



L1P Principles and Gender

Insights from Kenya

Cover

A young woman sitting in front of her kiosk in a quiet street of a peri-urban village, tells us about her own and her clients' usage of mobile money.

Photo © H. Smertnik.

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Summary

The Gates Foundation has committed to the Level One Project (L1P) Principles—a set of principles and best practices to guide countries, regions, or commercial organisations working in DFS (digital financial services) to improve access to DFS, particularly for underserved populations.¹

The Foundation sees certain DFS principles as core to this goal: for example, shared, open, standards-based components, including an interoperability service for transfers, and fraud and risk management services. The system aims to be governed by its direct participants: the providers of end-user digital financial services, who offer account opening services, consumer and agent management services, and merchant digital payment services (we provide more detail on the principles in Appendix A). However, one aspect of the principles about which more information would be useful is on women as end users—in brief, are any of the individual L1P principles or their cumulative impacts likely to affect women differently than men? Additionally, can the L1P principles be improved in any way so that they benefit women more?

To answer this question, Caribou Digital conducted two weeks' of qualitative fieldwork in Kenya, including 11 expert interviews and gathering insights from 80 end users (through focus groups and in-depth interviews with both men and women, but oversampling women). These were conducted in Nairobi (as a pilot with Kenyatta University students), peri-urban areas (Korochocho, Gathundu, Nyayo, and Gikomba), and one rural area (Lari). As part of our sample, we also spoke to “intermediaries” such as M-Pesa agents and super-users of DFS.

We found that certain L1P principles (for example, access notifications, irrevocability, consumer education, and access to DFS agents—who are not necessarily female) are likely to affect women more than men, particularly women as SME owners/managers. In other cases, L1P principles affect men and women equally but, in either case, are most likely to affect those older people, rural inhabitants, or those who are less digitally comfortable. We summarise these differences and hope that these findings can be integrated and serve as guidance for DFSPs (digital financial service providers, regulators, scheme operators, donors, and perhaps other third-party service providers) building inclusive financial services, with special attention to the gender gap in access and use of digital financial services (DFS).

¹ Bill & Melinda Gates Foundation. “The Level One Project Guide.”

Figure 1 Map of interview locations in and around Nairobi



A snapshot of women, finance and DFS in Kenya

Figure 2 Financial mechanisms for women in Kenya

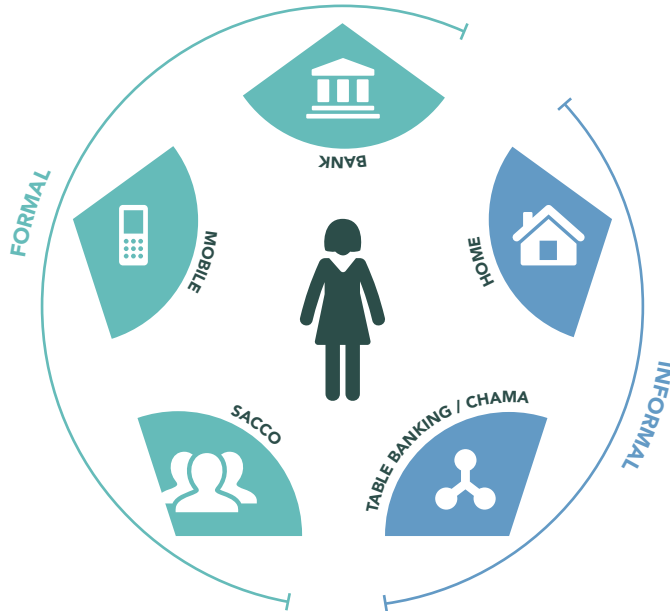
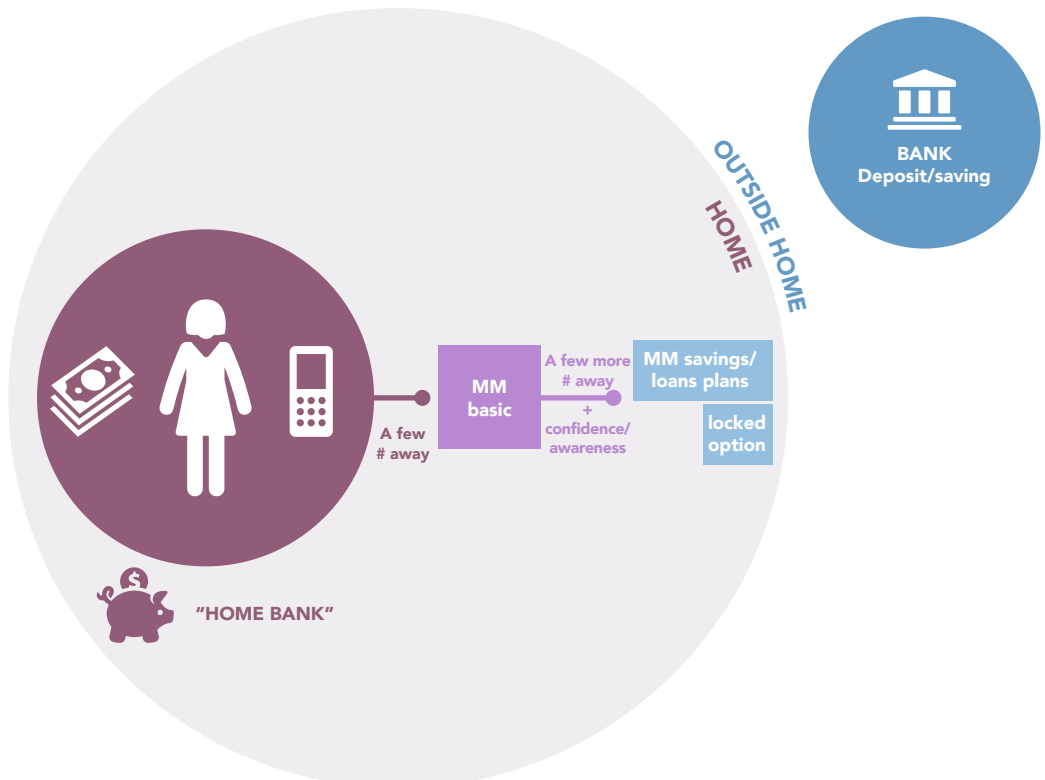


Figure 3 Deliberate strategies to manage money in more or less accessible ways (as recounted in focus groups)



The Level One Principles and End User Impact

We found three categories of impact when applying the Level One Principles to end users in Kenya. In Table 1, we map these in the following way:

Inconclusive impact

Equal effect on men and women (as recounted in focus groups and IDIs)

Greater effect on women than men (both positive and negative impact, as recounted in focus groups and IDIs)

For each principle with a greater effect on women than men, we have made a subjective judgement as to whether the effect is positive or negative.

For example:

On balance: Our interviews suggest that this could have a positive effect on women.

On balance: Our interviews suggest that this could have a negative effect on women.

(We have abbreviated the wording in the table).

We also included any recommendations for updates to the L1P Principles. Where the updates were specific wording changes, the new wording was highlighted. These recommendations should be considered tentative pending the conclusion of the research project.

Table 1 Gender impact of the Level One Principles

L1P Principle	How the implementation of L1P will affect women vs. men	Positive effect on women	Negative effects / improvements to principle
SCHEME DESIGN			
Interoperable	Greater effect on women than men On balance: Positive effect as long as the systems are well executed (which is never a guarantee with implementations involving emerging market banks/ telcos)	Interoperable services, such as M-Shwari and M-Shwari locked accounts, have had a positive effect on the usage of women who value the greater sense of control locked accounts provide them. In FGDs and IDIs, more women than men recounted the value of these locked accounts which we feel are a reasonable proxy for the kinds of specialised services that would be more available with interoperability.	Interoperability can also cause more uncertainty and reduce trust when not fully seamless. Additionally, women seemed to think that interconnected systems could lead to increased fraud.

SCHEME DESIGN

Scale	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p>	<p>In FGDs, women mentioned the value of being able to pay using different use cases (G2P, bill pay, merchant, etc.) consolidated in one account.</p> <p>Women also mentioned actively managing money in different places and keeping accounts deliberately separate. However, nothing in the L1P Principles prevents this specifically.</p>	
Push/real-time	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p> <p>Should give DFSPs guidance on messaging control</p>	<p>More so than men, women expressly mentioned wanting immediate notification so there is no uncertainty about transactions (relating back to trust).</p> <p>Women expressed their concern of money “hanging” in between networks—making them more reluctant to transfer money and reverting back to cash withdrawals.</p>	<p>Real-time messages need user features to enable control over messages that pop up on screen, which can be seen by others (husbands/fathers etc).</p>
Irrevocable	<p>Greater effect on women than men</p> <p>On balance: Negative client effect (though we recognise the key role this plays in overall system functioning)</p> <p>Should modify to include features such as a validation of sender before AND short recall period after the transaction</p>	<p>The ability to cancel a payment before it goes through, as provided by M-Pesa’s 25-second window, has been critical in increasing women’s confidence in using DFS (relating back to trust and control) and was cited by a large number of women in focus groups as being important. We believe that this feature is valuable (though different time lengths can be considered for different payment use cases) even if there are other features (such as name validation) as many users still make mistakes in the amount or just click through the validation (even though they have unlimited time to verify).</p>	<p>The complex process of revocation that exists for M-Pesa transactions after the 25-second window is daunting for many users and has even led to fraud, creating more caution. So much so, in fact, that many women reported returning to cash. We believe ad-hoc revocation is not valuable and should be obviated by features like recall and name validation.</p>
Prefunded	Inconclusive impact		

SCHEME DESIGN

Low-cost mandate	Inconclusive impact	We assume this principle relates to switching costs between DFSPs and consider end-user fees elsewhere.	
Directory	Greater effect on women than men On balance: Positive effect	In Nairobi and environs, women stated they were not worried about sharing their phone numbers. However, our literature search leads us to believe this will be an issue in other cultural contexts—according to Safaricom, for example, it is the case in the Kenya-Somalia border area.	From expert interviews, having multiple identifiers may be confusing for women—the phone number is often easiest to remember.
Fraud management	Inconclusive impact		
Settlement	Inconclusive impact		
Third-party connection	Inconclusive impact	Some of the effects of this principle might be seen in the section on interoperability as they are closely related.	
Forex providers	Inconclusive impact		

SYSTEM DESIGN

Technology	Inconclusive impact		
System components	Inconclusive impact		
Common core	Inconclusive impact		
Additional protocols	Inconclusive impact		
System connections	Inconclusive impact		

GOVERNANCE

Equal ownership	Inconclusive impact		
Participant engagement	Inconclusive impact		
Not-for-loss utility	Inconclusive impact		

GOVERNMENT SUPPORT

Regulated	Inconclusive impact		
Supervision	Inconclusive impact		
Government use	Inconclusive impact—did not find either male or female use cases use cases in Kenya	Likely G2P payments would have some effect here, but we didn't observe this in Kenya focus groups. This could be a self-reporting bias where individuals were reluctant to acknowledge government support.	
Open	Inconclusive impact		
Tiered KYC	Greater effect on women than men On balance: Positive effect, especially to the extent transactions are authenticated	In our sample size, women appreciated Tiered KYC as it gave them access to mobile money more easily than bank accounts. While obtaining a national ID is not generally an issue (in Kenya, ID4D states 94% female national ID coverage), other forms of identification needed to open a bank account can be problematic (utility bill, letter of reference, etc).	On the other hand, more women than men voiced the need for ID checks when conducting a cash out, to make sure people were not able to appropriate their money.

END-USER EFFECT

End-user fees	Equal effect on men and women in focus groups, though we believe low costs will facilitate high frequency savings behaviors which are more often mentioned by women	Transaction fees were mentioned by both men and women as a significant deterrent to using DFS. One young female student mentioned using workarounds (sending amounts under Ksh100 which did not incur a fee), but on the whole women did not mention workarounds, perhaps because of lack of knowledge, or because they were reluctant to acknowledge them. Women did more often mention savings strategies that involved lots of small-value, high-frequency deposits—a behavior that is highly sensitive to fees.	
Pricing transparency	Equal effect on men and women		

END-USER EFFECT

User experience	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p>	<p>An easy user experience is valuable for women and was mentioned more by women than men. This can include clear information, good menu design, a nearby agent you know well, and the opportunity to correct any mistakes/revocability.</p>	
Inexpensive user devices	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p>	<p>In our sample, women did not recount paying attention to more inexpensive devices. This could have been (a) respondent caution/bias, (b) less of a male/female gap in the Nairobi area, and (c) because much banking functionality is also designed for USSD and feature phones and so the phone is seen as serving its purpose. However, literature and data shows that, globally, women on average have more low-end phones than men indicating this principle would be beneficial for women.</p>	
Access points	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p>	<p>Women lean on CICO agents (but not necessarily female) in close proximity, both to increase convenience and as a place to get advice and product help.</p>	<p>The reliance on access points/agents could make women less independent in making transactions—some agents we spoke to said they also wanted to make women confident in making transactions independently.</p>
Notifications	<p>Greater effect on women than men</p> <p>On balance: Positive effect</p> <p>Should give DFSPs guidance on giving clients messaging controls</p>	<p>Real-time notifications of transactions appear to provide more confidence. More women than men related that immediate notifications are particularly important to build trust in the system.</p>	<p>As mentioned in push/real-time notifications above, privacy can be compromised with on-screen notifications, although this was only an issue for some. Some emphasised that if the messages didn't need to be saved, they could erase them.</p>

OTHER

Network service and availability	<p>Greater effect on women than men</p> <p>On balance: Positive effect to the extent that L1P systems are better executed than current systems</p>	<p>GSM network coverage was mostly taken for granted in Nairobi and environs due to Safaricom's network coverage and M-Pesa's penetration. However, to the extent that API sync issues and reliability of DFSP systems are considered within this principle, women seemed particularly concerned by the risks of money hanging in between systems (e.g., between M-Pesa and a bank account).</p>	
Enabling programs	<p>Equal effect on men and women (though potentially greater effect on women if programs are designed with women in mind)</p>		
Consumer education	<p>Greater effect on women than men (again, especially if women's needs are taken into account in the design of such programs)</p>	<p>Women expressed a greater need for consumer education but also stated they gained most confidence through peer-peer learning. Informing women and tailoring the messages and the ways of sharing them to their needs and habits was considered to positively affect women's access and usage (see below).</p>	
Data privacy	<p>Inconclusive impact</p>		
Gender disaggregated data	<p>Inconclusive immediate impact on end users. However, service providers having gender-disaggregated data can lead to a differential impact on men/women depending on what the providers find or decide to do with that data</p>		

Source: Based on the Level One Principles internal guide (forthcoming).

Level One Principles: analysis of gender impacts and recommendations for improvement

Extrapolating from Table 1, it seems that the themes which appear stronger for women than men, according to the qualitative fieldwork in Kenya, are trust, control, privacy, and secrecy.

To the extent the principles reinforce these (as many do) they are, on balance, positive for women. We make the distinction between privacy and secrecy because while both male and female respondents valued privacy in their DFS transactions, as with women in many other countries (see for example, gender DFS research in India, Kenya, and Mexico),² female respondents consistently voiced the importance of keeping their financial transactions and balances secret more than men. This is mostly due to the worry that men will interfere in their financial choices or appropriate their money—worries which are often legitimate, as illustrated by case studies in FSD Kenya’s Financial Diaries.³ It is to these themes that the L1P Principles should pay close attention. We expand in more detail on each of the gender-specific impacts of the principles here.

Cumulative impacts of the L1P Principles

In addition to evaluating the impact of each individual principle below, we also look at cumulative overarching impacts under the assumption that the whole will be greater than the sum of its parts. The advent of “lower fees and costs” and “greater innovation and variety of financial choice” are two likely outcomes from the L1P principles that transcend individual principles. In this section, we ask what the likely impact of these two outcomes will be based on our client discussions in Kenya.

² Zollman, J. and C. Sanford (2016). “A Buck Short: What Financial Diaries Tell Us About Building Financial Services That Matter to Low-Income women.”

³ FSD Kenya (2015). “An Overview of the Kenya Financial Diaries Research Program.”

Lower fees and overall costs matter equally to men and women but potentially impact women's limited budgets more

Most of the L1P principles contribute to lowering the cost-to-serve and the inherent costs of financial transactions. While lower costs are clearly good for consumers, whether women are more sensitive to cost and would thus benefit more or less than, or the same as men, is an open question.

Both men and women mentioned transaction costs equally—not just in terms of transactions within the M-Pesa network, but also between M-Pesa and Airtel, and between mobile money and banks. Having said this, women appeared to emphasise related concerns more often, such as money left hanging between networks, or being used to cover a Fuliza overdraft (see below). Women may also somewhat expect that cost is inevitable. Therefore, while on the whole women did not mention workarounds to avoid cost, one young female student in Nairobi did; this could mean those younger people, who know how to minimise transaction costs and paradoxically belong to a higher socio-economic group, are more aware of workarounds (and other women may use them if they made more aware of them):

“ If I'm owing you 500 shillings, instead of sending you that 500 shillings, and then I get taxed... I'd rather I send to you, one hundred... one hundred... like that, five times. You will get your money and I'll have saved my 11 shillings.

The age factor is echoed by a male M-Pesa agent who says:

“ I don't think I see a gender difference. The big difference: I think the age factor comes in, a young guy will be conscious of the cost. An old person, a mature person will just feel like I want to send the money. A young guy you will see him or her trying to compare charges to see if he will save something, I have seen that trend.

This has the implication that potentially older people (male and female) would want to save money but somehow either don't have the knowledge or confidence to do so—a point which also links to the L1P principle about consumer education. Experts did report, however, that women may be more negatively impacted by higher prices because of their more limited budgets.

A related point is that literature, expert interviews, fieldwork, and Caribou Data analysis of Kenyan financial activity illustrates that Kenyan women save more but borrow less than men.⁴ According to a chama (savings group) leader:

⁴ Fin Access Kenya (2019). Household survey. Access. Usage. Quality. Impact. [https://www.centralbank.go.ke/uploads/financial_inclusion/1035460079_2019%20FinAcces%20Report%20\(web\).pdf](https://www.centralbank.go.ke/uploads/financial_inclusion/1035460079_2019%20FinAcces%20Report%20(web).pdf)

“

Women are good in savings. They are very aggressive, more than men in savings. Men don't care and are the highest in the default rate. They also harass the people who go for follow up, scaring them away. They are the highest defaulters and I don't entertain men in my groups.

When women do borrow, they tend to use a variety of informal mechanisms, rather than formal ones.⁵ Women interviewed in the peri-urban and rural areas of Kenya highlighted that they both saved and borrowed, but only small (or very small) amounts at a time. It appears that men may manage bigger amounts of money—particularly via borrowing. Existing financial products—especially products with high transaction fees—may not encourage or incentivise saving small amounts and may deter women.

Our qualitative research in Kenya was not able to address the related questions of total cost of ownership or handset costs, though the macro data indicates that women are more often owners of basic or feature phones, a fact which may be driven in part by price sensitivity.

Thus we believe on balance that lower costs—especially low transactional fees that enable high-frequency, small-value savings—will create a positive impact for women, but it's hard to estimate how much this matters from our focus groups and interviews. As lower cost is likely to be the primary impact of the L1P principles, we plan to focus on this important area in the other aspects of this research to see how this plays out in different contexts.

The Level One Project Principles enable financial innovation and diversity through interconnected systems that impact women more than men

In addition to lowering costs, L1P principles create a more open, interconnected, standards-based and low-cost system that reduces entry barriers. Taken as a whole, these features are likely to spur new entrants, and more innovative and interconnected products that bundle capabilities from multiple providers (e.g., M-Shwari in Kenya).

The literature on financial inclusion shows women value a diversity of financial products for different scenarios and needs as much as men despite the fact that their needs are often less likely to be addressed by financial institutions.⁶ The need for variety (while prioritising anonymity) also showed up in our Kenya research:

⁵ Fin Access Kenya (2019). Household survey. Access. Usage. Quality. Impact. <https://s3-eu-central-1.amazonaws.com/fsd-circle/wp-content/uploads/2019/04/09103904/2019-FinAcces-Report-13-06-2019.pdf>

⁶ Zollman, J. and C. Sanford (2016). A Buck Short: What Financial Diaries Tell Us About Building Financial Services That Matter to Low-Income women.

“ *Mobile money for me it's Pesa Pap (quick money), but with the chama I can only withdraw at the end of the month so it's better for saving and even better is the bank. I try not to touch the bank deposits too often.*

— Female farmer, rural area, Kiambu county

“ *When you use cash, people can see it and you can get robbed easily in the night, if not worse. Look, with chamas, if it's your turn to take the money it is best to put it as quickly in an account and not keep it at home. At least with the phone, nobody knows for sure.*

— Women chama teacher, rural area, Kiambu county

“ *I like M-Pesa because if I hold cash in my hand, it will fly quickly. At least if it's on my phone there is less temptation.*

— Female vegetable seller at the market, informal settlement in the outskirts of Nairobi

This diversity, with accompanying interoperability, gives women more confidence and can contribute to their sense of control. This benefit is probably the primary impact of a more interoperable system.

As an example of the kind of innovation that an L1P-type system might foster, the integration of M-Shwari locked accounts appeared particularly relevant for women. Though not all respondents had these accounts, some female respondents, who had locked savings accounts, said they appreciated them for the control they provided over unlocked accounts that are too easily accessible.⁷ As mentioned earlier, the savings kept in those accounts would usually be kept for bigger spends rather than emergencies, enabling women to plan and manage their finances (the distribution being mobile money for immediate access, locked accounts for larger spends, and bank accounts, for those who had them, for major savings).

“ *Open accounts are for when you get an emergency. Locked is for when you have a long-term project, like when you want to buy a piece of land or something like that. It's useful and the interest is higher.*

— Female M-Pesa agent, informal settlement in the outskirts of Nairobi

Seamless integration (relating back to interoperability, standards, low cost, and other L1P principles) is important for women to gain confidence, but it also saves time to be able to maintain this diversity of products for different goals.

⁷ The value of hard to access accounts is also mentioned in Dupas, P., & Robinson, J. (2013). Why Don't the Poor Save More? Evidence from Health Savings Experiments. *American Economic Review*, 103(4), 1138:1171.

Impacts of individual L1P principles

Here we assess the likely impacts of each principle and make a few suggestions for improvement based on our research in Kenya. These conclusions are still preliminary and will evolve as we complete the Côte d'Ivoire field research and the quantitative analysis.

Interoperability

Women value interoperability, as long as they have confidence in transactions going through

Some of the positive benefits of interoperability are discussed above in the section on enabling financial innovation and diversity through interconnected systems (as interoperability is a key principle to enable greater innovation and variety it would be redundant to list the benefits here). We thus believe interoperability has clear benefits for women.

The challenge is when women do not immediately know what is happening to their money as it shifts between providers (e.g., between M-Pesa and banks). This could be a risk in systems which were established according to L1P principles but where the implementation or execution was lacking, leading to errors and delays.

For example, delays in receiving confirmation messages may be due to slower communication between networks and may result in customers reverting to withdrawing and depositing money through an agent rather than doing so through the mobile money menu—this is time consuming, more costly, and overall doesn't align with keeping money digital.

“

Sometimes you get your money hanging somewhere - it is not in your M-Pesa, it is not in your Equity account, so it is hanging and you get no message. As a small business woman, I don't like that much.

Last weekend, I did a transaction from my M-Pesa to Equity Bank. I found that my money didn't reach the account I was sending it to, it was hanging for two days... after two days it was reversed to me, with no message. I had to call Safaricom and Equity customer care to understand what had happened.

Now we prefer to withdraw the money and put it directly to your account, I have [a bank] account of Equity so I withdraw from M-Pesa and put it to my account.

— Female smallholder farmer who sells her vegetables, informal settlement in the outskirts of Nairobi

Additionally, as mentioned above, women do value separate accounts because of control and secrecy⁸—to this point, DFSPs might be cautious about increasing interoperability between different financial products if it implied that all of women's funds were accessible from a single interface that someone else could appropriate.

Recommendation

No changes recommended to this principle.

Scale

Developing scale should acknowledge that women value the diversity of financial products

In the Level One Project Principles, scale relates to the scheme supporting key payments use cases, including P2P, C2B, C2G, G2P, B2C. Scale is the core theory of change for the L1P. Scale happens when people use services often. One benefit of that is that the infrastructure becomes less expensive per transaction (fixed cost spread across more transactions). At least as important is that users get a more significant digital financial footprint the more they use the service (especially necessary for women). Finally, usage spurs more usage through the network effect.

In FDGs, given the fairly mature mobile money landscape in Kenya, female respondents did say that they used different mobile money use cases (G2P, bill pay, merchant, etc.) through one account. That said, while having the ability to do more types of payments from a single account was efficient, women also actively valued managing money in different places and keeping accounts deliberately separate, even if it costs both time and mental energy. We don't think this presents a downside if properly implemented because the L1P principles positively impact the ability to have and manage multiple accounts if desired.

Recommendation

No changes recommended.

8 Echoed by expert interviews with CGAP Kenya, GMaurich, and FSD Kenya respondents; November 2019.

Real-time notifications

Women like real-time notifications but also want control over them

Here we focus on the notifications generated by real-time transactions—this was the easiest concept to understand and discuss in a focus group context.

Female respondents voiced the value of immediate notifications more than male respondents. Women appear to be more concerned when messages do not come through immediately. This is mostly because women don't feel like they have the time to tackle the issue later if something goes wrong. Some women mentioned that it might be particularly nerve-racking for elderly users, who may not have as much knowledge and not know to call customer service if there is an error, or they may not have the ability to quickly go to an agent. In the section on irrevocability, we note that users greatly value the 25-second recall period wherein they can cancel the transaction before it has been formally executed. Because the transaction confirmation can only arrive after the built in delay for revocation, however, this points to a tradeoff between giving users a longer grace period versus delaying the final confirmation such that it's not convenient or causes anxiety around whether the transaction was completed. According to a discussion in one focus group:

“

Like Equitel ... you don't receive the message of who has sent your money, you don't know your balance, there are no notifications popping out when you receive money or it comes but it hangs a long time... so in the meantime, the money cannot help you.

— Group of female smallholder farmers and casual workers, rural area

From our observations at M-Pesa shops and as suggested by the quote above, more men than women would deposit money at an M-Pesa agent without waiting for the confirmation message that the money was deposited. Some women would do that as well (deposit money and leave) but exclusively with their trusted agent; and most would wait at the agent for confirmation.

On the other hand, some women did appear cautious around notifications as they were also at odds with desire for privacy and secrecy. Some women mentioned they appreciated the ability to control notifications, and some women owning smartphones would decide to not receive any push notifications in order to not have messages that they wouldn't want to show appear on their screens.⁹

⁹ A CGAP Kenya expert interviewee also spoke to the “intense value of privacy” for the majority of Kenyan women and how notifications left on screen were a key concern (November 2019).

Recommendation

We recommend that both sending and receiving DFSPs, scheme operators, and any third parties are careful in how they set up messaging so as to give users adequate control, such as being able to choose when to get their notification. Given the need for coordination across parties, this is probably best addressed through regulation or scheme rules. There is also a possible alternate path in which the user could set preferences with their DFSP which would then need to flow across the infrastructure to all other transaction participants. However, this would be a much more complicated approach.

Irrevocability

Confirmation messages and a timed delay (e.g., 25 seconds) reduce women's fears of irrevocability

A potentially negative impact of irrevocability on women is that women's testimonials (particularly from older women) suggested that they had less time, and sometimes less knowledge, to deal with revoking payments when making mistakes. In theory, two options are possible: the ability to cancel an M-Pesa transaction within 25 seconds (a feature introduced in 2019, and only on M-Pesa); and post-transaction, by dialling shortcode #456 on Safaricom for customer service and reversal. Both were mentioned by end users and experts as having a positive impact on female customers' experience as opposed to men's, providing greater trust and assurance.

“

I used to have a challenge with M-Pesa before... whenever I sent money to a wrong number, it would just go directly. That was before the 25 seconds details confirmation period was introduced. These days, I just confirm the details and if it's wrong, I cancel the transaction.

— Female smallholder farmer, rural area

Having said this, some respondents complained that 25 seconds was too short, especially when they were multitasking as salespeople:

“

Before I realised, twenty-five seconds were gone and the money too. I wish they gave us one minute, twenty-five seconds is very short Then I call the person who tells me 'oh, I had a problem, it is God who sent you to send me this money.'

— Female market seller, rural area



Gikomba's bustling market means female salespeople multitask when trading and are cautious of mistakes © H. Smertnik.

To reduce transaction mistakes and the need to revoke payments once they have gone through, both women and men suggested adding steps to existing processes before the payment goes through. One suggestion was for the DFSP to provide multiple confirmation messages:

“

When you are in a hurry and have many customers buying, you may send the money back to the wrong person. We need something that forces us to look—so maybe more confirmation before pressing send.

— Female market seller, informal settlement in the outskirts of Nairobi

However, expert interviewees felt this could lead to other mistakes (simply clicking on next and inadvertently agreeing to something—such as design which forces you to buy more credit).¹⁰ Perhaps setting up multiple confirmation messages could be an option by itself (“would you like multiple messages?”).

Other checks include asking for a PIN at point of transaction and confirming the name of the recipient before entering the amount. Currently, for M-Pesa, the recipient's number is entered followed by the amount, but the sender can only cancel during the 25-second confirmation message. This is linked to the issue of not being able to retrieve numbers from the phone or SIM storage directly.

¹⁰ Interviewee at The Standard as well as BFA Kenya (November and December 2019).

Some services have been put in place to reduce mistakes (at least in part), but have not been widely used:

- The **MySafaricom app** removes the challenge of having to copy/paste or memorise contact and account numbers before making a transaction, as the app saves numbers. However this feature had only been used by two male respondents. Contact numbers can also be saved by creating an address book or saving frequent recipients in USSD, but this is not frequently done. The app wasn't widely used because respondents feared the cost of consuming data when using the app (while in reality the app is free) or simply did not know about the app.
- **QR codes can be posted at agent shops** to reduce errors that might occur when typing the agent's number in the USSD menu. This has not picked up either as it requires a smartphone and is not widely known about nor promoted by agents.

Over time, revoking payments went from being a complicated and unguaranteed process to a service that could lead to fraud:

“

When you have finished with the customer and you get to find that they have reversed the money. On calling customer care, they ask a lot of questions and it will force you to go to the agent where the customer had withdrawn the money. By the time you reach there, you find maybe it is too late, the customer has already withdrawn that money elsewhere. You end up losing your money. Now, I ask my customers to pay me cash—less trouble this way though I risk losing my customers if they don't have money in hand.

— Helen, clothes seller, informal settlement in the outskirts of Nairobi

Recommendation

The single largest cost component of running a payments system is managing disputes and reversals. To get to low cost, irrevocability is a key feature. One possibility is a hybrid scenario in which merchant payments and cash out was irrevocable (as these are typically proximity payments) but P2P was revocable. This might help incentivise merchants to join as merchants instead of individuals, or might incentivise them to not accept digital payments in the first place. Therefore we recommend that the irrevocability principle could be tailored according to accounts as follows: *Final payment orders cannot be rescinded once they reach the switch, providing assurance that the receiver's account cannot be debited without their consent. Schemes should mandate some combination of a timed grace period to cancel payment, recipient name confirmation before the transaction is completed and an easy digital process for requesting return of funds from the recipient after an erroneous transaction.*

Low-cost mandate

This is discussed above in the “Lower fees and overall costs” section.

Identifiers/Directory

Non-phone number identifiers are of importance to women

In the Nairobi area in Kenya, we didn’t find any difference in women or men’s willingness to share phone numbers. That said, our literature search and expert interviews indicate that this will be an issue in other cultural contexts (including the Kenya-Somalia border).

Recommendation

We recommend updating the principles with: The scheme uses a directory that enables appropriate aliases for payments addressing—this may include phone number, account number, national ID, email address, or other identifier. Allowing a non-phone number identifier may be important for ensuring privacy and should be available for users who prefer them.

KYC and Tiered KYC

Women value KYC and tiered KYC

Having to provide an ID to register accounts (KYC) and to complete transactions (authentication) was seen as a guarantee of the safety and trustworthiness of a transaction, especially by women. In fact, even though slightly more men than women have a national ID in Kenya, men were more likely to complain about the hassle of having to provide their ID at every transaction whereas women found it reassuring.¹¹ Both expert interviews and female end users indicated these authentication checks are of value to women and, far from being tedious, give them a sense of security and control.¹²

¹¹ Interview with FSD Kenya respondent, November 2019. See also Findex (2018) data—91% overall ID coverage; The ID4D (2018) dataset states that 98.3% of men and 94% women have national ID though with the caveat that it does not register removal of deceased persons.

¹² Interviews with GMaurich and FSD Kenya respondents (November 2019).

“

I find asking for ID very right. Because [there are ID checks], these days it has become hard for someone to steal your phone and go withdraw your money.

— Female smallholder farmer, rural area

In addition to the security of customers, respondents would refer to the protection and security of agents:

“

If you transact without an ID and Safaricom comes to check the shop, that M-Pesa shop will be closed. So you have to use the ID throughout to make sure Safaricom doesn't bother that agent because he is convenient and you are used to going to him.

— Female worker, rural area

Finally, women preferred a tiered KYC approach because they needed minimum credentials (national ID) for a SIM but several other credentials for a bank account (letter of reference, utility bill, evidence of salary, etc.) that they might not have. On the other hand, more women than men voiced the need for stronger ID checks when conducting a cash out to make sure people were not able to appropriate their money.

Recommendation

L1P principles should be updated to recommend some form of ID authentication for cash out transactions, though it's not clear this belongs in the tiered KYC area.

End-user fees

This is discussed above in the “Lower fees and overall costs” section.

User experience

A good user experience is more important to women than to men to the extent it contributes to trust

An easy user experience is valuable for women—this was mentioned more by women than men. This might include clear information, good menu design, a nearby agent the user knows well, and the opportunity to correct any mistakes/revocability. There is some overlap with recommendations from other principles to the extent they touch on user experience.

Recommendation

Per our previous discussions, we recommend updating this principle with: The user interface is simple and intuitive for a consumer; the user interface is designed to prevent user errors and fraudulent activity; this includes features like being able to hide notifications, showing the recipient name prior to transaction, saving frequent transaction addresses, and enabling language localisation.

Inexpensive User Devices

No conclusive results from FGDs that women have lower-end phones, but we should continue designing DFS for these

The focus groups and discussions with Kenyans didn't reveal a strong bias toward the use of low-end phones by women, but we don't feel this is a conclusive result. Partly, people may be hesitant to discuss the fact that they can't afford better phones. Additionally, macro data and expert interviews both indicate that women more often have low-end devices and not enabling a platform to work on these devices could disenfranchise women.

Recommendation

Per our previous discussions, we recommend updating the principles to support low-end devices with: All primary functions should be accessible to users with inexpensive basic/feature phones. These functions are typically enabled through USSD interfaces on such devices.

Access Points

Women appear to rely on access points (agents) more than men because they build trust

Both expert interviewees and end users pointed to the need for agents in building trust and assurance, which was also mentioned in the literature.¹³ They provide the confidence women need to complete transactions and are available to provide

¹³ Suri, T., and W. Jack. "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science* 354, no. 6317 (December 9, 2016): 1288–92; Interviews with GMaurich and FSD Kenya respondents, November 2019; Olsen, Alexis Beggs. "Uniting Tech and Touch: Why Centaur Products Are Better for Consumers and Providers." Center for Financial Inclusion, 2017.

customers with information, especially in terms of exploring new features or avoiding mistakes.

“

I am talking out of experience, for the past five years as an agent, ladies want to be sure more than the gents. Ladies will come and say 'I want to withdraw, can you help me and enter the agent number for me.'

— Male M-Pesa agent, rural area

Except for one respondent (out of 80), there was no major evidence that women preferred to deal with female agents, though this may be quite specific to Kenya.¹⁴ The one female respondent said she would prefer to deposit with a female agent but withdraw anywhere (male or female agent) —presumably so the male agent would not know how much money she is depositing in her account and could not share that information.

When with an agent, female customers are also more careful than men (linked to the L1P Principles related to notifications):

“

Women are more cautious; they will stay and wait at my shop to see that their money has been deposited and get the confirmation message. Men do not want to stay around to deposit, they just want to give you the money, the details, then you send money later.

— Female M-Pesa agent, informal settlement in the outskirts of Nairobi

In fact, the value of agents was highlighted by the fact that women respondents compared DFS providers that either have no agent network (such as mobile loan apps Tala and Branch) or do not have a widely-spread one in terms of trust:

“

You might get only one T-cash agent, or one Airtel money agent, but M-Pesa agents ... they're everywhere, everywhere is green.

— Female student, Nairobi

“

These Tala apps, they don't even have agents so do they really exist? How can they help you if there is no one to go to?

— Female smallholder farmer, rural area

Men, however, did not mention valuing the presence of agents, appearing to be more comfortable doing most of their transactions on their own phones and by themselves, rather than being tied to any particular agent, as long as the transaction could be done quickly. This gender difference could be due to a number of factors: more digital and digital financial literacy among men, more general confidence, or even a desire to “save face” and experiment on their own without an agent.

¹⁴ Expert interviews supported this view: GMaurich, FSD Kenya and BFA (November and December 2019).

Recommendation

No recommended change to the principle.

Notifications

Real-time notifications provide confidence to women, though they should have the ability to control notifications to maintain secrecy and privacy

As stated above, real-time notifications of transactions appear to provide more confidence. More women than men noted that immediate notifications are particularly important to build trust in the system. As also mentioned in push/real-time notifications above, privacy can be compromised with on-screen notifications, although this was only an issue for some. Some emphasised that if the messages didn't need to be saved, they could erase them.

Recommendation

Per our previous discussions, we recommend updating the principles with: **Notification of account activities from all parties controllable by the end user.**

Network and service availability

The predominance of M-Pesa means GSM network service and availability is taken for granted in Nairobi and environs (likely the case will be different in the north and east of the country). However, women expressed concern when service issues arise between DFSPs. For example, when transferring between M-Pesa and a bank, focus group participants recounted unexplained delays, reversals, or even hung transactions that created anxiety and required calling customer service. This appeared to be felt more strongly by women than men.

Enabling programs and Consumer education

Programs and consumer education (using peer-to-peer learning) are critical for women

DFS education impacts women in two ways that are distinct from how it impacts men. Firstly, the women we interviewed state that they rely more on peers than formal notices from providers. Respondents (both experts and end users) strongly stated that women in lower-income areas trust their peers the most, replicating the community models such as chamas.¹⁵ More education and enabling programs (two of the Level One Project Principles) *that tie into social networks and community organisations* would certainly benefit women.

“

If the providers could get more elderly people educated to pass the message slowly it would be better than pamphlets or texting. My grandmother, if she receives a call or a pamphlet, she may not accept it, because, she will think 'who do I know [that] has used this type of thing and can tell me about it and can tell me that it's good', other than having a total stranger, because nowadays, everyone wants to get money.

— Female student, Nairobi

Secondly, women would benefit from more education and transparency around constantly evolving products. One such product is Fuliza, an overdraft service launched in 2019. If money has been sent by mistake to an account with a Fuliza credit, the amount will be automatically deducted, removing any chances for the sender to retrieve the money. This means users are becoming nervous about this complicating money sent erroneously, because it is harder to retrieve. Some men we spoke to had developed workarounds to deal with Fuliza, such as Peter below, but women still appeared unfamiliar with possible workarounds:

“

I've had to ask friends to send me money through my brother's account because it would have been taken from me if sent to my M-Pesa directly. I am also going back to asking for cash.”

— Peter, shoe seller, informal settlement in the outskirts of Nairobi

In cases such as Fuliza, respondents have expressed their frustration with new services that appear untransparent, leading them to find time-consuming alternative methods of sending each other money or even reverting back to cash. Ensuring that customers understand the usage and implications of financial services is critical for customers to maintain trust and control. Some respondents appeared to be quite distressed by unexpected consequences of digital financial services:

¹⁵ Interviews with GMaurich and FSD Kenya respondents (November 2019).

“

These apps are killing our generation. Take for example that young one, he is just out of school and his name is already at the CRB [credit rating bureau]. He can do some great things in the future, but he gets really nervous and stressed. I heard some young ones have done bad things to themselves because of that. You need to educate them, for them to know.

— John, shopkeeper, rural area

Recommendation

Consumer education programs should be geared to link into social networks and community organisations to have maximum impact. They should focus significantly on avoiding harm from new products that are launching in the market.

Conclusion

From our 80 end-user interviews and 11 expert interviews, it is apparent that some Level One Project Principles may be more applicable to women than men in Kenya and thus could impact the gender gap in terms of access to and use of DFS. It was also apparent that, on balance, the L1P principles conformed to outcomes that were desired by women and helped augment control, privacy, secrecy, and trust and thus seemed likely to have an overall positive impact on women, reducing the gender gap in the use of digital financial services
