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GSMA Connected Society

mobile industry and key stakeholders to improve network coverage, affordability, digital skills and locally relevant content, in pursuit of the wider adoption of the mobile internet.

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Executive Summary

Recent years have seen Rwandans come online at a rapid rate. 21.6% of Rwanda's 12.3 million population now subscribe to the mobile internet, a figure that has tripled in the last five years. This in part has been driven by ambitious investments from mobile operators and the Government, who want the country to become a regional ICT hub. A number of challenges remain: only 46% of connections are on a mobile broadband network (3G and 4G), with only 17.4% using a smartphone. Moreover, while Rwandans are enthusiastic about the opportunity that the internet represents, many lack the basic, functional digital skills needed to use the internet. Improving these skills will be key to realising the promise of 'Digital Rwanda'.

This report outlines the lessons from a project attempting to address this issue; the pilot deployment of the GSMA's Mobile Internet Skills Training Toolkit (MISTT) in Rwanda. For this project, The GSMA partnered with Tigo Rwanda (part of the Millicom Group) to test MISTT, a GSMA developed training methodology that aims to increase adoption and usage of the mobile internet. Tigo is a subsidiary of Millicom, a leading provider of mobile services dedicated to emerging markets in Latin America and Africa. Tigo launched in Rwanda in 2009 and is today, the second largest telecommunication company in Rwanda a 34% market share.2

Using MISTT, Tigo began training customers in basic internet skills across 11 of Rwanda's 30 Districts. The implementation of this first phase (covering the period June -September 2017) involved Tigo Sales School Staff, District Managing Supervisors and sales agents. Lessons from each level of this implementation are outlined within this

Key quantitative findings from the pilot were that MISTT training:

- Had a significant, positive impact on driving increased data usage among Tigo customers: 77% of MISTT trained customers increased their data usage in the period after their sales agents introduced the training.
- Appears to help sales agents to drive greater adoption of the mobile internet: following training, MISTT trained sales agents managed to increase the number of new data subscribers by 15% (compared to the average month pre training). The control group saw 0% growth in the same period.
- Led to increased data revenues for Tigo: The MISTT group significantly outperformed the 'control' group in terms of data revenue growth (15% versus 9%)
- Represents a cost effective way of increasing data usage and revenues. MISTT appears to cover the incremental cost per customer in the first month, with an ROI of 13% in a month and 240% in a quarter.

Key lessons from the qualitative evaluation conducted were that MISTT training:

- Is addressing the belief that 'the Internet is not for me' and giving customers the confidence to make it something that is relevant to their own lives. Customers felt the training is opening up their world and helping them feel more connected.
- Helps to demonstrate the value of having a smartphone and is driving smartphone purchases.
- Has a ripple effect, as customers are training other people on what they have learned.
- · Represents an opportunity to increase brand loyalty, by giving customers access to an ongoing point of
- Has the potential to help customers move beyond application 'islands'.
- The impact of the training is particularly high in rural locations, but this is where the challenges to implementation are largest.

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GSMA Intelligence Q4 2017

Background and Methodology

1.1 Background: the Mobile Internet Skills Training Toolkit

Despite huge increases in internet access in recent years, 47% of the world's population remain offline, the majority of whom are rural people in developing countries.³ The GSMA research has consistently shown that low levels of basic, functional digital literacy is one of the most important reasons why many remain offline.⁴

In order to address this barrier, the Connected Society programme developed the Mobile Internet Skills Training Toolkit (MISTT) in 2016. MISTT is a visual and easy to follow curriculum that helps trainers demonstrate the value and the functionality of the internet on smartphones. It was originally developed in Maharashtra State, India, through a user-centric design process in collaboration with Telenor India, Idea Cellular and Digital Empowerment Foundation (an Indian NGO). It was primarily developed in order to help operators increase mobile internet adoption

and revenues. However it was also intended for other organisations –e.g. Non-Governmental Organisations (NGOs), Development Organisations and Governments – interested in improving people's basic knowledge and understanding of the mobile internet.

The objective is through use of MISTT, organisations will be able to help people develop the basic skills needed to access and use the internet. MISTT is practical in nature and was originally built around three services: WhatsApp, YouTube and Google, as well as modules on safety and cost and a broader introduction to the internet. This was based on the original research conducted in India, which found these services were most relevant. The Toolkit is currently being expanded and this research was used to inform which services should be included.

1.2 Background: Pilot

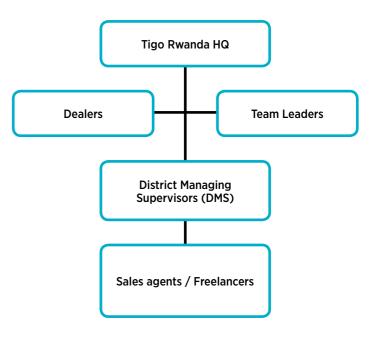
The GSMA partnered with Tigo Rwanda (part of Millicom) in order to improve digital literacy amongst Tigo's customer base. Tigo is the second largest operator in the country with growing 3G as well as 4G network coverage. To secure future growth they had identified a need to address consumers' lack of basic, functional digital skills,

which they felt was a major barrier to increased adoption of mobile internet services.

As a result, the GSMA was keen to test the validity of the MISTT methodology. A three month pilot deployment was agreed, with scope to expand to full national deployment depending on the results.

Figure 1

Tigo Sale Distribution Channel



The pilot involved Tigo's District Managing Supervisors (DMS) training the sales agents in techniques to teach Tigo customers basic, functional digital skills. The MISTT was used as the central resource, having been translated into Kinyarwandan by Tigo. The training included the following MISTT modules; Introduction to the mobile internet, WhatsApp, Google, YouTube, Safety and Cost, as well as two additional Tigo go-to-market modules: 'Tigo data bundles' and 'How to check your balance'.

Following an initial training of DMS in mid-May 2017

at the Tigo Training School in Kigali, DMS headed into their regions (representing 11 of Rwanda's 30 districts). Training took place in June 2017 and included an initial 302 sales agents in urban, periurban and areas. The sales agents involved in the pilot offered the training to customers with low levels of existing digital literacy. The objective of the training was to improve awareness, access and use of mobile internet services, ultimately increasing consumer data uptake within the pilot area.

3. Source: ITU. 20

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Society, Accelerating Digital Inclusion Report 2014 and Accelerating Digital Literacy: Empowering women to use the mobile internet; GSMA and Mozilla, Approaches to Local Content Creation: Realising the Smartphone Opportunity GSMA, Mobile internet usage challenges in Asia – awareness, literacy and local content (July 2015); GSMA Connected Women and Connected Society. Accelerating Digital Literacy: Empowering Women to use the mobile internet

In addition to MISTT, a clear and easily adaptable framework was developed at the same time (the 'How to Guide'). This can be used for designing and delivering training on basic
mobile internet skills, and can be replicated for various contexts in different parts of the world. This enables organisations to create a localised and customised toolkit relevant for
their audiences

Through the pilot, the GSMA and Tigo aimed to develop an understanding of the following:

- The process and impact of implementing mobile internet training programmes;
- User opinion of the training materials and sessions;
- Trainer perceptions of the go-to-market training model and training delivery;
- Commercial KPI's measuring usage and activations in areas receiving training (versus those not receiving training):
- Commercial viability of agent incentives and roll out costs and impact on mobile internet usage, adoption and revenues.

1.3 Evaluation Methodology

The evaluation of this project involved two distinct methodologies:

- Quantitative analysis of customer data relating to revenues and usage collected from Tigo Business Intelligence (BI) team over a 6 month period (April - September).
- 2. **Qualitative** evaluation of the pilot in the immediate aftermath of the training by 2CV (a consumer research agency contracted by the GSMA) between 29th of June and 6th of July.

Eiguro 1

Evaluation Timeline



1.3.1 Quantitative

The quantitative data used in the evaluation was drawn using two different approaches. In both cases data was extracted from Tigo Rwanda data warehouses by the local Business Intelligence team, aggregated and then analysed by Millicom Africa regional team and the GSMA in London.

Most of the data used in this evaluation was focussed on MISTT trained customers (83,711 over the course of the evaluation period), who were isolated through the use of distinct short codes and their unique MSISDN (phone number). Once the sales agent had used a distinct short code (in

order to claim the associated commission), an SMS was sent out to the customer in order to verify that the training had taken place.

The second method focused on activity relating to the 302 sales agents involved in the evaluation. Through a combination of both methods, the aspiration was to capture the most comprehensive picture possible. When discussing the study findings later in this report, the respective data source (customer level / sales agent level data) is referenced in a footnote.

Ten key performance indicators where selected to assess the impact of MISTT on various aspects of customer behaviour. These were:

- Data used (MB)
- Data revenue
- Non-data revenue
- ARPU
- ARPU (International only)
- On-net voice call minutes (i.e. Tigo to Tigo calls)
- Off-net voice call minutes (i.e. Tigo to other networks)
- International voice call minutes
- Number of SMS
- SMS Revenue

6 Background and Methodology Background and Methodology

In addition, commissioning payments to the above subset of sales agents were analysed in order to understand the Return on Investment (ROI).

The analysis was conducted over 6 months (April - September 2017). Training of DMS took place in the week of the 15th May at the Tigo training school, with the GSMA observers at selected sessions. Tigo expanded the training into 11 regions of Rwanda to deliver the training to the store owners in their jurisdiction across the rest of June. Analysis focused on comparing a two month pre-training period (April and May) compared with a three month post training period (July - September). The month of June was excluded from the analysis as his was the dedicated training period.

To ensure the impact analysis of the training was not disregarding other potential influencers in the pilot locations, the MISTT-trained group of users

were compared with two 'control' groups. This enabled control for the possibility that the multitude of other initiatives and market events were driving observed changes (e.g. regional or national pricing promotions, other training going on in the country at the same time).

These groups were:

- Regional Control: A random sample of non-MISTT trained customers in the same districts and of the same size as the MISTT trained group.
- National Control: A random national sample of non-MISTT trained users

Analysis focussed on differences between the MISTT and the regional control group, with the national control group used to monitor national trends (and further check to ensure robustness of the data).

1.3.2 Qualitative

The qualitative phase of the evaluation research was conducted across key districts where the pilot was taking place, covering urban, peri-urban and rural locations in Kigali-Kicukiro, Kigali-Gasabo, Musanze, Muhanga, Ruhango districts.6

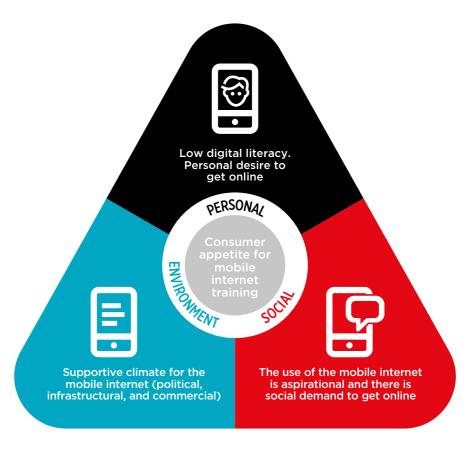
Research was conducted in between 29th of June - 6th of July 2017 with participants representing each stage of the implementation process:

- 1 focus group with District Managing Supervisors (DMS) from across the Kigali region
- 2 focus groups with sales agents held in Musanze and Ruhango
- 4 in depth interviews with sales agents (2 in Kigali and 1 in Musanze and Muhango)
- 6 community visits with customers who had taken up the MISTT training (Kigali, Musanze and Ruhango)
- In-store intercept interviews with Tigo customers at sales agent stores across locations

Digital skills: the opportunity

The qualitative phase of the pilot evaluation demonstrated that there is a clear appetite amongst consumers in Rwanda for mobile internet training, which is driven by a number of interrelated factors.

Digital Literacy Drivers in Rwanda



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^{6.} The research took place during w/c 3rd July 2017, 2-3 weeks after the MISTT training was rolled out to sales agents. The impact of the training as outlined in this study is based on this short-time frame and results should be considered in this context

2.1 Environmental drivers

Rwanda has decent internet network infrastructure in place that is conducive to mobile internet use, and a number of key players (including the Government, MNOs and NGOs) investing in initiatives to encourage the population to get online.

Large investment from MNOs in recent years means that 95% of the Rwandan population is now covered by a 3G network, one of the highest levels of network coverage in Africa. Rwanda has a rapidly growing mobile market, with 56% of Rwanda's 12.2 million population now subscribing to a mobile service. The number of people subscribing to mobile internet services is around half this, at 27%, however here the growth has also been impressive, having tripled in the last five years.

This is combined with a strong Government drive to encourage citizens online, with the stated ambition of becoming the "regional ICT hub".

In 2014, the Government transitioned all of its 'Government to business' and 'Government to citizen' services to the online platform 'Irembo'. Citizens must now go online for a myriad of key services including driver's license, marriage licence and National ID applications. More recently, the Government also announced a plan to partner with the Digital Opportunity Trust, in order to train 5,000 digital ambassadors. These ambassadors will provide training in ICT, internet and mobile applications for Rwandans around the country (with a stated aim of targeting 5,000,000 Rwandans). The project was launched in September 2017.

2.2 Social drivers

The use of mobile internet is aspirational and there is peer pressure to get online.

Customer, Female, Muhanga

Our research indicated that Rwandans are excited about the potential of the internet to improve their lives, particularly by enabling cheap communication and easy access to news and information.

WhatsApp is especially popular, given that it allows people to communicate cheaply (particularly abroad), send documents and pictures, and share news and information in groups. People also observe that internet users are more able to stay up-to-date through the numerous popular local news websites such as IGIHE. Not being able to use the internet can make people feel they are missing out.

Internet use is seen as modern and aspirational. Ownership of a smartphone is prized particularly highly and is perceived as a 'status symbol', even amongst those who lack awareness of a smartphone's internet capabilities. Today in Rwanda, particularly in urban areas, there is a social pressure to 'be online' and know how to use the internet. Many are embarrassed to admit (even amongst close family and friends) that they do not feel confident using mobile internet or that they lack basic knowledge.

The language of the Internet pervades everyday life. For example, cafés are named after WhatsApp and there are highly visible and numerous adverts for services such as Facebook. Many with low levels of digital literacy think that 'everyone is online' and that non-users are being left behind.

'Being online is important in Rwanda, it is what everyone is doing - you don't want to be left behind"

7 GSMA Q3 2017

GSMA, Q3 2017
 GSMA Intelligence O3 201

GSMA Intelligence, Q3 2017
 Government of Rwanda SMART Rwanda Master Plan (2015- 2020)

2.3 Personal drivers

There are strong environmental and social drivers in Rwanda that create a strong desire to own a smartphone and to use the internet. However, there are many people with low levels of digital literacy and a shallow understanding of what the internet is.

Key issues here are:

- Some people acquire a smartphones for status, without understanding its internet capabilities. Some smartphone owners lack any awareness of their device's internet capability. Others are buying a smartphone for one or two apps (primarily WhatsApp) without being aware these are internet services or that other apps are available.
- Many need support with installing apps and setting up accounts. People are often unaware of how to install apps and services on their phone, or lack an email account to access the app store. For this reason, many rely on mobile agents, or 'DJ's' (street vendors selling a range of services) to set up their phone, email or social media accounts and to install or update apps and services. A 'DJ's' services cost approximately 500 RWF (50p GBP) per app installed. Mobile agents and 'DJ's' often install apps by transferring them via Bluetooth,
- or a flash disk, as this means they can avoid accessing the app store, which requires an email account. Avoiding the data costs associate with downloading apps is a lesser issue for people compared to the knowledge of a 'how to download' and working around using email. Transferring data in this way presents a clear risk for customers, in terms of viruses and the theft of personal data.
- Some are stuck on application 'islands'.

 Some mobile internet users lack digital skills, confidence or awareness of the potential use outside of a few specific apps. Many are stuck on 'application islands', primarily using only WhatsApp or Facebook, without being aware of the broader potential of the internet. Others are unaware that the same services that can be on a desktop computer (e.g. in a cyber café) are also accessible on a smartphone.

"I thought you could only go to the cybercafé for internet, I didn't know you could get it on a smartphone"

Customer, Male, Musanze

2.4 The opportunity for Mobile Network Operators (MNOs)

The strong environmental and social drivers towards mobile internet use combined with low levels of digital literacy amongst many Rwandan has created demand for mobile internet training and a clear opportunity for MNOs in the country.

MNOs are well positioned to deliver mobile internet training to customers, given:

- Their extensive distribution channels and regular in-person contact with customers via mobile agents and sales agents
- Customers often trust their mobile agents and sales agents and view them as local experts in digital technology
- Their distribution channels commercial interest in increasing data usage and smart phone uptake
- Their capacity to deliver training without direct cost to customers, due to the commercial benefit of data uplift

Tigo is particularly well suited to deliver mobile internet training in Rwanda. Customers perceive Tigo as a good value, reliable and innovative mobile operator, with a competitive low-cost data offer, though 3G/4G coverage was noted as being limited in some areas.

Additionally, prior to the pilot some of Tigo's sales agents were already informally showing customers how to use mobile internet to meet some of their specific needs. Consequently, the MISTT training appears well placed to reinforce and encourage this informal training, providing a more structured approach.

"There is no-one offering free training for mobile internet that I know of at the moment apart from Tigo, it is much better than paying the DJ's"

Male customer, Kigali

12 Digital skills: the opportunity

Digital skills: the opportunity



Implementation

3.1 Implementation of the MISTT by Tigo in Rwanda:

Figure 4

Actors involved in disseminating the MISTT training:



Tigo Sales School staff

Trainers that train sales agents on how to deliver Tigo products and services to other sales agents and customers



District Managing Supervisors (DMS)

Sales agents that oversee and are responsible for disseminating Tigo products, services, campaigns and training to storeowners who work as Tigo sales agents



Sales agents

Independent store owners commissioned by Tigo as sale agents, selling Tigo products (e.g. data) and services (e.g. mobile money) to customers as well as other consumer goods (non telecoms related)



Tigo customers

People purchasing Tigo products and services. The end users of the MISTT training







Centralised training workshop at the Tigo Sales School

In May 2017, the Tigo Sales School ran a training workshop with DMS from across the pilot regions to disseminate the MISTT training. For the workshop, Tigo Sales School developed a PowerPoint outlining the MISTT 'Bitesize' training modules and translated these modules into Kinyarwandan.

Two additional modules were also added to the workshop, which covered 'Tigo data packages' and 'How to check your data balance'. These modules were created in video format and shared in the workshop.

During the workshop, the Tigo Sales School trainer used the printed aids and a mobile device to demonstrate aspects of the training, using methods involving explanation, discussion, demonstration,

and Q&A. Much of the interaction was done verbally in Kinyarwanda with reference to the materials available.

The training was carried out in a fit for purpose training room, with a video screen, and followed a train-the-trainer type structure designed to enable the DMS to pass on knowledge of the training to the sales agents under their supervision.

The full MISTT document (including 'Bitesize' and In Depth modules) was also translated into Kinyarwanda by Tigo and certain parts of the document (e.g. currency) were localised.

This document was shared with DMS in digital format through WhatsApp, to use when training sales agents in the field.

Figure 5

Successes and Challenges at Tigo Sales School

SUCCESSES



The DMS appreciated the training workshop as they felt Tigo were investing in them as employees and supporting their development as 'experts'. The format of the workshop appealed to DMS, they liked the group setting and felt the PowerPoint delivery was engaging and clear.

CHALLENGES



DMS felt that as it was a one-off training workshop on the MISTT, there was not the opportunity to solidify their knowledge or clarify their role in training sales agents on MISTT.

10. All the DMS involved in the pilot were young men, which is reflective of the general profile of DMS in Rwanda











District Managing Supervisors deliver training to sales agents

Description of Training

Following the training at the Tigo Sales School, the DMS visited the sales agents under their respective supervision to deliver the MISTT training to them. The sales agents tend to be trained by DMS at their place of work; over the counter, in between serving customers. The training delivered by DMS varied widely across our sample:

- Length of training session: The length of time that the DMS spent training each sales agent appeared to vary according to the sales agent's appetite for training, their level of existing knowledge of the internet, and their availability
- Number of visits to the sales agent: The number of times that the DMS visited each sales agent to conduct the training also varied, although it appeared most frequently to be once in the two-week period after the DMS were trained
- Content: This also appeared to vary according to the sales agent's appetite for training, their current digital literacy, and their availability

Consequently, in some cases, DMS were visiting the same sales agent several times over a threeday period, conducting approximately 30 minute training sessions each time, which covered new areas of the MISTT, or recapping on what had been covered previously. In other cases, DMS were conducting one training session with a sales agent, which could last between 10 minutes and two hours, depending on the sales agents appetite for training and availability. Many DMS were using a digital copy of the MISTT manual as a personal reference material when training the sales agents; they opened the document on their phone screen and followed it as they were speaking to the sales agent. However, they were not communicating to sales agents that the MISTT could be used as a stepby-step guide to train customers, or explaining the steps or structure of each training module.

Figure 6

Successes and Challenges for DMS

SUCCESSES



Some DMS welcomed their role as MISTT trainers both because they enjoy conducting training, and the MISTT positions them as experts.

Some DMS perceive the longer term commercial benefit of training sales agents with the MISTT. They feel the MISTT training may support them to increase sales, including data uplift and SIM registration across their region in the long term, often through a single training session.

CHALLENGES



Ensuring consistent delivery of MISTT training by DMS is a significant challenge, given that DMS have a number of other trainings on other Tigo products to deliver to sales agents.

Transport cost. Some DMS observed that transport costs are high and they are not paid for additional visits to the sales agents under their supervision (meaning they visit less frequently).

DMS felt that a lack of direct incentive/commission structure for rolling out the MISTT to sales agents was an issue.

Low levels of digital literacy amongst sales agents are a significant challenge. DMS are often using the MISTT to train sales agents on how to use the internet, rather than training sales agents on how to train customers about the internet. Moreover, in some cases, sales agents are illiterate, which makes training them to use written modules very challenging. DMS emphasise the importance of using visual aids, such as the step-by-step MISTT posters with these sales agents. While the MISTT contains these resources, they were often not used.











Sales agents deliver training at their point of sale

Description of Training

After receiving the MISTT training from DMS, the sales agents deliver training to customers, often over the counter in their place of work, in between serving other customers. Sales agent storeowners have a diverse range of establishments (research included: mobile phone shop owners, bar owners, stationary storeowners and hardware store owners). sales agents' enthusiasm for offering training varied, as some were actively offering training, whilst others were simply providing training if customers asked them for support. The training delivered by sales agents also varied widely across our sample:

- Length of training session: The amount of time that sales agents spent training each customer varied according to the customer's appetite for training, their existing knowledge of the internet, and their availability. Sessions lasted between 10 minutes and four hours. Longer sessions appeared to be broken up by the sales agent serving other customers
- Frequency of training: The number of times that the sales agent trained each customer also varied, as some customers came back multiple times to learn new information or recap on previous lessons
- Content: Content covered in each session varied according to the customer's current digital literacy and interests

Some sales agents had the digital copy of the MISTT document on their phone, which they used to remind themselves about the internet. However, the majority appeared to be training customers by memory of what they knew about the internet. DMS had largely taught them to use the MISTT as a reminder of how to use the internet, rather than as a step-by-step guide for training customers. After

training customers, sales agents often followed up with them 2-3 days later on WhatsApp, to check they were practising what they had learned and to encourage them to message the sales agent with any questions, sales agents often trained their more regular customers first, and friends and family who were interested, before expanding to new customers.

he returned several times in quick succession to

She was particularly excited to receive this

training because she feels this knowledge is

needed in community. In this rural area, she

feels many people do not know how to use the

mobile internet and they can feel disconnected from wider society as a result. She thinks there

is a problem of young people being unable to

find jobs and thinks that mobile internet can

Claudette already had some knowledge of

the mobile internet from using WhatsApp

and Facebook on her smartphone. She knew

help her solidify her knowledge.

help solve this problem.





websites such as umuriro.com, nshyashya.com and igihe.com.

Claudette has seen clear benefits to the training, as she is becoming even more well-known and trusted in the community. She has a new nickname, 'the modern old lady', and she has seen her customer base increase as those she has trained tell their friends to visit her shop.

She would love to see Tigo start marketing the training as she feels it is so beneficial to customers and to agents like herself and would like more people to have it.

If there are language barriers, it is important to work with a bilingual facilitator, or have a translator present.

There were fewer female than male sales agents included in the pilot, and the women who were included tended to be amongst those with lower digital literacy levels. However these women expressed the same appetite as men to learn, and were training similar numbers of customers once they had received the training from DMS.

Anecdotally, it appeared that there were more male customers being trained during the pilot than females. This may well be down to greater levels of smart phone ownership amongst males than females. However, the female sales agents were particularly good at encouraging female customers to be trained and where training had taken place this was very positively received by the female customers.

Figure 7

Successes and Challenge for sales agents

SUCCESSES



The majority of sales agents saw a clear commercial benefit to training customers. Most sales agents felt that offering training to customers helped them to strengthen their customer relationships and become a focal point in the community for mobile internet related activities and services. This was especially true for sales agents who were selling products related to technology but also included those selling other products including stationary and financial services.

For sales agents with low levels of digital literacy, the MISTT training provided a clear personal benefit, as it boosted their internet knowledge and awareness. These sales agents were excited about receiving the training, partly because Tigo was investing in them, with examples of how this was helping.

For sales agents with higher levels of digital literacy, the MISTT training boosted their confidence, as they felt more certain about their internet knowledge and what they should train customers on. Some also felt they were able to train customers faster, and serve multiple customers at the same time, therefore increasing their productivity and efficiency.

CHALLENGES



Some sales agents felt the opportunity cost of offering training was high. Despite the commercial benefit perceived by most sales agents, others felt the benefits of offering training were outweighed by the potential loss of a sale from another customer. This was particularly true of sales agents who sell other products in their shops unrelated to mobile phones or the internet (e.g. those running a busy bar while also being a sales agent).

Sales agents needed clarification on the commercial incentive that Tigo is offering. Most sales agents were aware that a commercial incentive is offered for registering customer SIMs and providing MISTT training. However, some needed clarity on the mechanics of the commission structure. The need to deliver training to customers was a new requirement for most sales agents.

Ensuring consistent delivery of internet training to customers is a challenge, as the MISTT was often not being used as a step-by-step guide and instead was conveyed in a fragmented way.

sales agents feel they are lacking visual aids to support internet training. Sales agents observe that customers often come back to them to recap on how particular internet services work, and that because they are busy it can be difficult to support them at the same time as serve other customers. Other customers are illiterate and would benefit from visual resources.

Sales agents feel they are lacking marketing materials to support internet **training.** Sales agents observe that they are currently advertising the training through word of mouth only, and that it would be more effective if they could put up posters, signage or have uniforms communicating 'we offer mobile internet training here'. Some also suggested radio adverts would be highly effective.

Some sales agents continue to lack confidence in their own digital literacy and want additional training from DMS.











Customers' reception to and perception of the training

Description of Training

Customers generally receive internet training from sales agents 'over the counter' in the sales agent's place of work, in between the sales agent serving other customers. These trainee customers come to the sales agents for a variety of reasons; in some cases, they have come to purchase other products and have been offered training by the sales agent and in other cases, they have come specifically to ask the sales agent for help with their phone and asked for training. The training received by customers varied widely across our sample:

- Length of training session: The amount of time each customer had spent being trained varied according to the customer's appetite for training, their existing knowledge of the internet, and their availability. Sessions lasted between 10 minutes and four hours. Longer sessions appeared to be broken up by the sales agent serving other customers
- Frequency of training: The number of times the customer had visited the sales agent for training also varied, as some customers came back multiple times to learn new information or recap on previous lessons
- Content: Content covered in each session varied according to the customer's current digital literacy and interests

After training, customers were frequently still in contact with their trainer, as the sales agent had often followed up with them 2-3 days later on WhatsApp, and the customer was still practising what they had learned and sharing information with the sales agent on a range of subjects, for example

job opportunities they had heard of in the area. This was particularly the case where there was already an existing relationship with the sales agent, for example, where they were regular customers or friends and family.



Case Study: Flora, customer of Claudette (sales agent) Ruhango

Flora is 24 years old and unemployed, she is a regular customer of Claudette's store (P.21) and a Tigo customer who owns a smart phone. Although Flora has a smartphone, prior to the training she did not feel confident using it. She had used Facebook a little bit but felt that the mobile internet was something that was more for rich people in urban areas.

Claudette called Flora to let her know that she was offering training on the mobile internet. She invited Flora to come to her shop and trained her individually one module at a time, showing her how to download the app and how to use it, step-by-step on her phone.

She taught each module for around 15 minutes over a period of a couple of weeks, so as not to overwhelm her.

Claudette advised Flora to practise what she had learnt and also followed up with a phone call to see how she was doing. She also encouraged her to share what she had learnt with other customers and to explore the internet further and then let her know what

she had learnt, in order to create an effective learning feedback loop.

Flora has been trained on WhatsApp, YouTube, internet safety (blocking people on WhatsApp) and using Opera mini to access job websites. She feels confident using these services now and feels like the internet is something someone like her can use. She has started to use the mobile internet to support her in the following areas:

- She has discovered cooking videos on YouTube and started following this to make food for her family.
- She has taught her younger sister how to use WhatsApp, something her sister appreciated.
- She is looking at jobs online and though she has not got a job yet she feels more hopeful that there are opportunities out there.
- She feels more in the loop with current Rwandan news and feels she can ignore rumours more easily as she can get accurate information from the internet, through news sites.

Customers who received training from sales agents included a mix of men and women, although female sales agents appeared to have more female customers than male sales agents. Equally, we observed customers from approximately 18-50 years old attending training, although it appeared to be particularly popular among younger customers and specifically men.

Eiguro

Successes and Challenges for Tigo Customers

SUCCESSES



Customers highly value the opportunity to receive internet training from a sales agent. Customers with low digital literacy levels often appeared to feel huge pressure to know how to use the internet and experienced shame in not doing so, particularly in the urban areas. There was a feeling that 'everyone else was doing it', including their friends. Learning from a sales agent was popular and something that customers returned to time and time again.

Customers are delighted with what is covered in the training. Customers often feel peer pressure to know WhatsApp, so they often come to sales agents to learn about this service, and appreciate that sales agents can train them on what it can be used for. Customers tend to have much lower awareness of YouTube or Google, but following training it is often these platforms that customers are most excited about being able to use. YouTube is appreciated particularly for news, music videos and entertainment, and Google is also highly valued for providing news, confirming or denying public rumours and providing information that customers feel they should know (e.g. on the President and his life). The Safety and Security module when taught is also seen as very useful.

Some customers are associating Tigo with internet and feel that the training shows they care for their customers. Tigo is already associated with offering cheap internet deals and providing extensive coverage, so some customers feel it makes sense that they are offering internet training also. When asked directly, customers explained that offering this free training suggests that Tigo care about their customers and want to support them.

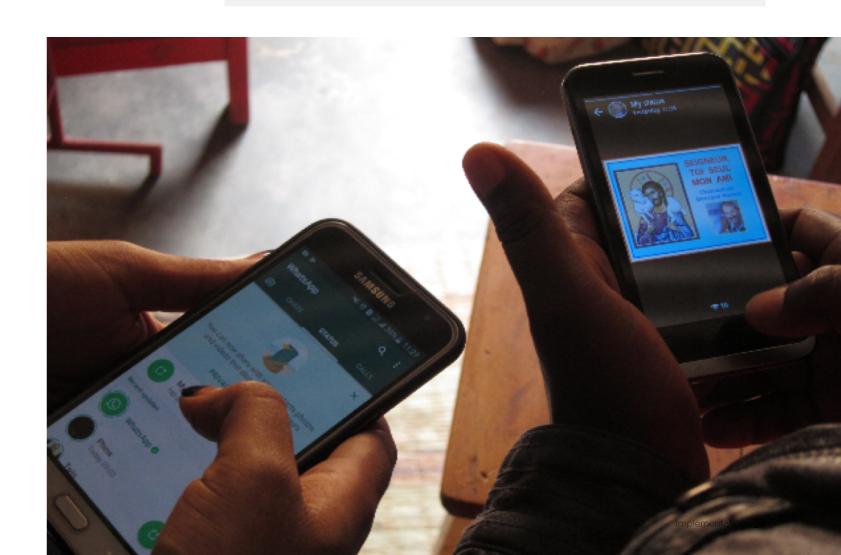
CHALLENGES



Some customers lack a bigger picture of what the internet is and are stuck on 'application islands'. Sales agents often skip the 'Introduction to the internet' module, meaning some customers lack the bigger picture of what the internet is and get stuck on 'application islands'.

Customers express a desire for ongoing training from sales agents on a wide range of platforms and functions. Customers often return to the sales agents to learn more about the internet after the basic training. There are a number of platforms and functions they want to learn more about including: Instagram, Emo, Viber, Facebook, Twitter, Wikipedia, Skype; setting up a Facebook account and setting up a profile picture; setting up and using an email account, particularly Gmail and Yahoo; downloading apps from the app store, and content from platforms including YouTube; and search techniques on Google and YouTube; bookmarking news sites on Opera Mini.

Customers also express a desire for support with the Government portal, 'Irembo'. While people value the services on the portal (e.g. getting a driver's license or National ID), many people struggle to use it, and therefore look for support from 'experts', for example in cybercafés. Sales agents could provide support in this area and one sales agent in the study had become known in his area as an expert



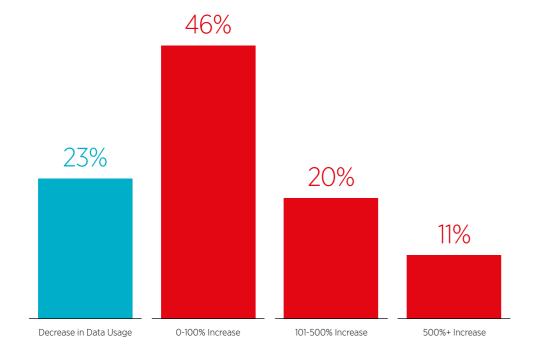
Lessons and Impact

4.1 Quantitative Findings

MISTT had a significant, positive impact on driving increased data usage among Tigo customers. Data usage among the vast majority (77%) of MISTT trained customers grew in the period after their sales agents introduced training. In around a third of cases (31%) this growth was particularly pronounced, growing between 100-500%.

Figure 9

Data usage: % of MISTT-trained customers who decreased / increased their usage (pre versus post training)



In aggregate, data usage amongst the MISTT-trained sample was on average 44% higher in the months following MISTT training in June. Crucially, growth in data usage was higher in the MISTT group than the regional control group (44% vs 32%) indicating that the training had a significant impact on data usage.¹¹

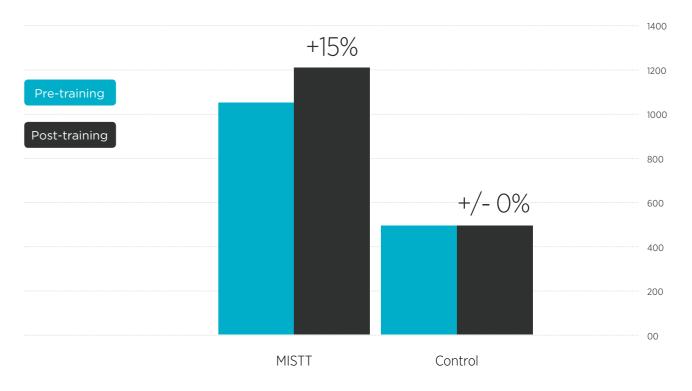
MISTT training appear to help sales agents to drive greater adoption of the mobile internet.

In the months following training, MISTT trained sales agents managed to increase the number of new data subscribers by 15% (compared to the pre training period). As figure 9 demonstrates (below) the sales agent control group saw no growth in data subscriptions in the same period. 12

Figure 10

Gross Data Subscriber Additions - MISTT-trained customers versus Control Group (pre versus post training)

Monthly Additions (average)



Lessons and Impact 29 28 Lessons and Impact

^{11 &#}x27;Customer' Data

^{12. &#}x27;Sales agent' Data

GSMA

There is good evidence that MISTT training leads to increased data revenues for operators. In the evaluation, the MISTT-trained group of customers significantly outperformed the 'control' group in terms of data revenue growth (15% versus 9% for the control). Moreover, the MISTT-trained group saw a 7% increase in the post training period.¹³

While driving increased data usage, MISTT training does appear to lead to decreased usage of traditional services (i.e. voice and SMS). During the evaluation, growth in on-network minutes was significantly lower in the MISTT-trained group than in the control group (9% versus 24%), with SMS usage declining in the MISTT-trained group (by 4%, compared with an 8% rise in the control group).¹⁴

Finally, MISTT training provides a ROI within a couple of months and appear to represent a cost effective way of increasing data usage and revenues. The GSMA met the initial costs associated with the pilot through funding the development of the MISTT resources in 2016. Beyond this, Tigo Rwanda incurred the cost of training DMS and the commission payments made to sales agents.

This cost is quickly offset by the positive impact on data revenues, an average of 0.09 USD data ARPU uplift (478 RWF average monthly revenue pre-training, 549 RWF post). The control group also saw an increase in data revenues, albeit of a far smaller magnitude (9% in the control versus 15% in the MISTT). However, the 60% difference between the two groups is over double the difference in commission paid out.¹⁵

This suggests that the results of MISTT training would cover the incremental cost per customer in the first month, with a 13% ROI in month 1 alone. Over a quarter there is an impressive 240% ROI on the additional investment required for to deliver MISTT training. Moreover, given that there is an indication that MISTT training also increases the number of new data customers (see above) the actual ROI may end up being higher.

4.2 Qualitative findings

MISTT training is addressing belief barriers that 'the internet is not for me' and gives customers confidence to make the internet relevant to their own lives. Before the training, some customers had very low awareness of what the internet was, and assumed it was not relevant to them. These customers often lacked confidence when it came to the internet. MISTT training is helping increase these customers awareness, understanding and confidence using the internet.

Training helps demonstrate the value of having a smart phone and is driving smartphone purchases. Some customers initially purchase a smart phone to enhance their social status and are unaware of its internet capabilities. For these customers the training demonstrates what more they can do with their phone. Some customers attend the training and purchase a smart phone once they realise the value of being able to access mobile internet.

MISTT training has a ripple effect, as some customers are training other people on what they have learnt. Sales agents and customers highlight that it is important to share what you know with others around you, particularly if it is useful and positive. They note that this builds trust in relationships and is the 'right' thing to do. Consequently, following the training some customers are training their friends and family on how to use the internet and sending them to the sales agents to learn more, thus multiplying the impact of the initial MISTT sales agent training. As a result, by training sales agents could represent an opportunity to increase brand loyalty, by giving customers access to an ongoing point of trust.

The training has the potential to help customers move beyond application 'islands'. At present, many Tigo customers are only using one application or service, and lack the confidence to explore further. Particularly when the training included the 'introduction to the internet' module, it allowed them to see the potential of the internet, leading to greater confidence and motivation to go further in their use.

Tigo Customers feel the training is opening up their world and helping them feel more connected. Customers feel it is very important to know what is happening in their local area, the country and in the world. Internet platforms that can support this –such as the ones included in MISTT –are highly valued. Being able to access this information allows customers to feel up to date and connected to the wider world.

The impact of the training is particularly high in rural locations, but there are also challenges to implementation. In rural locations, customers spoke of feeling particularly isolated – unable to access news, apply for jobs etc. and noted how training and use of the mobile internet has very much opened up their world and affected their lives. Given that digital literacy is particularly low in rural areas, training has a greater impact here than in urban areas.

30 Lessons and Impact

^{13. &#}x27;Customer' Data

^{14. &#}x27;Customer' Dat

^{15. 23%} difference, 0.13 USD per customer for the control versus 0.16 USD for the MISTT group

should be explored.

5

Recommendations

Given the significant impact on data usage and data revenue that the MISTT training demonstrated in the pilot period, along with the positive ROI, there is clear potential to take the project to scale. The positive findings from this initial analysis suggest that if scaled up, the impact on data usage, revenues and adoption of the mobile interne could be significant. Lessons were learnt in the pilot across several key areas. The positive impact demonstrated in the pilot would be magnified if the following recommendations are followed:

5.1 MISTT training delivery: Modifications and additions

- i. Offer additional and more advanced training modules to customers. Many customers have a huge appetite for learning about the internet, and once they start learning with a sales agent they often develop a relationship where they want to continue returning to the sales agent to learn more (e.g. Facebook, Wikipedia and Instagram). GSMA are currently working with these companies to develop these modules.
- ii. Alternative distribution models for MISTT content should be explored.

This pilot explored the impact of face to face training using MISTT resources. Other approaches should be considered as the project scales, including sending out links to MISTT content via SMS or MMS or creating video or app versions of the content.

- iii. Reduce the digital copy of the MISTT to include only the 'Bitesize' training. Currently the entire training document is shared with DMS. Including only the 'Bitesize' training resources will make it more usable.
- iv. Consider distributing a 'hardcopy' version of MISTT training resources. DMS observe that having a hardcopy of the training would be useful when training sales agents.

5.2 Sales agent and DMS focussed recommendations

- i. Tigo could make use of sales agent usage data to understand whether they would benefit from MISTT training. For example, understanding if the sales agent is a regular data user or owns a smartphone helps build a picture of their mobile internet understanding. Equally, their SMS usage could act as a proxy for whether they are literate.
- ii. Tigo could also use the commission and usage data to find 'super' sales agents who are driving more data usage and activations among customers. Our evaluation shows that some sales agents are operating at a particularly high standard. Tigo could use the data at their disposal to find top performing sales agents and seek to understand (e.g. through telephone interviews or DMS follow up) their success.
- iii. Provide ongoing training to sales agents.

 Given that some sales agents have low levels of digital literacy, putting a continuous training programme in place will help increase their own digital literacy and confidence levels, allowing them to make better use of MISTT resources and to support their own customers better. This could either come from periodic training from DMS, or through digital channels (e.g. a training app or video tutorials)

- iv. Upskill sales agents as Irembo experts.

 Customers want support using the Rwandan
 Government's Irembo site. However, given the
 wide range of functions on the site, module
 development would need to be carefully
 considered. Increasing the existing partnership
 between Tigo Rwanda and Digital Opportunity
 Trust (who are responsible for implementing the
- Ensure that DMS emphasise the 'Introduction to the Internet' module in the 'Bitesize' training with sales agents in order to ensure that customers can move beyond application 'islands' (e.g. only using WhatsApp or Facebook)

Government's Digital Ambassador programme)

Recommendations 33

5.3 Incentives

- i. Target smartphone deals and internet bundles to MISTT trainees. Many of the customers visiting sales agents for training have just purchased a smartphone, or are considering purchasing one once they have received the training. Targeted offers could sway these customers towards particular products and services.
- ii. Include MISTT training within DMS KPIs or business objectives. Some DMS do not feel incentivised to deliver the training and often deprioritise it. Clearly outlining the benefits of conducting the training with sales agents and including it within KPIs will help.
- iii. Ensure that sales agents are clear about the commission structure on offer and highlight the broader commercial benefits of offering training. While some sales agents already see the commercial benefit of offering MISTT training (e.g. due to increased product sales), for others it remains unclear. A number of sales agents would appreciate further clarification on the commission structure.

5.4 Marketing and visual resources

- i. Consider distribution of visual aids (e.g. posters) to support customer training. Sales agents feel that visual aids such as the MISTT step-by-step posters and flyers would help them to recap what they teach customers and would assist with illiterate customers.
- Provide marketing materials. Sales agents feel marketing materials (e.g. posters communicating 'mobile internet training here') flyers, uniforms, signage, or even radio and road shows would be valuable in creating public

awareness. Currently sales agents are creating awareness through word of mouth, and they feel that marketing would increase the MISTT training's reach and impact.

5.5 Pricing

i. Continue to focus on pricing strategies that alleviate the possible cannibalisation of voice and SMS revenues as understanding of data increases. The pilot showed that MISTT related training could lead to a decrease in usage of voice and SMS services, due to the introduction of VOIP and IM applications on smartphones. As a result, Tigo could consider pricing strategies and customer offering that mitigate this risk.

5.6 Operational implementation

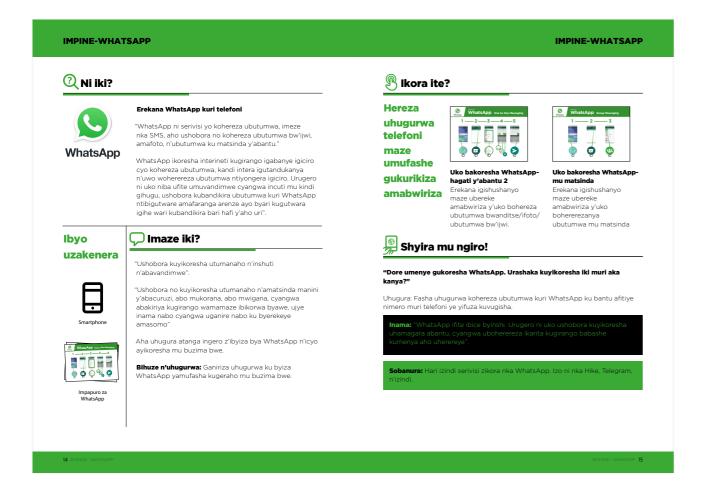
- i. A need for clear project ownership in a single department. During the pilot this project was moved around a number of different departments within Tigo (becoming a 'hot potato' project). Tigo Go To Market team would be best placed to implement the next stage of a national roll out
- ii. A dedicated single point of contact (SPOC) is required across all key departments.
 Similarly, attendance, engagement and preparation from key departments was insufficient during the pilot period. Assigning a SPOC for each department should alleviate this.
- iii. Ensure that local staff assigned to the project have the project assigned in their personal KPIs.
- iv. Desirability of real time analysis of activation data and performance. During the pilot there were major delays in extracting key KPI data to share with GSMA. Future roll out should aim for more regular analysis of data and project performance (i.e. bimonthly or monthly) to ensure that relevant trends or issues can be quickly addressed.

34 Recommendations

Appendix

Appendix 1:

Sample MISST Material: WhatsApp 'Bitesize' Module



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