internet-enabled handset or be able to afford mobile data packages.

Finding 4: The feel-good factor can trigger a multiplier effect

In this study, a digital skills multiplier effect occurred spontaneously and when sharing felt good. Those who received in-person training were motivated to share what they had learned with those in their close social networks they thought could benefit most from learning new skills. For example, sharing occurred when a customer felt it could help someone to save money on calls, improve communication or help with their business. Most sharing in the research sample happened spontaneously in response to the needs and curiosity of those in their social circle. Customers pointed to the feel-good aspect of sharing: peer recognition, a feeling of empowerment and joy and pride in being able to show others how to navigate the internet on a mobile.
Recommendations

This research demonstrates the potential of MISTT to create a digital skills training multiplier effect. While these findings were based on a training assessment of mobile customers who were primarily urban and literate, we have identified three recommendations for those implementing mobile-related digital skills training programmes to increase the digital skills multiplier effect:

1. **Focus the training on users’ life needs.** Encourage trainers to customise and adjust training “on the spot” to highlight scenarios in which apps could address a user’s life needs, such as entertainment, work and income or social connections. Identifying which needs are the most important for individual learners during training is crucial for maximising impact and making the training more memorable.

2. **Provide visual resources for learners to take away.** Visuals with clear steps can help trainees remember and practice what they have learned. This, in turn, can increase the multiplier effect since customers will have better retention and can share the visual resources with others. Providing resources in different formats can help trainees choose the format that works best for them, for example, print materials, a digital poster image or a video.

3. **Motivate trainees to share their newly acquired knowledge with others to maximise the multiplier effect and help scale the campaign.** Verbalising how to do something can improve retention. Explain to trainees that the knowledge and skills they have acquired are valuable and could also be useful to other people in their community.

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Meet Suzanne: a MISTT sharer, aged 26

Suzanne has two sisters, one she is very close to. She is a member of a church group and may tell them about WhatsApp in future if she’s sure they need it, for example, to start a church chat group. She would not share at all with older, rural family however, as it would be too hard to explain.

Suzanne’s social circle who she shares content with

- Sister
- Church group
- Sister
- Family in the village

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The views expressed do not necessarily reflect the UK or Swedish governments’ official policies.