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Mobile Financial Services in Kenya, Uganda and Tanzania:
Downstream Prediction for Lasting Economic Retention
Project DoPLER, Phase I Report

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I. Abstract

In this pilot study, we seek to use existing data sets to better understand long-term retention of mobile financial services in Uganda, Tanzania and Kenya.

Using statistical modeling techniques we identify those parameters which might serve as predictors to labeled response variables to identify longitudinal retention and usage of services such as payments and loans on mobile devices.

The goal of the study is a directional framework to enable mobile network operators (MNOs) and non-government organizations (NGOs) to better deliver financial inclusion in these markets.

II. Introduction

To date, much work has been done to understand the pathway between awareness and sign-up of digital financial services (DFS) in East Africa. This is referred to herein as “upstream” adoption.

Despite the research on the upstream process, from initial adoption to active usage, there is a dearth of understanding on longer term retention—herein referred to as “downstream”; activity beyond the initial 90 day of active usage.

In this work we seek to understand the relative effects of subscriber characteristics as they affect long term retention. For example:

- Gender
- Age
- Location
- Education Level
- Wealth
- Mobile- and Non-mobile Financial service usage

With the broader goal of financial inclusion of the currently unbanked populations, the study seeks to offer suggestions (though not quantified recommendations) on how to drive uptake of financial service offerings and products in these geographies.

III. Background

The project lies in the broader context of the Financial Services for the Poor (FSP) group at the Gates Foundation, and more narrowly, within the broader multi-year effort of the FSP group to deliver the FSP portal—a clearing house of tools and research to better enable practitioners and researchers involved in financial services and

financial inclusion projects in East Africa, including the MNOs themselves.

IV. Related Work

In the course of developing this pilot project, conversations were held with a broad consortium of stakeholders in the for- and non-profit space. Specifically, the Financial Inclusion Insights study (FII), funded by the Gates Foundation and administered by Intermedia plays a key role in shaping the scope and background of this work.

Additionally, work by CGAP and the World Bank provide the foundational elements of our analyses. Specifically, the Financial Inclusion Index (FINDEX) study, administered by Gallup as a part of a broader, global survey on financial inclusion serves to contextualize many of the findings herein.

The DataLab at University of Washington¹ has worked deeply to understand the impact of mobile technologies in emerging markets and this study draws from prior work including Dr. Joshua Blumenstock’s work on mobile money.²

An advisor to this project, Dr. Matthew Jackson’s work at Stanford’s Department of Economics provides a basis for the understanding of networks in the community, and the effect on adoption and retention.³ Additional sources and prior research are cited in the references section.

V. Data Sources

The Financial Inclusions Insights (FII)⁴ study by Intermedia (supported by The Gates Foundation) provides the most useful prior data available to assess financial inclusions within our geographies of interest.

For this study, we made contact with Intermedia and gained access to Phases one through three (2012-2014) of the annual longitudinal study.

Additionally the World Bank FINDEX study provides global, by-country measurement of key inclusion factors.

As observed in Table 1, differences were prevalent by geography in all basic demographic attributes, except for respondent age. As such, modeling was achieved on a per-country basis.

¹ <http://datalab.ischool.uw.edu/>

² <http://www.jblumenstock.com/>

³ <https://web.stanford.edu/~jacksonm/>

⁴ <http://finclusion.org/>

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.⁵

	Responses by Country			P-value
	kenya	tanzania	uganda	
country				
kenya	2,994 (100.0%)	0 (0.0%)	0 (0.0%)	< 0.0001
tanzania	0 (0.0%)	3,001 (100.0%)	0 (0.0%)	
uganda	0 (0.0%)	0 (0.0%)	3,000 (100.0%)	
year_of_birth				
Mean (SD)	1979.8 (±14.9)	1979.4 (±14.0)	1979.8 (±14.8)	0.44
Missing	0 (0%)	44 (1.5%)	0 (0%)	
gender				
Male	1,162 (38.8%)	1,479 (49.3%)	1,045 (34.8%)	< 0.0001
Female	1,832 (61.2%)	1,522 (50.7%)	1,955 (65.2%)	
marital_status				
Single	797 (26.6%)	720 (24.0%)	588 (19.6%)	< 0.0001
Polygamous	160 (5.3%)	239 (8.0%)	344 (11.5%)	
Monogamous	1,684 (56.2%)	1,634 (54.4%)	1,349 (45.0%)	
Divorced	37 (1.2%)	50 (1.7%)	54 (1.8%)	
Separated	77 (2.6%)	145 (4.8%)	184 (6.1%)	
Widowed	172 (5.7%)	122 (4.1%)	235 (7.8%)	
Living Together	63 (2.1%)	89 (3.0%)	236 (7.9%)	
Other	2 (0.1%)	0 (0.0%)	4 (0.1%)	
Refused	2 (0.1%)	2 (0.1%)	6 (0.2%)	
education_level				
None	295 (9.9%)	292 (9.7%)	486 (16.2%)	< 0.0001
Primary	660 (22.0%)	224 (7.5%)	1,002 (33.4%)	
Some Secondary	682 (22.8%)	1,755 (58.5%)	448 (14.9%)	
Secondary Complete	446 (14.9%)	176 (5.9%)	593 (19.8%)	
Some Secondary Vocational	499 (16.7%)	411 (13.7%)	197 (6.6%)	
Complete Secondary Vocational	34 (1.1%)	29 (1.0%)	68 (2.3%)	
Some Diploma	53 (1.8%)	18 (0.6%)	55 (1.8%)	
Diploma Complete	37 (1.2%)	23 (0.8%)	11 (0.4%)	
Some College	109 (3.6%)	24 (0.8%)	45 (1.5%)	
Some University	91 (3.0%)	14 (0.5%)	30 (1.0%)	
Complete University	54 (1.8%)	20 (0.7%)	48 (1.6%)	
Post Graduate	8 (0.3%)	4 (0.1%)	7 (0.2%)	
Koranic	20 (0.7%)	2 (0.1%)	0 (0.0%)	
Other	5 (0.2%)	6 (0.2%)	10 (0.3%)	
Refused	1 (0.0%)	3 (0.1%)	0 (0.0%)	

Table 1: FII Demographic Differences by Geography⁵

VI. Methodology and Models

To achieve a traditional retention analysis, the ideal data set might include longitudinal usage data by account. With such a data set, one could perform a time-series based survival analysis, the standard for clinical studies studying the effect of treatment.

To achieve parity with this approach in our context proved challenging: not only are we seeking to identify the “treatments” (subscriber attributes/behaviors) which lead to longer retention, but also no such longitudinal/paired data set existed from which we could derive effects over time.

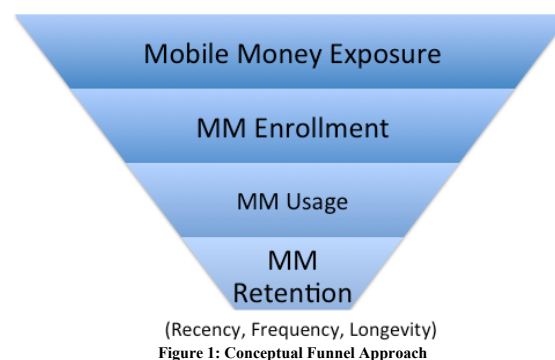
Further, the data at hand is based on household surveys, notoriously susceptible to self-reporting bias.

To ameliorate these deficiencies, we sought to engineer a “pseudo-retention” variable. This was done using the FII questions that included a time variable. By using the questions including the phrases: “last time used...” and “how often in the last...” we constructed a backward-looking value for response; that is: were this question asked 90 days ago, which users would be retained? Here we followed Blumenstock, et al’s definition of retention as active use within 90 days.

⁵ See appendix for full table

Beyond retention we wished to model and understand penetration and retention from the standpoint of steps along a funnel.

The funnel begins with exposure/awareness, and ends in long-term, usage:



In defining retention, we wish to not only account for “a single transaction of any type” within the time period of interest (90 days) but also look at the frequency and sophistication of these transactions.

VII. Working Definitions, Engineered Response Variables

To achieve the above, the following definitions are hereby employed:

Exposure: Does person have awareness of mobile money? (True/False)

Enrollment: Does person have a MM account **and** have they used it at least once? (True/False)

Basic Usage: Have they used MM account for basic services: deposit, withdraw, pay bills, send/receive money? (True/False)

Sophisticated Usage: Have they used MM account for sophisticated services: Insurance, long term savings, emergency funds, large transactions, periodic transactions: collect money, pay large bills (i.e. rent, insurance), save money, transfer money between accounts, loans, mortgage? (True/False)

Frequency: Have they used financial services at least one per month? (True/False)

Longevity: Have they used mobile money services for at least one year? (True/False)

Recency: Have they used mobile money services in the last 90 days? (True/False)

Retention: Are the three prior conditions true? (Recency + Longevity + Frequency) (True/False)

Of importance in the above is that here we engineer a very conservative definition of what “being retained” means in the context of mobile money; the subscriber must demonstrate not only active use, but have done so in the last 90 days (with frequency) and an enrollment of at least one year prior.

VIII. Findings

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Retention by Factors, FII		
	False	True	P-value
country			
kenya	1,225 (22.1%)	1,769 (51.4%)	< 0.0001
tanzania	2,054 (37.0%)	947 (27.5%)	
uganda	2,275 (41.0%)	725 (21.1%)	
year_of_birth			
Mean (SD)	1979.9 (±15.3)	1979.3 (±13.3)	< 0.0001
Missing	32 (0.6%)	12 (0.3%)	
gender			
Male	2,092 (37.7%)	1,594 (46.3%)	< 0.0001
Female	3,462 (62.3%)	1,847 (53.7%)	
marital_status			
Single	1,263 (22.7%)	842 (24.5%)	< 0.0001
Polygamous	562 (10.1%)	181 (5.3%)	
Monogomous	2,720 (49.0%)	1,947 (56.6%)	
Divorced	103 (1.9%)	38 (1.1%)	
Separated	262 (4.7%)	144 (4.2%)	
Widowed	381 (6.9%)	148 (4.3%)	
Living Together	251 (4.5%)	137 (4.0%)	
Other	4 (0.1%)	2 (0.1%)	
Refused	8 (0.1%)	2 (0.1%)	
education_level			
None	922 (16.6%)	151 (4.4%)	< 0.0001
Primary	1,423 (25.6%)	463 (13.5%)	
Some Secondary	1,808 (32.6%)	1,077 (31.3%)	
Secondary Complete	721 (13.0%)	494 (14.4%)	
Some Secondary Vocational	427 (7.7%)	680 (19.8%)	
Complete Secondary Vocational	63 (1.1%)	68 (2.0%)	
Some Diploma	54 (1.0%)	72 (2.1%)	
Diploma Complete	17 (0.3%)	54 (1.6%)	
Some College	29 (0.5%)	149 (4.3%)	
Some University	25 (0.5%)	110 (3.2%)	
Complete University	25 (0.5%)	97 (2.8%)	
Post Graduate	6 (0.1%)	13 (0.4%)	
Koranic	18 (0.3%)	4 (0.1%)	
Other	14 (0.3%)	7 (0.2%)	
Refused	2 (0.0%)	2 (0.1%)	

Table 2: Demographic Factors by Derived Retention Value

In Table 2, we see the relative effect of each of the available demographic characteristics of the subscriber, to achieve the final funnel step of being a retained subscriber.⁶ We can see initially that **age** and **education** play a significant role in the probability of retention. We also observe further evidence of differences by geography, supporting the approach described above of per-country analysis.

From here, we seek to understand the relative effect of each factor, by country. From the funnel metaphor above, we switch now to a “waterfall” metaphor, by country.

Waterfall Effect by Key Factors

If we look at the effect of education in Uganda, for example we see how each new level of education achieved significantly improves the subject’s likelihood to survive into a retained state.

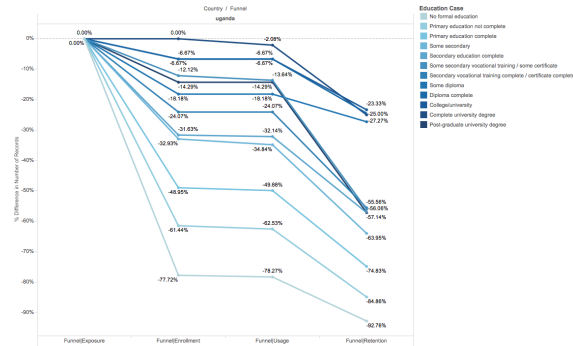


Figure 2: Retention by Education Level, Uganda 2014

The bottom line in Figure 2 shows that with no formal education, we are nearly 100% likely to have lost the subject between exposure to mobile money and retention. However, those with more education are more likely to be retained than not.

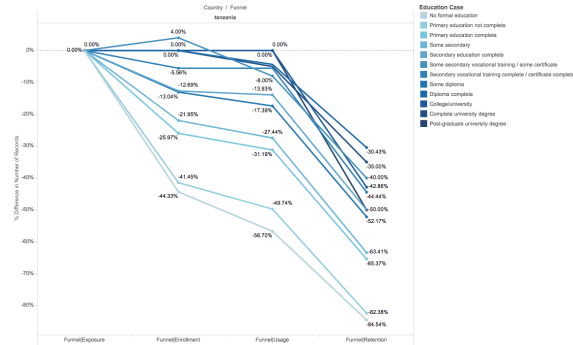


Figure 3: Retention by Education Level, Tanzania 2014

Results are similar for Tanzania (fig. 3), though not as pronounced as for Uganda.

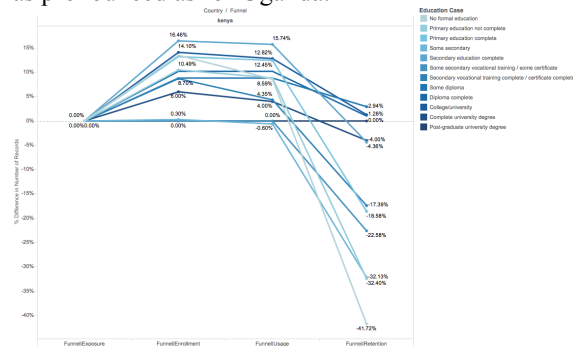


Figure 4: Retention by Education Level, Kenya 2014

⁶ See appendix for full frequency table of retention by FII response.

For Kenya (fig. 4) an interesting result arises where more subjects claim to have enrolled in mobile money than be familiar. This was an abnormality in the FII data that is worth follow-up, though the team conjectures that perhaps given the high penetration of mobile money in Kenya⁷ and position of this question, users believed the interviewer may have been referring to something besides those services familiar to nearly all, (i.e. Safaricom M-PESA).

Similar results are seen for age, where older age bins tend to fall away from mobile money with higher frequency than younger age bins.

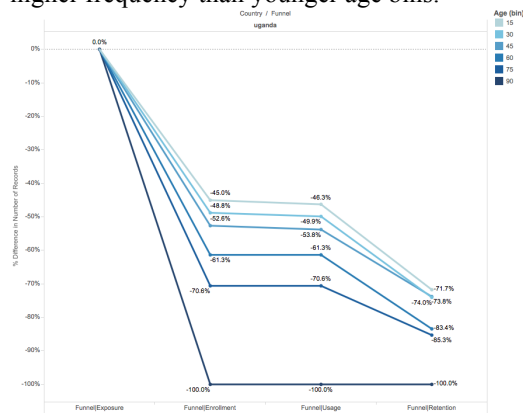


Figure 5: Retention by Age Bin Uganda 2014

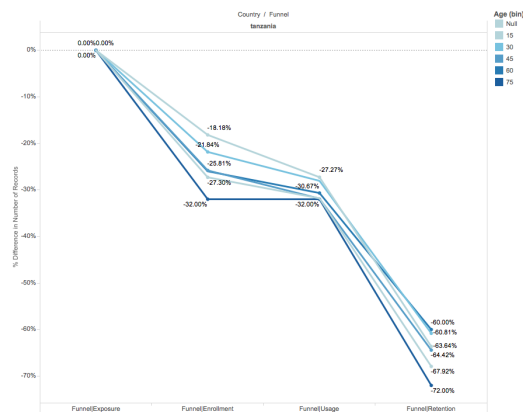


Figure 6: Retention by Age Bin, Tanzania 2014

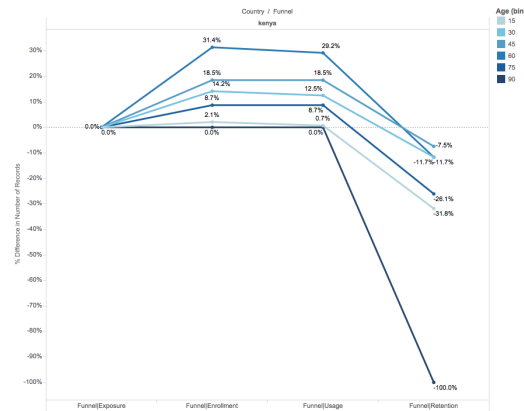


Figure 7: Retention by Age Bin, Kenya 2014

Worth noting is the loss in very old and very young, with middle-aged wage earners dominating the retained set.

Multivariate Analyses

The results above demonstrate only two-way effects of individual predictors for each level of our funnel/waterfall.

We used several modeling techniques, recursive partitioning trees, random forest and gradient boosting (adaBoost) stumps and trees. These methods supported the findings above, highlighting the importance of age and education as dominant factors in predicting adoption of mobile money.

Decision Trees

Recursive partitioning generates a single decision tree by splitting on the best predictor at each decision point.

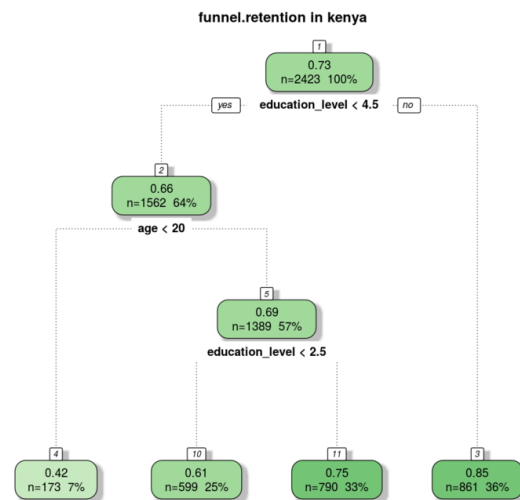


Figure 8: Recursive Partitioning Tree, Retention Kenya 2014

⁷ 51.2% in 2014 per FINDEX, see appendix

In this example, we can see that with more education and age, (answer: “yes” splits left at each decision point) we will achieve a higher predicted probability of retention (top number in each bubble). This is consistent with the above results, which assume independence.

Here is a more complex tree from Uganda. Following the path left, we can see that those under 20 with level four (“some secondary”) or less education are only 22% likely to be retained.

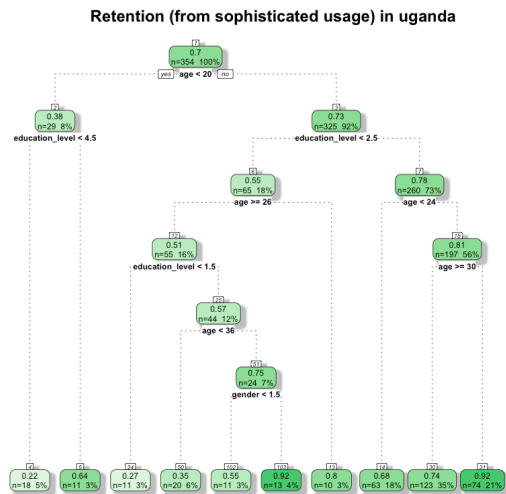


Figure 9: Recursive Partitioning Tree, Retention Uganda 2014

Random Forest

We can use the random forest methodology to build several hundred trees and cross-validate the outcome for a decrease in variance with no increase in bias.

Our forest model was predicting long-term retention w/ >80% accuracy using just the demographic data available within the FII data: Age, Education, Marital Status and Gender.

While random forest models are not as easily interpreted as decision trees (R Part), the relative variable importance can tell you of each predictor’s value in reducing error in the resultant model.

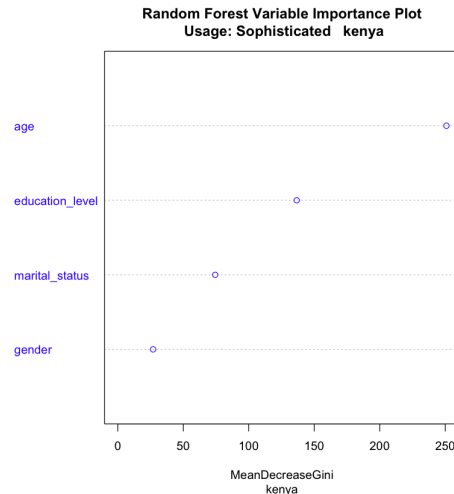


Figure 10: Random Forest, Relative Feature Importance, Kenya 2014

Logistic Regression

Given the general linear relationship between our response variables (levels of waterfall) and predictors (demographics) we fit a simple logistic regression model to the data to predict retention. Here we first scale the data to generate comparable coefficients, and then use the absolute value of the coefficient to compare effect:

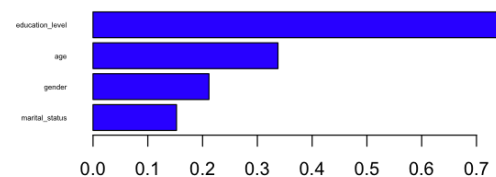


Figure 11: Logistic Regression, Absolute Value of Scaled Coefficients, Kenya Retention 2014

Here Education outweighs Age, though it should be noted that with the assumption of independence the interaction between age and education is ignored.

Boosted Stumps

The boosted stumps method combines several weak models (decision based on single predictor) and combines them into a stronger model through boosting. It is similar to the random forest approach, though has the benefit of reducing error through iterative boosting.⁸

Here we see a highly consistent result with our other methods, placing age and education at the top of importance in relative influence on the final model, predicting retention across all countries.

	var	rel.inf
age	age	58.241966
education_level	education_level	30.959295
gender	gender	6.876465
marital_status	marital_status	3.922274

Table 3: Boosted Stumps, Relative Influence of Demographics, Kenya, Tanzania, Uganda, 2104

In consideration of all of the results above from the FII data, results were consistent with all countries, all levels in both rank and relative feature importance, a surprise to the team.

Comparison: World Bank FINDEX 2014

The above analyses were completed using the 2014 Financial Inclusion Insights data set. To triangulate these findings, we additionally evaluated the 2014 FINDEX data. Although it did not include specific questions including “last time used”, it did enable a high-level analysis of factors that led to mobile money usage.

Recursive partitioning against the FINDEX data informs us that age and education do the best job reducing error in the model.

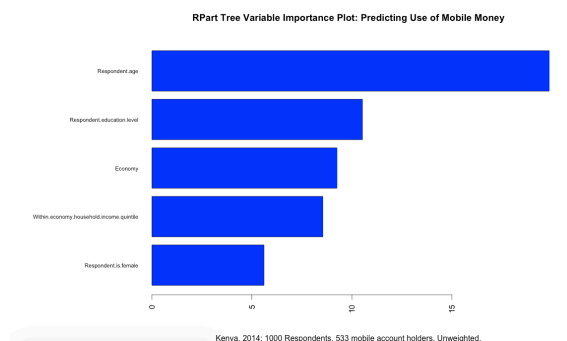


Figure 12: Variable Importance in MM Usage by Recursive Partitioning

We use all questions from FINDEX as prediction factors from which a random set is chosen at each stage.

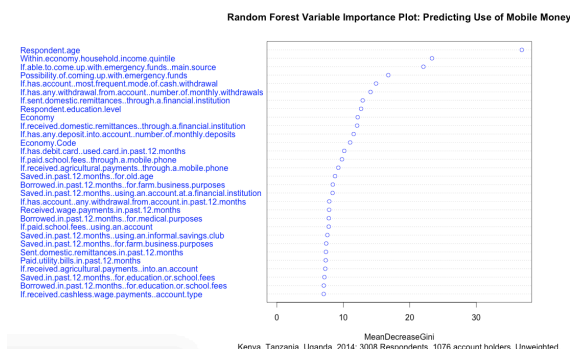


Figure 13: Variable Importance in MM Usage by Random Forest

This too aligns with our hypothesis of the importance of age and education in mobile money adoption, though the 2-way correlation between usage and other financial activities interrogated, does not provide deeper understanding of retention along a causal pathway.

IX. Discussion

The most noteworthy finding from these analyses is that (despite the radical differences between countries in demographics, adoption and services available) age and education consistently topped the list as enabling fairly accurate prediction at every level of our waterfall: enrollment, usage and retention.

Additionally through our investigation we developed a hypothesis that simpler, more basic services (deposit, withdraw, pay bills, send/receive money) act as “gateway services” for more sophisticated services (Insurance, long term savings, emergency funds, large transactions, periodic transactions: collect money, pay large bills (i.e. rent, insurance), save money, transfer money between accounts, loans, mortgage). Indeed, this hypothesis was true in the 2014 FII data for all but a single subscriber in the response set among nearly nine thousand.

Also worth noting is the low relative importance of gender in predicting retention. While prior literature points to gender inequality as a key issue to financial inclusion, gender took a lesser role in predicting adoption and retention in these data sets.

A limitation of this analysis was the shortcomings of the available data. Both the FII and FINDEX studies are meant to produce facts about the market, not develop input parameters for recommendation/prediction modeling. As such, beyond the very basic demographic data available, most of the other questions could not be adequately

disambiguated against the response variables to draw meaningful conclusions.

Our hope is that this work, while not prescriptive in recommending activities in mobile financial product/feature development or marketing techniques, can provide a framework and methodology in follow-on research enabling such outcomes.

X. Proposed Next Steps

As discussed above, the objective of identifying factors leading to long term retention was challenged by the limitations of our data.

For future projects we believe the correct approach is the development of a process and instrument for primary research within these and other geographies of interest. By developing the data set specifically designed for this purpose, we will enable a true time-series/survival analysis of users on mobile money platforms. The results of such a study could develop specific, actionable recommendations for mobile network operators (MNOs) as well as other service providers, government and non-government organizations (NGOs) in the sub-Saharan region and possibly beyond.

In the course of this project, we held several conversations with stakeholders such as Kiva.org, Branch.co, Orange, and Flutterwave who might directly benefit from further research in these areas. We also met with service providers such as Orange Door and Voto who have a data collection capability via IVR/SMS in the geographies of interest, using online surveys.

We therefore recommend a 3-month, phase II of this project, whereby we deploy a primary research instrument via IVR/SMS and develop new analyses based on true longitudinal responses, to identify factors and critical tipping points for long-term adoption.

Another underserved effect in this first exploratory phase is the influence of the social network in adoption and retention of mobile money usage. Prior research has shown that family-/neighbor-/village-influence is critical in gaining adoption, following Metcalfe's law.⁹

Embedded in this methodology would be a system whereby respondents could refer others within their mobile money "network" to identify factors not just

leading to long-term retention, but also organic adoption across a social graph.¹⁰

This study could be operated on a 3-6 month schedule, beginning immediately, including the following steps:

- 1) Development of the online survey/IVR/SMS instrument/package
- 2) Pilot deployment of instrument, by geography
- 3) Analysis of topline results
- 4) Follow-up/modification (if needed)
- 5) Full deployment (~3k responses by geography)
- 6) Survival analyses to isolate key factors, correlations between factors.
- 7) Recommendations, Communications to key stakeholders.

XI. Acknowledgements

The Data Guild wishes to acknowledge the many people who were helpful in reviewing and guiding our research. Specifically, Matthew Jackson (Stanford Department of Economics), Karen Fung (Curator, African Collection, Stanford Libraries), Joshua Blumenstock (UW/Berkeley), Kartik Raghavan, Jake Kendall, Steven Tiell (Accenture), Ted McCarthy (Google Access), Charlotte Stanton (Stanford), Iyinoluwa "E" Aboyeji (Andela/Flutterwave), Jody Rank (Ram Group), Melanie Walker, et al (World Bank).

We also wish to thank our sponsors and advisors on the project, Jennifer Kong and Theresa Boylan (Rockefeller Philanthropy Advisors) and Adam Sorensen (The Gates Foundation) without whom this work would not be possible.

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⁹ https://en.wikipedia.org/wiki/Metcalfe%27s_law

¹⁰ See Dr. Jackson's prior work, referenced above.

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Project Materials:

Python, R, Jupyter Notebooks and raw/derived data sets are available on github. Please contact info@dataguild.com for access.

XIII. Appendix

Full table comparison of mobile money attributes by country, FII:

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
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Mean (SD)	1979.8 (±14.9)	1979.4 (±14.0)	1979.8 (±14.8)	0.44
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Male	1,162 (38.8%)	1,479 (49.3%)	1,045 (34.8%)	< 0.0001
Female	1,832 (61.2%)	1,522 (50.7%)	1,955 (65.2%)	
marital_status				
Single	797 (26.6%)	720 (24.0%)	588 (19.6%)	< 0.0001
Polygamous	160 (5.3%)	239 (8.0%)	344 (11.5%)	
Monogomous	1,684 (56.2%)	1,634 (54.4%)	1,349 (45.0%)	
Divorced	37 (1.2%)	50 (1.7%)	54 (1.8%)	
Separated	77 (2.6%)	145 (4.8%)	184 (6.1%)	
Widowed	172 (5.7%)	122 (4.1%)	235 (7.8%)	
Living Together	63 (2.1%)	89 (3.0%)	236 (7.9%)	
Other	2 (0.1%)	0 (0.0%)	4 (0.1%)	
Refused	2 (0.1%)	2 (0.1%)	6 (0.2%)	
education_level				
None	295 (9.9%)	292 (9.7%)	486 (16.2%)	< 0.0001
Primary	660 (22.0%)	224 (7.5%)	1,002 (33.4%)	
Some Secondary	682 (22.8%)	1,755 (58.5%)	448 (14.9%)	
Secondary Complete	446	176	593	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
	(14.9%)	(5.9%)	(19.8%)	
Some Secondary Vocational	499 (16.7%)	411 (13.7%)	197 (6.6%)	
Complete Secondary Vocational	34 (1.1%)	29 (1.0%)	68 (2.3%)	
Some Diploma	53 (1.8%)	18 (0.6%)	55 (1.8%)	
Diploma Complete	37 (1.2%)	23 (0.8%)	11 (0.4%)	
Some College	109 (3.6%)	24 (0.8%)	45 (1.5%)	
Some University	91 (3.0%)	14 (0.5%)	30 (1.0%)	
Complete University	54 (1.8%)	20 (0.7%)	48 (1.6%)	
Post Graduate	8 (0.3%)	4 (0.1%)	7 (0.2%)	
Koranic	20 (0.7%)	2 (0.1%)	0 (0.0%)	
Other	5 (0.2%)	6 (0.2%)	10 (0.3%)	
Refused	1 (0.0%)	3 (0.1%)	0 (0.0%)	
heard_of_mobile_money				
Yes	2,222 (74.2%)	2,660 (88.6%)	2,750 (91.7%)	< 0.0001
No	772 (25.8%)	341 (11.4%)	250 (8.3%)	
biggest_challenge_with_mobile_money				
Service down time	624 (20.8%)	848 (28.3%)	666 (22.2%)	< 0.0001
Agent down time	352 (11.8%)	346 (11.5%)	145 (4.8%)	
Operating phone	79 (2.6%)	35 (1.2%)	36 (1.2%)	
Unclear Tx fees	78 (2.6%)	351 (11.7%)	176 (5.9%)	
Agent float cash avail	431 (14.4%)	60 (2.0%)	69 (2.3%)	
Contacting customer care	163 (5.4%)	35 (1.2%)	8 (0.3%)	
Sending to wrong number	310 (10.4%)	53 (1.8%)	55 (1.8%)	
Family friends stealing money	18 (0.6%)	13 (0.4%)	8 (0.3%)	
Other fraud	23 (0.8%)	12 (0.4%)	23 (0.8%)	
Other	263 (8.8%)	50 (1.7%)	127 (4.2%)	
DK/Refused	84 (2.8%)	75 (2.5%)	80 (2.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
reason_never_used_mobile_money				
Don't know what it is	11 (0.4%)	45 (1.5%)	149 (5.0%)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
Don't know how to open	41 (1.4%)	109 (3.6%)	102 (3.4%)	
Don't have ID	69 (2.3%)	5 (0.2%)	9 (0.3%)	
No POS	17 (0.6%)	125 (4.2%)	59 (2.0%)	
Don't need	62 (2.1%)	130 (4.3%)	163 (5.4%)	
Registration too complicated	4 (0.1%)	8 (0.3%)	26 (0.9%)	
Registration fee too high	0 (0.0%)	17 (0.6%)	20 (0.7%)	
Too difficult	5 (0.2%)	43 (1.4%)	21 (0.7%)	
Tx fee too high	4 (0.1%)	25 (0.8%)	18 (0.6%)	
No money	90 (3.0%)	237 (7.9%)	428 (14.3%)	
No friends or family using	1 (0.0%)	18 (0.6%)	36 (1.2%)	
Don't understand	11 (0.4%)	32 (1.1%)	63 (2.1%)	
No phone	136 (4.5%)	15 (0.5%)	33 (1.1%)	
Don't trust	9 (0.3%)	15 (0.5%)	28 (0.9%)	
Family don't approve	4 (0.1%)	3 (0.1%)	9 (0.3%)	
All agents men	0 (0.0%)	1 (0.0%)	0 (0.0%)	
No advantage over existing	5 (0.2%)	3 (0.1%)	40 (1.3%)	
Other	59 (2.0%)	177 (5.9%)	403 (13.4%)	
Missing	2,466 (82.4%)	1,993 (66.4%)	1,393 (46.4%)	
ever_used_mobile_money_for.deposit				
No	402 (13.4%)	470 (15.7%)	592 (19.7%)	< 0.0001
Yes	2,023 (67.6%)	1,408 (46.9%)	801 (26.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paygovt				
No	2,385 (79.7%)	1,832 (61.0%)	1,372 (45.7%)	0.090
Yes	40 (1.3%)	46 (1.5%)	21 (0.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.sendmoneyindiv				
No	479 (16.0%)	786 (26.2%)	531 (17.7%)	< 0.0001
Yes	1,946 (65.0%)	1,092 (36.4%)	862 (28.7%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Responses by Country				
	kenya	tanzania	uganda	P-value
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.getmoneyindiv				
No	128 (4.3%)	490 (16.3%)	331 (11.0%)	< 0.0001
Yes	2,297 (76.7%)	1,388 (46.3%)	1,062 (35.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.getmoneygovt				
No	2,401 (80.2%)	1,850 (61.6%)	1,366 (45.5%)	0.047
Yes	24 (0.8%)	28 (0.9%)	27 (0.9%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.getwages				
No	2,178 (72.7%)	1,826 (60.8%)	1,352 (45.1%)	< 0.0001
Yes	247 (8.2%)	52 (1.7%)	41 (1.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paylarge				
No	2,404 (80.3%)	1,866 (62.2%)	1,387 (46.2%)	0.31
Yes	21 (0.7%)	12 (0.4%)	6 (0.2%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payinsurance				
No	2,390 (79.8%)	1,868 (62.2%)	1,387 (46.2%)	0.001
Yes	35 (1.2%)	10 (0.3%)	6 (0.2%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payloan				
No	2,182 (72.9%)	1,861 (62.0%)	1,383 (46.1%)	< 0.0001
Yes	243 (8.1%)	17 (0.6%)	10 (0.3%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.savemoney				
No	1,739 (58.1%)	1,699 (56.6%)	1,230 (41.0%)	< 0.0001
Yes	686	179	163	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Responses by Country				
	kenya	tanzania	uganda	P-value
	(22.9%)	(6.0%)	(5.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.setasidepension				
No	2,384 (79.6%)	1,853 (61.7%)	1,371 (45.7%)	0.64
Yes	41 (1.4%)	25 (0.8%)	22 (0.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.withdraw				
No	38 (1.3%)	64 (2.1%)	119 (4.0%)	< 0.0001
Yes	2,387 (79.7%)	1,814 (60.4%)	1,274 (42.5%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.setasideother				
No	1,957 (65.4%)	1,721 (57.3%)	1,282 (42.7%)	< 0.0001
Yes	468 (15.6%)	157 (5.2%)	111 (3.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.makeinvestment				
No	2,412 (80.6%)	1,866 (62.2%)	1,381 (46.0%)	0.47
Yes	13 (0.4%)	12 (0.4%)	12 (0.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payatstore				
No	2,249 (75.1%)	1,859 (61.9%)	1,373 (45.8%)	< 0.0001
Yes	176 (5.9%)	19 (0.6%)	20 (0.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.transfermobile				
No	2,111 (70.5%)	1,786 (59.5%)	1,371 (45.7%)	< 0.0001
Yes	314 (10.5%)	92 (3.1%)	22 (0.7%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.transferbank				
No	2,253	1,841	1,380	<

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Responses by Country				
	kenya	tanzania	uganda	P-value
	(75.3%)	(61.3%)	(46.0%)	0.0001
Yes	172 (5.7%)	37 (1.2%)	13 (0.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.transfermobiletoother				
No	2,386 (79.7%)	1,853 (61.7%)	1,384 (46.1%)	0.030
Yes	39 (1.3%)	25 (0.8%)	9 (0.3%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.lendinggroup				
No	2,384 (79.6%)	1,866 (62.2%)	1,377 (45.9%)	0.006
Yes	41 (1.4%)	12 (0.4%)	16 (0.5%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payrent				
No	2,359 (78.8%)	1,856 (61.8%)	1,381 (46.0%)	< 0.0001
Yes	66 (2.2%)	22 (0.7%)	12 (0.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.accountmaint				
No	1,593 (53.2%)	1,559 (51.9%)	1,229 (41.0%)	< 0.0001
Yes	832 (27.8%)	319 (10.6%)	164 (5.5%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.other				
No	2,416 (80.7%)	1,872 (62.4%)	1,391 (46.4%)	0.50
Yes	9 (0.3%)	6 (0.2%)	2 (0.1%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paymobilebill				
No	644 (21.5%)	684 (22.8%)	794 (26.5%)	< 0.0001
Yes	1,781 (59.5%)	1,194 (39.8%)	599 (20.0%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payschoolfee				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Responses by Country				
	kenya	tanzania	uganda	P-value
No	2,188 (73.1%)	1,814 (60.4%)	1,306 (43.5%)	< 0.0001
Yes	237 (7.9%)	64 (2.1%)	87 (2.9%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paymedical				
No	2,339 (78.1%)	1,853 (61.7%)	1,361 (45.4%)	< 0.0001
Yes	86 (2.9%)	25 (0.8%)	32 (1.1%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.payelectrical				
No	2,180 (72.8%)	1,701 (56.7%)	1,327 (44.2%)	< 0.0001
Yes	245 (8.2%)	177 (5.9%)	66 (2.2%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paywater				
No	2,360 (78.8%)	1,846 (61.5%)	1,361 (45.4%)	0.097
Yes	65 (2.2%)	32 (1.1%)	32 (1.1%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paysolar				
No	2,400 (80.2%)	1,860 (62.0%)	1,385 (46.2%)	0.33
Yes	25 (0.8%)	18 (0.6%)	8 (0.3%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
ever_used_mobile_money_for.paytv				
No	2,238 (74.7%)	1,802 (60.0%)	1,352 (45.1%)	< 0.0001
Yes	187 (6.2%)	76 (2.5%)	41 (1.4%)	
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
how_often_use_mobile_money_for.deposit				
Daily	76 (2.5%)	53 (1.8%)	29 (1.0%)	< 0.0001
Weekly	495 (16.5%)	240 (8.0%)	123 (4.1%)	
15 days	309 (10.3%)	333 (11.1%)	174 (5.8%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
Monthly	658 (22.0%)	397 (13.2%)	223 (7.4%)	
3 Months	291 (9.7%)	269 (9.0%)	140 (4.7%)	
6 Months	111 (3.7%)	76 (2.5%)	60 (2.0%)	
Annually	33 (1.1%)	29 (1.0%)	31 (1.0%)	
Almost Never	50 (1.7%)	11 (0.4%)	21 (0.7%)	
Missing	971 (32.4%)	1,593 (53.1%)	2,199 (73.3%)	
how_often_use_mobile_money_for.paygovt				
Daily	0 (0.0%)	0 (0.0%)	1 (0.0%)	0.56
Weekly	2 (0.1%)	4 (0.1%)	2 (0.1%)	
15 days	4 (0.1%)	10 (0.3%)	3 (0.1%)	
Monthly	17 (0.6%)	10 (0.3%)	10 (0.3%)	
3 Months	5 (0.2%)	9 (0.3%)	2 (0.1%)	
6 Months	3 (0.1%)	4 (0.1%)	1 (0.0%)	
Annually	3 (0.1%)	3 (0.1%)	0 (0.0%)	
Almost Never	6 (0.2%)	6 (0.2%)	2 (0.1%)	
Missing	2,954 (98.7%)	2,955 (98.5%)	2,979 (99.3%)	
how_often_use_mobile_money_for.sendmoneyindiv				
Daily	18 (0.6%)	17 (0.6%)	10 (0.3%)	< 0.0001
Weekly	150 (5.0%)	86 (2.9%)	63 (2.1%)	
15 days	251 (8.4%)	180 (6.0%)	124 (4.1%)	
Monthly	800 (26.7%)	368 (12.3%)	258 (8.6%)	
3 Months	408 (13.6%)	302 (10.1%)	219 (7.3%)	
6 Months	197 (6.6%)	63 (2.1%)	94 (3.1%)	
Annually	71 (2.4%)	51 (1.7%)	65 (2.2%)	
Almost Never	51 (1.7%)	25 (0.8%)	29 (1.0%)	
Missing	1,048 (35.0%)	1,909 (63.6%)	2,138 (71.3%)	
how_often_use_mobile_money_for.getmoneyindiv				
Daily	22 (0.7%)	28 (0.9%)	12 (0.4%)	< 0.0001
Weekly	233 (7.8%)	120 (4.0%)	108 (3.6%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
15 days	293 (9.8%)	219 (7.3%)	163 (5.4%)	
Monthly	938 (31.3%)	466 (15.5%)	326 (10.9%)	
3 Months	472 (15.8%)	350 (11.7%)	263 (8.8%)	
6 Months	185 (6.2%)	120 (4.0%)	113 (3.8%)	
Annually	88 (2.9%)	49 (1.6%)	48 (1.6%)	
Almost Never	66 (2.2%)	36 (1.2%)	29 (1.0%)	
Missing	697 (23.3%)	1,613 (53.7%)	1,938 (64.6%)	
how_often_use_mobile_money_for.getwages				
Daily	5 (0.2%)	3 (0.1%)	0 (0.0%)	0.42
Weekly	26 (0.9%)	6 (0.2%)	3 (0.1%)	
15 days	23 (0.8%)	5 (0.2%)	3 (0.1%)	
Monthly	118 (3.9%)	16 (0.5%)	25 (0.8%)	
3 Months	40 (1.3%)	9 (0.3%)	4 (0.1%)	
6 Months	18 (0.6%)	8 (0.3%)	4 (0.1%)	
Annually	7 (0.2%)	2 (0.1%)	1 (0.0%)	
Almost Never	10 (0.3%)	3 (0.1%)	1 (0.0%)	
Missing	2,747 (91.8%)	2,949 (98.3%)	2,959 (98.6%)	
how_often_use_mobile_money_for.payloan				
Daily	13 (0.4%)	2 (0.1%)	1 (0.0%)	0.074
Weekly	12 (0.4%)	2 (0.1%)	0 (0.0%)	
15 days	113 (3.8%)	5 (0.2%)	6 (0.2%)	
Monthly	48 (1.6%)	2 (0.1%)	2 (0.1%)	
3 Months	29 (1.0%)	0 (0.0%)	1 (0.0%)	
6 Months	18 (0.6%)	2 (0.1%)	0 (0.0%)	
Annually	10 (0.3%)	4 (0.1%)	0 (0.0%)	
Almost Never	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Missing	2,751 (91.9%)	2,984 (99.4%)	2,990 (99.7%)	
how_often_use_mobile_money_for.savemoney				
Daily	10 (0.3%)	6 (0.2%)	5 (0.2%)	0.0005
Weekly	91 (3.0%)	22 (0.7%)	14 (0.5%)	
15 days	72 (2.4%)	27 (0.9%)	34 (1.1%)	
Monthly	346 (11.6%)	76 (2.5%)	59 (2.0%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
3 Months	109 (3.6%)	26 (0.9%)	23 (0.8%)	
6 Months	27 (0.9%)	13 (0.4%)	11 (0.4%)	
Annually	15 (0.5%)	5 (0.2%)	9 (0.3%)	
Almost Never	16 (0.5%)	4 (0.1%)	8 (0.3%)	
Missing	2,308 (77.1%)	2,822 (94.0%)	2,837 (94.6%)	
how_often_use_mobile_money_for.withdraw				
Daily	53 (1.8%)	67 (2.2%)	26 (0.9%)	< 0.0001
Weekly	564 (18.8%)	329 (11.0%)	211 (7.0%)	
15 days	410 (13.7%)	382 (12.7%)	253 (8.4%)	
Monthly	812 (27.1%)	472 (15.7%)	350 (11.7%)	
3 Months	347 (11.6%)	384 (12.8%)	244 (8.1%)	
6 Months	105 (3.5%)	113 (3.8%)	104 (3.5%)	
Annually	50 (1.7%)	49 (1.6%)	53 (1.8%)	
Almost Never	46 (1.5%)	18 (0.6%)	33 (1.1%)	
Missing	607 (20.3%)	1,187 (39.6%)	1,726 (57.5%)	
how_often_use_mobile_money_for.setasideother				
Daily	5 (0.2%)	9 (0.3%)	6 (0.2%)	< 0.0001
Weekly	49 (1.6%)	14 (0.5%)	15 (0.5%)	
15 days	43 (1.4%)	27 (0.9%)	11 (0.4%)	
Monthly	251 (8.4%)	64 (2.1%)	38 (1.3%)	
3 Months	75 (2.5%)	20 (0.7%)	21 (0.7%)	
6 Months	30 (1.0%)	11 (0.4%)	13 (0.4%)	
Annually	6 (0.2%)	4 (0.1%)	6 (0.2%)	
Almost Never	9 (0.3%)	8 (0.3%)	1 (0.0%)	
Missing	2,526 (84.4%)	2,844 (94.8%)	2,889 (96.3%)	
how_often_use_mobile_money_for.payatstore				
Daily	2 (0.1%)	0 (0.0%)	2 (0.1%)	0.23
Weekly	30 (1.0%)	3 (0.1%)	4 (0.1%)	
15 days	27 (0.9%)	1 (0.0%)	1 (0.0%)	
Monthly	49 (1.6%)	10 (0.3%)	6 (0.2%)	
3 Months	37 (1.2%)	2 (0.1%)	3 (0.1%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
6 Months	14 (0.5%)	2 (0.1%)	3 (0.1%)	
Annually	3 (0.1%)	1 (0.0%)	0 (0.0%)	
Almost Never	14 (0.5%)	0 (0.0%)	1 (0.0%)	
Missing	2,818 (94.1%)	2,982 (99.4%)	2,980 (99.3%)	
how_often_use_mobile_money_for.transfermobile				
Daily	3 (0.1%)	3 (0.1%)	0 (0.0%)	0.083
Weekly	28 (0.9%)	12 (0.4%)	6 (0.2%)	
15 days	39 (1.3%)	16 (0.5%)	1 (0.0%)	
Monthly	132 (4.4%)	28 (0.9%)	6 (0.2%)	
3 Months	65 (2.2%)	18 (0.6%)	4 (0.1%)	
6 Months	27 (0.9%)	6 (0.2%)	2 (0.1%)	
Annually	8 (0.3%)	4 (0.1%)	0 (0.0%)	
Almost Never	12 (0.4%)	5 (0.2%)	3 (0.1%)	
Missing	2,680 (89.5%)	2,909 (96.9%)	2,978 (99.3%)	
how_often_use_mobile_money_for.transferbank				
Daily	0 (0.0%)	1 (0.0%)	0 (0.0%)	0.025
Weekly	16 (0.5%)	4 (0.1%)	5 (0.2%)	
15 days	22 (0.7%)	4 (0.1%)	0 (0.0%)	
Monthly	85 (2.8%)	18 (0.6%)	3 (0.1%)	
3 Months	22 (0.7%)	2 (0.1%)	3 (0.1%)	
6 Months	8 (0.3%)	5 (0.2%)	1 (0.0%)	
Annually	9 (0.3%)	0 (0.0%)	0 (0.0%)	
Almost Never	10 (0.3%)	3 (0.1%)	1 (0.0%)	
Missing	2,822 (94.3%)	2,964 (98.8%)	2,987 (99.6%)	
how_often_use_mobile_money_for.payrent				
Daily	1 (0.0%)	1 (0.0%)	0 (0.0%)	0.20
Weekly	4 (0.1%)	3 (0.1%)	1 (0.0%)	
15 days	3 (0.1%)	1 (0.0%)	0 (0.0%)	
Monthly	45 (1.5%)	8 (0.3%)	7 (0.2%)	
3 Months	8 (0.3%)	3 (0.1%)	2 (0.1%)	
6 Months	2 (0.1%)	1 (0.0%)	1 (0.0%)	
Annually	2 (0.1%)	3 (0.1%)	0 (0.0%)	
Almost Never	1 (0.0%)	2 (0.1%)	1 (0.0%)	
Missing	2,928 (97.8%)	2,979 (99.3%)	2,988 (99.6%)	
how_often_use_mobile_money_for.accountmaint				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
Daily	54 (1.8%)	43 (1.4%)	20 (0.7%)	0.0006
Weekly	202 (6.7%)	77 (2.6%)	49 (1.6%)	
15 days	112 (3.7%)	57 (1.9%)	24 (0.8%)	
Monthly	271 (9.1%)	69 (2.3%)	31 (1.0%)	
3 Months	93 (3.1%)	38 (1.3%)	19 (0.6%)	
6 Months	38 (1.3%)	15 (0.5%)	7 (0.2%)	
Annually	24 (0.8%)	7 (0.2%)	6 (0.2%)	
Almost Never	38 (1.3%)	13 (0.4%)	8 (0.3%)	
Missing	2,162 (72.2%)	2,682 (89.4%)	2,836 (94.5%)	
how_often_use_mobile_money_for.paymobilebill				
Daily	229 (7.6%)	258 (8.6%)	93 (3.1%)	< 0.0001
Weekly	678 (22.6%)	387 (12.9%)	187 (6.2%)	
15 days	298 (10.0%)	225 (7.5%)	102 (3.4%)	
Monthly	311 (10.4%)	137 (4.6%)	100 (3.3%)	
3 Months	146 (4.9%)	121 (4.0%)	59 (2.0%)	
6 Months	52 (1.7%)	38 (1.3%)	28 (0.9%)	
Annually	24 (0.8%)	13 (0.4%)	16 (0.5%)	
Almost Never	43 (1.4%)	15 (0.5%)	14 (0.5%)	
Missing	1,213 (40.5%)	1,807 (60.2%)	2,401 (80.0%)	
how_often_use_mobile_money_for.payschoolfee				
Daily	3 (0.1%)	1 (0.0%)	0 (0.0%)	< 0.0001
Weekly	13 (0.4%)	2 (0.1%)	4 (0.1%)	
15 days	7 (0.2%)	1 (0.0%)	7 (0.2%)	
Monthly	60 (2.0%)	10 (0.3%)	18 (0.6%)	
3 Months	102 (3.4%)	15 (0.5%)	42 (1.4%)	
6 Months	24 (0.8%)	16 (0.5%)	7 (0.2%)	
Annually	14 (0.5%)	13 (0.4%)	9 (0.3%)	
Almost Never	14 (0.5%)	6 (0.2%)	0 (0.0%)	
Missing	2,757 (92.1%)	2,937 (97.9%)	2,913 (97.1%)	
how_often_use_mobile_money_for.paymedical				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
Daily	2 (0.1%)	0 (0.0%)	0 (0.0%)	0.18
Weekly	4 (0.1%)	0 (0.0%)	1 (0.0%)	
15 days	2 (0.1%)	0 (0.0%)	4 (0.1%)	
Monthly	23 (0.8%)	9 (0.3%)	5 (0.2%)	
3 Months	13 (0.4%)	9 (0.3%)	8 (0.3%)	
6 Months	16 (0.5%)	2 (0.1%)	4 (0.1%)	
Annually	17 (0.6%)	5 (0.2%)	7 (0.2%)	
Almost Never	9 (0.3%)	0 (0.0%)	3 (0.1%)	
Missing	2,908 (97.1%)	2,976 (99.2%)	2,968 (98.9%)	
how_often_use_mobile_money_for.payelectrical				
Daily	0 (0.0%)	3 (0.1%)	0 (0.0%)	< 0.0001
Weekly	8 (0.3%)	18 (0.6%)	5 (0.2%)	
15 days	5 (0.2%)	25 (0.8%)	5 (0.2%)	
Monthly	196 (6.5%)	100 (3.3%)	44 (1.5%)	
3 Months	18 (0.6%)	14 (0.5%)	9 (0.3%)	
6 Months	6 (0.2%)	7 (0.2%)	2 (0.1%)	
Annually	4 (0.1%)	3 (0.1%)	0 (0.0%)	
Almost Never	8 (0.3%)	7 (0.2%)	1 (0.0%)	
Missing	2,749 (91.8%)	2,824 (94.1%)	2,934 (97.8%)	
how_often_use_mobile_money_for.paywater				
Daily	1 (0.0%)	1 (0.0%)	0 (0.0%)	0.003
Weekly	3 (0.1%)	1 (0.0%)	3 (0.1%)	
15 days	2 (0.1%)	3 (0.1%)	1 (0.0%)	
Monthly	54 (1.8%)	18 (0.6%)	18 (0.6%)	
3 Months	1 (0.0%)	6 (0.2%)	8 (0.3%)	
6 Months	1 (0.0%)	0 (0.0%)	0 (0.0%)	
Annually	2 (0.1%)	2 (0.1%)	0 (0.0%)	
Almost Never	1 (0.0%)	1 (0.0%)	2 (0.1%)	
Missing	2,929 (97.8%)	2,969 (98.9%)	2,968 (98.9%)	
how_often_use_mobile_money_for.paytv				
Daily	1 (0.0%)	1 (0.0%)	0 (0.0%)	0.006
Weekly	4 (0.1%)	6 (0.2%)	0 (0.0%)	
15 days	3 (0.1%)	7 (0.2%)	3 (0.1%)	
Monthly	154 (5.1%)	46 (1.5%)	31 (1.0%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
3 Months	12 (0.4%)	8 (0.3%)	4 (0.1%)	
6 Months	5 (0.2%)	1 (0.0%)	1 (0.0%)	
Annually	3 (0.1%)	0 (0.0%)	0 (0.0%)	
Almost Never	5 (0.2%)	7 (0.2%)	2 (0.1%)	
Missing	2,807 (93.8%)	2,925 (97.5%)	2,959 (98.6%)	
ever_used_any_mobile_money_service.MPesa				
No	567 (18.9%)	1,584 (52.8%)	1,466 (48.9%)	< 0.0001
Yes	2,381 (79.5%)	1,183 (39.4%)	1,180 (39.3%)	
Missing	46 (1.5%)	234 (7.8%)	354 (11.8%)	
ever_used_any_mobile_money_service.AirtelMoney				
No	1,929 (64.4%)	1,873 (62.4%)	1,709 (57.0%)	< 0.0001
Yes	153 (5.1%)	677 (22.6%)	520 (17.3%)	
Missing	912 (30.5%)	451 (15.0%)	771 (25.7%)	
ever_used_any_mobile_money_service.YUCash				
No	1,241 (41.4%)	1,998 (66.6%)	896 (29.9%)	< 0.0001
Yes	23 (0.8%)	573 (19.1%)	15 (0.5%)	
Missing	1,730 (57.8%)	430 (14.3%)	2,089 (69.6%)	
ever_used_any_mobile_money_service.OrangeMoney				
No	1,280 (42.8%)	776 (25.9%)	455 (15.2%)	< 0.0001
Yes	12 (0.4%)	30 (1.0%)	1 (0.0%)	
Missing	1,702 (56.8%)	2,195 (73.1%)	2,544 (84.8%)	
ever_used_any_mobile_money_service.Tangaza				
No	534 (17.8%)	197 (6.6%)	252 (8.4%)	1.00
Yes	2 (0.1%)	1 (0.0%)	1 (0.0%)	
Missing	2,458 (82.1%)	2,803 (93.4%)	2,747 (91.6%)	
ever_used_any_mobile_money_service.MobiCash				
No	756 (25.3%)	13 (0.4%)	458 (15.3%)	0.055
Yes	8 (0.3%)	1 (0.0%)	10 (0.3%)	
Missing	2,230	2,987	2,532	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
	(74.5%)	(99.5%)	(84.4%)	
ever_used_any_mobile_money_service.Equitel				
No	1,097 (36.6%)	0 (0.0%)	239 (8.0%)	0.39
Yes	75 (2.5%)	0 (0.0%)	12 (0.4%)	
Missing	1,822 (60.9%)	3,001 (100.0%)	2,749 (91.6%)	
last_time_fin_activity_w_mobile_money.MPesa				
Yesterday	213 (7.1%)	146 (4.9%)	174 (5.8%)	< 0.0001
7 days	683 (22.8%)	434 (14.5%)	402 (13.4%)	
30 days	857 (28.6%)	352 (11.7%)	294 (9.8%)	
90 days	189 (6.3%)	126 (4.2%)	173 (5.8%)	
>90 days	439 (14.7%)	125 (4.2%)	137 (4.6%)	
Never	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Missing	613 (20.5%)	1,818 (60.6%)	1,820 (60.7%)	
last_time_fin_activity_w_mobile_money.AirtelMoney				
Yesterday	49 (1.6%)	86 (2.9%)	102 (3.4%)	< 0.0001
7 days	47 (1.6%)	265 (8.8%)	159 (5.3%)	
30 days	33 (1.1%)	179 (6.0%)	114 (3.8%)	
90 days	17 (0.6%)	72 (2.4%)	86 (2.9%)	
>90 days	7 (0.2%)	75 (2.5%)	59 (2.0%)	
Never	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Missing	2,841 (94.9%)	2,324 (77.4%)	2,480 (82.7%)	
last_time_fin_activity_w_mobile_money.YUCash				
Yesterday	10 (0.3%)	81 (2.7%)	7 (0.2%)	0.001
7 days	7 (0.2%)	211 (7.0%)	3 (0.1%)	
30 days	2 (0.1%)	128 (4.3%)	1 (0.0%)	
90 days	2 (0.1%)	114 (3.8%)	4 (0.1%)	
>90 days	2 (0.1%)	39 (1.3%)	0 (0.0%)	
Never	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Missing	2,971	2,428	2,985	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
	(99.2%)	(80.9%)	(99.5%)	
have_account_with_any_mobile_money_service.MPesa				
No	856 (28.6%)	1,583 (52.7%)	1,796 (59.9%)	< 0.0001
Yes	2,092 (69.9%)	1,184 (39.5%)	850 (28.3%)	
Missing	46 (1.5%)	234 (7.8%)	354 (11.8%)	
have_account_with_any_mobile_money_service.AirtelMoney				
No	1,932 (64.5%)	1,942 (64.7%)	1,864 (62.1%)	< 0.0001
Yes	150 (5.0%)	608 (20.3%)	365 (12.2%)	
Missing	912 (30.5%)	451 (15.0%)	771 (25.7%)	
have_account_with_any_mobile_money_service.YUCash				
No	1,240 (41.4%)	2,063 (68.7%)	899 (30.0%)	< 0.0001
Yes	24 (0.8%)	508 (16.9%)	12 (0.4%)	
Missing	1,730 (57.8%)	430 (14.3%)	2,089 (69.6%)	
have_account_with_any_mobile_money_service.OrangeMoney				
No	1,280 (42.8%)	773 (25.8%)	455 (15.2%)	< 0.0001
Yes	12 (0.4%)	33 (1.1%)	1 (0.0%)	
Missing	1,702 (56.8%)	2,195 (73.1%)	2,544 (84.8%)	
have_account_with_any_mobile_money_service.Tangaza				
No	531 (17.7%)	197 (6.6%)	252 (8.4%)	0.88
Yes	5 (0.2%)	1 (0.0%)	1 (0.0%)	
Missing	2,458 (82.1%)	2,803 (93.4%)	2,747 (91.6%)	
have_account_with_any_mobile_money_service.MobiCash				
No	754 (25.2%)	13 (0.4%)	464 (15.5%)	0.15
Yes	10 (0.3%)	1 (0.0%)	4 (0.1%)	
Missing	2,230 (74.5%)	2,987 (99.5%)	2,532 (84.4%)	
have_account_with_any_mobile_money_service.Equitel				
No	1,091 (36.4%)	0 (0.0%)	242 (8.1%)	0.062
Yes	81 (2.7%)	0 (0.0%)	9 (0.3%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Responses by Country				
	kenya	tanzania	uganda	P-value
Missing	1,822 (60.9%)	3,001 (100.0%)	2,749 (91.6%)	
last_time_financial_activity_using_account.MPesa				
Yesterday	150 (5.0%)	119 (4.0%)	85 (2.8%)	< 0.0001
7 days	578 (19.3%)	408 (13.6%)	271 (9.0%)	
30 days	720 (24.0%)	360 (12.0%)	261 (8.7%)	
90 days	153 (5.1%)	117 (3.9%)	99 (3.3%)	
>90 days	41 (1.4%)	51 (1.7%)	18 (0.6%)	
Never	450 (15.0%)	129 (4.3%)	116 (3.9%)	
Missing	902 (30.1%)	1,817 (60.5%)	2,150 (71.7%)	
last_time_financial_activity_using_account.AirtelMoney				
Yesterday	32 (1.1%)	60 (2.0%)	45 (1.5%)	< 0.0001
7 days	38 (1.3%)	218 (7.3%)	109 (3.6%)	
30 days	23 (0.8%)	156 (5.2%)	94 (3.1%)	
90 days	11 (0.4%)	72 (2.4%)	61 (2.0%)	
>90 days	39 (1.3%)	22 (0.7%)	13 (0.4%)	
Never	7 (0.2%)	80 (2.7%)	43 (1.4%)	
Missing	2,844 (95.0%)	2,393 (79.7%)	2,635 (87.8%)	
last_time_financial_activity_using_account.YUCash				
Yesterday	7 (0.2%)	60 (2.0%)	3 (0.1%)	< 0.0001
7 days	2 (0.1%)	162 (5.4%)	1 (0.0%)	
30 days	3 (0.1%)	111 (3.7%)	1 (0.0%)	
90 days	1 (0.0%)	77 (2.6%)	4 (0.1%)	
>90 days	8 (0.3%)	52 (1.7%)	3 (0.1%)	
Never	3 (0.1%)	46 (1.5%)	0 (0.0%)	
Missing	2,970 (99.2%)	2,493 (83.1%)	2,988 (99.6%)	
last_time_financial_activity_using_account.Equitel				
Yesterday	7 (0.2%)	0 (0.0%)	2 (0.1%)	0.087
7 days	26 (0.9%)	0 (0.0%)	2 (0.1%)	
30 days	20 (0.7%)	0 (0.0%)	0 (0.0%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

	Responses by Country			P-value
	kenya	tanzania	uganda	
90 days	7 (0.2%)	0 (0.0%)	2 (0.1%)	
>90 days	9 (0.3%)	0 (0.0%)	0 (0.0%)	
Never	12 (0.4%)	0 (0.0%)	3 (0.1%)	
Missing	2,913 (97.3%)	3,001 (100.0%)	2,991 (99.7%)	
how_long_using_mobile_money				
Mean (SD)	4.8 (±0.7)	4.3 (±1.1)	4.5 (±1.0)	< 0.0001
Missing	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	
source_filename				
fsp_final_kenya_w3_(public).csv	2,994 (100.0%)	0 (0.0%)	0 (0.0%)	< 0.0001
fsp_final_nigeria_w3_(public).csv	0 (0.0%)	0 (0.0%)	0 (0.0%)	
fsp_final_tanzania_w3_(public).csv	0 (0.0%)	3,001 (100.0%)	0 (0.0%)	
fsp_final_uganda_w3_(public).csv	0 (0.0%)	0 (0.0%)	3,000 (100.0%)	
minFS				
1 day	452 (15.1%)	219 (7.3%)	188 (6.3%)	< 0.0001
7 days	870 (29.1%)	571 (19.0%)	364 (12.1%)	
30 days	700 (23.4%)	700 (23.3%)	462 (15.4%)	
90 days	188 (6.3%)	200 (6.7%)	195 (6.5%)	
>90 days	215 (7.2%)	188 (6.3%)	184 (6.1%)	
Never	569 (19.0%)	1,123 (37.4%)	1,607 (53.6%)	

[†] n=8955 observations, FII

Full table comparison of mobile money retention¹¹, by attribute FII:

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

		Retention by Factors, FII		
		False	True	P-value
country				
kenya		1,225 (22.1%)	1,769 (51.4%)	< 0.0001
tanzania		2,054 (37.0%)	947 (27.5%)	
uganda		2,275 (41.0%)	725 (21.1%)	
year_of_birth				
Mean (SD)		1979.9 (±15.3)	1979.3 (±13.3)	< 0.0001
Missing		32 (0.6%)	12 (0.3%)	
gender				
Male		2,092 (37.7%)	1,594 (46.3%)	< 0.0001
Female		3,462 (62.3%)	1,847 (53.7%)	
marital_status				
Single		1,263 (22.7%)	842 (24.5%)	< 0.0001
Polygamous		562 (10.1%)	181 (5.3%)	
Monogomous		2,720 (49.0%)	1,947 (56.6%)	
Divorced		103 (1.9%)	38 (1.1%)	
Separated		262 (4.7%)	144 (4.2%)	
Widowed		381 (6.9%)	148 (4.3%)	
Living Together		251 (4.5%)	137 (4.0%)	
Other		4 (0.1%)	2 (0.1%)	
Refused		8 (0.1%)	2 (0.1%)	
education_level				
None		922 (16.6%)	151 (4.4%)	< 0.0001
Primary		1,423 (25.6%)	463 (13.5%)	
Some Secondary		1,808 (32.6%)	1,077 (31.3%)	
Secondary Complete		721 (13.0%)	494 (14.4%)	
Some Secondary Vocational		427 (7.7%)	680 (19.8%)	
Complete Secondary Vocational		63 (1.1%)	68 (2.0%)	
Some Diploma		54 (1.0%)	72 (2.1%)	

¹¹ Retention, as defined in the manuscript: a function of Recency, Longevity and Transaction Quality

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Retention by Factors, FII			
	False	True	P-value
Diploma Complete	17 (0.3%)	54 (1.6%)	
Some College	29 (0.5%)	149 (4.3%)	
Some University	25 (0.5%)	110 (3.2%)	
Complete University	25 (0.5%)	97 (2.8%)	
Post Graduate	6 (0.1%)	13 (0.4%)	
Koranic	18 (0.3%)	4 (0.1%)	
Other	14 (0.3%)	7 (0.2%)	
Refused	2 (0.0%)	2 (0.1%)	
heard_of_mobile_money			
Yes	4,543 (81.8%)	3,089 (89.8%)	< 0.0001
No	1,011 (18.2%)	352 (10.2%)	
biggest_challenge_with_mobile_money			
Service down time	842 (15.2%)	1,296 (37.7%)	< 0.0001
Agent down time	336 (6.0%)	507 (14.7%)	
Operating phone	102 (1.8%)	48 (1.4%)	
Unclear Tx fees	282 (5.1%)	323 (9.4%)	
Agent float cash avail	151 (2.7%)	409 (11.9%)	
Contacting customer care	51 (0.9%)	155 (4.5%)	
Sending to wrong number	98 (1.8%)	320 (9.3%)	
Family friends stealing money	18 (0.3%)	21 (0.6%)	
Other fraud	26 (0.5%)	32 (0.9%)	
Other	205 (3.7%)	235 (6.8%)	
DK/Refused	144 (2.6%)	95 (2.8%)	
Missing	3,299 (59.4%)	0 (0.0%)	
reason_never_used_mobile_money			
Don't know what it is	205 (3.7%)	0 (0.0%)	1.0
Don't know how to open	252 (4.5%)	0 (0.0%)	
Don't have ID	83 (1.5%)	0 (0.0%)	
No POS	201 (3.6%)	0 (0.0%)	
Don't need	355 (6.4%)	0 (0.0%)	
Registration too complicated	38 (0.7%)	0 (0.0%)	
Registration fee too high	37 (0.7%)	0 (0.0%)	
Too difficult	69 (1.2%)	0 (0.0%)	
Tx fee too high	47 (0.8%)	0 (0.0%)	
No money	755 (13.6%)	0 (0.0%)	
No friends or family using	55 (1.0%)	0 (0.0%)	
Don't understand	106 (1.9%)	0 (0.0%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Retention by Factors, FII			
	False	True	P-value
No phone	184 (3.3%)	0 (0.0%)	
Don't trust	52 (0.9%)	0 (0.0%)	
Family don't approve	16 (0.3%)	0 (0.0%)	
All agents men	1 (0.0%)	0 (0.0%)	
No advantage over existing	48 (0.9%)	0 (0.0%)	
Other	639 (11.5%)	0 (0.0%)	
Missing	2,411 (43.4%)	3,441 (100.0%)	
ever_used_mobile_money_for.deposit			
No	945 (17.0%)	519 (15.1%)	< 0.0001
Yes	1,310 (23.6%)	2,922 (84.9%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paygovt			
No	2,232 (40.2%)	3,357 (97.6%)	< 0.0001
Yes	23 (0.4%)	84 (2.4%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.sendmoneyindiv			
No	1,058 (19.0%)	738 (21.4%)	< 0.0001
Yes	1,197 (21.6%)	2,703 (78.6%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.getmoneyindiv			
No	560 (10.1%)	389 (11.3%)	< 0.0001
Yes	1,695 (30.5%)	3,052 (88.7%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.getmoneygovt			
No	2,233 (40.2%)	3,384 (98.3%)	0.037
Yes	22 (0.4%)	57 (1.7%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.getwages			
No	2,200 (39.6%)	3,156 (91.7%)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

		Retention by Factors, FII		
		False	True	P-value
Yes		55 (1.0%)	285 (8.3%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paylarge				
No		2,250 (40.5%)	3,407 (99.0%)	0.0004
Yes		5 (0.1%)	34 (1.0%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payinsurance				
No		2,248 (40.5%)	3,397 (98.7%)	< 0.0001
Yes		7 (0.1%)	44 (1.3%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payloan				
No		2,230 (40.2%)	3,196 (92.9%)	< 0.0001
Yes		25 (0.5%)	245 (7.1%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.savemoney				
No		2,067 (37.2%)	2,601 (75.6%)	< 0.0001
Yes		188 (3.4%)	840 (24.4%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.setasidepension				
No		2,238 (40.3%)	3,370 (97.9%)	< 0.0001
Yes		17 (0.3%)	71 (2.1%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.withdraw				
No		175 (3.2%)	46 (1.3%)	< 0.0001
Yes		2,080 (37.5%)	3,395 (98.7%)	
Missing		3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.setasideother				
No		2,117 (38.1%)	2,843 (82.6%)	< 0.0001
Yes		138 (2.5%)	598	

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Retention by Factors, FII			
	False	True	P-value
Missing	3,299 (59.4%)	0 (0.0%) (17.4%)	
ever_used_mobile_money_for.makeinvestment			
No	2,250 (40.5%)	3,409 (99.1%)	0.001
Yes	5 (0.1%)	32 (0.9%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payatstore			
No	2,240 (40.3%)	3,241 (94.2%)	< 0.0001
Yes	15 (0.3%)	200 (5.8%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.transfermobile			
No	2,186 (39.4%)	3,082 (89.6%)	< 0.0001
Yes	69 (1.2%)	359 (10.4%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.transferbank			
No	2,237 (40.3%)	3,237 (94.1%)	< 0.0001
Yes	18 (0.3%)	204 (5.9%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.transfermobiletoother			
No	2,241 (40.3%)	3,382 (98.3%)	0.0003
Yes	14 (0.3%)	59 (1.7%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.lendinggroup			
No	2,248 (40.5%)	3,379 (98.2%)	< 0.0001
Yes	7 (0.1%)	62 (1.8%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payrent			
No	2,238 (40.3%)	3,358 (97.6%)	< 0.0001
Yes	17 (0.3%)	83 (2.4%)	
Missing	3,299	0 (0.0%)	

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Retention by Factors, FII			
	False	True	P-value
	(59.4%)		
ever_used_mobile_money_for.accountmaint			
No	1,957 (35.2%)	2,424 (70.4%)	< 0.0001
Yes	298 (5.4%)	1,017 (29.6%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.other			
No	2,250 (40.5%)	3,429 (99.7%)	0.46
Yes	5 (0.1%)	12 (0.3%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paymobilebill			
No	1,266 (22.8%)	856 (24.9%)	< 0.0001
Yes	989 (17.8%)	2,585 (75.1%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payschoolfee			
No	2,183 (39.3%)	3,125 (90.8%)	< 0.0001
Yes	72 (1.3%)	316 (9.2%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paymedical			
No	2,230 (40.2%)	3,323 (96.6%)	< 0.0001
Yes	25 (0.5%)	118 (3.4%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.payelectrical			
No	2,191 (39.4%)	3,017 (87.7%)	< 0.0001
Yes	64 (1.2%)	424 (12.3%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paywater			
No	2,233 (40.2%)	3,334 (96.9%)	< 0.0001
Yes	22 (0.4%)	107 (3.1%)	
Missing	3,299	0 (0.0%)	

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Retention by Factors, FII			
	False	True	P-value
	(59.4%)		
ever_used_mobile_money_for.paysolar			
No	2,247 (40.5%)	3,398 (98.8%)	0.0003
Yes	8 (0.1%)	43 (1.2%)	
Missing	3,299 (59.4%)	0 (0.0%)	
ever_used_mobile_money_for.paytv			
No	2,226 (40.1%)	3,166 (92.0%)	< 0.0001
Yes	29 (0.5%)	275 (8.0%)	
Missing	3,299 (59.4%)	0 (0.0%)	
how_often_use_mobile_money_for.deposit			
Daily	23 (0.4%)	135 (3.9%)	< 0.0001
Weekly	157 (2.8%)	701 (20.4%)	
15 days	220 (4.0%)	596 (17.3%)	
Monthly	260 (4.7%)	1,018 (29.6%)	
3 Months	368 (6.6%)	332 (9.6%)	
6 Months	162 (2.9%)	85 (2.5%)	
Annually	67 (1.2%)	26 (0.8%)	
Almost Never	53 (1.0%)	29 (0.8%)	
Missing	4,244 (76.4%)	519 (15.1%)	
how_often_use_mobile_money_for.paygovt			
Daily	0 (0.0%)	1 (0.0%)	0.30
Weekly	1 (0.0%)	7 (0.2%)	
15 days	2 (0.0%)	15 (0.4%)	
Monthly	6 (0.1%)	31 (0.9%)	
3 Months	3 (0.1%)	13 (0.4%)	
6 Months	4 (0.1%)	4 (0.1%)	
Annually	2 (0.0%)	4 (0.1%)	
Almost Never	5 (0.1%)	9 (0.3%)	
Missing	5,531 (99.6%)	3,357 (97.6%)	
how_often_use_mobile_money_for.sendmoneyindiv			
Daily	9 (0.2%)	36 (1.0%)	< 0.0001
Weekly	49 (0.9%)	250 (7.3%)	
15 days	125 (2.3%)	430 (12.5%)	

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Retention by Factors, FII			
	False	True	P-value
Monthly	269 (4.8%)	1,157 (33.6%)	
3 Months	375 (6.8%)	554 (16.1%)	
6 Months	185 (3.3%)	169 (4.9%)	
Annually	123 (2.2%)	64 (1.9%)	
Almost Never	62 (1.1%)	43 (1.2%)	
Missing	4,357 (78.4%)	738 (21.4%)	
how_often_use_mobile_money_for.getmoneyindiv			
Daily	18 (0.3%)	44 (1.3%)	< 0.0001
Weekly	90 (1.6%)	371 (10.8%)	
15 days	168 (3.0%)	507 (14.7%)	
Monthly	367 (6.6%)	1,363 (39.6%)	
3 Months	591 (10.6%)	494 (14.4%)	
6 Months	258 (4.6%)	160 (4.6%)	
Annually	127 (2.3%)	58 (1.7%)	
Almost Never	76 (1.4%)	55 (1.6%)	
Missing	3,859 (69.5%)	389 (11.3%)	
how_often_use_mobile_money_for.getwages			
Daily	0 (0.0%)	8 (0.2%)	0.14
Weekly	4 (0.1%)	31 (0.9%)	
15 days	6 (0.1%)	25 (0.7%)	
Monthly	22 (0.4%)	137 (4.0%)	
3 Months	7 (0.1%)	46 (1.3%)	
6 Months	8 (0.1%)	22 (0.6%)	
Annually	3 (0.1%)	7 (0.2%)	
Almost Never	5 (0.1%)	9 (0.3%)	
Missing	5,499 (99.0%)	3,156 (91.7%)	
how_often_use_mobile_money_for.payloan			
Daily	1 (0.0%)	15 (0.4%)	0.13
Weekly	1 (0.0%)	13 (0.4%)	
15 days	7 (0.1%)	117 (3.4%)	
Monthly	6 (0.1%)	46 (1.3%)	
3 Months	3 (0.1%)	27 (0.8%)	
6 Months	3 (0.1%)	17 (0.5%)	
Annually	4 (0.1%)	10 (0.3%)	
Almost Never	0 (0.0%)	0 (0.0%)	

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Retention by Factors, FII			
	False	True	P-value
Missing	5,529 (99.5%)	3,196 (92.9%)	
how_often_use_mobile_money_for.savemoney			
Daily	1 (0.0%)	20 (0.6%)	< 0.0001
Weekly	19 (0.3%)	108 (3.1%)	
15 days	24 (0.4%)	109 (3.2%)	
Monthly	62 (1.1%)	419 (12.2%)	
3 Months	50 (0.9%)	108 (3.1%)	
6 Months	18 (0.3%)	33 (1.0%)	
Annually	9 (0.2%)	20 (0.6%)	
Almost Never	5 (0.1%)	23 (0.7%)	
Missing	5,366 (96.6%)	2,601 (75.6%)	
how_often_use_mobile_money_for.withdraw			
Daily	37 (0.7%)	109 (3.2%)	< 0.0001
Weekly	221 (4.0%)	883 (25.7%)	
15 days	281 (5.1%)	764 (22.2%)	
Monthly	396 (7.1%)	1,238 (36.0%)	
3 Months	660 (11.9%)	315 (9.2%)	
6 Months	266 (4.8%)	56 (1.6%)	
Annually	139 (2.5%)	13 (0.4%)	
Almost Never	80 (1.4%)	17 (0.5%)	
Missing	3,474 (62.5%)	46 (1.3%)	
how_often_use_mobile_money_for.setasideother			
Daily	1 (0.0%)	19 (0.6%)	< 0.0001
Weekly	14 (0.3%)	64 (1.9%)	
15 days	17 (0.3%)	64 (1.9%)	
Monthly	39 (0.7%)	314 (9.1%)	
3 Months	37 (0.7%)	79 (2.3%)	
6 Months	17 (0.3%)	37 (1.1%)	
Annually	8 (0.1%)	8 (0.2%)	
Almost Never	5 (0.1%)	13 (0.4%)	
Missing	5,416 (97.5%)	2,843 (82.6%)	
how_often_use_mobile_money_for.payatstore			
Daily	0 (0.0%)	4 (0.1%)	0.53

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		Retention by Factors, FII		
		False	True	P-value
Weekly		1 (0.0%)	36 (1.0%)	
15 days		1 (0.0%)	28 (0.8%)	
Monthly		4 (0.1%)	61 (1.8%)	
3 Months		4 (0.1%)	38 (1.1%)	
6 Months		3 (0.1%)	16 (0.5%)	
Annually		0 (0.0%)	4 (0.1%)	
Almost Never		2 (0.0%)	13 (0.4%)	
Missing		5,539 (99.7%)	3,241 (94.2%)	
how_often_use_mobile_money_for.transfermobile				
Daily		0 (0.0%)	6 (0.2%)	0.11
Weekly		5 (0.1%)	41 (1.2%)	
15 days		9 (0.2%)	47 (1.4%)	
Monthly		20 (0.4%)	146 (4.2%)	
3 Months		18 (0.3%)	69 (2.0%)	
6 Months		11 (0.2%)	24 (0.7%)	
Annually		3 (0.1%)	9 (0.3%)	
Almost Never		3 (0.1%)	17 (0.5%)	
Missing		5,485 (98.8%)	3,082 (89.6%)	
how_often_use_mobile_money_for.transferbank				
Daily		0 (0.0%)	1 (0.0%)	0.17
Weekly		4 (0.1%)	21 (0.6%)	
15 days		0 (0.0%)	26 (0.8%)	
Monthly		7 (0.1%)	99 (2.9%)	
3 Months		3 (0.1%)	24 (0.7%)	
6 Months		3 (0.1%)	11 (0.3%)	
Annually		0 (0.0%)	9 (0.3%)	
Almost Never		1 (0.0%)	13 (0.4%)	
Missing		5,536 (99.7%)	3,237 (94.1%)	
how_often_use_mobile_money_for.payrent				
Daily		1 (0.0%)	1 (0.0%)	0.25
Weekly		0 (0.0%)	8 (0.2%)	
15 days		0 (0.0%)	4 (0.1%)	
Monthly		10 (0.2%)	50 (1.5%)	
3 Months		4 (0.1%)	9 (0.3%)	
6 Months		0 (0.0%)	4 (0.1%)	
Annually		2 (0.0%)	3 (0.1%)	
Almost Never		0 (0.0%)	4 (0.1%)	
Missing		5,537 (99.7%)	3,358 (97.6%)	
how_often_use_mobile_money_for.accountmaint				
Daily		24 (0.4%)	93 (2.7%)	<

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Retention by Factors, FII			
	False	True	P-value
			0.0001
Weekly	50 (0.9%)	278 (8.1%)	
15 days	38 (0.7%)	155 (4.5%)	
Monthly	59 (1.1%)	312 (9.1%)	
3 Months	65 (1.2%)	85 (2.5%)	
6 Months	27 (0.5%)	33 (1.0%)	
Annually	16 (0.3%)	21 (0.6%)	
Almost Never	19 (0.3%)	40 (1.2%)	
Missing	5,256 (94.6%)	2,424 (70.4%)	
how_often_use_mobile_money_for.paymobilebill			
Daily	156 (2.8%)	424 (12.3%)	< 0.0001
Weekly	251 (4.5%)	1,001 (29.1%)	
15 days	138 (2.5%)	487 (14.2%)	
Monthly	99 (1.8%)	449 (13.0%)	
3 Months	176 (3.2%)	150 (4.4%)	
6 Months	88 (1.6%)	30 (0.9%)	
Annually	34 (0.6%)	19 (0.6%)	
Almost Never	47 (0.8%)	25 (0.7%)	
Missing	4,565 (82.2%)	856 (24.9%)	
how_often_use_mobile_money_for.payschoolfee			
Daily	1 (0.0%)	3 (0.1%)	0.001
Weekly	4 (0.1%)	15 (0.4%)	
15 days	2 (0.0%)	13 (0.4%)	
Monthly	7 (0.1%)	81 (2.4%)	
3 Months	25 (0.5%)	134 (3.9%)	
6 Months	13 (0.2%)	34 (1.0%)	
Annually	15 (0.3%)	21 (0.6%)	
Almost Never	5 (0.1%)	15 (0.4%)	
Missing	5,482 (98.7%)	3,125 (90.8%)	
how_often_use_mobile_money_for.paymedical			
Daily	0 (0.0%)	2 (0.1%)	0.009
Weekly	0 (0.0%)	5 (0.1%)	
15 days	0 (0.0%)	6 (0.2%)	
Monthly	4 (0.1%)	33 (1.0%)	
3 Months	13 (0.2%)	17 (0.5%)	
6 Months	2 (0.0%)	20 (0.6%)	
Annually	6 (0.1%)	23 (0.7%)	

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Retention by Factors, FII			
	False	True	P-value
Almost Never	0 (0.0%)	12 (0.3%)	
Missing	5,529 (99.5%)	3,323 (96.6%)	
how_often_use_mobile_money_for.payelectrical			
Daily	2 (0.0%)	1 (0.0%)	0.002
Weekly	7 (0.1%)	24 (0.7%)	
15 days	8 (0.1%)	27 (0.8%)	
Monthly	31 (0.6%)	309 (9.0%)	
3 Months	9 (0.2%)	32 (0.9%)	
6 Months	3 (0.1%)	12 (0.3%)	
Annually	1 (0.0%)	6 (0.2%)	
Almost Never	3 (0.1%)	13 (0.4%)	
Missing	5,490 (98.8%)	3,017 (87.7%)	
how_often_use_mobile_money_for.paywater			
Daily	1 (0.0%)	1 (0.0%)	0.55
Weekly	0 (0.0%)	7 (0.2%)	
15 days	1 (0.0%)	5 (0.1%)	
Monthly	15 (0.3%)	75 (2.2%)	
3 Months	4 (0.1%)	11 (0.3%)	
6 Months	0 (0.0%)	1 (0.0%)	
Annually	0 (0.0%)	4 (0.1%)	
Almost Never	1 (0.0%)	3 (0.1%)	
Missing	5,532 (99.6%)	3,334 (96.9%)	
how_often_use_mobile_money_for.paytv			
Daily	1 (0.0%)	1 (0.0%)	0.21
Weekly	1 (0.0%)	9 (0.3%)	
15 days	1 (0.0%)	12 (0.3%)	
Monthly	19 (0.3%)	212 (6.2%)	
3 Months	3 (0.1%)	21 (0.6%)	
6 Months	1 (0.0%)	6 (0.2%)	
Annually	1 (0.0%)	2 (0.1%)	
Almost Never	2 (0.0%)	12 (0.3%)	
Missing	5,525 (99.5%)	3,166 (92.0%)	
ever_used_any_mobile_money_service.MPesa			
No	3,206 (57.7%)	411 (11.9%)	< 0.0001
Yes	1,734 (31.2%)	3,010 (87.5%)	
Missing	614 (11.1%)	20 (0.6%)	
ever_used_any_mobile_money_service.AirtelMoney			

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Retention by Factors, FII			
	False	True	P-value
No	3,333 (60.0%)	2,178 (63.3%)	< 0.0001
Yes	550 (9.9%)	800 (23.2%)	
Missing	1,671 (30.1%)	463 (13.5%)	
ever_used_any_mobile_money_service.YUCash			
No	2,284 (41.1%)	1,851 (53.8%)	< 0.0001
Yes	270 (4.9%)	341 (9.9%)	
Missing	3,000 (54.0%)	1,249 (36.3%)	
ever_used_any_mobile_money_service.OrangeMoney			
No	1,033 (18.6%)	1,478 (43.0%)	0.061
Yes	24 (0.4%)	19 (0.6%)	
Missing	4,497 (81.0%)	1,944 (56.5%)	
ever_used_any_mobile_money_service.Tangaza			
No	354 (6.4%)	629 (18.3%)	1.0
Yes	1 (0.0%)	3 (0.1%)	
Missing	5,199 (93.6%)	2,809 (81.6%)	
ever_used_any_mobile_money_service.MobiCash			
No	431 (7.8%)	796 (23.1%)	0.23
Yes	4 (0.1%)	15 (0.4%)	
Missing	5,119 (92.2%)	2,630 (76.4%)	
ever_used_any_mobile_money_service.Equitel			
No	449 (8.1%)	887 (25.8%)	< 0.0001
Yes	9 (0.2%)	78 (2.3%)	
Missing	5,096 (91.8%)	2,476 (72.0%)	
last_time_fin_activity_w_mobile_money.MPesa			
Yesterday	112 (2.0%)	589 (17.1%)	< 0.0001
7 days	319 (5.7%)	1,184 (34.4%)	
30 days	549 (9.9%)	970 (28.2%)	
90 days	274 (4.9%)	214 (6.2%)	
>90 days	480 (8.6%)	53 (1.5%)	

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Retention by Factors, FII			
	False	True	P-value
Never	0 (0.0%)	0 (0.0%)	
Missing	3,820 (68.8%)	431 (12.5%)	
last_time_fin_activity_w_mobile_money.AirtelMoney			
Yesterday	45 (0.8%)	96 (2.8%)	< 0.0001
7 days	120 (2.2%)	206 (6.0%)	
30 days	167 (3.0%)	304 (8.8%)	
90 days	87 (1.6%)	88 (2.6%)	
>90 days	131 (2.4%)	106 (3.1%)	
Never	0 (0.0%)	0 (0.0%)	
Missing	5,004 (90.1%)	2,641 (76.8%)	
last_time_fin_activity_w_mobile_money.YUCash			
Yesterday	16 (0.3%)	25 (0.7%)	< 0.0001
7 days	40 (0.7%)	91 (2.6%)	
30 days	91 (1.6%)	130 (3.8%)	
90 days	69 (1.2%)	51 (1.5%)	
>90 days	54 (1.0%)	44 (1.3%)	
Never	0 (0.0%)	0 (0.0%)	
Missing	5,284 (95.1%)	3,100 (90.1%)	
have_account_with_any_mobile_money_service.MPesa			
No	3,569 (64.3%)	666 (19.4%)	< 0.0001
Yes	1,371 (24.7%)	2,755 (80.1%)	
Missing	614 (11.1%)	20 (0.6%)	
have_account_with_any_mobile_money_service.AirtelMoney			
No	3,446 (62.0%)	2,292 (66.6%)	< 0.0001
Yes	437 (7.9%)	686 (19.9%)	
Missing	1,671 (30.1%)	463 (13.5%)	
have_account_with_any_mobile_money_service.YUCash			
No	2,297 (41.4%)	1,905 (55.4%)	0.001
Yes	257 (4.6%)	287 (8.3%)	
Missing	3,000 (54.0%)	1,249 (36.3%)	
have_account_with_any_mobile_money_service.OrangeMoney			
No	1,033	1,475	0.17

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Retention by Factors, FII			
	False	True	P-value
	(18.6%)	(42.9%)	
Yes	24 (0.4%)	22 (0.6%)	
Missing	4,497 (81.0%)	1,944 (56.5%)	
have_account_with_any_mobile_money_service.Tangaza			
No	354 (6.4%)	626 (18.2%)	0.43
Yes	1 (0.0%)	6 (0.2%)	
Missing	5,199 (93.6%)	2,809 (81.6%)	
have_account_with_any_mobile_money_service.MobiCash			
No	432 (7.8%)	799 (23.2%)	0.28
Yes	3 (0.1%)	12 (0.3%)	
Missing	5,119 (92.2%)	2,630 (76.4%)	
have_account_with_any_mobile_money_service.Equitel			
No	449 (8.1%)	884 (25.7%)	< 0.0001
Yes	9 (0.2%)	81 (2.4%)	
Missing	5,096 (91.8%)	2,476 (72.0%)	
last_time_financial_activity_using_account.MPesa			
Yesterday	113 (2.0%)	582 (16.9%)	< 0.0001
7 days	261 (4.7%)	1,080 (31.4%)	
30 days	401 (7.2%)	856 (24.9%)	
90 days	202 (3.6%)	167 (4.9%)	
>90 days	306 (5.5%)	48 (1.4%)	
Never	88 (1.6%)	22 (0.6%)	
Missing	4,183 (75.3%)	686 (19.9%)	
last_time_financial_activity_using_account.AirtelMoney			
Yesterday	42 (0.8%)	88 (2.6%)	< 0.0001
7 days	102 (1.8%)	171 (5.0%)	
30 days	117 (2.1%)	248 (7.2%)	
90 days	72 (1.3%)	72 (2.1%)	
>90 days	63 (1.1%)	74 (2.2%)	
Never	41 (0.7%)	33 (1.0%)	
Missing	5,117 (92.1%)	2,755 (80.1%)	
last_time_financial_activity_using_account.YUCash			

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Retention by Factors, FII			
	False	True	P-value
Yesterday	28 (0.5%)	21 (0.6%)	< 0.0001
7 days	34 (0.6%)	81 (2.4%)	
30 days	65 (1.2%)	100 (2.9%)	
90 days	45 (0.8%)	37 (1.1%)	
>90 days	36 (0.6%)	34 (1.0%)	
Never	49 (0.9%)	14 (0.4%)	
Missing	5,297 (95.4%)	3,154 (91.7%)	
last_time_financial_activity_using_account.Equitel			
Yesterday	1 (0.0%)	14 (0.4%)	0.14
7 days	1 (0.0%)	19 (0.6%)	
30 days	1 (0.0%)	27 (0.8%)	
90 days	2 (0.0%)	7 (0.2%)	
>90 days	2 (0.0%)	7 (0.2%)	
Never	2 (0.0%)	7 (0.2%)	
Missing	5,545 (99.8%)	3,360 (97.6%)	
how_long_using_mobile_money			
Mean (SD)	3.8 (±1.2)	5.0 (±0.0)	< 0.0001
Missing	3,299 (59.4%)	0 (0%)	
source_filename			
fsp_final_kenya_w3_(public).csv	1,225 (22.1%)	1,769 (51.4%)	< 0.0001
fsp_final_nigeria_w3_(public).csv	0 (0.0%)	0 (0.0%)	
fsp_final_tanzania_w3_(public).csv	2,054 (37.0%)	947 (27.5%)	
fsp_final_uganda_w3_(public).csv	2,275 (41.0%)	725 (21.1%)	
minFS			
1 day	167 (3.0%)	692 (20.1%)	< 0.0001
7 days	442 (8.0%)	1,363 (39.6%)	
30 days	719 (12.9%)	1,143 (33.2%)	
90 days	354 (6.4%)	229 (6.7%)	
>90 days	573 (10.3%)	14 (0.4%)	
Never	3,299 (59.4%)	0 (0.0%)	
fs90			
No	3,872	14 (0.4%)	<

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

		Retention by Factors, FII		
		False	True	P-value
		(69.7%)		0.0001
Yes		1,682 (30.3%)	3,427 (99.6%)	
age				
Mean (SD)		35.1 (±15.3)	35.7 (±13.3)	< 0.0001
Missing		32 (0.6%)	12 (0.3%)	
funnel.exposure				
False		1,011 (18.2%)	352 (10.2%)	< 0.0001
True		4,543 (81.8%)	3,089 (89.8%)	
mm4_any				
False		3,299 (59.4%)	0 (0.0%)	< 0.0001
True		2,255 (40.6%)	3,441 (100.0%)	
mm6_any				
False		3,707 (66.7%)	299 (8.7%)	< 0.0001
True		1,847 (33.3%)	3,142 (91.3%)	
funnel.enrollment				
False		3,137 (56.5%)	0 (0.0%)	< 0.0001
True		2,417 (43.5%)	3,441 (100.0%)	
funnel.usage_basic				
False		3,340 (60.1%)	0 (0.0%)	< 0.0001
True		2,214 (39.9%)	3,441 (100.0%)	
funnel.usage_sophisticated				
False		5,038 (90.7%)	1,700 (49.4%)	< 0.0001
True		516 (9.3%)	1,741 (50.6%)	
funnel.usage				
False		3,339 (60.1%)	0 (0.0%)	< 0.0001
True		2,215 (39.9%)	3,441 (100.0%)	
mm5_min				
Mean (SD)		3.3 (±1.3)	2.3 (±0.9)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 8895 Respondents.[†]

Retention by Factors, FII			
	False	True	P-value
Missing	3,299 (59.4%)	0 (0%)	
mm8_min			
Mean (SD)	3.4 (±1.4)	2.3 (±1.0)	< 0.0001
Missing	3,707 (66.7%)	299 (8.7%)	
funnel.recent			
False	3,788 (68.2%)	0 (0.0%)	< 0.0001
True	1,766 (31.8%)	3,441 (100.0%)	
funnel.longevity			
False	4,718 (84.9%)	0 (0.0%)	< 0.0001
True	836 (15.1%)	3,441 (100.0%)	
mm17_basic_min			
Mean (SD)	4.0 (±1.8)	2.5 (±1.0)	< 0.0001
Missing	3,333 (60.0%)	0 (0%)	
mm17_sophisticated_min			
Mean (SD)	4.0 (±1.8)	2.5 (±1.0)	< 0.0001
Missing	3,333 (60.0%)	0 (0%)	
funnel.frequent			
False	4,345 (78.2%)	0 (0.0%)	< 0.0001
True	1,209 (21.8%)	3,441 (100.0%)	
funnel.retention			
False	5,554 (100.0%)	0 (0.0%)	< 0.0001
True	0 (0.0%)	3,441 (100.0%)	

[†] n=8955 observations, FII

Full table comparison of mobile money usage by country, 2014 FINDEX:

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

Responses by Country

	Kenya	Uganda	Tanzania	P-value
Economy				
Kenya	533 (100.0%)	0 (0.0%)	0 (0.0%)	< 0.0001
Uganda	0 (0.0%)	320 (100.0%)	0 (0.0%)	
Tanzania	0 (0.0%)	0 (0.0%)	223 (100.0%)	
Economy.Code				
KEN	533 (100.0%)	0 (0.0%)	0 (0.0%)	< 0.0001
UGA	0 (0.0%)	320 (100.0%)	0 (0.0%)	
TZA	0 (0.0%)	0 (0.0%)	223 (100.0%)	
Respondent.is.female				
1 male	280 (52.5%)	194 (60.6%)	128 (57.4%)	0.063
2 female	253 (47.5%)	126 (39.4%)	95 (42.6%)	
Respondent.age				
tempData[, i]	32.4 (±11.0)	35.4 (±13.8)	35.7 (±13.7)	0.0003
Respondent.education.level				
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	< 0.0001
completed primary or less	135 (25.3%)	93 (29.1%)	89 (39.9%)	
completed tertiary or more	63 (11.8%)	11 (3.4%)	16 (7.2%)	
secondary	335 (62.9%)	216 (67.5%)	117 (52.5%)	
Within.economy.household.income.quintile				
1 poorest 20%	48 (9.0%)	27 (8.4%)	11 (4.9%)	< 0.0001
2 second 20%	57 (10.7%)	23 (7.2%)	32 (14.3%)	
3 middle 20%	94 (17.6%)	50 (15.6%)	23 (10.3%)	
4 fourth 20%	139 (26.1%)	70 (21.9%)	32 (14.3%)	
5 richest 20%	195 (36.6%)	150 (46.9%)	125 (56.1%)	
Has.a.debit.card				
no	145	79	54	0.60

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
	(27.2%)	(24.7%)	(24.2%)	
yes	388	241	169	
	(72.8%)	(75.3%)	(75.8%)	
If.has.debit.card..card.in.own.name				
no	19	8 (2.5%)	11 (4.9%)	0.046
	(3.6%)			
yes	514	312	209	
	(96.4%)	(97.5%)	(93.7%)	
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
(ref)	0 (0.0%)	0 (0.0%)	2 (0.9%)	
If.has.debit.card..used.card.in.past.12.months				
(dk)	1 (0.2%)	1 (0.3%)	0 (0.0%)	0.18
no	393	215	160	
	(73.7%)	(67.2%)	(71.7%)	
yes	139	103	62	
	(26.1%)	(32.2%)	(27.8%)	
(ref)	0 (0.0%)	1 (0.3%)	1 (0.4%)	
Has.a.credit.card				
no	481	297	217	0.000
	(90.2%)	(92.8%)	(97.3%)	
yes	52	22	5 (2.2%)	
	(9.8%)	(6.9%)		
(dk)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
(ref)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
If.has.credit.card..used.card.in.past.12.months				
no	18	6 (1.9%)	2 (0.9%)	0.12
	(3.4%)			
yes	515	314	221	
	(96.6%)	(98.1%)	(99.1%)	
If.has.account..any.deposit.into.account.in.past.12.months				
(dk)	1 (0.2%)	1 (0.3%)	0 (0.0%)	< 0.000
				1
(ref)	3 (0.6%)	0 (0.0%)	1 (0.4%)	
no	122	56	78	
	(22.9%)	(17.5%)	(35.0%)	
yes	407	263	144	
	(76.4%)	(82.2%)	(64.6%)	
If.has.any.deposit.into.account..number.of.monthly.deposits				
1 one or two times per month	427	227	176	0.003
	(80.1%)	(70.9%)	(78.9%)	
2 three□□□□□□or more times per month	70	74	29	
	(13.1%)	(23.1%)	(13.0%)	
3 money is not deposited in a typical month	34	18	15	
	(6.4%)	(5.6%)	(6.7%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
5 (refused)	2 (0.4%)	1 (0.3%)	2 (0.9%)	
4 (dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
If.has.account..any.withdrawal.from.account.in.past.12.months				
(ref)	4 (0.8%)	0 (0.0%)	1 (0.4%)	< 0.0001
no	133 (25.0%)	58 (18.1%)	89 (39.9%)	
yes	396 (74.3%)	262 (81.9%)	133 (59.6%)	
If.has.any.withdrawal.from.account..number.of.monthly.withdrawals				
1 one or two times per month	383 (71.9%)	220 (68.8%)	169 (75.8%)	0.0005
2 three□□□□□□or more times per month	103 (19.3%)	84 (26.2%)	37 (16.6%)	
3 money is not taken out in a typical month	45 (8.4%)	11 (3.4%)	14 (6.3%)	
4 (dk)	2 (0.4%)	4 (1.2%)	0 (0.0%)	
5 (refused)	0 (0.0%)	1 (0.3%)	3 (1.3%)	
If.has.account..most.frequent.mode.of.cash.withdrawal				
1 you get it at an atm	292 (54.8%)	199 (62.2%)	153 (68.6%)	< 0.0001
2 you get it over the counter in a branch of your financial institution	161 (30.2%)	100 (31.2%)	20 (9.0%)	
3 you get it from a [insert local terminology for bank agent] who works at a store or comes to your home	49 (9.2%)	1 (0.3%)	3 (1.3%)	
4 you get it some other way	27 (5.1%)	13 (4.1%)	15 (6.7%)	
6 (dk)	2 (0.4%)	3 (0.9%)	18 (8.1%)	
7 (refused)	2 (0.4%)	0 (0.0%)	8 (3.6%)	
5 (do not need to get cash)	0 (0.0%)	4 (1.2%)	6 (2.7%)	
If.has.account..made.a.transaction.using.a.mobile.phone				
no	304 (57.0%)	194 (60.6%)	134 (60.1%)	0.53
yes	229 (43.0%)	126 (39.4%)	89 (39.9%)	
Made.payments.online.using.the.Internet				
(dk)	0 (0.0%)	1 (0.3%)	0 (0.0%)	0.33
no	494 (92.7%)	302 (94.4%)	212 (95.1%)	
yes	39 (7.3%)	17 (5.3%)	11 (4.9%)	
Saved.in.past.12.months..for.farm.business.purposes				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
(dk)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0.044
(ref)	1 (0.2%)	1 (0.3%)	1 (0.4%)	
no	264 (49.5%)	149 (46.6%)	85 (38.1%)	
yes	267 (50.1%)	170 (53.1%)	137 (61.4%)	
Saved.in.past.12.months..for.old.age				
(dk)	2 (0.4%)	0 (0.0%)	1 (0.4%)	0.010
(ref)	1 (0.2%)	1 (0.3%)	2 (0.9%)	
no	352 (66.0%)	243 (75.9%)	162 (72.6%)	
yes	178 (33.4%)	76 (23.8%)	58 (26.0%)	
Saved.in.past.12.months..for.education.or.school.fees				
(dk)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0.040
(ref)	1 (0.2%)	1 (0.3%)	1 (0.4%)	
no	245 (46.0%)	132 (41.2%)	120 (53.8%)	
yes	286 (53.7%)	187 (58.4%)	102 (45.7%)	
Saved.in.past.12.months..using.an.account.at.a.financial.institution				
(dk)	1 (0.2%)	0 (0.0%)	1 (0.4%)	0.003
(ref)	1 (0.2%)	1 (0.3%)	0 (0.0%)	
no	210 (39.4%)	113 (35.3%)	113 (50.7%)	
yes	321 (60.2%)	206 (64.4%)	109 (48.9%)	
Saved.in.past.12.months..using.an.informal.savings.club				
no	260 (48.8%)	185 (57.8%)	179 (80.3%)	< 0.0001
yes	273 (51.2%)	133 (41.6%)	44 (19.7%)	
(dk)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
(ref)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
Has.loan.from.a.financial.institution.for.house..apartment..or.land				
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0.31
no	425 (79.7%)	239 (74.7%)	175 (78.5%)	
yes	107 (20.1%)	81 (25.3%)	48 (21.5%)	
Borrowed.in.past.12.months..from.a.financial.institution				
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
no	405 (76.0%)	200 (62.5%)	172 (77.1%)	
yes	127 (23.8%)	120 (37.5%)	50 (22.4%)	
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
Borrowed.in.past.12.months..from.a.store..store.credit.				
(dk)	0 (0.0%)	1 (0.3%)	0 (0.0%)	< 0.0001
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	
no	433 (81.2%)	267 (83.4%)	220 (98.7%)	
yes	99 (18.6%)	52 (16.2%)	3 (1.3%)	
Borrowed.in.past.12.months..from.family.or.friends				
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	< 0.0001
no	184 (34.5%)	86 (26.9%)	131 (58.7%)	
yes	348 (65.3%)	234 (73.1%)	91 (40.8%)	
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
Borrowed.in.past.12.months..from.another.private.lender				
(dk)	0 (0.0%)	4 (1.2%)	0 (0.0%)	0.021
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	
no	483 (90.6%)	293 (91.6%)	212 (95.1%)	
yes	49 (9.2%)	23 (7.2%)	11 (4.9%)	
Borrowed.in.past.12.months..for.education.or.school.fees				
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	< 0.0001
no	342 (64.2%)	164 (51.2%)	166 (74.4%)	
yes	190 (35.6%)	156 (48.8%)	57 (25.6%)	
Borrowed.in.past.12.months..for.medical.purposes				
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0.0006
no	365 (68.5%)	204 (63.7%)	175 (78.5%)	
yes	167 (31.3%)	116 (36.2%)	47 (21.1%)	
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

	Responses by Country			P-value
	Kenya	Uganda	Tanzania	
Borrowed.in.past.12.months..for.farm.business.purposes				
(ref)	1 (0.2%)	1 (0.3%)	2 (0.9%)	0.42
no	346 (64.9%)	217 (67.8%)	140 (62.8%)	
yes	186 (34.9%)	102 (31.9%)	81 (36.3%)	
Possibility.of.coming.up.with.emergency.funds				
1 very possible	206 (38.6%)	133 (41.6%)	137 (61.4%)	< 0.0001
2 somewhat possible	179 (33.6%)	126 (39.4%)	58 (26.0%)	
3 not very possible	88 (16.5%)	46 (14.4%)	9 (4.0%)	
4 not at all possible	58 (10.9%)	13 (4.1%)	17 (7.6%)	
5 (dk)	1 (0.2%)	2 (0.6%)	1 (0.4%)	
6 (refused)	1 (0.2%)	0 (0.0%)	1 (0.4%)	
If.able.to.come.up.with.emergency.funds..main.source				
1 savings	247 (46.3%)	176 (55.0%)	101 (45.3%)	< 0.0001
2 family, relatives, or friends	127 (23.8%)	54 (16.9%)	21 (9.4%)	
3 money from working or a loan from an employer	123 (23.1%)	72 (22.5%)	38 (17.0%)	
4 a credit card or borrowing from a formal financial institution	10 (1.9%)	6 (1.9%)	2 (0.9%)	
5 (a/an [insert local terminology for private lenders (i.e., loan shark or pawn shop)])	5 (0.9%)	3 (0.9%)	1 (0.4%)	
6 some other source	18 (3.4%)	8 (2.5%)	58 (26.0%)	
7 (dk)	3 (0.6%)	1 (0.3%)	0 (0.0%)	
8 (refused)	0 (0.0%)	0 (0.0%)	2 (0.9%)	
Sent.domestic.remittances.in.past.12.months				
(ref)	1 (0.2%)	1 (0.3%)	0 (0.0%)	0.0009
no	153 (28.7%)	60 (18.8%)	70 (31.4%)	
yes	379 (71.1%)	257 (80.3%)	153 (68.6%)	
(dk)	0 (0.0%)	2 (0.6%)	0 (0.0%)	
If.sent.domestic.remittances..in.cash				
no	127 (23.8%)	32 (10.0%)	70 (31.4%)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
yes	406 (76.2%)	288 (90.0%)	153 (68.6%)	
If.sent.domestic.remittances..through.a.financial.institution				
no	454 (85.2%)	241 (75.3%)	175 (78.5%)	0.001
yes	79 (14.8%)	79 (24.7%)	48 (21.5%)	
If.sent.domestic.remittances..through.a.mobile.phone				
no	16 (3.0%)	34 (10.6%)	16 (7.2%)	< 0.0001
yes	517 (97.0%)	286 (89.4%)	207 (92.8%)	
If.sent.domestic.remittances..through.an.MTO				
no	501 (94.0%)	296 (92.5%)	202 (90.6%)	0.13
yes	32 (6.0%)	22 (6.9%)	21 (9.4%)	
(dk)	0 (0.0%)	2 (0.6%)	0 (0.0%)	
Received.domestic.remittances.in.past.12.months				
(ref)	1 (0.2%)	2 (0.6%)	1 (0.4%)	< 0.0001
no	153 (28.7%)	71 (22.2%)	91 (40.8%)	
yes	379 (71.1%)	247 (77.2%)	131 (58.7%)	
If.received.domestic.remittances..in.cash				
no	127 (23.8%)	32 (10.0%)	51 (22.9%)	< 0.0001
yes	406 (76.2%)	288 (90.0%)	172 (77.1%)	
If.received.domestic.remittances..through.a.financial.institution				
no	446 (83.7%)	220 (68.8%)	163 (73.1%)	< 0.0001
yes	87 (16.3%)	100 (31.2%)	60 (26.9%)	
If.received.domestic.remittances..through.a.mobile.phone				
(dk)	1 (0.2%)	0 (0.0%)	1 (0.4%)	0.007
no	20 (3.8%)	28 (8.8%)	17 (7.6%)	
yes	512 (96.1%)	292 (91.2%)	205 (91.9%)	
If.received.domestic.remittances..through.an.MTO				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
(dk)	1 (0.2%)	1 (0.3%)	0 (0.0%)	0.82
no	495 (92.9%)	302 (94.4%)	208 (93.3%)	
yes	37 (6.9%)	17 (5.3%)	15 (6.7%)	
Paid.utility.bills.in.past.12.months				
(dk)	0 (0.0%)	2 (0.6%)	0 (0.0%)	< 0.0001
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	
no	228 (42.8%)	194 (60.6%)	118 (52.9%)	
yes	304 (57.0%)	124 (38.8%)	105 (47.1%)	
If.paid.utility.bills..in.cash				
no	66 (12.4%)	11 (3.4%)	13 (5.8%)	< 0.0001
yes	467 (87.6%)	309 (96.6%)	210 (94.2%)	
If.paid.utility.bills..using.an.account				
(dk)	1 (0.2%)	0 (0.0%)	1 (0.4%)	0.0005
no	475 (89.1%)	289 (90.3%)	216 (96.9%)	
yes	57 (10.7%)	30 (9.4%)	6 (2.7%)	
(ref)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
If.paid.utility.bills..through.a.mobile.phone				
no	122 (22.9%)	71 (22.2%)	48 (21.5%)	0.93
yes	411 (77.1%)	249 (77.8%)	175 (78.5%)	
Paid.school.fees.in.past.12.months				
(dk)	2 (0.4%)	0 (0.0%)	0 (0.0%)	< 0.0001
(ref)	1 (0.2%)	0 (0.0%)	0 (0.0%)	
no	215 (40.3%)	101 (31.6%)	120 (53.8%)	
yes	315 (59.1%)	219 (68.4%)	103 (46.2%)	
If.paid.school.fees..in.cash				
no	142 (26.6%)	16 (5.0%)	17 (7.6%)	< 0.0001

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
yes	391 (73.4%)	304 (95.0%)	206 (92.4%)	
If.paid.school.fees..using.an.account				
no	360 (67.5%)	234 (73.1%)	178 (79.8%)	0.002
yes	173 (32.5%)	85 (26.6%)	45 (20.2%)	
(ref)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
If.paid.school.fees..through.a.mobile.phone				
no	455 (85.4%)	246 (76.9%)	199 (89.2%)	0.000
yes	78 (14.6%)	74 (23.1%)	24 (10.8%)	3
Received.wage.payments.in.past.12.months				
(ref)	1 (0.2%)	2 (0.6%)	0 (0.0%)	0.060
no	309 (58.0%)	192 (60.0%)	146 (65.5%)	
yes	223 (41.8%)	125 (39.1%)	75 (33.6%)	
(dk)	0 (0.0%)	1 (0.3%)	2 (0.9%)	
If.received.wage.payments..work.in.public.sector				
no	481 (90.2%)	253 (79.1%)	171 (76.7%)	< 0.000 1
yes	52 (9.8%)	67 (20.9%)	51 (22.9%)	
(ref)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
If.received.wage.payments..in.cash				
no	431 (80.9%)	246 (76.9%)	192 (86.1%)	0.026
yes	102 (19.1%)	74 (23.1%)	31 (13.9%)	
If.received.wage.payments..into.an.account.or.to.a.card				
no	75 (14.1%)	42 (13.1%)	12 (5.4%)	0.001
yes	458 (85.9%)	278 (86.9%)	211 (94.6%)	
If.received.wage.payments..through.a.mobile.phone				
no	472 (88.6%)	292 (91.2%)	212 (95.1%)	0.014
yes	61 (11.4%)	28 (8.8%)	11 (4.9%)	
If.received.cashless.wage.payments..account.use				
1 all of the money right away	19 (3.6%)	16 (5.0%)	11 (4.9%)	0.34

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
2 over time as needed	513 (96.2%)	304 (95.0%)	210 (94.2%)	
3 (dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
4 (refused)	1 (0.2%)	0 (0.0%)	1 (0.4%)	
If.received.cashless.wage.payments..account.type				
1 you had this account before you began receiving payments from an employer.	473 (88.7%)	280 (87.5%)	183 (82.1%)	0.008
2 you had an account before, but this account was opened so you could receive payments from an employer.	34 (6.4%)	23 (7.2%)	14 (6.3%)	
3 this was your first account, and it was opened so you could receive payments from an employer.	24 (4.5%)	17 (5.3%)	23 (10.3%)	
4 (dk)	2 (0.4%)	0 (0.0%)	0 (0.0%)	
5 (refused)	0 (0.0%)	0 (0.0%)	3 (1.3%)	
Received.government.transfers.in.past.12.months				
(dk)	0 (0.0%)	4 (1.2%)	3 (1.3%)	0.028
no	475 (89.1%)	288 (90.0%)	202 (90.6%)	
yes	58 (10.9%)	27 (8.4%)	18 (8.1%)	
(ref)	0 (0.0%)	1 (0.3%)	0 (0.0%)	
If.received.government.transfers..in.cash				
no	527 (98.9%)	305 (95.3%)	216 (96.9%)	0.004
yes	6 (1.1%)	15 (4.7%)	7 (3.1%)	
If.received.government.transfers..into.an.account.or.to.a.card				
no	17 (3.2%)	11 (3.4%)	6 (2.7%)	0.90
yes	516 (96.8%)	309 (96.6%)	217 (97.3%)	
If.received.government.transfers..through.a.mobile.phone				
no	525 (98.5%)	312 (97.5%)	218 (97.8%)	0.54
yes	8 (1.5%)	8 (2.5%)	5 (2.2%)	
If.received.cashless.government.transfers..account.use				
1 all of the money right away	11 (2.1%)	5 (1.6%)	2 (0.9%)	0.14
2 over time as needed	522 (97.9%)	315 (98.4%)	219 (98.2%)	
4 (refused)	0 (0.0%)	0 (0.0%)	2 (0.9%)	
If.received.cashless.government.transfers..account.type				
1 you had this account before you began receiving payments from the government.	514 (96.4%)	314 (98.1%)	214 (96.0%)	0.26
2 you had an account before, but this account was opened so you could receive payments from the government.	9 (1.7%)	2 (0.6%)	3 (1.3%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

Responses by Country				
	Kenya	Uganda	Tanzania	P-value
3 this was your first account, and it was opened so you could receive payments from the government.	10 (1.9%)	3 (0.9%)	4 (1.8%)	
5 (refused)	0 (0.0%)	1 (0.3%)	2 (0.9%)	
Received agricultural payments in past 12 months				
(ref)	1 (0.2%)	0 (0.0%)	1 (0.4%)	< 0.0001
no	239 (44.8%)	96 (30.0%)	112 (50.2%)	
yes	293 (55.0%)	224 (70.0%)	109 (48.9%)	
(dk)	0 (0.0%)	0 (0.0%)	1 (0.4%)	
If received agricultural payments in cash				
no	25 (4.7%)	1 (0.3%)	5 (2.2%)	0.0002
yes	508 (95.3%)	319 (99.7%)	218 (97.8%)	
If received agricultural payments into an account				
no	461 (86.5%)	283 (88.4%)	193 (86.5%)	0.69
yes	72 (13.5%)	37 (11.6%)	30 (13.5%)	
If received agricultural payments through a mobile phone				
no	424 (79.5%)	242 (75.6%)	165 (74.0%)	0.17
yes	109 (20.5%)	78 (24.4%)	58 (26.0%)	
Saved in the past year				
no	50 (9.4%)	22 (6.9%)	22 (9.9%)	0.37
yes	483 (90.6%)	298 (93.1%)	201 (90.1%)	
Borrowed in the past year				
no	75 (14.1%)	46 (14.4%)	70 (31.4%)	< 0.0001
yes	458 (85.9%)	274 (85.6%)	153 (68.6%)	


[†] n=1076 observations, FINDEX 2014

Full table comparison of mobile money usage by attribute, 2014 FINDEX:

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

	Made Mobile Transaction		
	no	yes	P-value
Economy			
Kenya	304 (48.1%)	229 (51.6%)	0.53
Uganda	194 (30.7%)	126 (28.4%)	
Tanzania	134 (21.2%)	89 (20.0%)	
Economy.Code			
KEN	304 (48.1%)	229 (51.6%)	0.53
UGA	194 (30.7%)	126 (28.4%)	
TZA	134 (21.2%)	89 (20.0%)	
Respondent.is.female			
1 male	348 (55.1%)	254 (57.2%)	0.49
2 female	284 (44.9%)	190 (42.8%)	
Respondent.age			
tempData[, i]	34.0 (±12.8)	33.9 (±12.2)	0.92
Respondent.education.level			
(dk)	1 (0.2%)	0 (0.0%)	< 0.0001
completed primary or less	220 (34.8%)	97 (21.8%)	
completed tertiary or more	44 (7.0%)	46 (10.4%)	
secondary	367 (58.1%)	301 (67.8%)	
Within.economy.household.income.quintile			
1 poorest 20%	47 (7.4%)	39 (8.8%)	< 0.0001
2 second 20%	87 (13.8%)	25 (5.6%)	
3 middle 20%	100 (15.8%)	67 (15.1%)	
4 fourth 20%	148 (23.4%)	93 (20.9%)	
5 richest 20%	250 (39.6%)	220 (49.5%)	
Has.a.debit.card			
no	196 (31.0%)	82 (18.5%)	< 0.0001
yes	436 (69.0%)	362 (81.5%)	
If.has.debit.card..card.in.own.name			

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

		Made Mobile Transaction		P-value
		no	yes	
no		19 (3.0%)	19 (4.3%)	0.60
yes		611 (96.7%)	424 (95.5%)	
(dk)		1 (0.2%)	0 (0.0%)	
(ref)		1 (0.2%)	1 (0.2%)	
If.has.debit.card..used.card.in.past.12.months				
(dk)		0 (0.0%)	2 (0.5%)	< 0.0001
no		493 (78.0%)	275 (61.9%)	
yes		137 (21.7%)	167 (37.6%)	
(ref)		2 (0.3%)	0 (0.0%)	
Has.a.credit.card				
no		594 (94.0%)	401 (90.3%)	0.020
yes		36 (5.7%)	43 (9.7%)	
(dk)		1 (0.2%)	0 (0.0%)	
(ref)		1 (0.2%)	0 (0.0%)	
If.has.credit.card..used.card.in.past.12.months				
no		11 (1.7%)	15 (3.4%)	0.11
yes		621 (98.3%)	429 (96.6%)	
If.has.account..any.deposit.into.account.in.past.12.months				
(dk)		1 (0.2%)	1 (0.2%)	< 0.0001
(ref)		1 (0.2%)	3 (0.7%)	
no		180 (28.5%)	76 (17.1%)	
yes		450 (71.2%)	364 (82.0%)	
If.has.any.deposit.into.account..number.of.monthly.deposits				
1 one or two times per month		514 (81.3%)	316 (71.2%)	< 0.0001
2 three  or more times per month		68 (10.8%)	105 (23.6%)	
3 money is not deposited in a typical month		45 (7.1%)	22 (5.0%)	
5 (refused)		4 (0.6%)	1 (0.2%)	
4 (dk)		1 (0.2%)	0 (0.0%)	
If.has.account..any.withdrawal.from.account.in.past.12.months				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

	Made Mobile Transaction		P-value
	no	yes	
(ref)	4 (0.6%)	1 (0.2%)	< 0.0001
no	209 (33.1%)	71 (16.0%)	
yes	419 (66.3%)	372 (83.8%)	
If.has.any.withdrawal.from.account..number.of.monthly.withdrawals			
1 one or two times per month	490 (77.5%)	282 (63.5%)	< 0.0001
2 three□□□□□or more times per month	90 (14.2%)	134 (30.2%)	
3 money is not taken out in a typical month	45 (7.1%)	25 (5.6%)	
4 (dk)	5 (0.8%)	1 (0.2%)	
5 (refused)	2 (0.3%)	2 (0.5%)	
If.has.account..most.frequent.mode.of.cash.withdrawal			
1 you get it at an atm	348 (55.1%)	296 (66.7%)	< 0.0001
2 you get it over the counter in a branch of your financial institution	181 (28.6%)	100 (22.5%)	
3 you get it from a [insert local terminology for bank agent] who works at a store or comes to your home	35 (5.5%)	18 (4.1%)	
4 you get it some other way	30 (4.7%)	25 (5.6%)	
6 (dk)	20 (3.2%)	3 (0.7%)	
7 (refused)	10 (1.6%)	0 (0.0%)	
5 (do not need to get cash)	8 (1.3%)	2 (0.5%)	
If.has.account..made.a.transaction.using.a.mobile.phone			
no	632 (100.0%)	0 (0.0%)	< 0.0001
yes	0 (0.0%)	444 (100.0%)	
Made.payments.online.using.the.Internet			
(dk)	0 (0.0%)	1 (0.2%)	< 0.0001
no	608 (96.2%)	400 (90.1%)	
yes	24 (3.8%)	43 (9.7%)	
Saved.in.past.12.months..for.farm.business.purposes			
(dk)	1 (0.2%)	0 (0.0%)	< 0.0001
(ref)	1 (0.2%)	2 (0.5%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

	Made Mobile Transaction		P-value
	no	yes	
no	326 (51.6%)	172 (38.7%)	
yes	304 (48.1%)	270 (60.8%)	
Saved.in.past.12.months..for.old.age			
(dk)	1 (0.2%)	2 (0.5%)	< 0.0001
(ref)	2 (0.3%)	2 (0.5%)	
no	488 (77.2%)	269 (60.6%)	
yes	141 (22.3%)	171 (38.5%)	
Saved.in.past.12.months..for.education.or.school.fees			
(dk)	0 (0.0%)	1 (0.2%)	< 0.0001
(ref)	2 (0.3%)	1 (0.2%)	
no	326 (51.6%)	171 (38.5%)	
yes	304 (48.1%)	271 (61.0%)	
Saved.in.past.12.months..using.an.account.at.a.financial.institution			
(dk)	2 (0.3%)	0 (0.0%)	< 0.0001
(ref)	2 (0.3%)	0 (0.0%)	
no	303 (47.9%)	133 (30.0%)	
yes	325 (51.4%)	311 (70.0%)	
Saved.in.past.12.months..using.an.informal.savings.club			
no	384 (60.8%)	240 (54.1%)	0.030
yes	247 (39.1%)	203 (45.7%)	
(dk)	0 (0.0%)	1 (0.2%)	
(ref)	1 (0.2%)	0 (0.0%)	
Has.loan.from.a.financial.institution.for.house..apartment..or.land			
(ref)	1 (0.2%)	0 (0.0%)	0.0003
no	517 (81.8%)	322 (72.5%)	
yes	114 (18.0%)	122 (27.5%)	
Borrowed.in.past.12.months..from.a.financial.institution			
(ref)	1 (0.2%)	0 (0.0%)	0.0005
no	482	295	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

	Made Mobile Transaction		P-value
	no	yes	
	(76.3%)	(66.4%)	
yes	148	149	
	(23.4%)	(33.6%)	
(dk)	1 (0.2%)	0 (0.0%)	
Borrowed.in.past.12.months..from.a.store..store.credit.			
(dk)	1 (0.2%)	0 (0.0%)	0.074
(ref)	1 (0.2%)	0 (0.0%)	
	551	369	
no	(87.2%)	(83.1%)	
yes	79	75	
	(12.5%)	(16.9%)	
Borrowed.in.past.12.months..from.family.or.friends			
(ref)	1 (0.2%)	0 (0.0%)	0.016
	255	146	
no	(40.3%)	(32.9%)	
yes	375	298	
	(59.3%)	(67.1%)	
(dk)	1 (0.2%)	0 (0.0%)	
Borrowed.in.past.12.months..from.another.private.lender			
(dk)	3 (0.5%)	1 (0.2%)	0.86
(ref)	1 (0.2%)	0 (0.0%)	
	581	407	
no	(91.9%)	(91.7%)	
yes	47	36	
	(7.4%)	(8.1%)	
Borrowed.in.past.12.months..for.education.or.school.fees			
(ref)	1 (0.2%)	0 (0.0%)	0.002
	419	253	
no	(66.3%)	(57.0%)	
yes	212	191	
	(33.5%)	(43.0%)	
Borrowed.in.past.12.months..for.medical.purposes			
(ref)	1 (0.2%)	0 (0.0%)	0.0001
	466	278	
no	(73.7%)	(62.6%)	
yes	164	166	
	(25.9%)	(37.4%)	
(dk)	1 (0.2%)	0 (0.0%)	
Borrowed.in.past.12.months..for.farm.business.purposes			
(ref)	3 (0.5%)	1 (0.2%)	< 0.0001
	448	255	
no	(70.9%)	(57.4%)	
yes	181	188	

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	Made Mobile Transaction		P-value
	no	yes	
	(28.6%)	(42.3%)	
Possibility.of.coming.up.with.emergency.funds			
1 very possible	256 (40.5%)	220 (49.5%)	0.018
2 somewhat possible	223 (35.3%)	140 (31.5%)	
3 not very possible	86 (13.6%)	57 (12.8%)	
4 not at all possible	62 (9.8%)	26 (5.9%)	
5 (dk)	3 (0.5%)	1 (0.2%)	
6 (refused)	2 (0.3%)	0 (0.0%)	
If.able.to.come.up.with.emergency.funds..main.source			
1 savings	295 (46.7%)	229 (51.6%)	0.013
2 family, relatives, or friends	135 (21.4%)	67 (15.1%)	
3 money from working or a loan from an employer	123 (19.5%)	110 (24.8%)	
4 a credit card or borrowing from a formal financial institution	11 (1.7%)	7 (1.6%)	
5 (a/an [insert local terminology for private lenders (i.e., loan shark or pawn shop)])	5 (0.8%)	4 (0.9%)	
6 some other source	60 (9.5%)	24 (5.4%)	
7 (dk)	2 (0.3%)	2 (0.5%)	
8 (refused)	1 (0.2%)	1 (0.2%)	
Sent.domestic.remittances.in.past.12.months			
(ref)	2 (0.3%)	0 (0.0%)	< 0.0001
no	205 (32.4%)	78 (17.6%)	
yes	424 (67.1%)	365 (82.2%)	
(dk)	1 (0.2%)	1 (0.2%)	
If.sent.domestic.remittances..in.cash			
no	133 (21.0%)	96 (21.6%)	0.82
yes	499 (79.0%)	348 (78.4%)	
If.sent.domestic.remittances..through.a.financial.institution			
no	563 (89.1%)	307 (69.1%)	< 0.0001
yes	69 (10.9%)	137 (30.9%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

	Made Mobile Transaction		P-value
	no	yes	
If.sent.domestic.remittances..through.a.mobile.phone			
no	48 (7.6%)	18 (4.1%)	0.020
yes	584 (92.4%)	426 (95.9%)	
If.sent.domestic.remittances..through.an.MTO			
no	602 (95.3%)	397 (89.4%)	0.0001
yes	28 (4.4%)	47 (10.6%)	
(dk)	2 (0.3%)	0 (0.0%)	
Received.domestic.remittances.in.past.12.months			
(ref)	3 (0.5%)	1 (0.2%)	0.0002
no	213 (33.7%)	102 (23.0%)	
yes	416 (65.8%)	341 (76.8%)	
If.received.domestic.remittances..in.cash			
no	125 (19.8%)	85 (19.1%)	0.82
yes	507 (80.2%)	359 (80.9%)	
If.received.domestic.remittances..through.a.financial.institution			
no	541 (85.6%)	288 (64.9%)	< 0.0001
yes	91 (14.4%)	156 (35.1%)	
If.received.domestic.remittances..through.a.mobile.phone			
(dk)	1 (0.2%)	1 (0.2%)	0.015
no	48 (7.6%)	17 (3.8%)	
yes	583 (92.2%)	426 (95.9%)	
If.received.domestic.remittances..through.an.MTO			
(dk)	1 (0.2%)	1 (0.2%)	0.006
no	602 (95.3%)	403 (90.8%)	
yes	29 (4.6%)	40 (9.0%)	
Paid.utility.bills.in.past.12.months			
(dk)	0 (0.0%)	2 (0.5%)	0.0006
(ref)	1 (0.2%)	0 (0.0%)	
no	344 (54.4%)	196 (44.1%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

		Made Mobile Transaction		P-value
		no	yes	
yes		287 (45.4%)	246 (55.4%)	
If.paid.utility.bills..in.cash				
no		43 (6.8%)	47 (10.6%)	0.033
yes		589 (93.2%)	397 (89.4%)	
If.paid.utility.bills..using.an.account				
(dk)		2 (0.3%)	0 (0.0%)	< 0.0001
no		596 (94.3%)	384 (86.5%)	
yes		33 (5.2%)	60 (13.5%)	
(ref)		1 (0.2%)	0 (0.0%)	
If.paid.utility.bills..through.a.mobile.phone				
no		153 (24.2%)	88 (19.8%)	0.10
yes		479 (75.8%)	356 (80.2%)	
Paid.school.fees.in.past.12.months				
(dk)		2 (0.3%)	0 (0.0%)	0.004
(ref)		1 (0.2%)	0 (0.0%)	
no		279 (44.1%)	157 (35.4%)	
yes		350 (55.4%)	287 (64.6%)	
If.paid.school.fees..in.cash				
no		91 (14.4%)	84 (18.9%)	0.054
yes		541 (85.6%)	360 (81.1%)	
If.paid.school.fees..using.an.account				
no		496 (78.5%)	276 (62.2%)	< 0.0001
yes		136 (21.5%)	167 (37.6%)	
(ref)		0 (0.0%)	1 (0.2%)	
If.paid.school.fees..through.a.mobile.phone				
no		570 (90.2%)	330 (74.3%)	< 0.0001
yes		62 (9.8%)	114 (25.7%)	
Received.wage.payments.in.past.12.months				

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

	Made Mobile Transaction		P-value
	no	yes	
(ref)	2 (0.3%)	1 (0.2%)	< 0.0001
no	425 (67.2%)	222 (50.0%)	
yes	203 (32.1%)	220 (49.5%)	
(dk)	2 (0.3%)	1 (0.2%)	
If.received.wage.payments..work.in.public.sector			
no	556 (88.0%)	349 (78.6%)	< 0.0001
yes	76 (12.0%)	94 (21.2%)	
(ref)	0 (0.0%)	1 (0.2%)	
If.received.wage.payments..in.cash			
no	541 (85.6%)	328 (73.9%)	< 0.0001
yes	91 (14.4%)	116 (26.1%)	
If.received.wage.payments..into.an.account.or.to.a.card			
no	69 (10.9%)	60 (13.5%)	0.22
yes	563 (89.1%)	384 (86.5%)	
If.received.wage.payments..through.a.mobile.phone			
no	598 (94.6%)	378 (85.1%)	< 0.0001
yes	34 (5.4%)	66 (14.9%)	
If.received.cashless.wage.payments..account.use			
1 all of the money right away	26 (4.1%)	20 (4.5%)	0.93
2 over time as needed	604 (95.6%)	423 (95.3%)	
3 (dk)	1 (0.2%)	0 (0.0%)	
4 (refused)	1 (0.2%)	1 (0.2%)	
If.received.cashless.wage.payments..account.type			
1 you had this account before you began receiving payments from an employer.	564 (89.2%)	372 (83.8%)	0.011
2 you had an account before, but this account was opened so you could receive payments from an employer.	33 (5.2%)	38 (8.6%)	
3 this was your first account, and it was opened so you could receive payments from an employer.	32 (5.1%)	32 (7.2%)	
4 (dk)	0 (0.0%)	2 (0.5%)	
5 (refused)	3 (0.5%)	0 (0.0%)	

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. † 2014

	Made Mobile Transaction		P-value
	no	yes	
Received.government.transfers.in.past.12.months			
(dk)	3 (0.5%)	4 (0.9%)	0.002
no	584 (92.4%)	381 (85.8%)	
yes	45 (7.1%)	58 (13.1%)	
(ref)	0 (0.0%)	1 (0.2%)	
If.received.government.transfers..in.cash			
no	624 (98.7%)	424 (95.5%)	0.001
yes	8 (1.3%)	20 (4.5%)	
If.received.government.transfers..into.an.account.or.to.a.card			
no	15 (2.4%)	19 (4.3%)	0.11
yes	617 (97.6%)	425 (95.7%)	
If.received.government.transfers..through.a.mobile.phone			
no	626 (99.1%)	429 (96.6%)	0.006
yes	6 (0.9%)	15 (3.4%)	
If.received.cashless.government.transfers..account.use			
1 all of the money right away	10 (1.6%)	8 (1.8%)	0.91
2 over time as needed	621 (98.3%)	435 (98.0%)	
4 (refused)	1 (0.2%)	1 (0.2%)	
If.received.cashless.government.transfers..account.type			
1 you had this account before you began receiving payments from the government.	616 (97.5%)	426 (95.9%)	0.27
2 you had an account before, but this account was opened so you could receive payments from the government.	5 (0.8%)	9 (2.0%)	
3 this was your first account, and it was opened so you could receive payments from the government.	10 (1.6%)	7 (1.6%)	
5 (refused)	1 (0.2%)	2 (0.5%)	
Received.agricultural.payments.in.past.12.months			
(ref)	2 (0.3%)	0 (0.0%)	0.14
no	275 (43.5%)	172 (38.7%)	
yes	354 (56.0%)	272 (61.3%)	
(dk)	1 (0.2%)	0 (0.0%)	
If.received.agricultural.payments..in.cash			

The Data Guild, Project DoPLER: Kenya, Tanzania, Uganda, 3008 Respondents, 1076 account holders. Unweighted. [†] 2014

	Made Mobile Transaction		
	no	yes	P-value
no	14 (2.2%)	17 (3.8%)	0.14
yes	618 (97.8%)	427 (96.2%)	
If.received.agricultural.payments..into.an.account			
no	578 (91.5%)	359 (80.9%)	< 0.0001
yes	54 (8.5%)	85 (19.1%)	
If.received.agricultural.payments..through.a.mobile.phone			
no	533 (84.3%)	298 (67.1%)	< 0.0001
yes	99 (15.7%)	146 (32.9%)	
Saved.in.the.past.year			
no	74 (11.7%)	20 (4.5%)	< 0.0001
yes	558 (88.3%)	424 (95.5%)	
Borrowed.in.the.past.year			
no	137 (21.7%)	54 (12.2%)	< 0.0001
yes	495 (78.3%)	390 (87.8%)	

[†] n=1076 observations, FINDEX 2014

