

L1P Principles and Gender

Insights from Côte d'Ivoire



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.

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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?

Because some aspects of the payments system in Côte d'Ivoire are L1P compliant (e.g., real-time push-transfers in the form of mobile money) but others are not (e.g., a lack of interoperability) our approach was to explore the costs and frictions as well as benefits generated by the non-L1P compliant components and L1P compliant components. Within this we were careful to probe for differences between how men and women experienced these effects.

To research this, Caribou Digital conducted two weeks' of qualitative fieldwork in Côte d'Ivoire, including expert interviews and 80 end-user insights (through focus groups and in-depth interviews with both men and women, but oversampling women). These were conducted in peri-urban areas (Yopougon and Koumassi), the urban area of the capital Abidjan (Marcory), and rural areas (Mondoukou and Akoupe Zeudji). As part of our sample, we also spoke to intermediaries such as DFS agents and super-users.

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

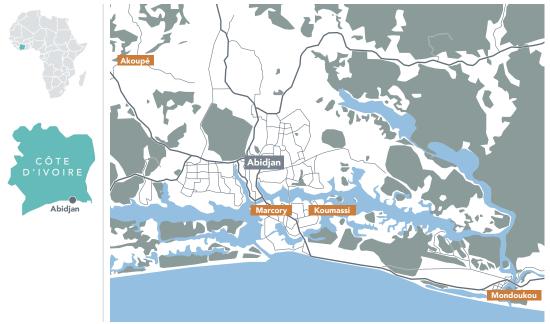


Figure 1 Map of interview locations in and around Abidjan

Source: Google Maps

We found that women's use of DFS is generally low in Côte d'Ivoire and their (digital) literacy is less, or significantly less, than that of men, with most DFS use limited to P2P transfers and cash-in and cash-out at agents. In fact, many people ask agents to do the P2P transfers for them at the agent point. As a result, women stand to benefit more from the application of the L1P principles because women most actively need them—particularly the principles on consumer education, tiered KYC, low and transparent pricing, user experience, and access to agents. We summarise these differences and hope that these findings can be integrated and serve as guidance for DFSPs building inclusive financial services with special attention to the gender gap in DFS.

A snapshot of women, finance and DFS in Côte d'Ivoire

Limited DFS use by women

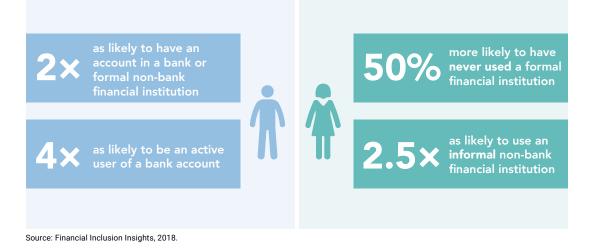
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I don't want to leave money in my mobile money account. Once I receive it I take it out. I feel like I am losing money if I leave money in my mobile, every time I want to do something with the money it reduces and it certainly doesn't grow. It's not like that with the Tontine [group savings] or the bank. – Vivienne, 34, fruit seller in Yopougon

Vivienne's comment echoed that of many female respondents in our Côte d'Ivoire fieldwork, where mobile money (what appeared to be the very first rung of digital financial services) is widely used by women but only at a basic level, that is, mainly to withdraw or send money. In our sample, the majority of the female respondents did not have their own mobile money accounts for several reasons—citing lack of trust, confidence, and access to devices. It also seemed to be true that more women than men relied on agents to do their financial transactions.

The low use of digital financial services we found among women mirrors existing literature on gender and financial inclusion, including DFS in Côte d'Ivoire. In financial inclusion more broadly, FII (2018)² found the following gender differences in a survey of 3,059 respondents:

Figure 2 Male and female differences in financial inclusion in Côte d'Ivoire

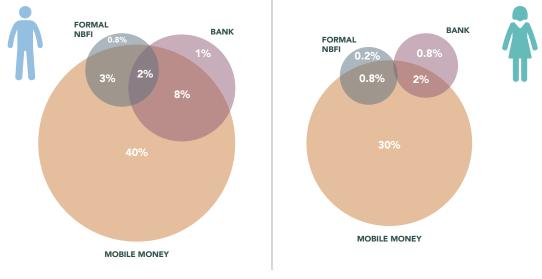


2 CGAP. "Financial Inclusion Insights."

4

FII (2018) calculates that 46% of women and 62% of men in Côte d'Ivoire are financially numerate, and 50% of men and 31% of women are financially included (having a registered bank, MFI, or mobile money account). However, women are more likely to restrict their use to mobile money, while men use a variety of methods:

Figure 3 Men are more likely to use a variety of financial methods, whereas women use a greater proportion of mobile money



Source: Financial Inclusion Insights, 2018.

In our fieldwork, a number of female respondents (as in wider literature) saw mobile money as safer than cash:

I was robbed at home. If someone steals my phone, I'll just take out my chip and my money will still be there. Before when I came back from the market, children took 40,000 CFA [\$67.00], 50,000 CFA [\$83.00], I cried and I don't know who took it. Two weeks after the thief did it again and I cried again. I lost more than 200,000 CFA [\$235.00]. Since then I have opened my mobile money account.³
– Marianne, 50, fish seller in Akoupe Zeudji

Respondents also see mobile money as preferable to banks:

66 Banks ask you for evidence of your salary. We don't have fixed salaries so we can't show that. With the mobile, we can withdraw money quickly, unlike banks where it's more difficult – Roseline, 40

3 Exchange rate calculated at 1 USD = CFA 596.236 on xe.com 15 March 2020.

Banks were seen as involving too much KYC paperwork, high fees, and dispersed branches with long waiting times. One respondent said *"I'm not going to stand in the front of the cashier for 2,000 CFA (\$3.65)."* Another respondent told us that *"banks are for those people who earn a lot."*

However, despite women's greater proportional use of mobile money in comparison to other financial tools, men in Côte d'Ivoire are still 65% more likely to use mobile money than women (FII, 2018). The main barriers women stated in FII's study include lack of device, lack of SIM, and lack of ID to register the SIM. In our interviews, these were mentioned less (though some women did explore workarounds for lack of ID, such as registering on their husband's SIM if they were married), but women did mention variable concerns of agent quality, network unreliability, fraud, and unclear fees.

Other than credit for airtime, none of our female respondents had taken a loan with their mobile carrier. Like Vivienne, most female respondents preferred other methods of procuring loans and savings: mainly tontines (savings groups) or "Mauritanians"⁴ (informal lenders) while a few wealthier respondents used banks. Other products such as MTN's Momo cash (mobile money credit) were barely used; only two respondents had tested the service, but they weren't actively borrowing. Respondents were more cautious of microfinance institutions (MFIs)—we heard of bad experiences with MFIs coming to villages to open savings accounts for people and then disappearing with the money.

Figure 4 below outlines the places where women we spoke with keep their money. As the research is qualitative (80 respondents in and around Abidjan), we cannot provide representative percentages. However, informal methods (at home, carrying it on their person, group savings, or individual savings) are still prevalent savings⁵ methods for low-income women.

⁴ Le mauritanien is the name given to informal lenders, most often coming from Mauritania. They are considered a trustworthy source for borrowing money, removing both the group factor of tontines (which some respondents considered unreliable and at times unsafe) and the high interest rates of MFIs.

⁵ Note that, in the case of the respondents we spoke with, saving is often understood as merely keeping a limited amount of money rather than more strategic savings.

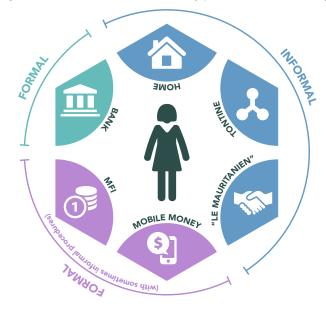
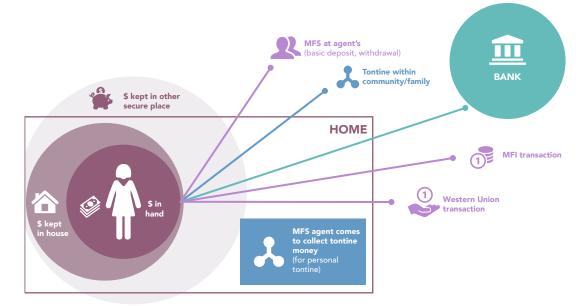


Figure 4 Different places in which women save money (as recounted in focus groups and IDIs)

Figure 5 below provides a visual representation of how the women we spoke to manage their money. Very few female respondents did their financial transactions digitally (i.e. sending money, paying bills) from the safety and comfort of their homes. As mentioned earlier, most relied on agents for two main reasons—costs and lack of mobile money accounts—and thus are not taking advantage of the convenience digital transactions offer.





Several of the women interviewed preferred keeping their money on their person, such as Josephine, 47: "I don't trust my children, I don't trust my husband, I don't have a mobile money account or a bank account. So I keep my money right here on me. I got robbed twice and it's very hard every time to get back up from that."

One possibility we observed in at least one small rural village and in one peri-urban community was the possibility for mobile money agents to come to their customers' home to collect their savings money, bringing back this convenience DFS provides. During one interview with a female mobile money agent in Akoupe Zeudji, a customer came to sign up for a personal tontine savings. At the end of each day, the agent would go to the person's house to collect the money they want to save. This appeared to be an informal service that agents would propose when comfortable, such as in smaller, known communities, to avoid risk. The benefit for the agent would be to keep a part of the money as liquidity (float), including in remote areas, and keep the rest in their own mobile money account. At a decided time, the agent will give the total amount saved back to the customer.

One key inhibiting factor for women is the inconsistent and informal nature of mobile money services in Côte d'Ivoire

As seen above, one of the main attractions of DFS in Côte d'Ivoire is that of tiered KYC— a biometric national ID suffices to buy a SIM and conduct a transaction. However, because agents are not consistent in asking for an ID, there are more opportunities for fraud. Some agents also mention they are afraid to ask for ID, in case the customer takes their business elsewhere. This leads to some confusion and lack of trust:

All agents should ask for an ID or at least get the ID number, but it creates a battle between those agents who don't ask and those who do. Those who are stubborn and continue to ask for it can lose their clients. – Female agent, Koumassi

Another example of the type of informal transactions accepted by certain mobile money agents are transactions conducted by third parties on behalf of the owner of a mobile money account, particularly in rural areas and with the older generation who may send a younger relative to collect cash without providing ID:

66

Often, when you do not have an account, in agreement with the mobile money agent, you can communicate the number of the agent to your correspondent who must send you money. The latter forwards the money via the agent number. Is it common in the village? Yes, when you don't have a cellphone, you'll explain this to the agent and if he accepts you can receive money via his number (rural area).

The issue with the mobile money agents' lack of formality in conducting financial transactions is the possibility of fraud and the unsecure environment it creates. Mobile money fraud and fear of fraud is a major reason why women are cautious in using mobile money:

46 You feel mobile money is not 100% secure because someone else can access your account.

This fear of fraud is not only due to agents' informality but is also anchored in experiences from the early days of mobile money in Côte d'Ivoire when fraud was not well contained. Orange, particularly, seemed to suffer from fraud and a reputation of fraud. One respondent mentioned:

I remember at the end of 2018, I saved my bonus on my Orange account. I go to the agent to make a withdrawal and then go to my hairdresser. To my surprise, the mobile money agent tells me that there is nothing on my account. I was desperate and called Orange and they told me that I had made transactions on my account. Since this day I automatically withdraw the money I receive on the Orange account and then put it on the MTN account.

In this context, trust in mobile financial transactions is limited in a way that seemed more prevalent with the female customers to whom we spoke. This lack of trust is emphasised by the unreliability of MFS. For example, women would choose to go to an agent to send money—instead of doing it on their phone—in order to get an informal receipt confirming their transaction. This receipt is an informal piece of paper on which the agent writes the date and the amount sent or deposited; these exist because SMS notifications have not been consistent and thus provide reassurances to customers even though its formal validity hasn't been verified. If the recipient hasn't received the money within 24 hours, the sender can go back to the agent with the receipt to verify the transaction.

The Level One Principles and End User Impact

We found three categories of impact when applying the Level One Project Principles to end users in Côte d'Ivoire. 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

L1P Principle SCHEME DESIG	How the implementation of L1P will affect women vs. men N	Positive effect on women	Negative effects /improvements to principle
Interoperable	Greater effect on women than men On balance: Positive effect	Women had little knowledge of how to conduct interoperable transfers between networks and experts told us it was very difficult even for people who were aware. When they did want to move money between networks they would withdraw and re-deposit at an agent. Interoperability would likely have saved significant time and cost for these women (we found women were often more time or price sensitive). Very few women (four in the sample of 80) had locked accounts for savings—however, this was more women than men. We feel these accounts are a reasonable proxy for the kinds of specialised services that would be more available with interoperability and would seem to be of greater interest to women based on FGDs.	Interoperability can cause more uncertainty and reduce trust when not fully seamless—fear of "money hanging in the air" when interoperable transfers are delayed or fail. Right now, networks are investing more in fraud awareness rather than interoperability— implementation by MNOs will need extensive awareness raising and confidence building as most users prefer to own multiple SIMs or take cash out and redeposit at an agent when transferring across value networks. At its core, concerns around interoperability can be addressed by ensuring real-time payments, to give users, especially women, confidence that money is being transacted as quickly and surely as possible.
Scale (in the form of many use cases)	Inconclusive impact (as yet)	Unlike Kenya, the women and men we interviewed in Côte d'Ivoire did mostly very basic transactions—cash in/out and P2P transfers— often mediated by the agent over the counter. However, the interviewees did mention differences in payment tasks where men were used to paying bills and school fees while women were more often in charge of saving. Savings behavior by women was almost entirely in cash or informal institutions (like tontines) while men's lower frequency higher value use cases (bills and school fees) were more likely to be paid digitally. Given the gender differences across use cases, a payment system which facilitated more types of payment use cases might benefit women by assuring their use cases were included, especially high-frequency, low- value savings.	It did seem possible that if scale meant having more payment use cases available on one account it could create some confusion if the user experience was not managed well.

The Level One Principles and End User Impact

SCHEME DESIGN

Push/	Croator offect or	Women in our complexies	
	Greater effect on	Women in our sample voiced	
real-time	women than men	greater concerns over network	
	On balance:	drops or worries that payments	
	Limited positive	were not going through, in relation to a lower level of trust overall.	
	effect		
	Deel time builde	The agent's receipt is an example	
	Real time builds	of how women feel reassured with	
	trust in the system	physical evidence of a transaction,	
		when the digital evidence is not	
		always forthcoming in real time.	
		Currently the network drops	
		seem to contribute to a great deal	
		of mistrust. If women feel more	
		confident that transactions are	
		going through in real time, it will	
		build their trust and confidence in	
		the system and save them the time	
		of chasing the trails of transactions.	
Irrevocable	Greater effect on	In Côte d'Ivoire, as in Kenya, it is	Fear of both revocability and
	women than men	possible to revoke a payment made	irrevocability is not as strong in
	On balance:	by mistake—including after it goes	Côte d'Ivoire as in Kenya, but this
	Potential negative	through.	could be because of the reliance on
	client effect	As in Kenya, the caveat to revoking	agents. Agents feel under greater
	(though we	payments is that the recipient of	pressure to make the correct
	recognise the key	the payment can't have withdrawn	transaction, especially when in a
	role this plays in	the payment yet. Hence, the	rush. As in Kenya, there should be
	overall system	approach is very ad hoc.	more steps before the transaction
	functioning)		goes through to validate receiver
		Senders valued the possibility of	and amount and to potentially
		reversing when they made an error	allow a short recall period.
		but also it seemed like they relied	
		more on agents to reduce errors in	
		the first place.	
		While most SMEs were not using	
		mobile money. The few that did	
		had to come up with strategies	
		to limit the risk of revocation. A	
		few SME owners we talked to	
		allowed partial deposit with mobile money but then asked for full	
		final payment in cash so the buyer	
		couldn't dispute it later. Hence,	
		irrevocability would seem to be critical for commerce-based use	
		critical for commerce-based use	
Prefunded	Inconclusive		
	impact		

SCHEME DESIGN

Low-cost mandate	Inconclusive impact		
Directory	Inconclusive impact	Some women suggested another form of ID might be a good alternative ("when we go to an ATM it's just a simple code") but overall there were no privacy concerns raised by women in sharing their phone numbers—this may be more to do with the limited use of DFS.	
Fraud management	Inconclusive impact		
Settlement	Inconclusive impact		
Third-party connection	Inconclusive impact		
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	
	Inconclusive impact	
Not-for-loss utility	Inconclusive impact	

GOVERNMENT SUPPORT

Regulated	Inconclusive impact
Supervision	Inconclusive impact

Government use	Inconclusive impact		
Open to non-banks	Inconclusive impact		
Tiered KYC	Greater effect on women than men On balance: Strong positive effect	Several women stated that a main incentive for mobile money compared to banks was the lower ID requirement (a national ID when registering a SIM). However, even that can pose a challenge and many female respondents were registered under other people's IDs which could leave them formally disadvantaged, for example, if they tried to reinstate their account after losing their SIM. If anything, the lower tier of KYC that mobile money relies on in Cote d'Ivoire should be even further relaxed to allow a self registration tier without ID as many women found even its basic requirement daunting.	

END-USER EFFECT

End-user fees	Greater effect on women than men On balance: Positive effect	Both men and women were concerned about transaction costs. However, the latter appeared to affect more women in our sample than men because women did not appear to have a clear understanding of cost breakdown. Further, there was some confusion between paying for airtime and mobile money (see row below). Finally, as women in our sample had tighter budgets than men, they appeared to be more careful about the mobile money fees.	
Pricing transparency	Greater effect on women than men On balance: Positive effect	Women we interviewed voiced greater concerns around pricing and lack of transparency. In addition, there seemed to be a lack of transparency and trust around MNOs' management of fees as costs increased and customers weren't informed and felt caught by surprise.	

END-USER EFFECT

User experience	Greater effect on women than men	As the women in our sample mainly access DFS through agents, direct user experience feedback was limited. One female MM agent said she preferred using a feature phone for her MM transactions. This was because she felt she made fewer errors on a keypad (rather than touchscreen) because the keys were separate, and she was used to the codes. Understanding these user experiences is essential for better implementation of DFS.	
Inexpensive user devices	Greater effect on women than men On balance: Positive effect	In our sample, women tended to have lower-end phones than men. Cost of devices was mentioned as a key limitation by both men and women. However, women are likely more sensitive to these costs given their smaller incomes.	
Access points	Greater effect on women than men On balance: Positive effect	Access points largely mean agents in Côte d'Ivoire. Agents are critical for women in particular as many reported relying on agents to complete their transactions. However, there seemed to be a lack of standardisation in terms of pricing and quality of agents, particularly as women may be limited in choice within their geography.	While more mobile money-style agents are a net positive, the informal nature of these agents did lead to some challenges with unclear pricing and inconsistent service. Some women mentioned hidden fees or arbitrary pricing and lack of awareness on redressal/ complaints against an agent. Conversely, agents also need protection and support as many were completing transactions for users and felt under pressure if there were problems.

Notifications	Greater effect on women than men On balance: Positive effect	Given the lack of trust women in particular have in DFS, transactional confirmation messages are critical. Because in CIV confirmation notifications do not always come on time, women in particular visit agents who have gotten into the habit of providing a small informal paper receipt with a stamp of the agent's kiosk name and, on the back, the date, amount transferred, and the number to which it was transferred/ deposited — further confirming the importance of real time notifications controlled by the user. Women also mentioned the fraud alert messages sent after transactions are made.Those seemed to have made a difference when it came to alerting people (particularly in more vulnerable communities) about the risks of fraud. Some men also complained of too many notifications, and suggested more choice over what is sent.	
OTHER Network service and	Equal effect on men and women	Connectivity was an issue that was widely mentioned as a	
availability	(as recounted in FGDs and IDIs).	challenge when wanting to do transactions and—linked to notifications—meant that people would be delayed in receiving their confirmation messages.	
Enabling programs	Inconclusive impact. Men mentioned privacy more than women but no clear difference.	In our sample, respondents did not mention any specific programs.	

OTHER

Consumer education	Greater effect on women than men On balance: Positive effect	Women, especially in rural areas, mentioned lack of knowledge around mobile money—pricing and transparency. Very few knew about interoperability, or savings or loans services which they stated are not very publicised. There is greater awareness of fraud than of costs. As mentioned in the access category, women rely heavily on agents for their transactions, don't often own accounts, and sometimes decide not to learn new approaches preferring instead that the agent do it.	
Data privacy	Inconclusive impact. Men mentioned privacy more than women which could be because of more advanced use but no clear difference.		
Gender disaggregated data	Inconclusive impact		

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, the themes that appear stronger for women than for men according to our qualitative fieldwork in Côte d'Ivoire are trust, tiered KYC, consumer education, and agent access points. We expand in more detail on the likely gender-specific impacts of each of the principles below.

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 Côte d'Ivoire.

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 which should lead to lower costs to consumers. While lower costs are clearly good for consumers, whether women are more sensitive to cost than men is an open question. Both men and women complained about the lack of transparency around costs, also echoed by an expert interviewee: "it would be fair to say that MNOs have spent a lot of time on fraud awareness campaigns and very little on transaction costs." A male mobile money agent said "there's no transparency—costs go up without you knowing about it." In his case, he navigates transaction costs by making smaller payments to reduce the transaction fees.

One issue is that high and/or unexpected transaction costs greatly disincentivise women, especially when they don't understand where the fee goes:

In 2014, I was employed in a company, we saved 10,200 CFA [\$17.00] per month on Orange for 1 year. It was a blocked account. After 1 year, the amount to be received was 122,000 CFA [\$104.00]. Hold on tight! Orange paid me only 91,000 [\$151.00] or 92,000 CFA [\$154.00]. I was really angry. Since that day, I no longer wanted to save Orange. After my complaint there was no follow-up. it demotivated me. I borrowed 500 CFA [\$0.83] of airtime from Orange but I do not go further than that.

Another female respondent said:

66 Mobile money uses up your credit so quickly, you just don't know where it goes."

A third picked up the differences between agencies:

My observation is that in one agent I am asked 300 CFA [\$0.50] as a transaction fee for a withdrawal of 5000 CFA [\$8.38] and in another agent I am asked 275 CFA [\$0.46].

A female market trader said:

Control The units disappear without anyone knowing why. I made a unit transfer of 1,000 CFA in the early morning, I have 100 CFA [\$0.16] left in call credit. I have inquired with the agents and they have told me that I have subscribed to an offer. We are made subscriptions without our agreement. They need to end all this.

In addition, some women complained that as airtime was often "eaten up" with services they had not subscribed to, such as horoscopes, they worried the same may be the case for mobile money. In this sense, women saw mobile money as *"a place to lose money."*

We did not hear men raise concerns to the same extent as women, while women held the opinion that: "men are salaried, they have good pay, but women do small informal businesses... all these fees matter more for us."

Our qualitative research in Côte d'Ivoire 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 but also other factors.

We believe on balance that the lower costs that L1P systems should have—and in particular **low and transparent transactional fees** that would enable high-frequency, small-value transactions as well as savings—will create a positive impact for women. Lack of trust on pricing means that many women either try to avoid DFS or only use it for cash in-cash out.

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 barriers to users transferring money between providers and also reduces entry barriers to financial services providers. Taken as a whole, these features are likely to spur new entrants in the long run, and more innovative and interconnected products that bundle capabilities from

multiple providers. The DFS landscape in Côte d'Ivoire is so nascent that there is not yet a large number of new products or DFSP entrants. The lack of concrete examples of innovative interconnected products to which to point made it nearly impossible to explore this topic fully in the focus groups. That said, some experts speculated that when a wider variety of products does emerge, it could very well benefit women disproportionately as they have been an underserved segment in the past.

Impacts of individual L1P principles

Here we assess the likely impacts of each principle and make a few suggestions for improvement based on our qualitative interviews and research in Côte d'Ivoire.

Interoperability

Women would value interoperability, but currently don't have enough knowledge and trust to use it and have not been motivated with compelling use cases

At present, expert interviewees and respondents agree that interoperability is a challenge in Côte d'Ivoire. There is low use across networks in Côte d'Ivoire by women. Operators do not publicise the possibility of transferring money between Orange, Moov, and MTN. *"Why would an operator want money to leave their ecosystem?"* as one expert pointed out.

A male tailor stated:

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When a parent in Yamoussoukro wants you to send them money, you know MTN is difficult in the 'interior' so you have to use Orange. It's possible to make a transaction between MTN and Orange but it's a little complicated. You can't go to any agent on the street —you can only go to authorised ones which are already overloaded. You can spend a lot of time there with long queues.

In our end-user interviews, we did not find any woman who had made a transfer across networks on their own. Women either use agents or multiple SIMs precisely to avoid transactions across networks—one woman said she had two SIMs (Orange and MTN) because her mother was not on her preferred provider, Orange, but instead preferred to receive transfers on MTN.

Where women do conduct transactions across networks, delays, failed transactions, and network drops impact significantly on their trust (we explore this below). This could be a risk in systems that were established according to L1P principles but where the implementation or execution was lacking, leading to errors and delays. We believe that implementing the interoperability principle in Cote d'Ivoire would benefit both men and women but will disproportionately benefit women as they appeared to be more time and budget constrained.

Recommendation

No changes recommended to this principle.

Scale

Building for scale now will allow for diversity once women's trust in DFS grows

In the Level One Project Principles, scale relates to the scheme supporting key payments use cases, including P2P, C2B, C2G, G2P, B2C, and others. In Côte d'Ivoire, we found low use of digital financial services other than mobile money, and within that largely P2P transfers mediated by an agent.

From our interviews, it appeared that payment use cases associated with men are better served by the current DFS landscape whereas women's use cases were more likely to be informal or cash. A few interviewees explained that men were largely seen as the bill payers (for example, for cable TV, electricity bills, school fees) and women largely managing household funds, daily purchases, and savings, indicating that use cases are divided by gender (or at least are seen to). We encountered a few women who used "locked accounts" which allow someone to deposit and lock away savings until a future date, but in general there was less trust in digital financial products such as savings accounts. As one female respondent said:

It's all virtual, there is no real person or place to go to if you have a problem, so it's scary. I prefer a real place with receipts and confirmations.

Tontines were the norm for saving:

6 A tontine is for saving, mobile money is for spending.

Similarly, almost no one paid for daily purchases in digitally.

While the variety of payment use cases is not very well built out in Côte d'Ivoire, the low-frequency, high-value use cases like bill payments that do exist were seen as more the domain of men. On the other hand there is clear potential for further development of digital products that are better at meeting the higher frequency payment and savings behaviors exhibited by women. Based on this we expect implementing this principle would have a positive impact on women overall.

Recommendation

No changes recommended. (Except to rename this principle "Scope" rather than "Scale".)

Push/real-time

Women in our sample voiced greater concerns, related to a generally low level of trust, over network issues and worries that transactions were not being completed. The fact that many women valued an agent's informal, paper receipt is an example of how women feel reassured with physical evidence of a transaction when the digital evidence was not always forthcoming in real time.

Currently the dropped transactions seem to contribute to a great deal of mistrust. If women feel more confident that transactions are going through in real time, it will build their trust and confidence in the system and save them the time of chasing the trail of a transaction that appeared to not have gone through. Because transactions that might occur with a delay would likely generate a lot of anxiety while waiting for the final confirmation that it had gone through, and because this anxiety seemed to impact women more than men, we feel that implementing this principle would likely have a positive effect on women though it was not easy to know whether this would be strong enough to be important.

It was not possible to explore the question of push vs. pull payments given the lack of local pull payment options as comparisons.

Recommendation

No changes recommended.

Irrevocability

The complexity of reversing payments hinders women more than men

Mobile money transfers in Cote d'Ivoire are revocable if the money transfered is still in the receiver's account and irrevocable if the money has been withdrawn. Thus, they are revocable but in a fairly ad hoc manner.

Women payers or senders were particularly nervous about making a mistake and said this was why they preferred USSD and keypad phones rather than on-screen keypads which they found more prone to error. Here, the fact that there was no clear protocol for revocation seemed to be a negative, particularly for women who were often more cautious of errors than men and seemed more likely to seek a different option when faced with the possibility of making a costly mistake.

Small business women payees, on the other hand, mentioned the fear of being defrauded by people who might buy something and then revoke the payment after they left with the goods, although this had not actually happened to anyone in our sample. This fear prompted some to establish processes where deposits for larger value products (e.g., for braids or dresses) are made through mobile money, but the full amount must be paid in cash when the buyer comes to pick up the goods so that they can't revoke the payment. Thus, irrevocability would have clear benefits for payees in commercial settings.

Some experts noted that the process of completing the transactions could be improved to reduce the risk of sending the wrong amount or to the wrong recipient, while still making transactions ultimately irrevocable. As an example, a number of respondents including agents felt MTN provided a better process than Orange in terms of confirming transactions—six steps as opposed to two with Orange (none of the Cote d'Ivoire operators has a grace period for cancelling the transaction as M-Pesa does in Kenya).

Money sent mistakenly through Orange can be reversed more easily—returned within three days—whereas with MTN it is considered a deposit and one has to go to an agent to have it returned as well as report it to police. According to the experts we interviewed and some of the women in our focus groups, women are often more time constrained making this a greater challenge for them than for men, not to mention a higher degree of intimidation in going to the police station and agency office.

Making a mistake and then trying to reverse it also means losing money along the way. One agent said:

Last year I was doing my evening courses and the school sent me a number to pay through mobile money. I made a mistake with the number. I contacted the recipient directly who was honest and he sent me back my money. But I had paid 10,600 CFA [\$17.80] and he returned 10,000 CFA [\$16.75] [because MTN had already taken 600 CFA [\$1.00]. I got back 9,900 CFA [\$16.60] because 100 CFA [\$0.16] went in state taxes.

This is another loss which potentially impacts women more than men, given they often have smaller budgets. Another challenge mentioned by experts is that irrevocability is harder with SIMs from neighbouring countries, such as from Ghana or Guinea; this particularly impacts female cross-border traders. We did not encounter these in our sample, but it is worth looking into this demographic more widely across Africa given the number of female informal cross-border traders.

While irrevocability may benefit receivers such as female business women, it was seen as off putting by women senders. The principle should be implemented with several confirmation steps and a grace period to build confidence in female senders.

Recommendation

We recommend that the irrevocability principle be updated 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, and transaction value confirmation before the transaction is completed and an easy digital process for requesting return of funds from the recipient after an erroneous transaction.

Identifiers/Directory

Women may be unaware of alternatives to providing phone numbers as identifiers

In our sample of Côte d'Ivoire, we did not find any difference in women or men's willingness to share phone numbers with the people or businesses with whom they transacted. This could be either because women did not know any other option (for example, it is technically possible to link one's account to a national ID) or because there was an implicit acknowledgement of an agent's professionalism (an agent being the limited use case so far). There may be some privacy concerns, but, given low usage by women, these may be limited. For example, Alice, a seamstress and an agent herself was slightly ambivalent:

It's not a problem to share our number ... but if we can find another way rather than a phone number, that would be good. Like an ATM doesn't need all our information.

Finally, women may prefer another form of identifier simply to avoid making mistakes in typing out a phone number—so this would implicitly address one of the fears women raised in the focus groups around making costly errors while using mobile money.

While there were some indications that women would value a system where they didn't give out their phone number to counterparties, we didn't reach a strong conclusion on gender difference in Côte d'Ivoire. That said, research and expert interviews indicated it would likely be important in other cultural contexts.

Recommendation

We recommend updating the principle 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

Tiered KYC is particularly important for women and there should even be a self serve tier with no verification, but there also needs to be consistent KYC practices across networks to make sure ID checks are adhered to

In the Financial Inclusion Insights (2018) study, survey respondents saw an ID as one the three main "readiness indicators" in being able to access mobile money (the other two were owning a SIM—which is dependent on ID—and mobile phone access). Female focus group respondents more often mentioned challenges like issues in registering a SIM and producing ID while conducting transactions. Different operators in Côte d'Ivoire have different approaches to KYC and to enforcing the KYC procedures in their network. Focus groups revealed that women often use the operator which has the most lax KYC standards (Orange is perceived as the strictest).

Women appreciated when they did not need to show ID credentials at a local agent. As did male customers too—one man said *"I go where the agent knows me because he doesn't ask me for my ID."* In the village of Akoupe, women said they only used mobile money for small transactions in the village as for bigger amounts they had to go to the cities where they may be asked for identification which they didn't have. A female agent in Akoupe said she prefers not to ask for ID, *"because you risk customers going elsewhere."*

Women typically had less access to identification, so SIMs were sometimes registered on their friend's or husband's ID. Mattieu, a tailor in urban Marcory, says he got his wife's SIM using his ID as his wife has been waiting for an ID for four years:

She has the 'attestation d'identite' [a holding document] but it has to be renewed every year. If she loses it, she might lose access to her SIM.

Another female respondent said:

I had to identify a friend's SIM by my name because she didn't have an ID. We were in Bouaké together. Some months after I moved to Abidjan, this friend lost her phone. I was then the one who had to go to an agency for the removal of her SIM, but given the distance, this was not possible. So she lost her number and took another SIM on behalf of another person because she still does not have her ID documents. This is why you should not identify your number with the name of another person.

Access to a national ID is clearly more of a challenge for women than men in Côte d'Ivoire, which creates significant challenges. Tiered KYC, including a zero tier where no ID is required, is important in making sure women are able to open accounts with minimum ID barriers and would likely improve women's access significantly.

Recommendation

None.

Pricing transparency

There appears to be a great deal of confusion among the female respondents in our sample on pricing—not just transaction costs, but also confusing airtime and mobile money costs as well as worries about the possibility of monthly fees. Clear and transparent pricing might help address the issues of trust and confidence, which are among the main barriers to women using DFS.

Recommendation

L1P principles should mandate every agent to clearly display costs. We recommend updating as follows:

All fees charged to end-users are displayed prior to transaction execution and the paying customer confirms the transaction; foreign exchange fees extracted through less favorable exchange rates are included in this. Agents, branches, and other access points should be mandated to display relevant costs where appropriate.

User experience

A good user experience is important to women in building trust

An easy user experience is valuable for women—it was mentioned more by women than men. This can include clear information, good menu design, an agent you know and trust who is close by, and features to avoid costly mistakes. One example is that of keypads, preferred to touchpads on smartphones. Another is that women got used to the language of one particular provider (especially if they were illiterate or had only basic literacy, as they would just follow the sequences or "syntax" as respondents termed it). Such gender differences are important for ensuring that the L1P principles address women. There is some overlap with recommendations from other principles to the extent they touch on user experience.

Recommendation

We recommend updating the principle as follows: 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 confirming the recipient name and transaction amount prior to transaction, saving frequent transaction addresses, and enabling language localisation.

Another suggestion would be to explore standardisation of language and message formatting across providers as one of the challenges women mentioned was that the format and text are different for each provider.

Women in our sample size had lower end phones than men—we should continue designing DFS for these

In contrast to our fieldwork in Kenya, Ivorian women did have lower-end phones to men, a finding which is shared by our quantitative research. They also stated their preference for USSD rather than an app as they "did not trust the internet" and preferred keys rather than an on-screen keypad to avoid data entry errors. This principle will undoubtedly positively impact women more than men.

Recommendation

We recommend updating the principles to support low-end devices with: All primary functions should be accessible to users with inexpensive basic/feature phones and low-end Androids. These functions are typically enabled on such devices through USSD interfaces.

Access Points

Women appear to rely on access points (agents) more than men, but these need to be better resourced

Agents are critical in Côte d'Ivoire. As an example, it was stated as early as 2015 that 99.9% of school fees in Côte d'Ivoire are paid through mobile money. However, the majority of these mobile payments are over the counter transactions at agents rather than payments that pass through an individual's wallet. Matthieu, a tailor who also works as an agent, says he often makes payments for his friend's children for their school fees. Agents are therefore critical for transactions such as these but also as a point of contact for reversals and grievances.

Another female agent says:

The majority of women who come need help to validate their transaction. I'm helping. Women need more help than men. Female agent in Marcory

By and large women did not express a particular need for female agents. In fact, some respondents felt that female agents were less available because they may work fewer hours so they also need time to manage their households.

Once at the agent, men and women also interact differently. Enoch, 29, is an agent in Marcory, an area of Abidjan. He says:

I started to help out my sister who is an agent in an area with many seamstresses. The women here do use mobile money. More women than men, even though it is a little, a little. But men navigate the phones more than women ["les hommes maîtrisent plus les téléphones que les femmes"]. With women, I do the procedure on my phone and the woman just puts her code in.

On the other hand, Enoch feels pressure to do more than what he was trained for:

It's not my job to raise awareness. When I did my training, I was shown how to do transactions, how to welcome clients and how to avoid risks and mistakes. I do advise clients how to reduce costs though. I earn very little. For a CFA 10,000 [\$16.75] deposit we receive CFA 28 [\$0.45], and CFA 38 [\$0.50] for a withdrawal. It exhausts me and brings me nothing.

Matthieu advises:

It's best to do all your transactions at the same agent. Mobile money is delicate and you don't want to share your number with the whole world. Every time you receive a message, you think it's a scam. But some people don't have a good agent.

A final point about agents as access points is that they need protection: An Orange agent says:

Orange must carefully study the strategies of scammers to properly protect agents. Our numbers are accessible by customers after a transaction. These are the numbers they go through to scam. I would like Orange to make agent numbers invisible and block calls to these work numbers. I would also like Orange to make withdrawals mandatory with an ID otherwise you are at risk of a scam as an agent.

In Côte d'Ivoire, pressure on agents and long queues mentioned by women suggests that agents as access points need more resourcing—more float as well as more personnel—especially at times of the day when women are likely to go to the agent. As of yet, agents are the main access points for the majority of women and appear critical in educating them and establishing trust. Based on these observations, we feel the principle of having readily available access points could benefit women more than men.

Recommendation

No changes recommended to the principle.

Notifications

Real-time notifications will provide confidence to women (and agents) but should be controlled by the end user

Women value notifications, but (lack of) literacy, network outages and drops in service cause problems:

I paid a bill and didn't receive a message for two days. My brother-in-law and I went to the agency to file a complaint. It was found that indeed I had paid the bill by mobile money and that I had not received a message."

Some women also mentioned the value of the fraud notifications which Orange and MTN send when they make a deposit.

However, because many transactions are mediated by agents, agents too pointed out the importance of notifications:

Operators don't systematically send messages. You have the money in the account, but you don't receive a message and you have to ask for a confirmation. Just yesterday, I didn't receive a notification about a transfer I made. Sometimes I get it two or three days later. I can only start work after I get a confirmation from a client.

On the other hand, some questioned the necessity of notifications: *"people who are in a hurry get bored of them"* (Enoch, Marcory). When a rural female respondent stated she had been a victim of a scam, we asked how. Her response was:

66 I put money regularly in my account and when making a withdrawal I am told that I have no more money in the account.

But when we asked whether she had received alerts after each transaction, her response was: *"I can't read so I'm not too interested in all of that."*

Notifications will give much needed confidence to women as opposed to men who implicitly had more trust in the system. However, they need to be controllable and in language that is easy to understand and standardised across different networks.

Recommendation

We recommend updating the principles with: Notification of account activities from all parties controllable by the end user.

Network and service availability

This came up as more of an issue in Côte d'Ivoire than Kenya due to poor network coverage, for example in this rural focus group:

- Have you had other difficulties with mobile money?
- Yes, often there is no network.
- Then we cannot make a withdrawal or deposit.
- It's often discouraging.
- But we get by anyway.

It was not immediately clear to what degree this might affect women as opposed to men, though it is possible this lack of reliability would feed more into the general distrust of digital financial services expressed by women.

Even a mobile money agent says:

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I don't want to have too much money on my account, I never exceed 500,000 CFA [\$838.00]. The other time we didn't have a network for three days, I couldn't access my money. When there is an emergency and there's no network, it's a big problem.

Recommendation

No changes recommended to the principle.

Enabling programs and Consumer education

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

DFS education impacts women, more than men, in two distinct ways. Firstly, women appear to (or at least state that they) rely more on peers than formal notices from providers. Respondents (both experts and end users) strongly felt that women in lower-income areas trust their peers the most, a fact reflected in their greater dependence on community savings models such as tontines. More education and enabling programs (two of the L1P principles) that tie into social networks and community organisations would certainly benefit women. This observation echoes other research indicating that a number of fintech companies had found success in using these community networks to better reach women consumers with their products.

This is particularly necessary in Côte d'Ivoire as some users expressed that mobile money has a bad reputation in terms of fraud. Given the apparently more cautious nature of women cited by male and female respondents, this bad reputation could hamper DFS uptake. Female respondents also mentioned that *"the language is too formal when they contact us. They should understand many of us are illiterate. It needs to be simpler [moins soutenu]."* Female-targeted consumer education programs would likely have a differential benefit for women by helping clarify critical topics and generally build trust through understanding.

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. Suggest updating the principle to be:

Appropriate investment is made in consumer education to drive adoption of products and services, particularly among low-income consumers. The consumer education programs should be geared to link into social networks and community organisations to have maximum impact.

Conclusion

While DFS use by women is low compared to men in Côte d'Ivoire, our 80 end-user interviews and expert interviews showed that some Level One Project Principles were more applicable to women than men in Côte d'Ivoire and that implementing L1P fully would likely boost women's access to and usage of financial services.

Addendum: Contrasting Côte d'Ivoire with Kenya

In Kenya, with more advanced DFS use and higher mobile penetration (in our sample), the major issues women voiced were around trust, control, privacy, and secrecy. All these normally would appear only after some level of maturity around DFS as they relate to women's agency around usage, rather than reasons for non-usage (as was more the theme in Côte d'Ivoire).

In Côte d'Ivoire on the other hand, the major themes which arose in our sample were trust, consumer education, access to agents, and friction associated with the lack of interoperability or ID. Control, privacy and secrecy imply a more advanced use of DFS which most of the women in our sample had not yet reached. Very few were leaving any money stored in their accounts preferring to do basic transactions and then withdraw the money. With these usage patterns, control and secrecy were less of an issue. Additionally, many of those who did use mobile money depended on their husbands so did not have the option of secrecy.

In these two countries interoperable transactions are low for different reasons—in Kenya because M-Pesa is the dominant network, in Côte d'Ivoire, because executing crossnetwork transactions is so difficult that people (men and women) either stick to one network or have one SIM for each network they use. In our sample, we did not hear of any women who had sent money across networks, and only one man said he had done so on his own. Experts told us it was quite difficult to do and most people didn't know how.

In terms of types of transactions, in our Côte d'Ivoire sample we mostly saw CICO and agent-mediated P2P transfers. Identity checks to complete transactions appear to be applied inconsistently, especially in rural areas where the agents know customers and rarely ask for ID. However, tiered KYC is definitely valuable for users because one reason that they prefer mobile money to bank accounts is the less rigorous KYC. Network service is also critical for women as they often don't know if a notification has gone through (whereas it was much less of an issue in Kenya). For all of the above reasons, there is a need for the L1P principles in Côte d'Ivoire.