FinSights LAB

BRIDGING THE GENDER GAP IN FINANCIAL INCLUSION

Social and Market Investment Priorities

Research design, data analysis and report by
Financial Sector Deepening Trust and
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FSDT
FINANCIAL SECTOR DEEPENING TRUST

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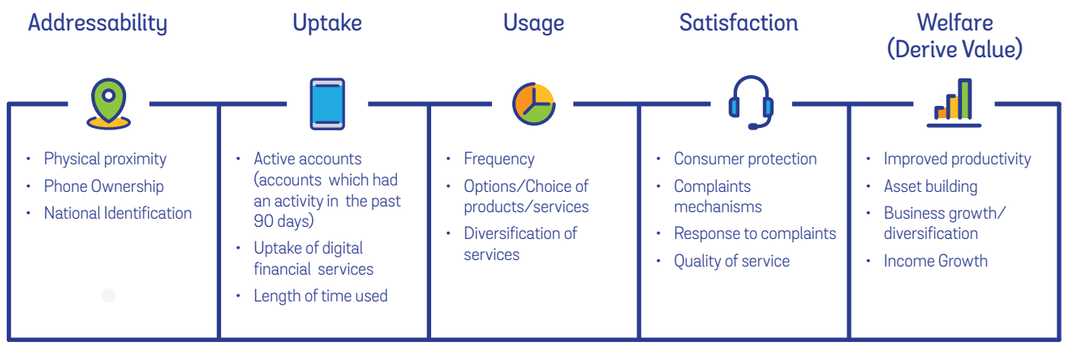
INTRODUCTION

Context of this Research

FSDT (Financial Sector Deepening Trust) commissioned the Busara Center for Behavioral Economics to jointly seek an understanding on the factors that affect the **financial inclusion and wellbeing of women** with the goal of improving women's lives.



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BACKGROUND

Why Women's Financial Inclusion Matters

Financial well-being is seen as the ability to adequately cope with emergencies, comfortably make payments on bills and utilities, have access to essential services and save for retirement. Though women make up 40% of the world's workforce, they are less likely to have access to formal financial services (World Bank, 2013). This limits their ability to borrow, save or manage risks, leading a large proportion of women to resort to using informal instruments of often unreliable and limited resources.

In the African context, the highest gender gap is seen in savings. This is because women earn less but are still more financially responsible for their families (GIZ, 2009). Overall, African women have lower financial participation rate due to lower education, formal employment, and not being the head of the household (Reyes, Thorsten, & Lacovone, 2009).

Social, cultural, and economic histories continue to prevent women from progressing financially, yet differences in household income allocation have shown that women mainly use their household income on household goods such as investing in their children's education, nutrition and health (Ashraf, 2009).

Tanzania: Potential Drivers of Financial Inclusion Inequalities

Though there are clear advantages of financial well-being for women, certain **structural and behavioral factors** hinder them from achieving financial well-being.

LACK OF INCENTIVE

Financial providers **lack the incentive to provide financial services to women** because the smaller margins demand a higher investment cost. According to Women's Banking, women don't earn enough money, have difficulty saving and are more intimidated by financial jargon than men. According to the FinScope 2017, 42% of women in Tanzania feel comfortable going into a bank or another financial institution compared to 56% of men. Achieving economic and individual well being depends on making pro-poor, pro-women policies, programs, and products.

SOCIAL NORMS

Social norms act as **determining factors towards financial inclusion**. In their report on extending financial access to women, World Bank (2014) states that, though women may access financial services from formal institutions, certain sociocultural norms such as getting permission from a male family member and regulatory requirements often prevent them from actively pursuing financial services and products.

LACK OF ACCESSIBILITY

The fact that **women have less access to technology** also act as a hindrance towards achieving financial well being. According to a report by GSMA (2015), 200 million fewer women than men have access to mobile phones in middle and low income countries. This means that in the age of increased usage of mobile financial services, men are more likely to engage with benefits of digital financial services than women. Statistics from the FinScope 2017, 71% of men state to owning phones while only 54% of women own mobile phones.

FINANCIAL LITERACY GAP

Mobile Money usage not only includes sending and receiving money, but also **savings and stored value**. World Bank (2017) relates the low usage of advanced financial services to financial literacy gap. There is a gap of 26 percentage points between the advanced users in urban as opposed to rural areas. In the rural areas, they will mostly use their accounts to receive money transfers from their relatives living in the cities, and o en lack the digital knowledge to explore more advanced uses on their own initiative. The FinScope 2017, identifies gaps between the financial literacy of men and women with some of the biggest gaps noticed in English literacy that had a gender gap of 9% and numeracy skills such as multiplication that had a gap of 20%.

What Actually Drives the Gender Gap?

DEMOGRAPHIC DIFFERENCES

Education, Phone Ownership, Financial history, Monthly income

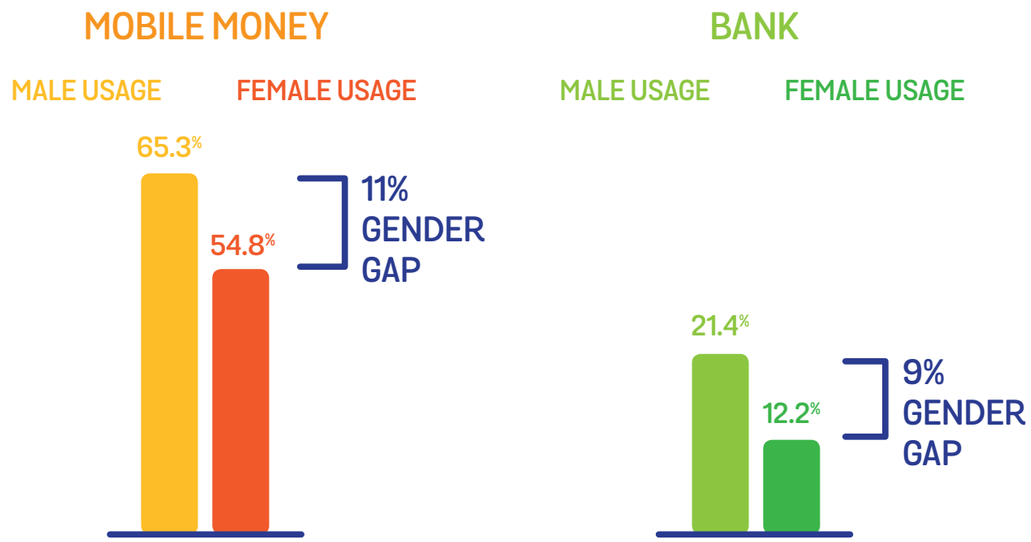
By addressing demographic factors that are significant in explaining differences in the uptake and usage of financial products and services amongst women, we can reduce the gender gap drastically.

USE CASE APPROPRIATENESS

Products are not structured to fit women's needs

While women may have the means, income and financial literacy to use financial services such as mobile money, they are not doing so because it's not useful to them. This could illustrate the extent to which products are not designed for women.

The Gender Gap



What Levers Do We Have to Address the Gender Gap?

DEMOGRAPHIC DIFFERENCES

POLICY

A share of the gender gap is caused by **differences in demographic characteristics of men and women** (income, education, ID and phone ownership, etc.). Resolving these issues will largely **require formal policy interventions with private sector support**.

Further, many of these investments will span outside the financial sector, and **require national coordination**.

USE CASE APPROPRIATENESS

PRODUCT DESIGN

A significant share of the gender gap cannot be explained by traditional demographics, suggesting that **women with comparable attributes are not finding use from the financial products** available. This calls for a product-oriented set of interventions that are **more appropriate to women's needs**.

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RESEARCH DESIGN

To understand the gender gap in financial inclusion, we used a mixed method approach of quantitative and qualitative research tools to determine the drivers of the gender gap, and develop pathways to address it going forward.

	QUANTITATIVE RESEARCH	QUALITATIVE RESEARCH	USE CASE MAPPING
SAMPLE	Using the FinScope data 2017, we identified **unique groups based on significant financial behaviors**, as well as quantify and measure the drivers of the gender gap.	**50 in-depth interviews** across Dar-es-salaam and Zanzibar.	**33 targeted interviews** across men and women with a representation of agents, retail shops, hospitals and schools.
OBJECTIVE	Shared understanding of primary demographic differences contributing to the gender gap.	A prioritization of significant use cases (with a focus on women).	A enhanced understanding of the current use cases, and preliminary ideas to formalize.
OUTPUT	Priority areas for policy interventions.	Significant use cases to drive women's financial inclusion in DFS and Banking.	Initial solutions and trigger points for prioritized use cases.

Qualitative Work – Location

83 INTERVIEWS ACROSS 2 SITES

	Dar Es Salaam	Zanzibar
IN-DEPTH INTERVIEWS		
	15 WOMEN	9 WOMEN
	12 MEN	14 MEN
USE CASE MAPPING		
	9 WOMEN	N/A
	7 MEN	
SERVICE PROVIDERS*		
	13	4

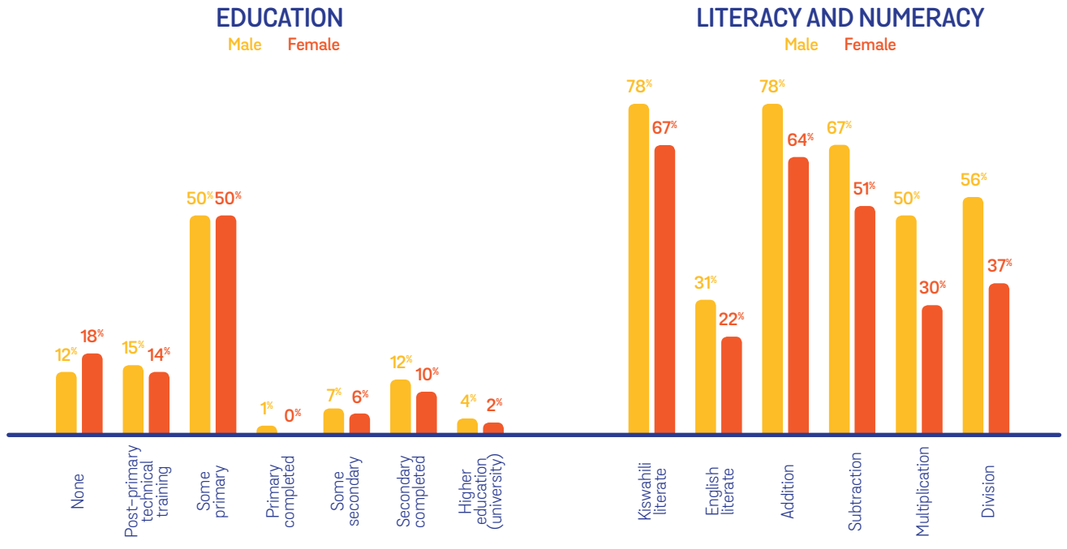
*Service providers includes teachers, headmasters, utility agents, mobile money agents, and hospital managers.

4

DEMOGRAPHIC DIFFERENCES

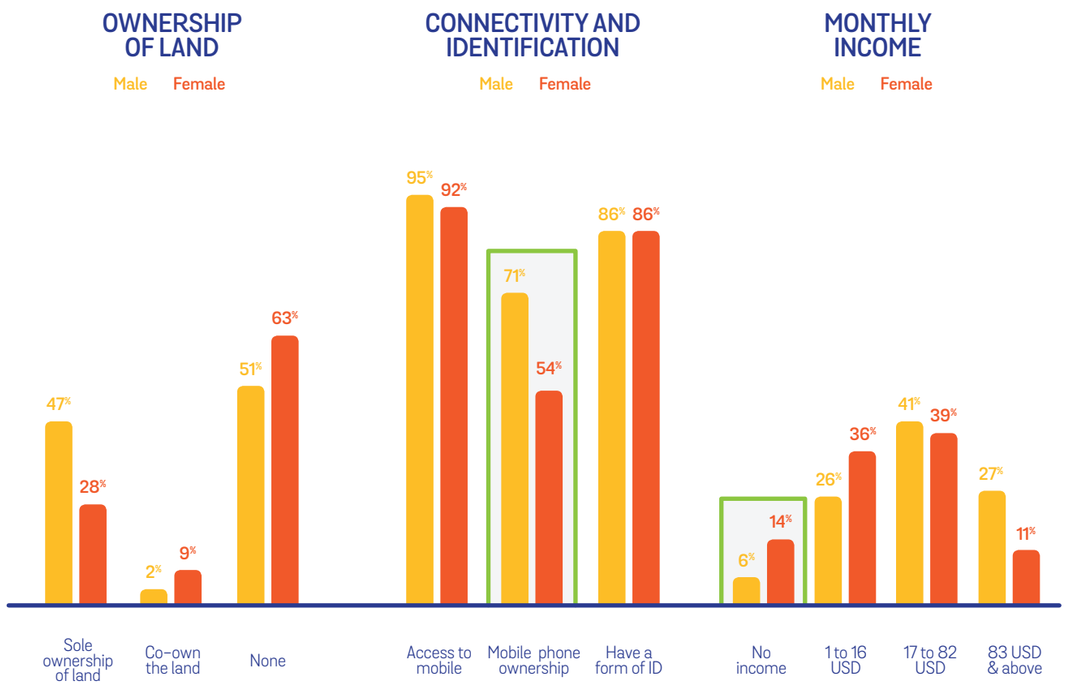
Highest Level of Education Completed

As we frame the discussion around gender in financial inclusion, it is important to map the gender trends across several important demographics. *Women have lower levels of Literacy and Numeracy, and more women have no formal education.*



Gender Landscape in Tanzania

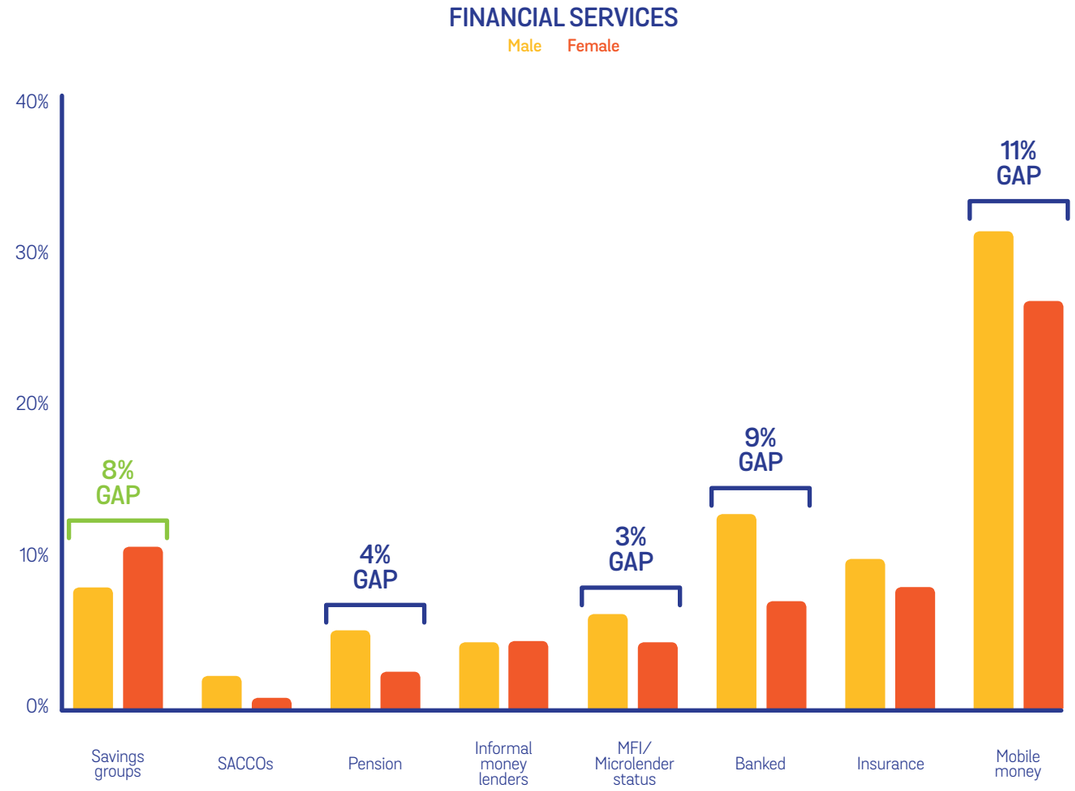
Women have lower income levels and fewer independently own land and have access to a mobile phone.*



**Further, we do not see meaningful differences in availability of KYC details between men and women, indicating MM access may be largely attributed to phone ownership.*

We find that there are gender differences across many, but not all financial services. ***Mobile money and banking services represent the highest gaps***, and thus will be the focus of the remainder of this report.

Savings groups are notably an area where the gender gap is reversed, indicating that women actively save, just may not have access, or a suitable use case with the existing products available to them.



What Structural Factors are Driving the Gender Gap?

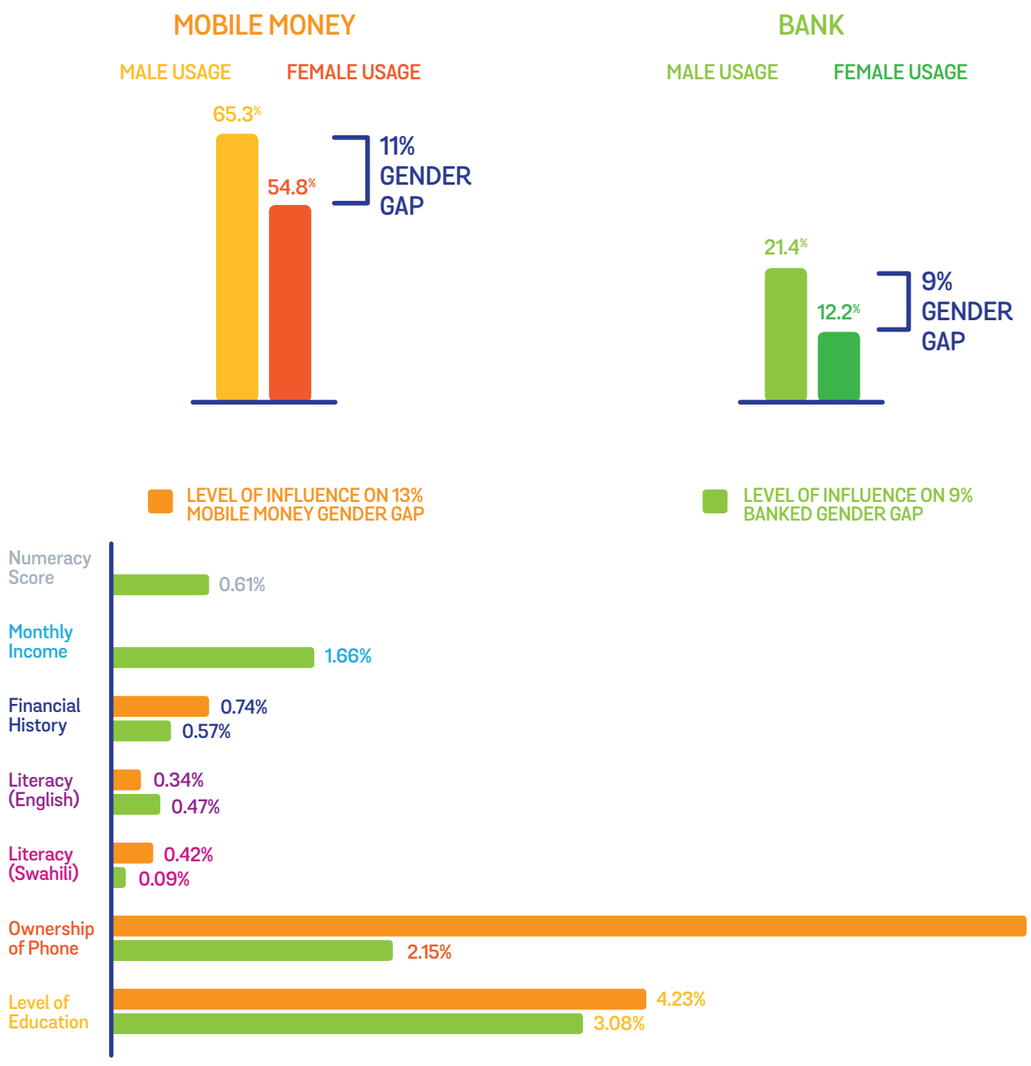
By modeling all potential access and demographic differences against mobile money and banking access, we can precisely estimate the individual impact of each factor in driving the gender gap. In essence, **we control for each feature, and then identify what share of the gender gap remains holding that variable fixed**. The graphs beside describe the share of the gender gap that is attributed to each individual factor to understand their relative weight. For example, you can imagine the following statement – for all men and women, if we fix that they both own mobile phones (or both do not own mobile phones), that would explain 7.2% of the gender gap."

Education access and quality along with **phone ownership** were the primary structural factors in explaining the gender gap across both mobile money usage and the usage of banks. Education is further explained by the large gaps in secondary enrollment, which might speak to the quality of primary education, or barriers to access to secondary education. Further we find limited share of explanation in literacy or numeracy, which indicates that women who have mobile money do not demonstrate meaningfully higher numeracy or literacy, speaking to the potential for consumers to learn how to use mobile money if there is a clear value addition.

However, we find that monthly income and numeracy are more significant at explaining the gender gap with regards to usage of banks.

Level of education, in particular tertiary level education and numeracy scores, as well as ownership of phone are the most significant demographic factors influencing usage of mobile money.

The Gender Gap



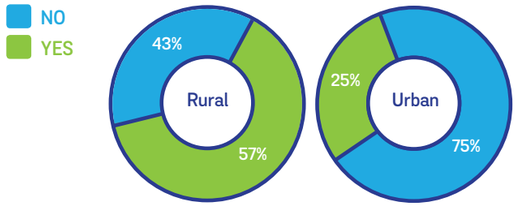
*National ID ownership, Numeracy, and Monthly Income explained less than 0.05% of the gender gap so were excluded from the table.

*National ID ownership explained less than 0.05% of the gender gap so was excluded from the table.

Perceived Barriers to Phone Ownership for Women

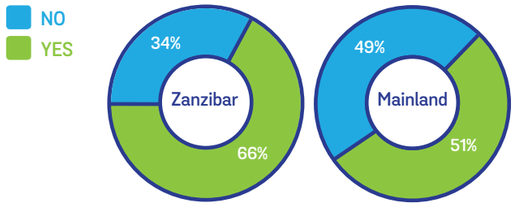
We further analyzed different segments of the FinScope survey to understand which type of women did not own their own handset, and what were the primary barriers to acquiring one.

Women's Mobile Phone Ownership Rural vs. Urban (FinScope Data, 2017)



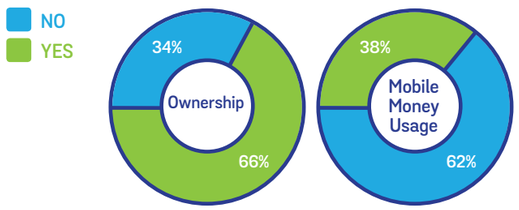
We find that phone access is more limited for rural than urban women, and this discrepancy is surprisingly higher when comparing Zanzibar to the Mainland.

Women's Mobile Phone Ownership Zanzibar vs. Mainland (FinScope Data, 2017)

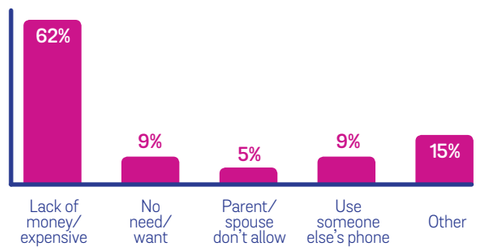


Majority of barriers to phone ownership are driven by the lack of use case, money inefficiencies and lack of autonomy.

The Zanzibar Anomaly – Differences in Phone Ownership and Mobile Money Usage for Women (FinScope Data, 2017)



Barriers to Phone Ownership (FinScope Data, 2017)



Potential Public–Private Partnerships and Policy Areas for Mobile Phone Ownership

There is limited research on successful interventions to increase mobile phone ownership among women, however using the primary barriers identified in the FinScope survey, we have identified initial policy focus areas based off of GSMA's Connected Women Initiative, and best practices in behavioral science.

PERCEIVED EFFORTS AND COST

- Consider targeted, subsidized programs for women to get access to mobile (e.g., subsidizing handsets)
- Provide public subsidies to mobile operators to facilitate network expansion in rural areas
- Reduce the perceived costs of registering mobile handsets through layaway savings and credit offers targeting women

SOCIAL CONVENTIONS

- Ensure pilots and user testing of products and services include women and those with lower literacy levels
- Train and incentivize agents to better help women navigate handsets and mobile services, including mobile internet and the credit refill process

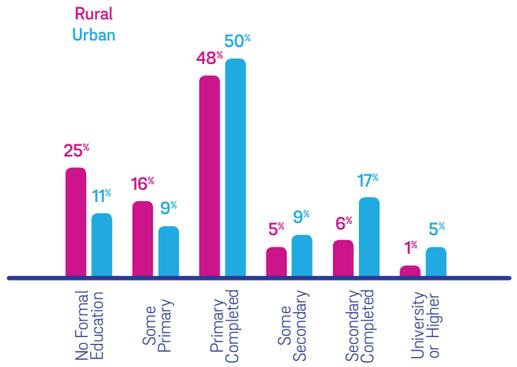
SATISFIED WITH STATUS QUO

- Consider which services can be provided to women via mobile (e.g., G2P) to help women become comfortable and confident
- Identify community advocates and social triggers to facilitate changed perceptions about the benefits of mobile phone usage

Barriers to Education for Women

We further analyzed different segments of the FinScope survey to understand which type of women were limited in their education access or achievement. We further posited potential barriers to education based on the qualitative research.

Women's Level of Education – Rural vs. Urban



Educational access is limited for rural households at the secondary level, and identifying interventions to promote secondary education for girls will likely address a large share of the gender gap.

SCHOOL TRAVEL TIME
Sometimes the distance to school is so far that attendance is impossible. In other cases where the journey is possible, distance can deter attendance. The time, effort, and risk of a long trip to school is immediate, salient, and has to be faced every day. (Kazianga, Harounan, Dan Levy, Leigh L. Linden, and Matt Sloan. 2013.)

ACCESS TO HEALTH PRODUCTS
All over the world, children miss school when they are sick. Conditions such as anemia and infection by parasitic worms can sap a child's energy and increase the effort cost of attending school. In India and Kenya, mass school-based treatment for these conditions had large, positive impacts on school attendance and was very cost-effective. (Miguel, Edward, and Michael Kremer. 2004)

PERCEPTION OF VALUE
When making decisions about investing in education, parents and students must weigh the expected costs and benefits. However, costs are usually immediate while benefits can be hard to judge and are often not top-of-mind. A number of programs that reframed the costs and benefits of education increased attendance. (Jensen, Robert. 2010)

STUDENT MOTIVATION
Policy discussions about school enrollment and attendance often focus on parents' decisions, but students' perceived costs and benefits can also be important. Providing information on the higher wages that those with more years of education earn could help motivate children as well as their parents.(Kremer, Michael, Edward Miguel, and Rebecca Thornton. 2009.)

Previous Evidence of Policy Successes in Education

Fortunately, there is a wealth of research on successful interventions to improve education access and quality for women, and we have cited some of the most relevant case studies below:

Informing girls and their parents of the economic returns to education can increase attendance and test scores and reduce dropout rates.

Information on the earnings of adolescents who finish primary school boosted attendance of boys and girls in Madagascar—teachers provided students (aged 9-15) and parents with information on average wages for those who did and did not finish primary school.

Nguyen, Trang. 2008. "Information, Role Models, and Perceived Returns to Education: Experimental Evidence from Madagascar." Unpublished Manuscript, J-PAL at MIT.

Photo credit: Rod Waddington

Conditional cash transfers can boost education. They can reduce child labor and increase post-secondary matriculation.

Even very small cash transfers boost education for girls in Africa—an intervention in rural Malawi provided cash transfers, monthly transfers of varying size made to the girl and to the household. For some girls these transfers were conditional on school attendance, for others they weren't.

Baird, Sarah, Craig McIntosh, and Berk Ozler. 2009. Designing Cost-Effective Cash Transfer Programs to Boost Schooling among Young Women in Sub-Saharan Africa. Unpublished Manuscript: Policy Research Working Paper No 5090, The World Bank.

Greater economic opportunity for girls increases investment in education of girls.

A program that boosted the potential earnings capacity of adolescent girls by bringing recruiters from telephone answering services to rural communities around Delhi in India found that families throughout the community responded by investing more in younger girls, including sending them to school more and by investing more in their nutrition and health.

Jensen, Robert. 2010. Returns to Human Capital and Gender Bias: An Experimental Test for India. Unpublished manuscript, UCLA.

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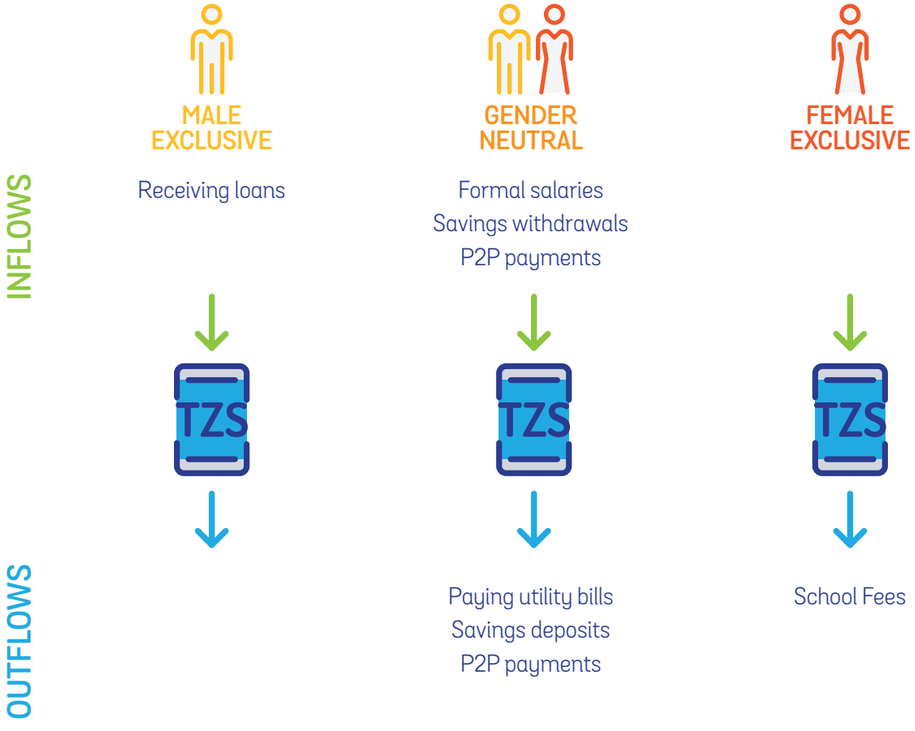
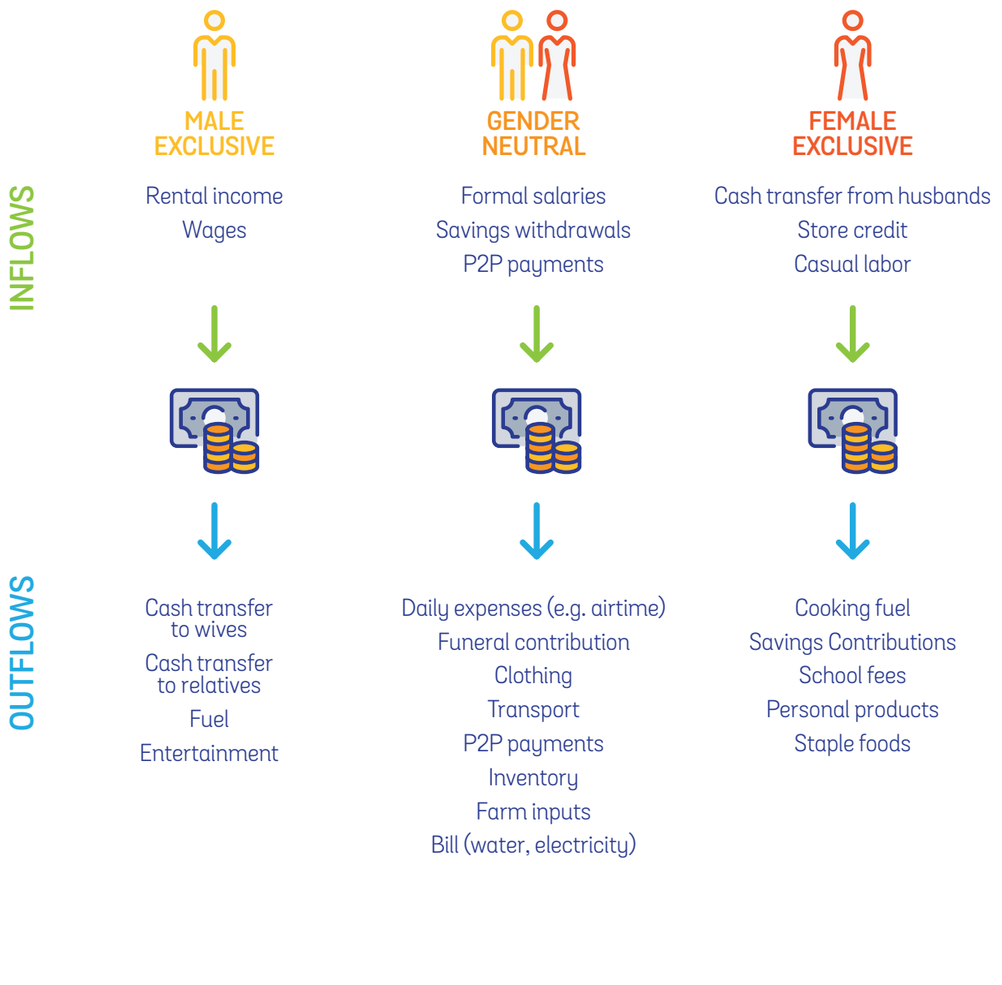
USE CASE APPROACH

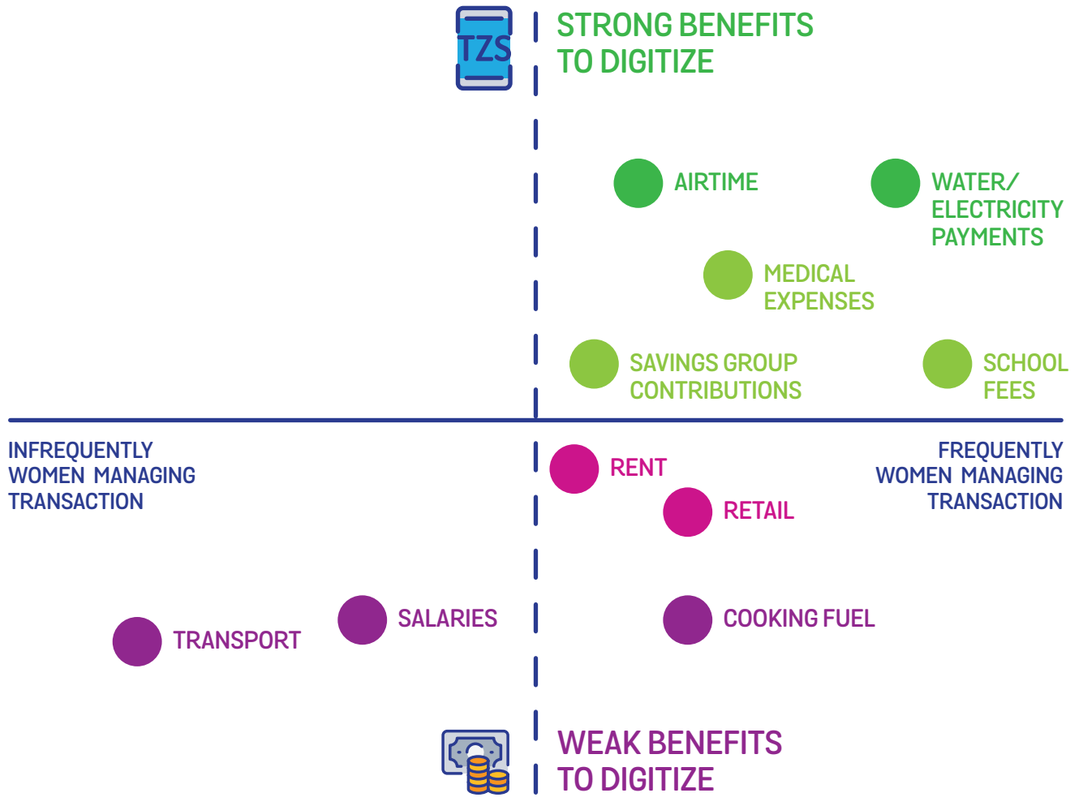
Existing Use Cases (Currently Formal)



Potential Use Cases (Informal)



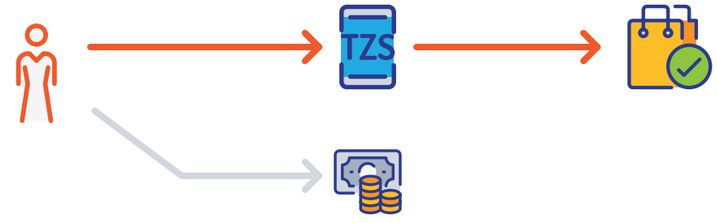
Evaluating Use Cases



How a Behavioral Science Approach Can Support Product Innovation

Applied behavioral science applies small tweaks or environment shifts to help change target behaviors.

Many of the use cases to be described have relatively light barriers to digitization, but remain cash heavy due to defaults, ease, and automation. Through a behavioral design approach, we propose a number of solutions that "nudge" the transaction towards digital platforms.



Some Behavioral Science Considerations for Financial Inclusion

RELATIVITY

Studies show that our preferences and choices change dramatically with context (Benartzi, S., & Lehrer, J. 2015).

For instance, in a study conducted in Tanzania, ***we were able to increase savings levels on mobile devices by 11% solely by triggering a sense of competition*** between members of a group through relative rank (Busara, 2016).

SALIENCE

Increasing the saliency of a choice (making it more noticeable) increases its importance in the decision-making process. (Karlan, McConnell, Mullainathan, Zinman, "Getting to the Top of Mind: How Reminders Increase Saving" 2013).

We found that salient reminders of the physical features of money through a gold coin led to a 480% increase in savings levels (Busara, 2014).

PRESENT BIAS

We weigh present concerns more than future ones. Exemplified by decision making at harvest time – farmers often sacrifice huge price differences to deal with immediate needs.

A study in Kenya found that offering farmer's liquidity smoothing credit at harvest period led to them delaying harvest sales until prices increased later in the season (Burke et al, 2013).

Use Case 1: School Fees Payments

School fees are one of the largest expenses that most low-income households incur. Most households save on a daily basis in order to pay for school fees and other school related expenditures either in cash or through bank deposit. They then return with the bank slip to the school to verify that the payment has been made.

WHY CASH?

- Most people don't save in banks
- Schools require payments through banks
- Bank slip acts as positive reinforcement
- Opportunity to visit school

WHY DOES IT MATTER?*

55% of those who pay school fees are women

64.8% of those who save for school fees are women

56.6% of those who prioritize school fees as their most important expense are women

Source: FinScope, 2017

PAY SCHOOL FEES IN CASH	AVERAGE SCHOOL PAYMENT PER TERM	POTENTIAL MARKET PER TERM
POTENTIAL AND IMPACT – WOMEN*		
3.12 MILLION	TZS 30K (USD 13.32)	TZS 93.8 BILLION (USD 41.6m)
POTENTIAL AND IMPACT – MEN*		
2.75 MILLION	TZS 30K (USD 13.32)	TZS 82.6 BILLION (USD 36.7m)
POTENTIAL AND IMPACT – TOTAL MARKET*		
5.88 MILLION	TZS 30K (USD 13.32)	TZS 176.4 BILLION (USD 78.35m)

Triggers to Behavior Change

STATUS QUO SHIFT

Majority of payments of school fees are default set by the schools. Any change should happen at the school level for maximum effect.

SOCIAL PROOF

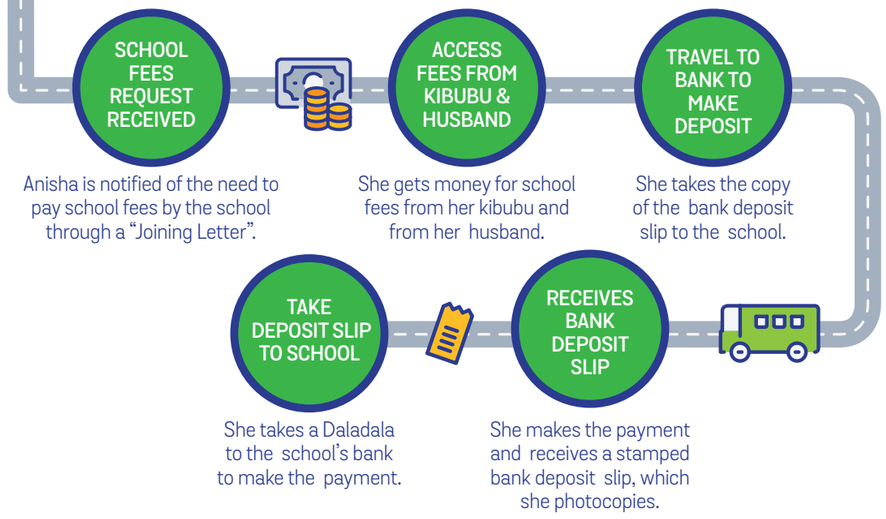
People's payment method is influenced by how others are making their payments. By leveraging central social nodes as early adopters, you can demonstrate proof that this method is accepted and adopted.

TANGIBILITY

People use the paper slip as a salient signal of their identity as a responsible parent who pays their school fees on time. Removing the slip may lead to concerns over confusion or awkward social scenarios.

ANISHA'S JOURNEY TO PAY SCHOOL FEES

"The school requires us to pay through the bank"



SOLUTIONS

1. **Make digital payments mandatory**
   Mandating digital school fees payments would require parents to pay fees through mobile money, saving them time and transportation costs.
2. **Pay teacher salaries through mobile money**
   Digitizing teacher salaries would enable schools to integrate their school fees payment systems with their payroll payments.
3. **Complement digital payments with a physical slip**
   Enable parents to maintain their current sense of security by complementing digital payments with a physical receipt at mobile money agents.

Use Case 2: Medical Expenses

Triggers to Behavior Change

Medical expenses are the largest unexpected cost incurred by the target population. The uptake of medical insurance means that people often have to pay for medical expenses from their savings or by borrowing, which is usually in cash. Moreover, hospitals themselves require payments to be made in cash.

WHY CASH?

- Hospitals often require payments for services to be made in cash.
- Medical expenses are often paid for in cash because of low uptake of medical insurance.

WHY DOES IT MATTER?*

55% of medical payments made in cash are by women

2,000 TZS
COST OF A HOSPITAL CARD

	PAYING MEDICAL BILLS IN CASH	VISITING HOSPITAL IN PAST 3 MONTHS	POTENTIAL IMPACT PER 1/4 OF DIGITAL HOSPITAL CARD PAYMENTS
POTENTIAL AND IMPACT – WOMEN*	12.5 MILLION	22%	TZS 5.6 BILLION (USD 2.5m)
POTENTIAL AND IMPACT – MEN*	12.1 MILLION	18%	TZS 4.3 BILLION (USD 1.9m)
POTENTIAL AND IMPACT – TOTAL MARKET*	24.6 MILLION	20%	TZS 9.9 BILLION (USD 4.4m)

Source: FinScope, 2017

AUTOMATION

Customers will likely default to cash payments, and automating the digital process will make it easier and lower friction to switch.

MICRO–INCENTIVES AND PERCEIVED COST

Registering for a new process can seem unfamiliar and uncomfortable, but can be smoothed through small incentives.

POSITIVE REINFORCEMENT

Help reinforce the shift to digital payments through small value added services as a result of mobile money transactions.

SALMA'S JOURNEY TO MEDICAL BILL PAYMENTS

Initial visit to public hospital in Zanzibar

HOSPITAL PROCESS
Medical need arises. Salma starts with her nearest public hospital.

HOSPITAL PAYMENTS
She pays administration fee at the cashiers (TZS 2,000) for a personal hospital card before she can see the doctor. ***All other services are free.***

PUBLIC CHEMIST
She rarely gets the prescribed medicine stocked at the government chemist. ***Medication is free at government chemist.***

Subsequent visit to private hospital (for specialized assistance)

PUBLIC CHEMIST
Salma will then go to the private chemist to get medication and pay for this using cash.

HOSPITAL PAYMENTS
Salma will pay fees for 1) The hospital card – before getting treated 2) Doctor's fee

HOSPITAL PROCESS
Salma will sometimes go to the private hospitals to get specialized medical help.

SOLUTIONS

1 Digitize medical payments

- Reduced queue time for all who make mobile payments at public and private hospitals compared to those using cash
- Electronic receipt token that fast tracks one's serviced delivery and makes it easy for hospitals financial management

2 Digitize medical savings

- Medical savings menu options that are default for all users of mobile money
- Goal setting options on mobile money menu's for enhanced mental accounting

Use Case 3: Electricity Payments

Electricity payments are part of the household expenses that women are often in charge of making. This is usually done by paying in cash to an agent who then gives them tokens (for pre-paid meters) or through the TANESCO offices (for post-paid meters). Majority of women are left with the responsibility of making electricity payments on behalf of other tenants.

WHY CASH?

- Immediate receipt of tokens and confirmation of payment
- Need to use other agent services as well, such as airtime purchases
- Strong preference to go to agents with cash rather than paying directly from their savings on mobile money

WHY DOES IT MATTER?*

51.7% of payments made in cash for electricity are done by women

21.1% of households in Tanzania have dwellings connected to the national electricity grid line

30,000 TZS AVERAGE ELECTRICITY BILL PER MONTH

15% OF THE POPULATION PAY UTILITY BILLS OFTEN

DWELLINGS CONNECTED TO THE NATIONAL ELECTRICITY GRID	WITH ELECTRICITY CONNECTIONS PAY IN CASH	POTENTIAL MARKET PER MONTH

POTENTIAL AND IMPACT – WOMEN*

3.57 MILLION	52% 270,000	TZS 8.1 BILLION (USD 3.8m)

POTENTIAL AND IMPACT – MEN*

3.41 MILLION	47% 240,400	TZS 7.2 BILLION (USD 3.2m)

POTENTIAL AND IMPACT – TOTAL MARKET*

6.98 MILLION	49.5% 518,265	TZS 15.3 BILLION (USD 6.7m)

*Source: FinScope, 2017

Triggers to Behavior Change

TIMING

Electricity payments conducted independently will be most helpful when agents are unavailable. Triggering that information at token expiry will help raise it to relevance for consumers.

PERCEIVED RISKS

Agents are frequently available and idle, the current payment process is low risk for customers. Any conversion will need to mitigate risk for customers.

REHEMA'S ELECTRICITY PAYMENT

"Every household makes a contribution in cash for the bill then one of us goes to the agent to make the payment"

VISIT TO AGENT

Rehema will be appointed as the custodian for electricity payments at her apartment houses.

Tenants agree on amount to purchase electricity.

Rehema writes down the meter number on a piece of paper and goes to the agent.

PAYMENT PROCESS

Agent purchases the number of tokens needed by Rehema based on the meter number. No other documentation is needed.

Rehema sometimes sends her child to make the payment at the agent since it is close to her house.

CONFIRMATION

The agent hands the confirmation receipt to Rehema indicating:
1) Meter number
2) Name registered on the meter
3) Amount paid
4) Number of tokens purchased

SOLUTIONS

1. **Triggering behavior via SMS**
   Prompting mobile money payment information via SMS when token's expire to trigger registration on next token purchase.

2. **Empowering women to use mobile money**
   Triggering agents to train women on making payments for electricity payments using mobile money compared to using cash and guaranteeing their payments for a fixed period to reduce risk.

Use Case 4: Water Payments

Triggers to Behavior Change

Water expenses are paid mostly as a post paid expense by women within households. Dawasco is the main institution providing piped water to people. Post paid bills are either given to people physically or sent via mobile. Majority of Dawasco bill payments are made via cash.

WHY CASH?

- Strong preference to go to agents with cash rather than paying directly from their savings on mobile money
- Confirmation of payment via agents is immediate with a physical receipt produced

WHY DOES IT MATTER?*

51.7% of water bill payments (such as water) are made by women

19.3% of Tanzanian households have access to piped water

10,000 TZS AVERAGE WATER BILL PER MONTH

15% OF THE POPULATION PAY UTILITY BILLS OFTEN

Source: FinScope, 2017

	HAVE PIPED WATER	COLLECT WATER	POTENTIAL MARKET PER MONTH
POTENTIAL AND IMPACT – WOMEN*	2.75 MILLION	78.5% 270,000	TZS 3.2 BILLION (USD 1.42m)
POTENTIAL AND IMPACT – MEN*	2.55 MILLION	14.2% 240,400	TZS 543 MILLION (USD 0.24m)
POTENTIAL AND IMPACT – TOTAL MARKET*	5.3 MILLION	46.4% 518,265	TZS 3.7 BILLION (USD 1.64m)

SOCIAL PROOF

Many customers (including DAWASCO officials) favor cash payments for water via agents and will visibly reinforce this within communities.

PACE OF TRANSACTION

One of the main drivers for water bill payments via cash is the ease and pace of transaction. Any digital solution needs to reflect that pace to be a replacement for cash.

JANE'S JOURNEY TO PAYING WATER (POST–PAID)

"The transaction costs I will incur will not make sense compared to the amount I am paying for the water."

WATER BILL
DAWASCO officials communicate the water bill to the tenants.

CASH CONTRIBUTIONS FROM ALL TENANTS
Jane is chosen as the sole responsible person for payment. She collects contributions.

PAYMENT TO AGENT
She makes the payment at the agent level with the meter number.

PAYMENT CONFIRMATION
She gets a receipt of payment from the agent.

RECEIPT PROOF
She takes the receipt as evidence of payment to other tenants.

SOLUTIONS

1. **Incentivizing on–time payments**
   Using micro–incentives for payments from water bill payments (i.e added bonus talk time) for all payments done on time and complete on mobile money. Further make that bonus shareable to encourage others to adopt.

2. **Targeting merchant payments**
   Digital "tap–tap" product for quick payments for existing water merchants (use of mobile that targets merchant payments).

Use Case 5: Airtime Top-ups

Triggers to Behavior Change

Airtime is a significant expense for both men and women in Tanzania in order to facilitate communications for business and social connections. Most purchases of airtime are made through cash, rather than digitally. Buying airtime digitally offers both convenience and safety and also encourages users to save more money on their mobile money accounts.

WHY CASH?

- Small transaction value of airtime being bought
- Not wanting to use savings to purchase airtime
- Convenience and availability of agents

WHY DOES IT MATTER?*

3.1% of the population use non-cash medium to purchase airtime in Tanzania

61.3% Global share (volume) of mobile money purchases on airtime

	BUY AIRTIME USING CASH	PAYMENT SIZE	AIRTIME PURCHASES PER DAY
POTENTIAL AND IMPACT – WOMEN*	10.1 MILLION	TZS 750 (USD 0.33)	TZS 7.6 BILLION (USD 3.4m)
POTENTIAL AND IMPACT – MEN*	8.4 MILLION	TZS 750 (USD 0.33)	TZS 6.3 MILLION (USD 2.8m)
POTENTIAL AND IMPACT – TOTAL MARKET*	18.5 MILLION	TZS 750 (USD 0.33)	TZS 13.8 BILLION (USD 6.1m)

Source: FinScope, 2017

TIMING

Airtime consumption is on-demand subject to cash availability. Breaking that trend requires a perceived benefit of digital top-ups. Timed, targeted prompts that identify the times where an agent is unavailable may help customers to see value in mobile airtime top-ups.

REDUCING FRICTION TO REGISTRATION

Consumers are stuck in their defaults because change requires a small investment of time. Compensating that investment will likely reduce the friction costs to register.

LUCY'S JOURNEY TO BUYING AIRTIME

"The amount I usually buy is very small to buy using mobile money."

RECEIVES MONEY FROM HER BUSINESS
Lucy has a small business where she is paid in only cash for her goods.

SAVES MONEY IN HER KIBUBU
The money left over each day is saved in a kibubu, some of which is for airtime.

INPUTS THE AIRTIME HERSELF
She scratches the airtime and inputs it herself. She does this several times a week after work.

GOES TO WAKALA TO BUY AIRTIME
She takes her airtime money to the wakala and buys airtime for 500-1000/=.

SOLUTIONS

1 Targeted incentives for registration to Mobile Money triggered after airtime top-up

Trigger registration by giving a time bound registration bonus after airtime top-up.

2 Build bonus mobile money cash for airtime top-ups through low cost incentivizes

- Having financial incentives for mobile money purchases for small airtime purchases (Tsh. 500 to 1,000) would incentivize women to put more money in their wallets and to purchase airtime more frequently.
- Thanks for topping up – if you register for Mobile Money in the next 30 minutes, you will get Tsh. 10,000 airtime

Use Case 6: Retail Payments

Triggers to Behavior Change

Retail payments constitute the biggest category of costs for majority of women in Tanzania. Most retail payments are currently being made in cash across genders. However, women are more frequent purchasers using smaller amounts compared to men. Further, women account for 54% of all MSMEs in Tanzania, meaning digitizing will not only benefit the customer, but the merchants as well. (NFIF 2017).

WHY CASH?

- Most women get paid daily in cash, spending the remainder of the cash they make.
- Women are conscious and sensitive of charges made by mobile money networks.

  Cash payments are also largely driven by the merchants.

WHY DOES IT MATTER?*

99% of the population pay for retail using cash

54% of women are involved in household expenditure decisions

MAKE RETAIL PURCHASES IN CASH	AVERAGE DAILY EXPENSES	DAILY RETAIL EXPENDITURE

POTENTIAL AND IMPACT – WOMEN*

13.7 MILLION	TZS 2,000 (USD 0.88)	TZS 27.3 BILLION (USD 12.1m)

POTENTIAL AND IMPACT – MEN*

13 MILLION	TZS 2,000 (USD 0.88)	TZS 26 MILLION (USD 11.5m)

POTENTIAL AND IMPACT – TOTAL MARKET*

26.7 MILLION	TZS 2,000 (USD 0.88)	TZS 53.3 BILLION (USD 23.6m)

Source: FinScope, 2017

CONSUMER–LED CONVERSION

Majority of shops require cash payments for all purchases, and consumer credit is central to the consumer – merchant relationship. By allowing consumers to store digital credit with merchants, you may incentivize merchants to accept digital payments.

VICTORIA'S JOURNEY FOR RETAIL EXPENDITURES

"If my customers pay me using mobile money, I will incur withdrawal charges which is a loss for my business."

SOLUTIONS

1. **Encourage consumers through store credit linked to pay bill transactions**

   Consumer credit can be expanded with improved payment data through digital merchant payments. Merchants will then be encouraged to receive merchant payments and register customers.

2. **Deploy merchant loyalty cards linked to mobile money**

   Build merchant loyalty cards or other "tap" devices that connect to mobile wallets and can initiate payments.

Use Case 7: Savings Group Contribution

Triggers to Behavior Change

A large number of households save on a daily basis. This practice, however is more common for women than men. The women will receive money from their husbands or income from businesses which they will use for their expenses during the day. The amount that remains will the be saved in either their local savings device (kibubu, matress etc.), for later remitting to the group, or in the group on a regular meeting schedule.

WHY CASH?

- Groups have a large number of physical reminders to galvanize savings.
- Meetings are part of a larger social function, with the cash being incidental, and thus unplanned.

WHY DOES IT MATTER?*

20% of women consider a savings group as the most important to help you manage money

12% of men consider a savings group as the most important to help you manage money

	BELONG TO A SAVINGS GROUP	AVERAGE AMOUNT SAVED IN SAVINGS GROUPS MONTHLY	TOTAL SAVINGS PER MONTH IN SAVINGS GROUP
POTENTIAL AND IMPACT – WOMEN*	2.97 MILLION	TZS 20,700 (USD 9.2)	TZS 61.5 BILLION (USD 27.3m)
POTENTIAL AND IMPACT – MEN*	1.6 MILLION	TZS 19,600 (USD 8.7)	TZS 31.4 MILLION (USD 14m)
POTENTIAL AND IMPACT – TOTAL MARKET*	4.75 MILLION	TZS 20,350 (USD 9)	TZS 93 BILLION (USD 41.3m)

*Source: FinScope, 2017

COMPLEMENTING ANALOG WITH DIGITAL

Ensuring that any digital solution only adds and extends the analog features, but does not replace them.

PLANNING FOR PHYSICAL ENCOUNTERS

Using digital solutions to help track and improve physical meetings by helping commit resources in advance.

ZAINAB'S JOURNEY TO DAILY SAVINGS

"I prefer to pay my money on kibubu as it is easily accessible to me"

DAILY EXPENDITURE

Zainab starts with money given to her by her husband. She uses this to buy food and pay for transport for her child. The rest she buys supplies for her business.

SALE OF GOODS

She opens her business and sells vegetables (taken on credit) through the day getting paid in cash for all transactions.

DAILY SAVINGS

She makes sure to leave about TZS 500 to save on her 'Kibubu' daily which she does for emergency payments and any other child-related expenses.

DEBT REPAYMENT

At the end of the day, the money she earns is used to repay the initial debt.

SOLUTIONS

1. **Digital savings group treasury**
   Develop a digital purse for savings group at the treasurer level that gives members visibility and reduces the risk of carrying funds from meetings.

2. **Digital remittances and investment tracking**
   Set up mobile wallets to enable visualization of savings goals and investment targets for the full group.

The Case for Innovation

While we believe innovation for these use cases will further women's financial inclusion, it is important to note that many of these use cases may enable men's financial inclusion. An underlying assumption in this strategy is that we should target solutions for women, but it may be as effective target solutions that represent large opportunities, even if they are less specific to women. These use cases are a starting point for transforming digital finances services for women in Tanzania. Our hope is to use these as a road map to connect product innovation with women and ensure a more diverse set of solutions are available to create value in this market.

Case Study 1: Disrupting the mobile money market

Disruption potential– An MNO with a mobile money product and 5 million active customers (60% male) stands to gain a substantial revenue increase through following one or several of the solutions previously presented.

Building a mobile money school fees payments product

930,000	TZS 28 BILLION	TZS 0.6 BILLION
*Existing customers affected**	*Potential market capture per term*	*Increased fee revenue per term (2% fee)*

*Plus a potential customer base expansion of*** 570,000

**Based on the percentage of Tanzanian men and women over 14 who pay school fees by cash, mapped to the MNO's customer base*
***10% of Tanzanians who pay school fees by cash*

Encouraging electricity payments via mobile money

84,000	TZS 2.5 BILLION	TZS 50 MILLION
*Existing customers affected**	*Potential market capture per month*	*Increased fee revenue per month (2% fee)*

*Plus a potential customer base expansion of*** 51,000

**Based on the percentage of Tanzanian men and women over 14 with electricity connections who pay fees by cash, mapped to the MNO's customer base*
***10% of Tanzanians with electricity connections who pay fees by cash*

Incentivizing airtime purchases from mobile money using discounts

3 MILLION	TZS 2.3 BILLION	TZS 45 MILLION
*Existing customers affected**	*Potential market capture per day*	*Increased fee revenue per day (2% fee)*

**Based on the percentage of Tanzanian men and women over 14 who buy airtime using cash, mapped to the MNO's customer base*

Promoting mobile money merchant payment solutions

4.4 MILLION	TZS 8.8 BILLION	TZS 175 MILLION
*Existing customers affected**	*Potential market capture per day*	*Increased fee revenue per day (2% fee)*

**Based on the percentage of Tanzanian men and women over 14 who make retail purchases in cash, mapped to the MNO's customer base*

Case Study 2: Innovations in Banking

New revenue streams – A bank offering services to 1 million active customers (60% male) can expand both its customer and revenue base through implementing these suggested solutions.

Promoting retail purchases by card payments

875,000
*Existing customers affected**

TZS 1.8 BILLION
Potential market capture per day

TZS 35 MILLION
Increased fee revenue per day (2% fee)

TIPS

- **Encourage consumers through store credit linked to paybill transactions**

  Consumer credit can be expanded with improved payment data through digital merchant payments. Merchants will then be encouraged to receive merchant payments and register customers.

- **Deploy merchant loyalty cards linked to mobile money**

  Build merchant loyalty cards or other "tap" devices that connect to mobile wallets and can initiate payments.

*Based on the percentage of Tanzanian men and women over 14 who make retail purchases in cash, mapped to the bank's customer base

Digitalizing informal savings groups

Creating digital linkages with 10% of Tanzanian informal savings groups would:

Increase female bank customers by:
297,000

Increase male bank customers by:
160,000

Potential market capture per month of:
TZS 9.3 BILLION

Increased fee revenue per month (2% fee) of:
TZS 186 MILLION

6

CONCLUSIONS & TAKEAWAYS

Lessons Learned

Overall

There is a significant gap in financial inclusion for women, and access measures may be an underestimate as many women indicated they shared lines or bank accounts with others.

Any approach to addressing the gender gap cannot focus exclusively on policy, but requires an honest assessment of the current products available, and how well they map to the priority use cases for financial services for women.

Priority Investments

***Education* and *phone ownership* are the most significant structural factors in explaining the gender gap across both mobile money and bank usage.**

Majority of barriers to phone ownership are driven by the lack of use case, money inefficiencies and lack of autonomy.

Use Cases

A significant share of the gender gap cannot be explained by traditional demographics, suggesting that women with comparable attributes are not finding use from the financial products available. This calls for a product-oriented set of interventions that are more appropriate to women's needs.

Recommendations

Promote gender focused policies to improve girl's attendance in schools and promote mobile phone ownership:

- Committing parents to girls' attendance through conditional cash transfer programs
- Make information salient and readily available on the returns to education for parents.
- Framing education as a linked investment for future earnings
- Target subsidized phones for specific, vulnerable segments of women
- Reduce the perceived costs of purchase by offering credit or employment opportunities linked to phone purchase

Engage the private sector to design adjusted products that better target women's financial needs, including:

- Automated school fees payments with physical payment slips
- Medical payments linked with valued added digital services
- Low friction electricity and water payment devices or onboarding strategies
- Incentivize airtime purchases through the wallet for added convenience

7

ANALYSIS MODELS

Qualitative Sampling with a Propensity Score

Often, sampling for qualitative research is conducted through convenience sampling. While easy and efficient, this can often constrain the diversity of perspectives observed, as well as limit the direct relevance to a larger, quantitative dataset (such as the FinScope Survey, or a financial service provider's transaction database). **Our interest in this study was to identify respondents who were not currently financially included, but were similar to those who were included**, and for whom we could more likely attribute their lack of inclusion to the current use cases for banking or DFS, rather than larger, systematic barriers (access to branches, income, etc.).

To achieve this, we developed a propensity score to quantify how similar a recruited respondent would be to a "banked" or "DFS-included" individual. Put simply, this score measured the probability that a person would be financially included (DFS or banked), based on their similarity to those who were currently included on a number of core demographic variables. By embedding this tool in a light recruitment survey, we were able to ensure we received a diverse set of perspectives that were reflective of our target audience – namely those who were "bankable" or "DFS-able", -- and design solutions around use-cases, rather than broader, structural issues of access or income, which are likely better served by a policy response.

Gender

Location (rural, urban)

Mobile Connectivity

Internet & Computer Connectivity

Ownership of Land

Numeracy & Literacy Scores

Poverty Quantile (household)

Ownership of Property

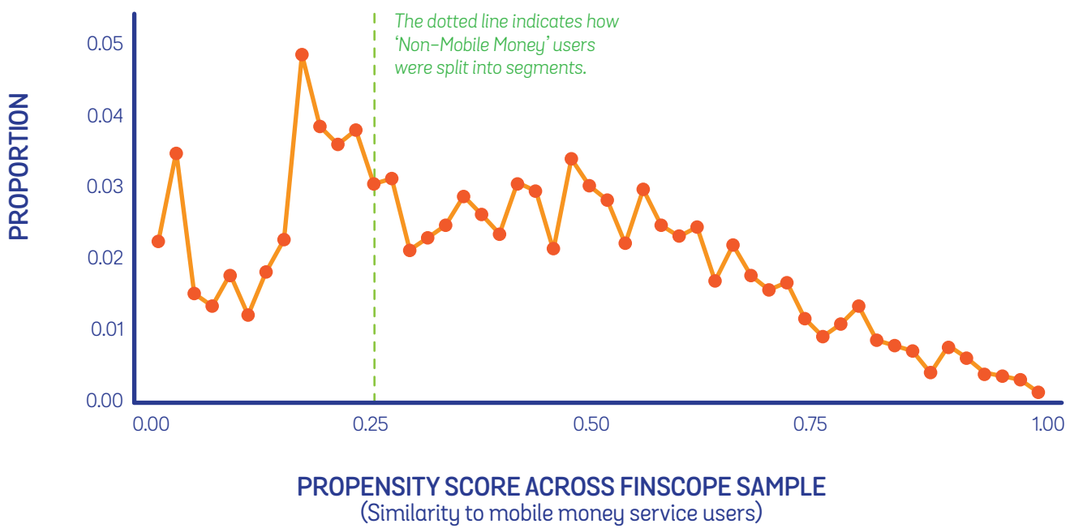
Total Monthly Income

Main source of funds (salaried, casual labor, trading, dependent on others, dependent on social welfare)

Propensity Scoring "DFS-ability" among Tanzanians

Our propensity score model highlights that there is a reasonably normal distribution of propensity scores among the DFS-excluded population. We used a cutoff score of .28 to define "DFS-able" respondents, which represented over 50% of the DFS-excluded population, and 23% of the total population.

All participants who were given a score of .28 or higher were invited to participate in our use-case study and interviewed on their primary payment methods and financial service needs. Those who scored lower were interviewed for further detail on structural and access issues preventing financial inclusion.

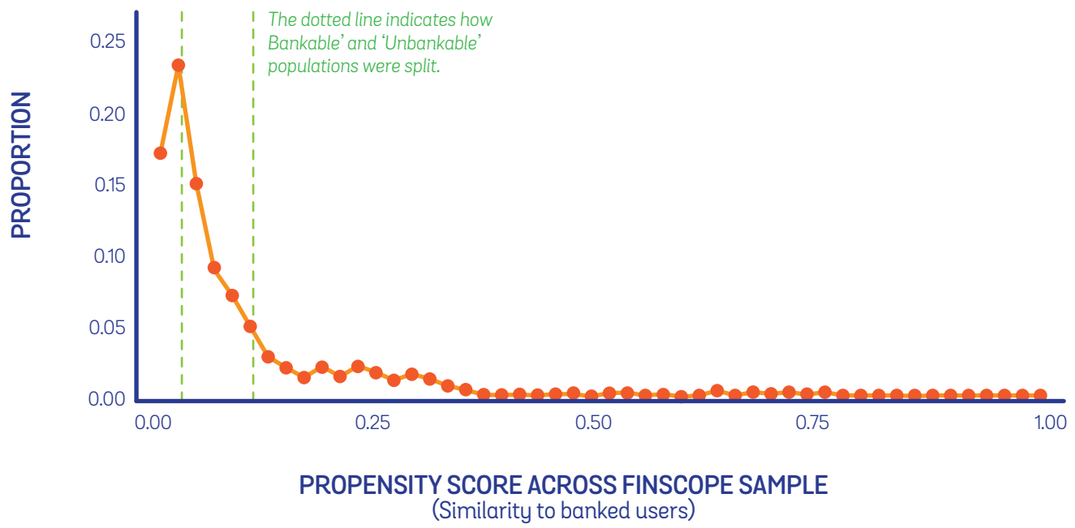


Propensity Scoring "Bankability" among Tanzanians

The story for banking is less encouraging – our propensity score model highlights that there are significant differences between the unbanked and banked populations, with the vast majority of respondents scoring less than .25.

In order to capture a reasonable share of the market (23%), we gave a much wider range of scores to represent the "bankable" population (propensity scores between .11 and 1). However, given the wide distribution of scores, our categorization led to a less concentrated set of perspectives for consumer needs.

The skewed distribution indicates stronger structural barriers to the banking sector, and as such was of lower focus in our use case development as compared to DFS services.



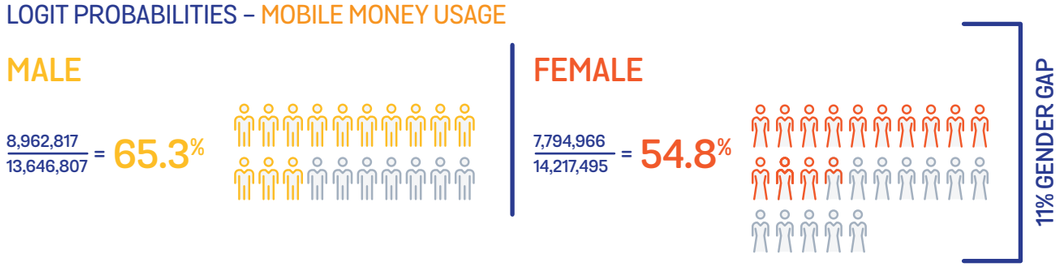
Estimating the Gender Gap

We sought to analyze the gender gap that exists for DFS and banking services in Tanzania using the FinScope data, 2017. To do this, we used econometric data analysis tools such Ordinary Least Squares (OLS) and logistic regression models.

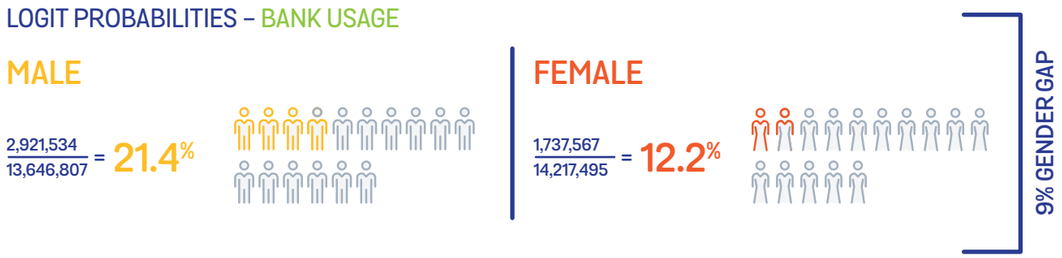
Logit regression models are particularly useful when attempting to estimate probabilities and likelihoods. We specified a logit regression model to estimate the probability of an individual's decision to adopt DFS (in this case mobile money) or formal banking services.

The output of the logit regression model identified the usage of financial services from a nationally-representative sample of men (4,119) and women (5,340) in Tanzania. The dependent variable, usage of a financial service (in this case, either mobile money or formal banking), assigned a binary value of either 0 (no usage) or 1 (usage). The total number of individuals who use mobile money (2,602 men and 2,671 women) and banking services (635 men and 445 women) enabled us to identify determinants of the probability of usage across the Tanzanian market.

LOGIT PROBABILITIES – MOBILE MONEY USAGE



LOGIT PROBABILITIES – BANK USAGE



Applying the Logit Regression

In order to accurately apply this model, we sought to identify all the demographic factors responsible for the 11% gender gap in mobile money usage and 9% gap in banking services usage. We used the six key factors outlined in the FinScope "Insights that drive Innovation" report which are considered significant influencers of this gap.

These factors were identified as covariates (variables which are most likely to influence the outcome – in this case the gender gap).

While we know that gender plays an important part in the uptake of DFS and banking services, we needed to control for the above covariates to be able to assign an accurate value of influence of gender.

Demographic Factors

- **Phone ownership**
- **Monthly income**
- **National ID card ownership**
- **Comfort and confidence in borrowing and saving**
- **Financial history based on an individual's payment, saving and borrowing activity**
- **Education level, literacy levels, and numeracy levels**

Applying the Logistic Regression

Given a binary response, that is, whether one uses banks/mobile money or not, the logistic regression model[1] further analyzed estimates presented on an odds ratio[2] scale, which is obtained by dividing the odds of using mobile money for the first group and the odds of using mobile money for the second group.

For example, the odds ratio of 1.1 for gender means that, the odds of using mobile money for females is 1.1 times the odds of using mobile money for males while holding the other variables at their means.

ODDS – MOBILE MONEY USAGE

MALE

65 USERS

100 NON USERS

FEMALE

54 USERS

100 NON USERS

ODDS – BANK USAGE

MALE

21 USERS

100 NON USERS

FEMALE

12 USERS

100 NON USERS

As we add covariates beyond gender, the odds ratio changes to compare the outcomes when those covariates are set as equal. For instance –– the difference in the odds ratio with zero covariates to the odds ratio when mobile phone ownership as a covariate will tell us the share of the gender gap that mobile phone ownership explains (as its inclusion has adjusted the odds of using mobile money between men and women).

[1]A Logistic Regression is a regression model where the dependent variable is categorical. Logistic regression is used to describe data and to explain the relationship between one dependent binary variable and one or more nominal, ordinal, interval or ratio-level independent variables.

[2]Odds ratio is a way of quantifying how strongly the presence or absence of property A is associated with the presence or absence of property B in a given population. The higher the odds ratio, the more significant the relationship.

Outputs of the Logit Regression – Mobile Money

Level of education, in particular tertiary level education and numeracy scores, as well as ownership of phone are the most significant demographic factors influencing usage of mobile money.

Regression Model – Using Mobile Money

COVARIATE DETERMINANTS	EFFECT ON GENDER GAP	FACTORS	ODDS RATIO	P-VALUE
Ownership of Phone	7.39%	Own_phoneYes*	6.96490	0.00000
Level of Education	4.23%	Education_Primary level	1.33360	0.01306
		Education_Secondary level	1.35530	0.05703
		Education_Technical/Tertiary education*	3.79840	0.00033
		Numeracy_score*	1.11360	0.00003
Financial History	0.74%	Most_conf_borrow_instBanks	1.17300	0.07413
		Most_conf_borrow_instMicrofinance inst...	1.43290	0.21355
		Most_conf_borrow_instSACCOs	1.19400	0.46059
		Most_conf_borrow_instPension fund	2.17760	0.07403
		Most_conf_borrow_instMob...serviceproviders*	2.24980	0.00000
		Most_conf_borrow_instSavings groups*	1.69820	0.00000
		Most_conf_borrow_instMoney lenders in com	1.88260	0.15810
		Most_conf_save_instBanks	1.28960	0.00806
		Most_conf_save_instMicrofinance institutions	1.63930	0.23076
		Most_conf_save_instMob...serviceproviders*	3.72130	0.00000
		Most_conf_save_instPension fund	1.29860	0.43038
		Most_conf_save_instSACCOs	1.29620	0.31837
		Most_conf_save_instSavings groups	1.14290	0.30534
Literacy (Swahili)	0.42%	Literacy_kisCan read and write*	1.77310	0.00000
		Literacy_kisCan read only	1.48180	0.04189
		Literacy_kisRefused to read	1.75840	0.08624
Literacy (English)	0.34%	Literacy_engCan read and write	1.48580	0.00022
		Literacy_engCan read only	1.15430	0.24695
		Literacy_engRefused to read	1.21400	0.42206

** Most significant factors at a 95% confidence level*

Outputs of the Logit Regression – Bank Usage

Ownership of phone and level of education remain significant factors in determining usage of bank services. Monthly income and numeracy scores are also key significant factors that predict usage of bank services.

Regression Model – Using Bank Services

COVARIATE DETERMINANTS	EFFECT ON GENDER GAP	FACTORS	ODDS RATIO	P–VALUE
Level of Education	3.08%	Education_Primary level	1.19170	0.51494
		Education_Secondary level	1.91400	0.02271
		Education_Technical/Tertiary education*	6.05450	0.00000
Ownership of Phone	2.15%	Own_phoneYes*	5.99720	0.00000
Monthly Income	1.66%	Total_monthly_amt2*	1.00000	0.00000
Numeracy Score	0.61%	Numeracy_score*	1.17660	0.00000
Financial History	0.57%	Most_conf_borrow_instBanks	1.68620	0.00000
		Most_conf_borrow_instMicrofinance inst...	1.14960	0.64136
		Most_conf_borrow_instSACCOs	1.07270	0.81466
		Most_conf_borrow_instPension fund	1.26730	0.50306
		Most_conf_borrow_instMob...serviceproviders*	2.97310	0.00000
		Most_conf_borrow_instSavings groups*	1.88420	0.00000
		Most_conf_borrow_instMoney lenders in com	1.56480	0.35248
		Most_conf_save_instBanks	2.95940	0.00000
		Most_conf_save_instMicrofinance institutions	2.04970	0.15346
		Most_conf_save_instMob...serviceproviders*	1.38770	0.11783
		Most_conf_save_instPension fund	7.45210	0.00000
		Most_conf_save_instSACCOs	1.83950	0.11723
		Most_conf_save_instSavings groups	1.23030	0.39765
Literacy (English)	0.47%	Literacy_engCan read and write	1.76900	0.00000
		Literacy_engCan read only	1.26630	0.08883
		Literacy_engRefused to read	0.79220	0.47583
Literacy (Swahili)	0.09%	Literacy_kisCan read and write*	1.79010	0.01014
		Literacy_kisCan read only	2.72390	0.00363
		Literacy_kisRefused to read	2.72960	0.07057

** Most significant factors at a 95% confidence level*

Use Case Data Sources

USE CASES DATA SOURCES	FINAL FIGURE	ACTUAL QUESTIONS ASKED	DATA SOURCE	CALCULATIONS METHOD
School Fees Payments	5.88 million people paying school fees by cash	How do you usually pay for school fees?	FinScope 2017	Weighted Number of Households who pay schools fees by cash
	TZS 30,000 average school payment per term	How much do you pay in school fees per term for private schooling?	Qualitative data source (Dar es Salaam)	Average based on qualitative research responses
	55% of those who pay school fees are women	How do you usually pay for school fees?	FinScope Tanzania 2017	% of women who make school fees payment out of the total number of people making actual school fees payment
	65% of those who save for school fees are women	What do you mostly put money away for? (One Choice: Education/School fees)	FinScope Tanzania 2017	% of women who save money for school fees out of total population who are saving for school fees
	56.6% of those who prioritize school fees as their most important expense are women	EXCLUDING buying food and clothing, during the past 12 months, what was most important for you to pay or to do first when you get money? (School Fees)	FinScope Tanzania 2017	% of women who prioritize school fees as an important expense out of total population that prioritize school fees as a payment
Medical Expenses	12.5 million women paying medical bills by cash	How do you usually pay for medical treatment?	FinScope Tanzania 2017	Weighted number of women who pay for medical bills using cash
	22% share of women cited to visiting the hospital in the past 3 months	Thinking about the past 3 months, how often did you need medical attention/treatment? Which of the following describes your situation best?	FinScope Tanzania 2017	%share of women out of the total population that answered to visiting the hospital in the past 3 months
	55% of medical payments made in cash are by women	How do you usually pay for medical treatment?	FinScope Tanzania 2017	%of women who answered to paying for medical bills by cash out of the total population making medical bills payment

USE CASES DATA SOURCES	FINAL FIGURE	ACTUAL QUESTIONS ASKED	DATA SOURCE	CALCULATIONS METHOD
Electricity Payments	6.98 million people have dwellings connected to the national electricity grid	Which of the following does your household own/have? (Dwelling connected to the national electricity grid)	FinScope 2017	Weighted number of people who respond to having their dwelling connected to national electricity grid
	15% of the population pay utility bills often	Do you have utility bills such electricity, water, DSTV, Star times, etc. that you have to pay on a regular basis?	FinScope 2017	% of the population that responded to paying utility bills either daily, weekly, or monthly (rounded up)
	51.7% of women pay electricity via cash	In the past 12 months, how often did you use the following for paying your bills?	FinScope 2017	% of the population that responded to paying utility bills either daily, weekly, or monthly (rounded up)
	21.1% of Tanzanians have access to electricity	Which of the following does your household own/have? (Dwelling connected to the national electricity grid)	FinScope 2017	% of the total population who answered to having access to the electricity grid
	TZS 30,000 average electricity bill per month	N/A	Qualitative research	Average of responses from qualitative work
Water Payments	5.30 million people with piped water	Which of the following does your household own/have? (Piped water)	FinScope 2017	Weighted number of women who respond to having access to piped water in their households
	15% of the population pay utility bills (i.e water) often via cash	Do you have utility bills such electricity, water, DSTV, Star times, etc. that you have to pay on a regular basis? In the past 12 months, how often did you use the following for paying your bills? (cash)	N/A	% of the population that responded to paying utility bills either daily, weekly, or monthly (rounded up)
	78% of women and 14.2 % of men collect water	Do you collect water?	Tanzania Household Budget survey (2011/12)	Cited percentage
	TZS 10,000 is the average water bill per month	N/A	Qualitative finding (average water payment across women respondents)	Average of responses from qualitative work
	51.68% of water bill payments (such as water) are made by women	Do you have utility bills such electricity, water, DSTV, Star times, etc. that you have to pay on a regular basis?	FinScope 2017	% of women making utility bill payments over the total population
	19.25% of Tanzanians have access to piped water	Which of the following does your household own/have? (piped water)	FinScope 2017	% of population that responded to having access to piped water

USE CASES DATA SOURCES	FINAL FIGURE	ACTUAL QUESTIONS ASKED	DATA SOURCE	CALCULATIONS METHOD
Airtime Top-ups	18.5 million people buy airtime using cash	How do you usually pay for airtime?	FinScope 2017	Weighted number of people who responded to using cash to make airtime purchases
	TZS 750 / USD 0.33 average payment size	N/A	Qualitative finding (average daily airtime purchases amongst women)	Average of responses from qualitative work
	61.3% global share (volume) of mobile money purchases on airtime	N/A	GSMA report 2017	Cited percentage
	3.1% of the population uses non-cash mediums to purchase airtime in Tanzania	How do you usually pay for airtime?	FinScope-Tanzania 2017 Insights that Drive Innovation 2017	Cited percentage
Retail Payments	26.7 million women make retail purchases in cash	How do you usually pay for groceries?	FinScope 2017	Weighted number of women who respond to making grocery purchases
	TZS 2,000 / USD 0.88 average daily expenses	N/A	Qualitative finding (women self-reported value)	Average of responses from qualitative work
	99% of the population pay for retail using cash	How do you usually pay for groceries?	FinScope 2017	% of people who responded to purchasing groceries using cash
	54% of women involved in household expenditure decisions	How do you usually pay for groceries?	FinScope 2017	% number of women who actually make groceries purchases / Total population

USE CASES DATA SOURCES	FINAL FIGURE	ACTUAL QUESTIONS ASKED	DATA SOURCE	CALCULATIONS METHOD
Daily Savings	2.97 million women belong to a Vikoba savings group	You said you belong to a community association/savings group – please tell me what these are? (Savings group established by members themselves – VICOBAs)	FinScope 2017	Weighted number of women who responded to belonging to a savings group
	20% of women consider a savings group as the most important to help you manage money	Which one of these providers are the most important for you to help you manage your money? (Savings Group)	FinScope 2017	% number of women who consider savings as important over the total population
	1.6 million men belong to a Upatu savings group	You said you belong to a community association/savings group – please tell me what these are? (Rotating savings group where members take turns in getting the contribution of all the members – Upatu)	FinScope 2017	Weighted number of men who responded to belonging to a savings group.
	12% of men consider a savings group as the most important to help you manage money	Which one of these providers are the most important for you to help you manage your money?(Savings Group)	FinScope 2017	% number of men who consider savings as important over the total population

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