Tanzania Mobile Money Tracking Study

Quarter 1 Report (September – November 2011)





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Attribution and Acknowledgements

This study was carried out with funding from the Bill & Melinda Gates Foundation. All survey materials and data resulting from this study are the property of the Bill & Melinda Gates Foundation.

The research was carried out in Tanzania by InterMedia Survey Institute with Synovate and Ricochet Research, in conformity with the standards of the ICC/ESOMAR International Code on Market and Social Research (http://www.esomar.org/index.php/codes-guidelines.html).

Special thanks to Agatha Marie from Financial Sector Deepening Trust (FSDT) Tanzania for technical support of this research.

InterMedia Project Managers Hannah Bowen and Sidra Butt managed all aspects of the project with the support of InterMedia research and technical staff. InterMedia's Myriam Benlamlih, Sidra Butt, and Diana Turecek wrote this report. The authors wish to acknowledge the support of their colleagues Tim Cooper, Vivien Marles and Peter Goldstein.

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EXECUTIVE SUMMARY

- Ownership of a mobile phone in Tanzania is high with more than three-quarters (78 percent) of Tanzanians having household ownership of a mobile phone and 63 percent having personal ownership. Household ownership of mobile phones is higher among males compared to females, among urban residents compared to rural residents, and among those living above the \$1.25 day/PPP poverty line compared to those living below the \$1.25 Day/PPP poverty line.
- O General awareness of mobile money (MM) services in Tanzania is almost universal with 93 percent of Tanzanians aware of at least one brand of mobile money services. However, only about a quarter of the population (24 percent) is actually using MM.¹
- O **Use of mobile money is not even across demographic characteristics.** The biggest demographic group in the country women in rural areas living below the \$1.25/day PPP poverty line (25 percent) also is the group using MM the least at only 7 percent usage. Urban males living above the \$1.25/day PPP poverty line are the heaviest users of MM at 48 percent usage, despite being a minority in the population.²
- O Usage of mobile money is positively associated with ownership of mobile phones. MM use is highest among those who personally own a mobile phone. Ninety-six percent of MM users own a mobile phone versus only 72 percent of non-users.
- o Income often not a factor in usage of MM applications. For many MM applications, MM usage does not differ significantly by income. The only key difference is that urban Tanzanians living below the \$1.25/day PPP poverty line are more likely than Tanzanians living above the \$1.25/day PPP poverty line to use MM to receive money; rural Tanzanians living below the \$1.25/day PPP poverty line are less likely than those living above the poverty line to use MM to store money for later spending. However, non-users still have strong perceptions that MM services are designed for higher income earners as noted in the study focus groups.
- o **MM** usage still restricted to sending and receiving money. Sending and receiving money is by far the most popular use of MM and the reason most survey respondents started using it in the first place. Fifty percent of respondents began using MM to receive money; 37 percent began using it to send money. In terms of current usage, 76 percent of survey respondents received money from others in the past month; 61 percent sent money to others.

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¹ Unless specified otherwise, MM users are defined as past 3 month users of MM.

² This report uses the Grameen Foundation's definition of poverty levels in Tanzania, which group Tanzanians as living below or above a predetermined poverty line. This report uses the \$1.25/day 2005 PPP poverty line and classifies respondents as either living below or above this poverty line. See appendix I for a description of how the percentage of Tanzanians living below or above the \$1.25/day PPP poverty line was calculated.

- o Many of the factors hindering MM use or souring the reputation of MM services among users are attitudinal or service-related—54 percent of MM users said network problems slow or impede transactions and they had been unable to make a transaction in the past because the network was down.
- O Difficulty using MM: MM users often need help with transactions. Difficulties getting help can discourage MM use. According to the survey results, only half of MM users have been able to make transactions without any help. Of the rest, 90 percent go to agents for help and 10 percent seek assistance from friends or family.
- Poor agent customer service. More than half of MM users (60 percent) say they have encountered at least one kind of difficulty in dealing with agents in the last 12 months; about a third of those who encountered difficulties say they stopped using the agent involved in the transaction as a result. MM users in the focus group component of the study also frequently complain about agents who are rude, unavailable, or unprofessional. Agent's lack of e-float was also a frequently cited problem with 20 percent of MM users reporting they had experienced agents who do not have sufficient amounts of e-float to serve customers throughout the day, of which 86 percent reported encountering this problem 1-3 times in the past year.
- Non-MM users are not yet convinced that MM is reliable, trustworthy, or convenient. Some non-users in the focus group component of the study, for example, fear their money is not safe with MM or they will lose their funds if they lose their phone. Some in rural areas also do not have convenient access to a MM agent. Advertising campaigns that emphasize the security of MM can help dispel these perceptions. Increasing the number of reliable and trustworthy agents with clean and professional facilities can also help. Due to these perceptions, MM non-users continue to use methods other than MM for sending or receiving money, which they value primarily for convenience, reliability, and trustworthiness. The most popular alternative to MM services is sending money with friends or family at 65 percent of non-MM users.
- o Many potential customers do not understand how to use MM or what it is capable of doing. Although most are comfortable getting help from agents, educational and informational campaigns that provide clear and straightforward explanations of how to use MM and what it can do may attract new users. Face-to-face campaigns are particularly important since word-of-mouth is one of the ways most focus group respondents who use MM were introduced to MM in the first place.
- O Rural females living below the \$1.25/day PPP poverty line, the population least likely to use MM currently, express the most interest in the product's safety, security and convenience; Mobile money providers seeking to reach this group may wish to emphasise these attributes in their advertising and educational campaigns.

INTRODUCTION

With support from the Bill & Melinda Gates Foundation, InterMedia is undertaking a one-year tracking study to inform strategies for increasing the use of mobile money..

Starting in September 2011 the study takes place over four quarters, each quarter comprising four research components. This report is based on the results of the first quarter research, which took place from September to November 2011 – Fieldwork for the quantitative study occurred from September to October 2011 and the qualitative fieldwork occurred from October to November 2011. The results were analyzed using InterMedia's Mobile Money Insights © approach.

Figure 1. Quantitative and Qualitative Research Components for Each Quarter

Research Component	Respondent Profile
National Survey	A nationally representative sample of 2,000 Tanzanians 15 or older
Focus Groups	Registered and non-registered MM users in Dar es Salaam and Mwanza
In-Depth Interviews	25 single- and multi-network MM agents in urban and rural areas
Mystery Shoppers	25 visits in urban and rural areas

Quantitative National Survey

A nationally representative survey sample of 2,000 Tanzanians 15 years and older was drawn using Tanzania's 2002 Population and Housing Census, distributing the n=2,000 sample across the representative demographic segments. The survey collected a wide range of data, including respondents':

- demographic characteristics;
- access to and use of mobile phone services and mobile money;
- access to and use of financial services, including formal and informal savings products;
- exposure to various types of marketing campaigns
- obstacles to adopting MM among non-users of MM; and
- perceptions of mobile network operators.

The quantitative element was aimed at providing a national-level perspective, allowing the Foundation and other key stakeholders to take a broad view of how the industry is evolving, and look at the nature and scope of obstacles and opportunities to increase financial access via broad uptake of mobile money services.

InterMedia project managers designed a brief (maximum 30-40 minute) questionnaire in English, which a field partner, Synovate Tanzania, translated into Kiswahili (both English and Kiswahili versions were used during fieldwork, along with a list of key terms translated into additional local vernacular to assist respondents with limited fluency in English or Kiswahili).

Quantitative Sample by Key Demographics:

Figure 2. Population Demographics versus Survey Sample Demographics

	Population	Sample (n=2,000)
Gender	Percent	Percent
Male	48	46
Female	52	54
Residence	Percent	Percent
Rural	71	72
Urban	29	29
Region	Percent	Percent
Dar es Salaam	8	9
Dodoma, Singida, Tabora	13	13
Kagera, Mara, Shinyanga, Mwanza, Kigoma	29	29
Morogoro, Tanga, Pwani	13	13
Arusha, Kilimanjaro, Manyara	11	11
Iringa, Mbeya, Rukwa	14	14
Lindi, Ruvuma, Mtwara	9	9
Zanzibar	2	2
Pemba	1	1
Age group	Percent	Percent
15 -29	49	48
30-44	29	32
45-59	14	14
60+	8	7

Source: Population statistics were based on data from the Tanzanian National Bureau of Statistics Population and Housing Census 2002. Sample data based on InterMedia national tracking survey of Tanzanian; n=2,000; September-October 2011

During this first quarter of the study, a sample frame was drawn using Tanzania's 2002 Population and Housing Census, distributing the n=2,000 sample down to the smallest administrative units (wards) proportionate to population size (stratified by urban/rural setting as defined by the National Bureau of Statistics). The same sample frame will be used in each of the quarterly surveys, but each quarter a new starting point will be selected in each ward to ensure that respondents do not participate in more than one quarterly survey. This sampling method will ensure that all four quarterly surveys are directly comparable, but that responses in the later quarters are not biased by participants' knowledge of the content of the questionnaire.

Qualitative Research

In addition to the survey, qualitative research was conducted to contextualize and provide additional insight to the survey findings. The qualitative segment of the study probed more deeply into the insights and patterns of behavior that emerge from the quantitative data, to obtain a more detailed and nuanced understanding of the factors influencing consumers' use of mobile money, as well as the role mobile network operators' marketing activities play in consumers' decision-making. The focus groups identified strengths, weaknesses, opportunities and barriers within the mobile money space and, beyond this, provided insight into the consumer attitudes and opinions that drive their decision- making.

Qualitative Sample:

Respondents Profile

- •Tanzanian Adults 15+
- Quota controlled on demographics (gender, age, location) and user group (current users/lapsed users and non-users)

Focus Group

- •12 Total
- •6 Dar es Salaam; 6 Mwanza
- •6 Registered & 6 Non Registered Users
- •8 participants per group

In-Depth Interviews (IDI's)

- •20 Total Interviews with mobile money agents
- •5 regions Urban & Rural; Dar, Mwanza, Dodoma, Mbeya & Moshi

Mystery Shopping

- •25 Total
- 5 Regions Urban & Rural; Dar, Mwanza, Dodoma, Mbeya & Moshi

The groups were quota-controlled on demographic characteristics (gender, age, etc.) and on user status (current users, lapsed users, non-users). The groups were held in two locations, both rural and urban settings. The locations were guided by the geographic focus of marketing activities occurring in recent periods. Groups were facilitated by experienced moderators, lasted no more than two hours each, and were conducted in Kiswahili. Each discussion followed a clear discussion guide, with a maximum of three variations per quarter (for example, discussion guides adapted for mobile money users and non- users).

Focus Groups provided insights into consumer attitudes and opinions regarding MM, including:

- Mobile phone usage
- Perceptions of mobile money services
- Experiences of mobile money services
- Barriers to registration (for non-registered users)
- Alternatives to mobile money services
- Awareness of mobile money marketing campaigns, and

In-depth Interviews solicited mobile money agents' insights on:

- Interactions with customers
- Customer problems
- Support from mobile service providers
- MM advertising and marketing outreach activities

Mystery Shopper research provided a view of real-life consumer/agent interactions. Researchers visited MM agents posing as customers, and assessed:

- External and internal agent appearance and cleanliness
- Informational and promotional materials in agent kiosks
- Agent appearance and service
- Agent problem solving abilities

Poverty Index Calculation

The poverty line was constructed using the Grameen Foundation's Progress Out of Poverty Index. The percentage of the survey's sample falling below the \$1.25/day 2005 PPP is 55.6 percent, which is similar to the 61.2 percent of the Tanzanian population falling below this poverty line in the official Progress Out of Poverty / Grameen Foundation Poverty Scorecard for Tanzania report. For a detailed description of how the poverty line was constructed, please see Appendix I.

The \$1.25/day PPP poverty line was selected instead of the \$2.50/day PPP poverty line because, according to the official Progress Out of Poverty / Grameen Foundation Poverty Scorecard for Tanzania report, the percentage of the sample that would be below the \$2.50/day PPP poverty line would be approximately 88 percent, leaving only 12 percent of the sample (n=240) living above this poverty line. Such a small base size would make it difficult to conduct statistically valid analyses for sub-groups within the group living above \$1.25/day PPP. For example, it would not allow for statistically significant comparisons between age groups or regions, or comparisons between urban females and urban males living below the \$1.25/day PPP line, since the base size for groups being compared would be smaller than the minimum n=50 that InterMedia requires.

MOBILE PHONE USAGE

More than three-quarters (78 percent) of Tanzanians have a mobile phone at home.

Household ownership of mobile phones is higher among males compared to females, among urban residents compared to rural residents, and among those living above the \$1.25/day PPP poverty line compared to those living below it.

Personal ownership of mobile phones is relatively high among Tanzanian adults, at 63 percent. Personal ownership of mobile phones varies by demographics, following similar patterns to those described above for household ownership of mobile phones. Data also suggest that about a third of Tanzanian adults have access to a mobile phone either through other people in their household or through other means outside of the household. (36 percent have 1 or 2 other people with mobile phone in their household and 32 percent of all Tanzanians have access to other phone somewhere else that they can use.)

Figure 3. Selected Mobile Phone Statistics among the Tanzanian Population

	Personal Ownership of Mobile Phone (%)	Household Ownership of Mobile Phone (%)	Percent of Tanzanians with 1 or 2 other people with mobile phone at home (%)	Percent of Tanzanians who have access to other phone somewhere else that they can use (%)
Total Sample	63	78	36	32
Gender				
Male	72	82	37	25
Female	55	75	35	39
Residence				
Urban	75	89	41	22
Rural	58	74	38	36
Region				
Dar es Salaam	76	90	37	20
Dodoma, Singida, Tabora	59	80	35	38
Kagera, Mara, Shinyanga, Mwanza, Kigoma	64	80	37	30
Morogoro, Tanga, Pwani	62	74	36	34
Arusha, Kilimanjaro, Manyara	67	80	40	27
Iringa, Mbeya, Rukwa	58	77	35	36
Lindi, Ruvuma, Mtwara	48	65	27	45
Zanzibar	85	92	49	5
Pemba	67	74	26	26
Poverty level				
Above \$1.25/day PPP	78	89	46	19
Below \$1.25/day PPP	51 -2.00	70	27	42

Source: InterMedia tracking survey of Tanzanians; n=2,000; September-October 2011.

There are important differences by demographic group in where mobile phones are usually charged. For example, urban residents predominantly charge their mobile phones at home (67 percent) compared to rural residents (19 percent). These differences are also evident by region, as well as by poverty level. Fifty percent of those living above the \$1.25/day PPP poverty line charge their phone at home compared to 15 percent of those living below \$1.25/day PPP, who have to rely on outside locations to charge their phone, at a cost. (It should be noted that the question related to where Tanzanians charge their phone was only asked to those who have a mobile phone at home).

Figure 4. Places Where Mobile Phones are Usually Charged

	At home (%)	At work (%)	At another location for free (%)	At another location where I have to pay
Total Sample	34	2	7	57
Gender				
Male	32	3	6	60
Female	37	1	8	54
Residence				
Urban	63	4	6	27
Rural	19	1	7	73
Region				
Dar es Salaam	87	3	3	7
Dodoma, Singida, Tabora	29	0	5	66
Kagera, Mara, Shinyanga, Mwanza, Kigoma	18	1	3	78
Morogoro, Tanga, Pwani	21	3	5	72
Arusha, Kilimanjaro, Manyara	40	5	9	45
Iringa, Mbeya, Rukwa	33	2	9	56
Lindi, Ruvuma, Mtwara	26	3	14	57
Zanzibar	82	3	15	0
Pemba	56	0	44	0
Poverty level				
Above \$1.25/day PPP	50	2	7	42
Below \$1.25/day PPP	15	2	7	76

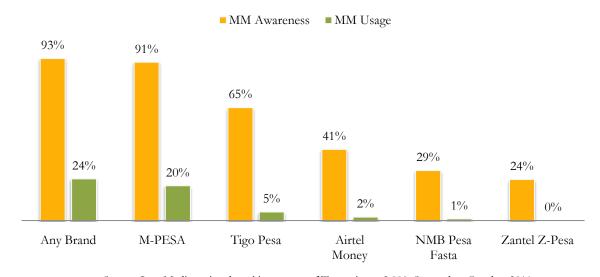
Source: InterMedia tracking survey of Tanzanians; n=2,000; September-October 2011. Base is 1,252 Tanzanians who have a mobile phone at home.

MOBILE MONEY AWARENESS AND USE

Almost all Tanzanians (93 percent) are aware of MM, but only 24 percent have used the services. (In this report, MM users are defined as those who have used MM in the past three months. MM non-users refer to everyone else, including those who have used MM more than three months ago, and those who have never used it). An additional 5 percent have done so more than three months ago. The most well-known and widely used MM services are Vodacom's M-PESA, followed by Tigo's Tigo Pesa. Eighty four percent of MM users used M-PESA in the past three months, versus 19 percent for Tigo Pesa.

Figure 5. M-PESA is the Most Widely Known and Used Mobile Money Brand in Tanzania

Percentage of Tanzanians 15+ who are aware of key MM brands and have used them



Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October 2011

MM use is highest among those who personally own a mobile phone. Ninety-six percent of MM users own a mobile phone versus only 72 percent of non-users. MM users are defined as past three-month users of MM. MM non-users include inactive users who have used MM more than three months ago, as well as Tanzanians who have never used MM. Personal ownership of mobile phones varies by key demographics, as does the usage of MM, as can be seen in Figure 6 below.

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³ Unless specified otherwise, MM non-users include inactive users who have used MM more than 3 months ago, as well as Tanzanians who have never used MM. MM inactive users and non-users are analyzed together in this report because: (1) questions in the survey were also asked to both inactive users and non-users (2) inactive users represent only 5 percent of the Tanzanian population – it doesn't make sense, marketing-wise, to focus on these separately from non-users, and (3) with a base size of only 96 inactive users, further analysis on this segment would be limited.

Figure 6. Usage of Mobile Money is Positively Associated with Ownership of Mobile Phones

Percent of Tanzanians using mobile money in the past three months and percent of Tanzanians who personally own a mobile phone

	Usage of Mobile Money Among All Respondents (%) Personal Ownershi Among All Res	
Total Population	24	63
Gender		
Male	28	72
Female	21	55
Residence		
Urban	41	75
Rural	17	58
Age Group		
15-24	20	51
25-34	27	69
35-44	27	74
45-54	26	67
55-64	27	64
65+	9	39
Poverty level		
Above \$1.25/day PPP	35	78
Below \$1.25/day PPP	16	51

Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October 2011

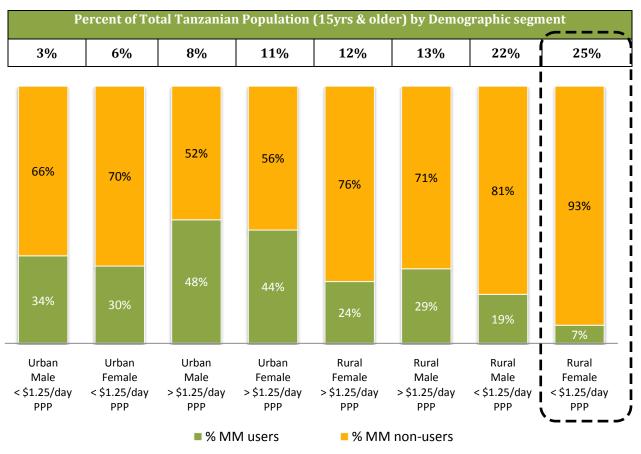
Rural women living below the \$1.25/day PPP poverty line (the largest demographic group defined by our criteria of gender, location and poverty level) use MM the least, as can be seen in Figure 7 below. Urban males living above the \$1.25/day PPP line use MM more than any other demographic group. Participants in the focus group of rural women who are non-MM users suggest limited use among rural women living below the \$1.25/day PPP poverty line may be attributable to fears of potential fraud or high costs, or a lack of understanding of how to use the services. In the words of two respondents:

We have seen people using mobile technology to con others. - Rural female

I find the charges very costly. If you send 10,000 shillings, you need to have 11,000 shillings for the recipient to receive the 10,000 intact. - Rural female

Figure 7. Rural Women living under \$1.25/day PPP, who Represent the Largest Part of the Tanzanian Population, Are Also those with the Smallest Percentage of Mobile Money Users

X-axis: Demographic segments, as defined by gender, area of residence and poverty level. Y-axis: Percentage of MM users and MM non-users by demographics segment



Source: InterMedia tracking survey of Tanzania; n=2,000; September-October 2011

Figure 8. Limited Differences in Use of MM Applications by Income

Percentage of selected segments of the Tanzanian population who have used MM for specific activities in the past 4 weeks

Use MM to:	% urban below \$1.25/day PPP	% urban above \$1.25/day PPP	% rural below \$1.25/day PPP	% rural above \$1.25/day PPP
Receive money	88	75	72	74
Store money for spending later	32	41	23	43
Deposit money	15	19	9	15
Buy airtime	44	47	32	43
Send money	67	61	54	60

Source: InterMedia tracking study of Tanzania; n=2,000; September-October 2011. Base is 59 urban below \$1.25/day PPP, 173 urban above \$1.25/day PPP, 116 rural below \$1.25/day PPP and 134 rural above \$1.25/day PPP MM users.

Income often not a factor in usage of MM applications. For many MM applications, MM usage does not differ significantly by income. The only key difference is that urban Tanzanians living below the \$1.25/day PPP poverty line are more likely than those who are better off financially to use MM to receive money; rural Tanzanians living below the \$1.25/day PPP poverty line are less likely than Tanzanians living above the line to use MM to store money for later spending.

Demographic Profiles of M-PESA and Tigo Pesa Users



Both M-PESA and Tigo Pesa users have a greater percentage of males, urban dwellers and Tanzanians living above the poverty line compared to the general population. As depicted below, the key differences between M-PESA and Tigo Pesa users are:

- The gender breakdown of Tigo Pesa users is closer to that of the overall population, with more female than male users.
- There is a greater percentage of Tanzanians living above the poverty line and in urban areas who are Tigo Pesa users compared to M-PESA users. This may be due to the fact that the Tigo Pesa network and agency branches are more prevalent in urban areas compared to rural areas.

Figure 9. There are Greater Percentages of Urban Dwellers and Tanzanians living above the poverty line among M-PESA and Tigo Pesa Users than among the General Population

Total population, M-PESA users, and Tigo Pesa users split by gender, area of residence and poverty level



WHY TANZANIANS USE MOBILE MONEY

Tanzanians use MM to send and receive money. Sending and receiving money is by far the most popular use of MM and the reason most survey respondents started using it in the first place. In terms of current usage, 76 percent of survey respondents received money from others in the past month; 61 percent sent money to others.

50 percent of respondents began using MM to receive money; 37 percent began using it to send money.

Convenience: Qualitative research suggests that convenience is a key attraction of MM for money transfers. Focus group respondents also were frustrated with having to wait in long bank lines or deal with broken ATMs.

Reliability: This is another benefit of using MM to send and receive money, according to focus group participants. For example, they appreciate MM services' ease of access in an emergency. According to respondents:

[Having mobile money is important because] if you went to CRDB bank you might find a long queue waiting to be served and the network is faulty. - Urban Male

If you have money in your mobile, in case of any emergency you can easily go to the agents and get your money; when your money is in the bank, the banks might be closed or far away. - Urban Female

Banking and billing are growing reasons for respondents to use Mobile Money. Smaller percentages of MM users are using MM as a virtual bank or to pay bills. In the four weeks prior to the survey, 42 percent of MM users had used MM to buy airtime, 36 percent to store money, 15 percent to deposit money directly to someone else's phone, and 7 percent to pay a bill or withdraw money from an ATM.

Intrestingly, 15 percent of MM users noted that they used the services to deposit money directly to someone else's phone, a practice which is being used by MM users to avoid paying any transfers fees and is being aided by MM agents but is strictly prohibited by all Mobile Service Providers.

Security: For some focus group respondents, MM is appealing for banking and billing because it offers security. In the words of one:

It is not safe to walk around with plenty of money and so you can save it and withdraw from any point as there are many agents. - Urban Male

Convenience and Accessibility: Some focus group participants also say that "banking" with mobile money is more convenient and accessible. According to respondents:

This phone that I hold is my money. When a person calls and says he has deposited the money in your bank account, the money is not in your hands, and you have to go to the bank to get it. With a mobile money account, you can easily see your money through your phone via SMS. - Rural Male

It is important because some [uneducated] people don't have enough information on banking and if you tell them there is a bank called Barclays, they will not understand. It is easier to ask them to register on M-PESA or Tigo Pesa. - Urban Male

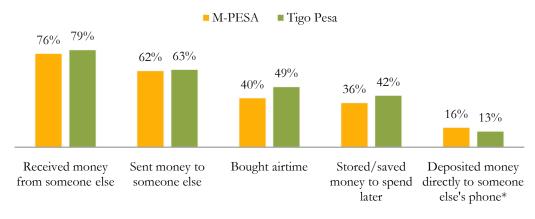
Use of M-PESA and Tigo Pesa for Popular MM Applications



Popular MM activities among frequent users of M-PESA and Tigo Pesa are similar. Figure 10 shows the percentages of each operators' users who performed a given activity in the past four weeks.

Figure 10. Similar Percentages of M-PESA and Tigo Pesa Most Frequent Users Use their Respective MM Service for Popular MM applications

Percent of M-PESA and Tigo Pesa users who use their respective MM service to conduct key MM activities



* M-PESA and Tigo Pesa do not allow this practice and agents claim they do not do it.

Source: InterMedia tracking study of Tanzanians; n=2,000; September-October 2011. Base is 381 and 67 most frequent users of M-PESA and Tigo-Pesa

FACTORS THAT DISCOURAGE USE OF MOBILE MONEY

No mobile phone access. Twenty-nine percent of non-MM users said the main reason they did not use MM is because they do not have access to a mobile phone. Women are more likely than men to cite lack of access to a mobile phone as a barrier to the usage of MM. This is also more likely the case among rural residents as opposed to urban dwellers, and among those living below \$1.25 day/PPP compared to those living above \$1.25 day/PPP.

Figure 11. Percent of Various Demographic Groups Who Cite Lack of Access To Mobile Phones as Main Reason for Not Using MM

Ger	ıder	Area of Residence		Poverty	y Level
Male	Female	Urban	Rural	Above \$1.25/day PPP	Below \$1.25/day PPP
22	35	22	31	19	36

Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October 2011. Base is 660 male MM non-users, 858 female MM non-users, 338 urban MM non-users, 1180 rural MM non-users, 575 MM non-users living above the \$1.25/day PPP poverty line and 943 MM non-users living below the \$1.25/day PPP poverty line.

Attitudinal barriers also hinder use and generally are related to a lack of awareness of what MM can do or how to use it. Qualitative feedback suggests that, aside from mobile phone access, all of these issues affect both users and non-users.

Network problems. Network problems have slowed or impeded transactions for 54 percent of MM users, who said they had been unable to make a transaction in the past because the network was down. Focus group respondents mentioned network problems when asked to name some of the difficulties of having a mobile phone:

The percentages of those who could not complete transactions because of network problems does not vary significantly between active MM users living in urban areas versus rural areas or those living in different regions of the country.

The most common [risk of MM] is loss of network for a couple of hours, maybe four or five. You might be told to try the following day. If you had an emergency, it would have to wait until the following day. - Urhan Male

Whenever I call [company name] they normally tell me that they are working on [the network problem] although at times it takes too long for the problem to be resolved. - Agent/Dar es Salaam

Lack of awareness of MMapplications and

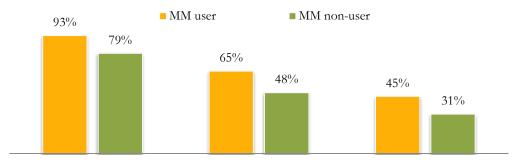
benefits. Many non-MM users are unaware of the benefits of MM and focus group responses suggest this may deter some from using the service. For example, fewer non-MM users than active users are aware that MM can be used for sending, receiving, or

Almost half of MM users (45 percent) either did not know the correct code for accessing the MM service menu for the provider they use most frequently, or gave the wrong code.

storing money, or that it can be used like cash. One urban female focus group respondent said she had not registered because she did not have sufficient information about the product. Another thought traditional banking was more convenient.

Figure 12. Larger Percentages of MM Users than Non-Users Are Aware of the Applications Available through MM

Percentage of MM users and non-users who know that MM is [...]



for sending or receiving money for keeping or storing money like carrying cash but on your phone

Source: InterMedia tracking survey of Tanzania; n=2,000; September-October 2011. Base is 482 MM

MM Users still require assistance using MM due to lack of education on service usage: MM users often need help with transactions. Difficulties getting help can discourage MM use. According to the survey results, only half of MM users have been able to make transactions without any help. Of the rest, 90 percent go to agents for help and 10 percent seek

In urban areas, 58 percent of MM users living above the \$1.25/day PPP poverty line can make transactions on their own, compared with only 39 percent of Tanzanians living below the \$1.25/day PPP poverty line.

assistance from friends or family. Users seeking assistance often provide their Personal Identification Number (PIN) to the person helping them, indicating that further messaging is needed on PIN privacy and training of agents to ask the user to key-in their own PIN.

One MM agent thought Tigo Pesa customers needed help more often than M-PESA customers, which he attributed to the fact that M-PESA was the first to the market. Although most focus group respondents did not mention needing help with MM transactions as a deterrent to use, several were frustrated when they made a mistake and sent money to the wrong person. They needed assistance getting their money back, but failed to get help.

The main setback is that service is not given to the public when you incorrectly send [money] to another person. We need more help on how to get our money back. The public needs to be told how and what to do to get their money back. - Urban Male

M-PESA customers have a lot of skills compared to Tigo Pesa customers. M-PESA was introduced first; this means that people have better knowledge about M-PESA. -Agent/Dodoma

Tanzanians living below \$1.25 day/PPP are particularly dependent on assistance to complete transactions, possibly because of higher illiteracy rates. Survey data suggest that illiterate Tanzanians living below \$1.25 day/PPP are more likely to ask for assistance than all other groups. 53.6 percent of Rural MM users noted that they have someone who helps them with all their transaction compared to 43 percent of Urban MM users.

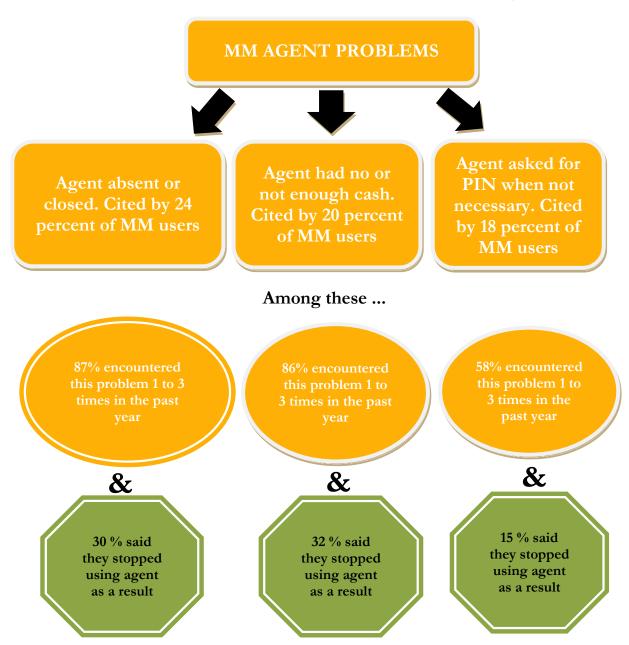
According to one focus group respondent:

If you send money to someone who is illiterate, they will go to the agents and the agents will assist them to withdraw money. Those people in the village ... most don't have bank accounts; they don't even understand the meaning of a bank account. - Urban Female.

Some focus group participants said that agents helped them to send money by letting them use the agents' phones, for which the customer would pay a small fee. However, the agents interviewed said they never performed this service because MM service operators are not allowed to do this. Mystery shoppers did not witness this practice, although it should be noted that the mystery shoppers were not regular, known customers of the agents.

Figure 13. More than half of MM users (60 percent) say they have encountered at least one kind of difficulty in dealing with agents in the last 12 months; about a third of those who encountered difficulties say they stopped using the agent involved in the transaction as a result.

The most common issues cited are illustrated in the diagram below:



Source: InterMedia tracking survey of Tanzanians; n=2,000; September-October 2011.Base is 482 MM users.

Difficulties maintaining liquidity. Agents say it is sometimes difficult to manage their daily float, making it impossible for them to disburse funds. Consumers get frustrated with delays. Agents who operate under super agents noted there are sometimes delays receiving float through the super agents. One agent noted that not having enough e-float can lead

The agents should be courteous because at times we come across some agents who are very rude, especially to the illiterate.
- Rural Female

customers to suspect agents of foul play. According to focus group respondents:

You might go to an agent and probably in that area there are few agents; when you get there, the agent tells you they don't have float and that is really something that should be looked into. - Urban Male

You might just open and one customer walks in and withdraws a huge amount of money. If another customer walks in, then you have to send them elsewhere or give them half and send them to collect the other amount elsewhere. They treat you with a lot of suspicion. - Agent/Moshi

Mistrust of system. Some focus group respondents were concerned about the security of MM services. They were afraid they could lose their money if they lost their phones or if the companies changed hands Again, these misperceptions that lead to distrust can be managed by better educating agents and clients.

My concern is what happens if these companies change management. Is my money safe? I always fear that I might lose my savings. - Rural Male

I fear that if I lose my handset, I will lose the money in the account. - Urban Female

Other barriers. About a fifth of respondents (17 percent) said they did not see a need to use mobile money. Sixteen percent said they did not have access to a MM agent; 12 percent did not know how to use the service. Several focus group respondents indicated they did not use MM because they did not see a need, either because they had insufficient funds or because they did not understand the benefits of registering. One woman also thought that if she had access to MM, she would do too much impulse shopping.

Technical difficulties in registering for MM are not an important obstacle in the use of the service. Only 3 percent of MM non-users tried to register for a mobile money service and were unable to do so (note that this question was only asked of non-users).

ALTERNATIVES TO MOBILE MONEY

MM non-users use methods other than MM for sending or receiving money, which they value primarily for convenience, reliability, and trustworthiness.

Figure 14. Usage of MM alternatives among MM non-users for sending and receiving money

Percentage of MM non-users who used this alternative			Reasons	s for using th	is method	(%)
Λ	IM alternatives		Least expensive	Most Convenient	Fastest	Safest
Friends or family	65	Among	54	50	31	31
Airtime vouchers to be sold later	34	these	31	37	44	28
Dala dala bus	31		22	22	21	17

Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October 2011. Base is 986 MM non-users who use Friends or family, 520 MM non-users who send airtime vouchers to be sold later, and 466 MM non-users who use dala dala bus as alternatives to sending or receiving money

Figure 15. Usage of MM alternatives among MM non-users for saving money

	Percentage of MM non-users who used this alternative		Reasons for t	using this me	thod (%)
MM altern	atives		Least Expensive	Most convenient	Safest
Safe place at home or work	84		62	64	35
With a trusted individual	28	Among	21	17	9
Buying durable assets, livestock, etc	23	these	18	18	20
Bank account	12		48	49	90
Merry Go Round	12	1 O 1 2044 B	27	24	23

Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October 2011. Base is 1280 MM non-users who store money at home or work, 430 MM non-users who store money with a trusted individual, 349 MM non-users who buy durable assets as a way to save money, 178 MM non-users who save money in a bank account and 195 MM non-users who save money in a Merry Go Round

ATTRACTING NEW USERS

Research results suggest that advertising and education campaigns can encourage those with mobile phone access to use. Indeed, as described above, Tanzanians not actively using MM are using alternatives they value for many of the same reasons that users value MM (notably convenience, reliability, and trustworthiness). A key difference between the two groups is that a greater percentage of MM users has seen or heard MM advertisements (82 percent) compared to MM non-users (51 percent). As expected, there is a positive association between awareness of the benefits and usage of mobile money, as suggested previously in Figure 9. In addition, the segment that uses MM the least in Tanzania are those who have seen the least advertising. In particular, females, those who live in rural areas and those who live below \$1.25/day PPP are less likely than other groups to have seen an advertisement for MM in the past month.

Figure 16. A Greater Percentage of Urban Tanzanians, Males, and those Living Above the Poverty Line Have Seen an Advertisement About MM in the Past Month Compared to Other Tanzanians.

Percentage of select segments of the Tanzanian population who have seen an advertisement about MM in the past month

Gen	Gender		Area of Residence		y Level
Male	Female	Urban	Rural	Above \$1.25/day PPP	Below \$1.25/day PPP
61%	43%	64%	47%	66%	42%

Source: InterMedia national tracking survey of Tanzania; n=2,000; September-October. Base is 912 males, 1,088 females, 570 urban Tanzanians, , rural Tanzanians, 882 Tanzanians living above the \$1.25/day PPP poverty line and 1,118 Tanzanians living below the \$1.25 day/PPP poverty line

Focus group respondents and MM agents had several suggestions for using information to improve the perception of MM as a good alternative to traditional means of holding and exchanging money. They include:

Increase the volume of advertising. Several agents suggested simply increasing the volume of advertising, particularly in rural areas, to attract more users. Most of the mobile networks' advertising noted at kiosks were general and tended towards the voice/airtime services of the operators. The Mobile Money messages were often about the ability of users to buy airtime, rather than about the benefits of sending or receiving funds – which is the primary reason clients state for being active MM users. According to one:

They should have more advertisements countrywide so that every person gets an opportunity to know what is going on. And they could have brochures which customers can take and read on their own time to understand more. - Agent/Mbeya

Figure 17. Advertising for MM Services at MM Agents

In mystery shoppers' visits to MM agents conducted as a part of this research, shoppers made note of advertisements used in MM kiosks.

Company	MM Ads That Mystery Shoppers Noticed at Agent Kiosks
Vodacom	"Use M-PESA to pay your bills" "Call for ½ Tsh per second" "500 Tsh a day for mobile internet" "If you use Vodafasta to buy airtime, you get double airtime" "Promotion about how you can get internet services for one month for 178,999 Tshs" "Vodaphone voice box" "Welcome to Vodacom M-PESA shop"
Tigo	"Buy airtime for Tsh225 to get 50 SMS for free and 2 minutes airtime" "When you buy airtime using Tigo Pesa, you get double the airtime" "If you send money with Tigo Pesa you get free airtime" "If you recharge your account with Tigo Pesa, you get free minutes for calling"
Airtel	"When you send 9 SMS's you get 100 SMS's free" "Call for ½Tsh per second during day time and ¼Tsh per second at night" "If you register with Zap you can pay your bills (water, DSTV) through this program"
Zantel	"If you use Zantel Pesa to buy Ths 2,000 airtime, you get double airtime" "If you buy a modem from Zantel, you get interesting internet rates" "Zantel can offer you a Zantel line/number with the same last 6 digits as your other lines" "EpicNation Promotion" – Sim-up with the coolest crew in town – free entry to a club and buy one get one free offer from a retailer"

Source: Tanzania tracking study – Mystery Shopper Data, September-October 2011

Enhance face-to-face marketing. Focus group participants' comments suggest that face-to-face interactions play an important role in encouraging MM use. For example, several respondents who had seen advertisements for MM in the media said they actually first used MM because family or friends were using it or recommended it. Many others learned about it from agents who were travelling from house to house to sell the services. According to two respondents:

I knew about [MM] through their agents who were visiting different neighborhoods to educate us about mobile money services and registered those who were interested. - Urban Male

My phone was stolen and I had gone to replace my SIM card, and when I got to the agents shop I found another lady sending money to Mombasa and I was impressed. I had heard about M-PESA on TV, but I didn't have the full information about it so when I told the agent that I wanted a SIM replacement he advised me to register my line on M-PESA as well and that is how I got registered. - Urban Male

Given the importance of face-to-face interactions, even MM agents suggest that marketing campaigns should go beyond informational materials and also include interactive educational seminars, town hall meetings that involve Q & A, and similar sessions.

Advertisements should be more targeted and able to resonate with the audience. For example, a couple of rural focus group respondents criticized one of the ads they had seen because it seemed to focus only on urban dwellers. An MM agent thought the same ad was too complicated:

It's good, but it's not easy to digest; you have to sit down and think about it critically first before you can understand it. When you watch it, you cannot get the message instantly. - Multi Agent/Moshi

Customers should be told the benefits of M-PESA—like no queues and you can get your money wherever you are and much more—so that even those who are reluctant to use M-PESA can try using it. Because there are people back in the villages that have money and there are no banks nearby and they would like to save, so if they are empowered in that knowledge then they can start saving. - Agent/Mbeya

Improve agent liquidity management. According to the agents interviewed, agents should be equipped with enough cash and e-float to last them the entire day or have an easy way to access additional cash during the day, if necessary. Because the amount of cash necessary to avoid a liquidity shortage may be different from day to day, and region to region, one agent suggested that giving agents training on how to determine the amount of e-float they need based on customers' past needs may help avoid shortages. According to the agent, who does not have problems with e-float:

I have studied my customers' transactions so I am able to know what float to keep. I know that if I have a float of 1 million and cash 1.5, that is enough. If for some reason I use all my cash, then I can rush to the bank to withdraw. And if my float gets finished, I just call the super agent and they give me more float. - Agent/Mwanza

Enhance agent training. Ensuring clients have positive interactions with MM agents is essential because agents are the key interface between clients and MM companies. Even the most courteous and professional agents sometimes have difficulties with clients and may not know the best way to deal with them. Clients can blame agents for problems with e-float, network downtime or other issues over which the agent has no control. As a result, training for these and other occurrences is important. One agent describes the importance of good people skills:

There are customers who have problems with the network. They can start shouting at the agent about the network. With customers like those, you need to convince them and instruct them because they might not have enough knowledge. Other customers might have an emergency and need to quickly cash out the money. When he gets to an agent, there could be no network. The customer might think it is the agent that makes the network unavailable. If the customer comes and speaks bad language to you, all you have to do is to just be polite. If he is understanding, that is good; if not, then I will direct him to the [company]shop. If the customer wants to cash-out Tsh 50,000 and you did everything the customer wanted and he finds you a pleasant person to deal with, he will come again to use your service. -Agent/Dodoma

Conclusion

This survey will be repeated quarterly until Sepetember 2012 and fieldwork for the next quarter of the study will be taking place from December 2011 until February 2012. The report highlighting the results of the second quarter will be available in April 2012.

Looking ahead, survey results will allow us to identify trends in uptake and use of mobile money, as well as changes in the overall market. For example, the relative positioning of the multiple service offerings may change with time, and with new market entrants (e.g., Airtel Money). Potential use-cases of mobile money may also broaden as mobile money gains more traction and operators negotiate new partnerships with bulk payers and financial institutions. It is an exciting time for mobile money in Tanzania.

APPENDIX I. Poverty Index Calculation

The poverty line (\$1.25/day PPP) was constructed using the Grameen Foundation's Progress Out of Poverty Index. The percentage of the survey's sample falling below the \$1.25/day 2005 PPP is 55.6 percent, which is similar to the 61.2 percent in the official Progress Out of Poverty / Grameen Foundation Poverty Scorecard for Tanzania report.

Constructing the PPI Score

In order to estimate poverty among respondents, the survey employed the Progress out of Poverty Index (PPI). To construct the PPI score, responses to 10 demographic questions were summed for each respondent based on the table here:

http://www.progressoutofpoverty.org/system/files/Tanzania PPI Indicators and Lookup Table <u>s 2011.pdf</u>. These point totals correspond to certain likelihoods of falling below national and international poverty lines (see lookup tables in above link).

Comparing to Tanzania poverty rates

To get an estimate of the total poverty rate among those sampled, the poverty probability values were summed for the entire sample and divided by the N (2,000 for total sample). This was repeated for 1) Dar es Salaam 2) the remaining urban respondents outside of Dar es Salaam and 3) the remaining rural respondents. These values are largely comparable to the household poverty rate presented on page 65 of the Progress Out of Poverty

report: http://www.progressoutofpoverty.org/system/files/PPI Design Documentation Memo T anzania 2011.pdf#page=65 (note: free log-in required to access)

Figure 24. Tanzania Poverty Rate Analysis using \$1.25/day PPP measure

	Percentage Below Poverty (\$1.25/day 2005 PPP)	
	PPI Tanzania Scorecard	Tanzania Mobile Money
		Study
Tanzania	61.2%	55.6%
Dar es Salaam	11.7%	36.5%
Urban outside Dar es Salaam	39.6%	45.2%
Rural outside Dar es Salaam	73.8%	60.8%

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