

**HARVARD KENNEDY SCHOOL
POLICY ANALYSIS EXERCISE**

DOING DIGITAL RIGHT:

ADDRESSING THE
GROWING FINANCIAL
INCLUSION GENDER GAP
IN PAKISTAN

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1. INTRODUCTION

1.1. The issue

Today more men and more women across the globe hold formal financial accounts than ever before. From 2014-2017 the number of adults worldwide who held an account increased from 62% to 69% as measured by the World Bank's Global Findex survey¹¹. The rise in global accounts matters because financial inclusion is both an enabler for better development outcomes and a goal in and of itself². Studies show that widening the formal financial net helps individuals build businesses, protect themselves from adverse events, and augment their personal wealth³. These impacts are then reflected in the wider economy in the form of higher growth rates⁴.

As a result of these well documented benefits there has been an explosion in attempts to widen the reach of the formal financial sector. Yet, despite the progress of the last few years, the **gender gap in financial inclusion paints a grim picture**. The global gender gap has remained static at 7 percentage points for almost a decade⁵; in developing nations the gap remains unchanged at 9 percentage points. Looking at disaggregated data at the country level makes clear that only a handful of nations have achieved gender parity and even fewer have a higher number of financially included women versus men⁶.

In South Asia the picture is particularly dire; even as topline financial inclusion indicators improve, in most of the region the **gender gap has not just stagnated but widened** since 2014. Bangladesh has one of the largest financial inclusion gender gaps in the world at 29 percentage points, and Pakistan is not far behind at 28 percentage points⁷. While this may be an accidental adverse outcome, the result is that women are being left behind. So, why should we care?

1.2. Why do we care?

By leaving women out of the formal financial sector, everyone loses out.

Giving women access to financial services empowers them. Equally importantly it empowers those around them and makes outcomes across every single major developmental goal (i.e. education, health etc.) better, because - at a micro level - women are more likely to reinvest any benefits they reap back into their families⁸.

At a macro level including women into the formal financial net can improve a nation's economic outlook by boosting growth and productivity in new ways; after all women can replenish a stagnant workforce both through the power of sheer numbers and new perspectives⁹. Since

¹ The Global Findex is conducted once every three years and is the only truly "global" financial inclusion demand side survey.



economic growth is the barometer by which we compare progress across the world, the importance of including women cannot be overstated, and conversely the adverse impact of excluding them cannot be understated.

From a business perspective, financially including women means unlocking the door to a whole new range of previously untapped potential customers, and with them a new set of revenue possibilities and growth opportunities.

Formally financially including women is “the tide that can lift all boats”¹⁰.

1.3. How the financial inclusion gender gap is playing out in Pakistan

Pakistan is one of many nations where the message about the value of female empowerment has yet to take root. Optimistic estimates show that improving female equality across the board could improve Pakistan’s GDP by an additional 7 percentage points which amounts to approximately 30 billion dollars¹¹. Yet, progress is not just slow but barely discernible especially in the financial inclusion space.

Despite its commitment to achieving universal financial inclusion - first affirmed in 2011 with the signing of the Maya Declaration, and later in 2015 with the launch of the country’s first NFIS (National Financial Inclusion Strategy) - the vast majority of women remain in the informal financial sector. Even as financial inclusion levels in the country rise, the gender gap widens at an even faster rate. As can be seen in Table 1 as of 2017 a Pakistani man was 5 times more likely to have a formal financial account than a woman¹². Almost 93% of adult women don’t have access to a formal account. While explicit targets for improved gender inclusion have been set at a country level, generally **the ecosystem remains largely gender neutral, or in the words of one expert, “gender blind”¹³.**

Table 1: Pakistan’s gender gap across years and account types

Year	Account Ownership	Men's Account Ownership	Women's Account Ownership	Gender Gap in All Accounts	Gender Gap in Financial Institution Accounts	Gender Gap in Mobile Money
2011	10%	17%	3%	14%	-	-
2014	13%	21%	5%	16%	11%	7%
2017	21%	35%	7%	28%	23%	12%

Source: Global Findex, World Bank¹⁴

Currently there is a huge in-country push to increase inclusion using digital means. Evidenced upon the unprecedented scale and impact that mobile phone based financial technologies have



achieved in East Africa in less than a decade, **digital pathways have long been touted as the ideal way to reach otherwise hard to access segments**. This is because not only is it 90% cheaper to deliver a bank account over digital technologies - specifically mobile phones - as opposed to a brick and mortar branches, but also because of the vast reach of mobile phone technologies¹⁵. Indeed, a large proportion of the global growth in accounts has been fueled by the expansion of digital enabled financial solutions, particularly mobile money, but also by the increasing reach of digital banks, and digitally enabled non-bank financial institutions. However, while this may be true for other countries, and other segments, **using digital financial services to bring Pakistani women into the formal net is not a straightforward endeavor**.

In South Asia women are “26% less likely to own a mobile than men and 70% less likely to use mobile internet”¹⁶ and Pakistan is no exception. As a result, depending too much on simple digital solutions to automatically draw women into the formal financial sector without fundamentally addressing the core barriers they face in accessing and actively using these digital services, is likely to be counterproductive. Simultaneously it is worth acknowledging that Pakistan’s financial inclusion gender gap, though still significant, is the lowest in the mobile money space at 12 percentage points as compared to other account types (see Table 1).

Note for Reader

Mobile money is the primary focus of this report. From this point on the terms “digital financial services”, “mobile money”, and “branchless banking” will be used interchangeably as they are synonymous within the Pakistani context.

1.4. Purpose of this document

Digital may be the right answer to the growing financial inclusion gender gap question, but it needs to be delivered in a new way. Given the evidence of preceding years presented above, **unless the gender gap in financial inclusion is tackled head-on it is likely to persist, or (worst case scenario) potentially even widen**.

While fragmented and mostly ad hoc efforts to address aspects of the gender financial inclusion gap issue have been made by various stakeholders across Pakistan, to our knowledge no concerted policy effort - especially one that zeros in on digital financial services - exists at this stage.

CGAP wants to gain new insight into what a gender financial inclusion strategy enabled by digital channels for Pakistan may look like. Given their long-standing history and reputation as a pioneer in the digital financial services space in Pakistan CGAP is well situated to advise on what this next phase of sectoral expansion looks like. To do this however, there is a need to synthesize the disparate resources on this topic in and map out the landscape of gender and digital financial services in Pakistan.

This document aims to identify areas that are ripe for intervention to more effectively tackle the growing gender gap in financial inclusion through digital financial services.

This report draws from business and agile design principles to create an analytical framework that can help us identify both broad ecosystem wide opportunities for action to create a more enabling environment for increasing female inclusion via digital means, and more specific and



potentially tailored interventions that can help female users themselves become more comfortable with using digital financial services. It does this by first assessing the mobile money ecosystem as it relates to gender inclusion more broadly, and then second by following women along the five key touchpoints on their unique mobile money customer journeys and assessing these across the three primary dimensions that women globally self-identify as the biggest barrier to financial service access and use: literacy, socio-cultural norms, and regulations¹⁷.

It is important to remember that **the issue of the gender gap in financial inclusion is not a simple or straightforward problem and thus does not have a clear answer. Solving it will require the wide range of stakeholders in this space to pull several levers in tandem, and iterate upon these to handle changing expectations, and evolving customer types.** With its great influence and experience CGAP can present a roadmap that identify these levers and indicate how they can be moved to ensure that the female inclusion revolution finally comes about.

1.5. A brief note on methodology

Four methods were used to collect information for this report:

1. Literature review
The literature review for this work was centered on three main areas; 1) blogs, reports and peer-reviewed articles on women and digital financial services, 2) research reports on women's use of financial services more generally, and 3) reports on female use of digital financial services in Pakistan.
2. Interviews with experts
The author conducted 14 semi-structured interviews with policy experts and professionals working on the topic of financial inclusion generally, or the issue of gender and financial inclusion, at foundations, non-profits, think tanks, financial institutions, trade associations and regulators. Most of these individuals were either Pakistan-based, or were US based but had previously worked on projects in the country. A complete list of interviewees can be found in the Appendix.
3. Data from demand and supply side surveys
Data from existing demand and supply side surveys including the World Bank Findex survey, the Intermedia Financial Inclusion Insights surveys, Microsave's Agent Network Accelerator surveys, and the quarterly State Bank branchless banking newsletters have been selectively used to support the findings of this document.
4. Design sprint on female literacy
The author participated in a two-day agile, human-centered design sprint called "Hack for Inclusion"¹⁸ hosted by MIT. As part of an 8-person team, the author conducted user research (8 interviews), ideated, prototyped and pitched a potential solution on the topic of "Improving Financial Literacy among Women".



2. BACKGROUND NOTE

SUMMARY: This section provides a snapshot of how Pakistan's mobile money market has evolved to-date and highlights recent innovations in the space.

TAKEAWAYS:

- Pakistan is still in the early stages of female mobile wallet adoption.
- Positive things are happening in the ecosystem at large. While some female-centric innovations have emerged, these have come about in a largely ad-hoc manner.
- It would be valuable to combine the learnings of the last few years with current experiences, to take advantage of emerging pro-female empowerment trends.

2.1. Overview of mobile money in Pakistan

Pakistan was an early adopter of mobile money and from almost the beginning the industry regulators explicitly linked this pathway as a road to greater financial inclusion for the population at large.

Since the first branchless banking regulations were introduced by SBP (State Bank of Pakistan) in 2008 and established the market's bank-led mobile money model¹⁹, **the country has come a long way**. Under this model no matter the mobile money services partnership structure, ultimately the customer has a contractual relationship with a bank, which is the only entity allowed to provide financial services²⁰. The model has not precluded Pakistani MNOs (mobile network operators) from either owning banks or setting up green-field microfinance banks, or in managing agent networks and driving customer acquisition. Today there are twelve active mobile money providers²¹ operating in the nation; these providers are supported either by commercial banks, MFBs (microfinance banks), or a combination of MFBs and MNOs.

Definition: Branchless Banking

"Banking beyond branches uses agents or other third-party intermediaries as the primary point of contact with customers and relies on technologies such as card-reading point-of-sale (POS) terminals and mobile phones to transmit transaction details."

Source: AFI, MFS Basic Terminology

From the beginning, mobile money in Pakistan has been delivered through two primary channels: OTC (over the counter) and mobile wallets. While OTC is strictly a service – essentially a formalized version of traditional hawala/hundi in-country remittance systems – for most of the last decade it has dominated branchless banking transactions in terms of both volume and value. In contrast, **uptake of mobile wallets has been much slower than originally anticipated²². However, that is now changing.**

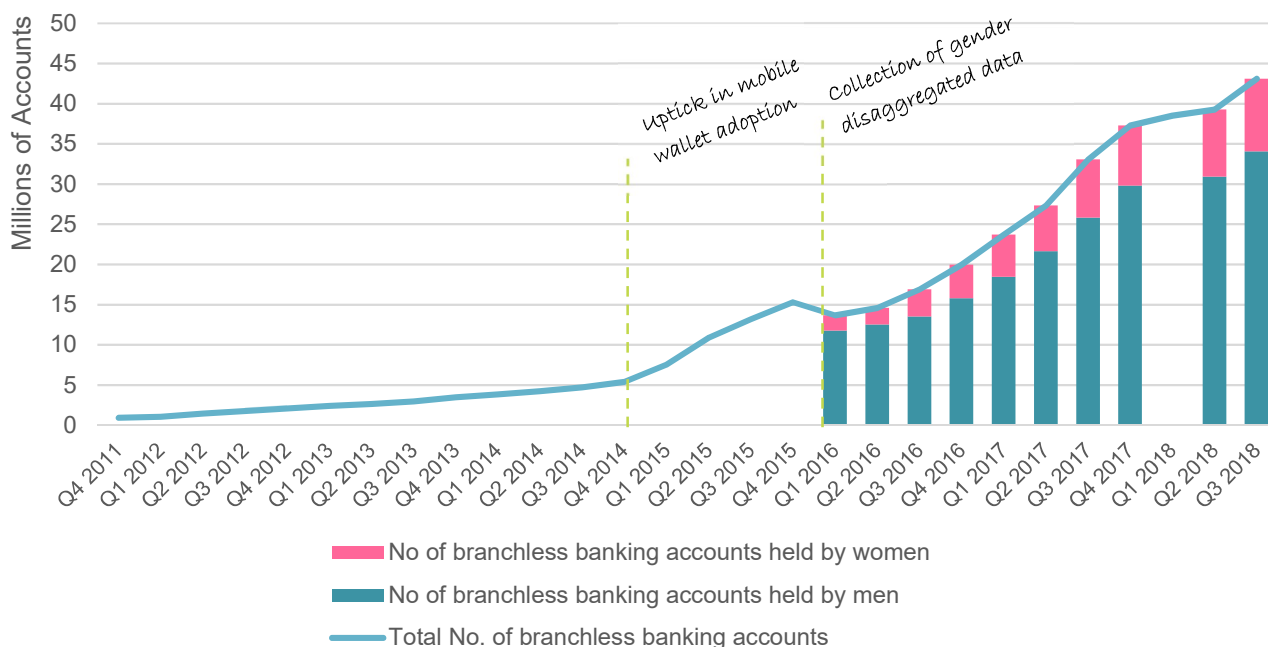


According to quarterly supply side data that is collected by SBP since Q4 2014 that there has been a dramatic uptick in account penetration (see Table 1). More recently, this **uptick has been reflected in a movement from OTC transactions to wallet -based transactions**. As of Q3 2018, around 42 million mobile money accounts had been opened and mobile wallet accounted for 72% of all branchless banking volume²³. Notably, through all the changes the industry has seen, the total value of all branchless banking transactions has risen steadily.

Even in today's relatively robust atmosphere, wallet opening is largely restricted to men with women only accounting for 21% of total accounts in Q3 2018. The proportional split between men and women has remained fairly steady in the two-year period between Q3 2016 and Q3 2018. Unfortunately, since gender disaggregated numbers only began to be collected in 2016, there is insufficient information to really analyze how female account opening trends (e.g. quarter on quarter account opening) may have changed over time.

The low level of female mobile wallet opening is the result of a combination of supply and demand side barriers which we will discuss further in Section 2.

Figure 1: Mobile Wallet Adoption



Data source: Quarterly Branchless Banking Newsletters, State Bank of Pakistan²⁴

Of course, **account opening is only part of the story; the other aspect that we need to examine is account usage**. Despite the gains that the sector has made, activity across all



wallet accounts has remained static between Q4 of 2017 and Q3 of 2018 at around 52%. This means that half of the accounts that are opened are not used. Importantly, even this is a relatively optimistic number as activity is measured on a 180-day basis which is double the industry standard of a 90-day measurement basis. Again, due to the lack of gender disaggregated data it is unclear if activity numbers for female-held account tends to be different as compared to male-held accounts.

2.2. Major developments in the last two years

Despite the sheer number of branchless banking services that have emerged in Pakistan, the country in many ways remains an early stage mobile wallet market. A multi-sectoral group of stakeholders (see Table 2) have been working to help the industry evolve. In the last five years some notable developments have taken place that promise to positively impact the gender gap.

1. Government (re)commitment to digitization

There is a lot of political interest in guiding Pakistan through a digital revolution. Digitization is a featured agenda of the new government (elected 2018) which was showcased in its 100-day agenda, via the launch of an updated NFIS²⁵.

Under the updated strategy, the government has set more granular targets than the original NFIS did. Specifically, it has set a goal of ensuring that 65 million active transaction accounts are opened by 2023, 20 million (~30%) of which need to be held by women²⁶. A key part of the strategy is digitization of all government flows including G2P (government-to-person) and P2G (person-to-government) programs.

The trickledown effects of gender specific targets being set in the NFIS are expected to take the form of improved gender disaggregated data collection, and more thoughtful targeting of female customers by providers. Since government programs are gender diverse these could dramatically reduce the gender gap **if** designed properly.

2. Advancements in interoperability

Pakistan was an early interoperable mobile money player on the global stage. While there are many aspects to interoperability, here we are using the term according to its broadest definition – the ability of users of different mobile money services to transact between each.

Till now, in Pakistan technical interoperability for mobile money is enabled by the IBFT (inter-bank fund transfer) system; this system undergirds ATMs in the country as well. The pricing structure of mobile money IBFT is a problem as it directly replicates the ATM IBFT fee structure²⁷. This does not work in the mobile money context and has forced operators to recoup their costs by adding high fees to any off-network transactions which disproportionately harm lower income customers, including women.

To address the pricing issue stakeholders are establishing a “micro-payment gateway” dedicated to small payments. Increased functionality combined with lower prices as a



result of the gateway will make mobile money a more attractive proposition for low-income consumers.

3. Moves towards API opening

The market is slowly moving towards open banking initiatives as providers begin to share their APIs (application programming interface) through bilateral partnerships. APIs allow two software programs to communicate with each other. In the case of mobile money, the API defines “how a developer can write a program that successfully requests services” from the mobile money platform²⁸.

The market is still not at the stage where providers are openly publishing and sharing APIs freely with external partners²⁹. Five providers (Jazzcash, Easypaisa, HBL Express, JSBank and FINCA) have opened up a limited number of payment related APIs, mostly to facilitate e-commerce payments. To get access to these APIs, third party partners need to register and go through a basic verification process prior to partnership formalization.

Moving towards open API initiatives spurs innovation and extends market reach through engagement with the broader developer community (e.g. FinTechs, merchants etc.)³⁰. The potential benefits of open banking are substantial: improved customer experience, new revenue streams, and a sustainable service model for traditionally underserved markets such as women³¹. Though the Pakistani market is not fully open yet, it can begin to capture some of the described benefits which in turn are likely to lead to “greater competition, lower provider costs and more affordable and accessible financial services for poor consumers”³².

Table 2: Mobile Money Ecosystem: Stakeholder Map

Government	Financial Institutions	Mobile Network Operators	Local Research and Advocacy Groups	International Donors and Experts
Regulators - SBP (State Bank of Pakistan) - PTA (Pakistan Telecom Authority) Quasi-government entities - NADRA (National Database and	Commercial Banks: UBL, HBL, Askari, JSBank, MCB, Alfallah, Meezan, Askari, Dubai Islamic Bank Microfinance Banks: Telenor MF Bank, Mobilink MF Bank, UBank, NRSP Bank, FINCA Switch: 1-Link, Mobile Net	- Telenor - Mobilink - Uphone - Zong	- Karandaaz Pakistan - PMN (Pakistan Microfinance Network) - CERP (Center for Economic Research of Pakistan)	- UKAid - World Bank - IFC - CGAP - Gates Foundation - GSMA
Mobile Money Services				



Registration Authority)	Easypaisa Jazzcash Upaisa Timepey	HBL Express UBL Omni MCB Lite Jcash Alif DIMB	SimSim		
Government programs - BISP (Benazir Income Support Program)					

Source: Expert interviews and author's own knowledge.

2.3. Recent female specific initiatives

In addition to the market specific changes that have taken place in the last two years, there are also a few women specific initiatives that were either recently launched or are about to emerge. It's worth keeping an eye on such initiatives as they hold important lessons for a unified gender gap reduction strategy.

- **BISP digitization**

Since the country's largest G2P program - BISP (Benazir Income Support Program) - is an unconditional cash transfer program targeted at 6 million of the poorest women in the country, digitizing BISP could drastically reduce the gender gap **if** designed properly. Various attempts to achieve BISP digitization have been made in the past. In 2010 BISP introduced a closed loop ATM card for disbursements, and in 2016 the program was biometrically enabled so that women could access their money by simply putting their thumb on a biometric device at a certified cash-out location. Evidence suggests that while these past efforts reduced system leakages, they did not deepen financial inclusion for the target population (see Box 2 for more information). The Bill & Melinda Gates Foundation is working with key stakeholders to change the form of BISP digitization by introducing open loop systems to the G2P program as they believe this can have a transformative effect on female inclusion.

- **Guddi Baji Program**

99% of mobile money agents in Pakistan are men; this fact has proven to be a barrier to female use of mobile money³³. In 2017 Jazzcash and Unilever partnered to launch a pilot aimed at transforming female retail agents in rural areas into mobile money agents³⁴ ³⁵. The pilot was moderately successful and contains rich learnings for future projects aimed at changing the agent mix in the future. Jazzcash and Unilever are now iterating upon their original model based on pilot learnings and will be scaling up the program within the coming year (see Box 1 for more details).

Definition: Agent

A person or business that is contracted to facilitate transactions for users in exchange for a commission. The most important of these are CICO (cash-in and cash-out). In many instances, agents also register new customers.

Source: GSMA, Mobile Money Definitions

- **New products from major players**



Major players in the market have some female oriented products in their development pipeline. The most female centric of these is a digital “committee product” otherwise known as a ROSCA (rotating savings and credit association) model. In a ROSCA a group of individuals agree to contribute money into a centralized pool for a defined period in order to save and borrow together. Informal ROSCA are extremely common in Pakistan and are the top informal channel for saving money other than saving money at home³⁶. In 2015 33% of Pakistanis said that they had used a ROSCA, and women were twice as likely as men to have done so³⁷. Digitizing this channel could be an attractive proposition for female inclusion.

2.4. Big trends that will impact female inclusion

According to experts in the financial inclusion and gender space, there are a couple of big trends emerging in Pakistan that are likely to impact the gender gap over the next decade. The three most cited trends were:

Increasing female labor force participation. Economic pressures like the increasing cost of living seem to be driving more women in the workforce. From 1992-2014 the female labor participation doubled; each new generation of women shows higher levels of labor force participation than the generation that preceded them³⁸. In the past women who chose to enter the labor force tended to fall out post marriage; however, today Pakistan is increasingly witnessing the emergence of two-income households. More importantly still, for women who are hesitant to enter traditional job markets, we are seeing the power of technology in providing non-traditional job opportunities. Women (from mostly middle- and upper-class backgrounds) are setting up their own informal businesses over social media, particularly WhatsApp and Facebook, and selling everything from services to consumer goods directly to clients.

Attempts to seed entrepreneurial activity centered on women. International donors and local entities alike are increasingly rewarding start-ups for including women on management teams and for designing businesses that explicitly set gendered targets as part of their operational metrics. For example, in 2018 established a “specialized refinance facility for women entrepreneurs”³⁹.

Increased female agency. Younger generations of educated women in Pakistan are trending towards greater individual agency. Experts agree that new generations are more aware and self-motivated than previous ones and are pushing back against traditional socio-cultural norms that are economically disenfranchising. The trend towards greater agency is perhaps best exemplified by the 2019 “Aurat March” (translation: Women’s March) held on International Women’s Day when thousands of women rallied across major cities in Pakistan to “demand more safety and better working conditions”⁴⁰.



BOX 1: Cultivating Female Agents via Guddi Baji

Issue background

Agents are critical to the success of a mobile money deployment. They are the first point of contact for the majority of mobile money users and as such can either make or break the customer's experience.

Almost 100% of Pakistan's 200,000 active mobile money agents are men⁴¹. This is a problem for female financial inclusion via mobile money. Field research shows that female customers feel much more comfortable working with women versus men; often customers will even wait to go into a regular store until a female seller is available⁴². Such behaviors mean that there is a strong case to be made for creating women agents who can service female customers and guide them through opening and using a mobile wallet account.

Creating a partnership

In 2017, Jazzcash partnered with Unilever (Pakistan's largest FMCG [fast moving consumer goods] company) and Women's World Banking to figure out how to create more women agents by leveraging Unilever's existing Guddi Baji (colloquially good sister) training program for rural female entrepreneurs⁴³. While Jazzcash's brought expertise and field infrastructure to support the registration, training, and management of a mobile money agent network, Unilever brought deep experience in engaging and training rural women entrepreneurs. Both companies were interested in strengthening their ties to the rural women's market.

Developing a model

Female agents are expensive to cultivate as they need to be identified and trained from scratch. To do this work, Jazzcash and Unilever created a joint task force. The task force approached existing Guddi Bajis and recruited new Guddi Bajis to see if they'd be willing to become a mobile money agent in addition to acting as Unilever's rural retailer⁴⁴. In addition to willingness to perform the job, the team assessed if someone was a good fit based on whether they had a SIM enabled phone, and whether they were digitally literate⁴⁵. Once identification was complete the task force trained the new agents.

Pilot results

Today, 32 of the 100 Guddi Bajis who were trained under the pilot are active agents⁴⁶. Their transactions revenues are comparable to any other agent's and taking on this role has boosted these individual's monthly incomes by an average of \$9.40 per month⁴⁷. Equally importantly during the pilot period 566 new Jazzcash customers were onboarded, 42% of the them women; this is a significantly higher proportion than the industry's average of 20%⁴⁸.

The pilot was not as successful as originally expected as it was hard to identify women who were both willing and able to take on the agent role⁴⁹. Interestingly, the task team learnt that it was easier to sell the value proposition of becoming an agent to new Guddi Bajis. However, cell phone ownership, low literacy levels, and socio-cultural constraints related to interacting regularly with a male Jazzcash Business Development Officer all proved to be an issue for



attraction and retention⁵⁰.

Next steps

Jazzcash and Unilever are changing their model based on pilot learnings. With the help of a grant, they are going to scale up the program to 3300 women; the revised program will launch in mid-2019⁵¹. To overcome some of the identification challenges they faced they are partnering with NRSP (National Rural Support Program) – a local NGO that has deep expertise in community development work and will be able to take over and adapt the training components of the program to local contexts⁵².



3. LEARNINGS FROM PREVIOUS WORK

SUMMARY: This section summarizes and analyzes learnings from past research into female use of financial services.

TAKEAWAYS

- There are a variety of supply and demand side barriers to female financial inclusion. The most significant barriers in Pakistan's case are (i) literacy, (ii) socio-cultural norms, and (iii) policy and regulatory barriers.
- Female financial behavior is distinct from male financial behavior.
- "Women" are not a single homogenous group and can be segmented into several customer types that have different needs and exhibit different behaviors.

To develop a plan on how to address the growing financial inclusion gender gap via digital financial services we first need to understand female behavior within the Pakistani context. We are particularly interested in **gaining insight into the unique gender specific barriers** that women face when using mobile money services and are less concerned with wider barriers that are felt across the entirety of the Pakistani population (e.g. cost of handset for low income customers, cellular service penetration in remote areas etc.) In addition to mapping barriers, we will also attempt to **understand how female financial behavior differs from men's** and try to better **understand the different female customer segments in Pakistan**.

While female use of financial services is an increasingly addressed topic of research, there is still a dearth of information, particularly peer-reviewed information in the space. Therefore, in addition to Pakistan specific reports we have also drawn on global research, and reports on South Asia generally. **The learnings from this section will help shape future interventions both at an ecosystem level, and from a product specific perspective.**

Readers should keep **two big caveats** in mind as they go through this section. First it is extremely hard to isolate the drivers of female financial behavior; this is partly because in most cases these drivers interact with and enhance each other. If women are to be recognized as a viable segment there is a real need to better define the drivers at play and understand which of them need to be targeted to encourage financial service uptake and use. As we get more granular in the future it is possible that we will begin to get a sense of any correlations between certain drivers and use of specific financial services.

Second, a lot of research in the gender and financial services space tends to focus on BOP (bottom of the pyramid) customers which in some ways are the most complicated customers to



target. Since Pakistan is currently facing a practically untapped female market, while providers should continue to look at BOP customers to see how to reach them, strategies to reach more up-market customers should also be explored.

3.1. Identifying the primary supply and demand side barriers to female financial inclusion in Pakistan

There are a variety of supply and demand side barriers to female financial inclusion, some of which are more pertinent within the Pakistani context. The complete list of supply and demand side barriers to female financial inclusion presented in Table 3 below have been drawn from a variety of reports. The barriers have been assessed across two dimensions:

Past / current efforts in the space – gives a sense of how much work has been done to date, to mitigate the barrier

Potential impact of targeting barrier – gives a sense of the size of the impact that targeting this barrier could have

Together these two dimensions give a sense of what barriers should be focused on, and if current efforts in the space are sufficient or if they need to be either ramped up or adjusted so as to improve female financial inclusion. The actual classification is based on expert advice as well as the author’s own knowledge of the space.

Supply side barriers are more easily identifiable and somewhat better understood by stakeholders primarily because this is a relatively easier area to target and influence particularly for profit-minded providers. For the same reason generally, more work has been done to address supply side barriers.

On the flip side it is harder to isolate and identify the various demand side barriers at play as several of these are interconnected. Less work has been done in the space by stakeholders partially because most businesses see such activities as going beyond their purview, and government entities/NGOs recognize that these are sensitive issues to handle. However, it is worth acknowledging that some demand side barriers – especially those that are linked to a range of other demand side barriers – if tackled are potentially very high impact.

Table 3: Classifying the barriers to female financial inclusion from a Pakistani perspective

	Low	Medium	High	Very High
Barrier to female financial inclusion	Past / current efforts in the space?	Potential impact of targeting barrier		
<i>Supply side</i>				
Restrictive policy and regulations	While a fair amount of work has been done in the regulatory space, the work is largely gender neutral.	Putting gender specific policies can help remove systemic barriers to female inclusion.		



Lack of female oriented products and/or targeted outreach to female clients	Few products exist and current marketing efforts are largely male centric.	Tailoring products and marketing efforts to fit female needs is likely to increase voluntary uptake of financial services.
Unintuitive user experience	Significant work has been done to improve smartphone UI/UX for low income segments.	Additional work in this space is likely to have lower returns.
Lack of CICO (cash-in, cash-out) points	There are ~200,000 active agents in the network. Providers are working to increase the numbers and diversify the base in terms of location and demographics.	Increasing the CICO footprint and making it female-friendly could make mobile money a more attractive proposition for women living in remote areas but there are other issues demand side issues that need to be addressed in tandem,
Poor “rails” (technical infrastructure)	Significant work has been done to strengthen the technical infrastructure as evidenced by recent developments in API opening, and the establishment of the micro-payment gateway.	While more work needs to be done, Pakistan is on the right track in regard to technical infrastructure.

Demand side

Literacy (general, financial, and digital)	Literacy is a multi-faceted issue. While several traditional methods to tackle female literacy have been used – most recently with the launch of the NFLP (national financial literacy program) – these have had limited traction in underserved segments.	Targeting literacy barriers in new ways could be immensely impactful for female financial inclusion and beyond.
Technology access and use	Little work has been done to increase access to technology for women.	Efforts in this space would only be impactful when targeted in conjunction with “socio-cultural norms” and “privacy and security concerns”.
Lack of collateral	MFIs have done significant work in this space and opened up alternative forms of collateral (e.g. gold for women seeking) microcredit.	While more work in this space would be valuable, it is important that women are exposed to a broader array of products than just credit.
Mobility constraints	No female specific efforts in this space have been made.	Efforts in this space would only be impactful when targeted in conjunction with “socio-cultural norms” and broader safety concerns.
Privacy and security concerns	While work has been done around consumer protection, Pakistan’s general digital protection laws are weak.	Efforts in this space would only be impactful when targeted in conjunction with “socio-cultural norms”.



Lack of trust in financial institutions	Little work has been done in this area for men or women.	Research suggests that increasing trust in financial institutions could have a major impact on financial inclusion. However, the gender disaggregated picture of this is unclear.
Socio-cultural norms	Very little work has been done to address the socio-cultural norms that dictate female use of digital financial services.	If addressed appropriately and successfully, the removal of this barrier could be the single most transformative thing for female use of digital financial services, and female empowerment more generally.

Source: Various reports; classification based on expert input and author's own knowledge.

The three barriers that have been classified as “high impact” if addressed properly are as follows.



Literacy: Literacy really goes to the heart of a woman’s ability to transact and understand her rights and responsibilities. According to 2014 data from UNESCO around 44% of adult females and 70% of adult males are literate⁵³. Though old, the number is not expected have changed significantly given the topline results of the 2017-18 Pakistan census (only 58% of the population was counted as literate)⁵⁴. It is worth pointing out that this number is not a completely accurate proxy for the issue at hand since as we are interested in women’s ability to read basic text, their facility with basic numeracy, as well as some level of digital literacy. We are interested in these different facets of literacy because we recognize that even the ability to send and receive text messages on a phone does not directly translate into the ability to use financial services on a phone. However, these statistics do give a sense of the scale of the issue.

Many experts see literacy as fundamental to decreasing the gender gap, and believe that once this issue is overcome, we will be able to get a lot more traction on the female financial inclusion front. This point of view is supported by research in Kenya which shows through regressions that once financial literacy, trust, and risk are controlled for, gender is no longer a significant determinant of account ownership⁵⁵. This makes sense intuitively speaking; after all, if women are confident in their ability to use a mobile money service independent of any assistance, they are far more likely to proactively demand it.



Socio-cultural norms: The existing socio-cultural environment dictates how women behave. This is continuously identified as the biggest barrier in overcoming the gender gap as it impacts almost every single demand side barrier, ranging from women’s ability to own and operate technology, to their ability to move freely, to their ability to hold collateral. Concretely identifying what these norms are, is a significant challenge around which more work needs to be done. Broadly though, relevant socio-cultural norms are centered on the following:



- Expectations around how women should carry themselves in public (e.g. no talking to strange men!)
- Defined primary roles vis a vis the men of the house (e.g. they are the caretakers of the home who need to support their spouse, while men are the breadwinners)
- Perceptions around how capable women are when pursuing non-traditional or non-typical tasks such as dealing with finances (e.g. the perception is not very!)

These norms are externally enforced but more importantly also influence women's internal view of themselves. Tackling this area will require concerted effort across a range of stakeholders and over a long period of time. Though not easy to achieve, lasting change in this sphere will be transformative for the financial inclusion gender gap and beyond.



Restrictive policy and regulations: Policies and regulations of both regulators and providers can either help or hinder female financial inclusion. We are choosing to focus more on regulatory bodies in the branchless banking space since these bodies tend to set the priorities of the industry at large within the Pakistani context.

Though generally the primary branchless banking regulator - SBP - is viewed as being very progressive and open to change, the fact remains that the policies that they have issued remain by their own description "gender neutral". A recent World Bank report ranked Pakistan 116 of 131 economies in the world when it came to issues of how "women's employment and entrepreneurship are affected by legal discrimination"⁵⁶. While this index does not map completely onto the financial inclusion space, it does show that more work can be done by regulators as well as other policymakers in the arena to make policies and regulations more gender positive. Furthermore, any moves that they make have the potential to be hugely impactful given their level of influence.

Limitations of existing research: Current research on gendered barriers to financial inclusion is quite broad. Further defining these barriers and quantifying their impact within the Pakistani context would be hugely valuable in the future.

3.2. Differentiating between male and female financial behaviors

Women have rich financial lives and their behavior is different to their male counterparts'. Women's financial lives are not well understood, especially in Pakistan. Even as women face significant barriers to formal financial inclusion, they have extremely complex and rich financial lives which are distinct from men's financial. To effectively shrink the gender gap, we need to better understand this complexity.

We can glean great insights about women's financial lives from financial diary² research conducted across India and Pakistan by Bankable Frontier Associates. When a gender lens is

² Financial diaries are different from typical research methods in that they "attempt to build a detailed understanding of households' financial behavior over time by following a small, non-representative sample of families over many months" (A Buck Short, Omidyar) using both quantitative and qualitative methods. Instead of testing a specific



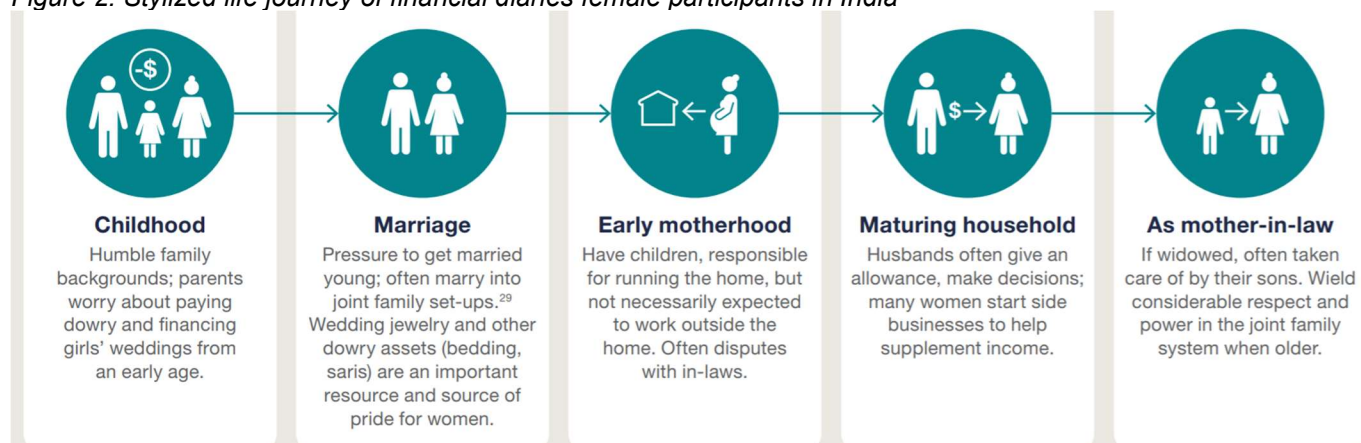
applied to existing financial diaries research, we find significant differentiators between male and female financial behavior. Some of these differentiators are as follows.

- **Unlike men, women go through frequent moments of transition and change and thus plan their financial lives accordingly.**

Women's economic lives are tightly linked to major life events (marriage, early motherhood, maturing household and as mother-in-law) as depicted in image 1 below⁵⁷. While these events were originally drawn from an Indian context, given the regional similarities, they are highly applicable in Pakistan's case.

Women are both aware of and sensitive to the societal expectations around these major transitions. Financial planning is centered on these milestones and takes precedence over achieving independence⁵⁸. For example, women know that upon marriage they will be expected to move into their spouse's household. Women are also aware that if the marriage breaks down, they may be left with no support system. As a result, women tend to invest in non-traditional forms of collateral, specifically small movable assets such as gold jewelry, that can be held throughout their lifecycle and be liquidated when needed⁵⁹. These investments are both self-prioritized and encouraged by women's mothers⁶⁰.

Figure 2: Stylized life journey of financial diaries female participants in India



Source: A Buck Short, Omidyar⁶¹

- **Women tend to have smaller more inconsistent incomes and different income sources than men.**

There is a huge differential in the amount of money that women earn when compared to their male counterparts. This is a particularly dire problem in Pakistan which, according to the ILO, as of 2018 has the highest gender wage gap in the world at 43.8 percentage

research hypothesis, the financial diaries approach helps unearth information that may have been completely unanticipated by researchers at the outset.



points⁶². Since higher earnings are correlated with greater formal inclusion, the wage gap is an important issue.

Somewhat unsurprisingly as women receive lower earnings for their labor, over time they are less likely to be salaried⁶³. Instead, women's income streams are comprised of the money they receive from their husbands (head of household), the small income they generate from taking on odd jobs on an as needed basis, as well as remittances and government cash transfers^{64 65}. The latter two sources form a higher proportion of the average woman's wallet than they do the average man's⁶⁶.

- **Women's financial priorities tends to be different than men.**

While men tend to focus on growing their income streams, women tend to focus on how to backstop these same streams when it comes to household finances⁶⁷. This is partially because women face more acute external societal pressure to keep the family afloat. It is expected that even when a man messes up a household's finances, the women will step-up to solve the problem. As a result of such solution-oriented expectations, women are much more emergency and saving minded than men. Mothers teach their daughters "shrewd savings habits to prepare them for household management on a limited income"⁶⁸.

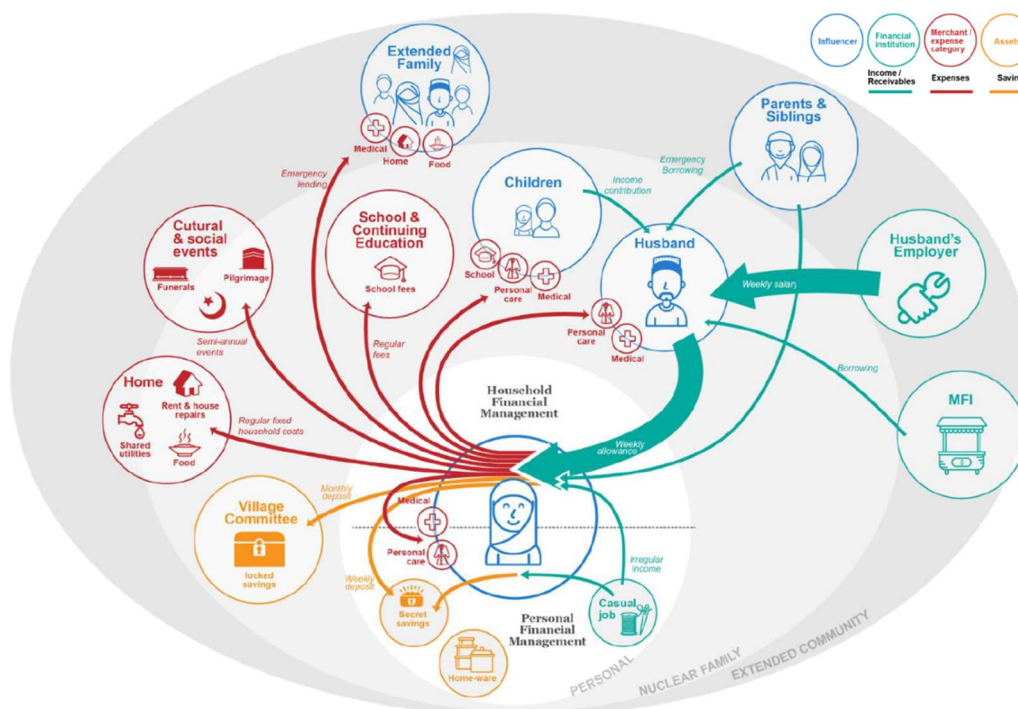
Additionally, women's investment priorities are also different from men's. Women tend to highly prioritize investment in quality education for future generations, and a stable home as opposed to men who tend to focus more on investing in their businesses.

- **Women depend on horizontal networks for financial help.**

Women tend to depend upon their social networks more heavily for financial help than men do. For women social networks tend to be horizontal. This means that women often depend on female friends and family members of similar incomes who reside in their communities. Since women are generally less mobile than men, and have fewer opportunities to engage in the workforce, they have less access to vertical networks where members are from different socio-economic segments.



Figure 3: A snapshot of women's financial lives



Source: Pakistan Women Country Report, The Human Account⁶⁹

Limitations of existing research: While financial diaries are extremely detailed, the research sample sizes (only 90 households per country) are both small and non-representative. Furthermore, financial diary research has been conducted with individuals from fairly low socio-economic segments. It is unclear how the findings listed above might shift as we begin to look at slightly higher income groups. Finally, the research conducted to date examines financial activity generally and does not have a specific digital angle.

3.3. Understanding female financial user segments in Pakistan

Though we have largely talked about women as a single entity so far, the fact is that they are not. Women in Pakistan do not form a single homogenous financial group. Recent segmentation work shows that female financial users can be broken up into multiple segments each of which exhibit specific behaviors and have specific needs⁷⁰. The primary elements used to create these segments are demographics, financial behavior (a category used to better understand differences in the way that people manage money) and psychology (psychological drivers both intrinsic and extrinsic).

The five primary segments for female financial users are as follows:

Social optimists (17%): young, open-minded, planners

Conservative individualists (12%): family-oriented, financially stressed, skeptical



Careful strivers (38%): diligent, investment-minded, financially stressed

Confident planners (17%): effective, conscientious, investment-minded

Networked elites (17%): moderate, confident, wealthy

Of the five segments listed above, only three – social optimists, confident planners and networked elites – would be comfortable enough to experiment with technology driven financial solutions themselves if properly motivated. These segments together form 50% of the female population which means approximately 50 million people.

So, what drives the differences between different segments especially vis a vis comfort using technology driven financial services? From the research we can extrapolate that some of the following elements may be behind these differences.

Level of adherence to social norms – How much men comply with social norms for fear of external ridicule and how much women stick to them for fear of negative consequences are both pertinent here.

Generational changes - Beliefs in the “proper” roles of men and women is changing with younger female generations who increasingly see the value of dual income households and are more likely to want agency in decision making.

Unequal learning opportunities - Men are taught how to manage money early and then continue to gain knowledge through experiential learning opportunities. However, there is a stigma associated with teaching women similar skills. Interestingly this stigma stands at odds with a widespread belief amongst parents that education will allow their children to prosper, regardless of gender.

Level of agency - Women with less agency may struggle to open and maintain financial accounts without familial support. Financial accounts which are generally designed with fully autonomous individuals in mind may also provide a lot less value to women whose financial decision making is not entirely independent.

Trust in formal institutions - Low- and middle-income individuals generally believe that banks aren't for people like them; this is also true for women. Such individuals feel unwelcomed by formal financial institutions and think that it is unnecessarily difficult to use formal services.

Limitations of existing research: Current segmentation work is oriented towards designing product solutions.



BOX 2: Research on G2P digitization in Pakistan

Despite the purported benefits of G2P digitization as a route towards universal financial inclusion, the evidence shows otherwise. In fact, recent research on existing digitization efforts in Colombia (Familias En Accion) and Pakistan (BISP) indicate that depending upon the program design G2P digitization may result in no “meaningful increases” in financial inclusion⁷¹.

Why is this the case?

As seen with the example of BISP in Pakistan even when G2P payments are digitized through closed loop ATM cards, recipients tend to cash-out almost immediately. Female beneficiaries can cash-out in a variety of ways ranging from completing the process themselves, to someone else (often a male relative) doing it on their behalf; what pathway is ultimately chosen is dependent upon the prevailing gender dynamic of the community⁷². In the scenario where women depend on others to collect their disbursement, they continue to be largely cut out of the formal financial system. Even when BISP beneficiaries do go to an ATM or agent location themselves for cash-out, someone else is likely to complete the transaction on their behalf⁷³.

Meaningful inclusion - meaning active use of a wider array of services - is not taking place.

Part of that problem appears to be that supply side providers don't recognize BISP people as a viable customer segment; many of them only want G2P contracts because of the margins they earn, as opposed to new customer acquisition⁷⁴. On the demand side, customers (who in the case of BISP are mostly very low literacy customers) see digitization as an inconvenience. For the government the value of digital G2P is it reduces leakages and opportunities for corruption. Increased financial inclusion doesn't even come into the picture⁷⁵.

Existing margins on G2P accounts don't incentivize businesses to spend more money to cultivate customers amongst BISP recipients⁷⁶. Furthermore, internally businesses treat G2P as a distinct business line as opposed to a channel which feeds into the businesses broader pipeline of customers⁷⁷.

What does this mean for the gender gap?

This research shows that G2P digitization solutions are not a panacea for increased female financial inclusion and shouldn't be treated as such. Careful design is needed if further efforts in the G2P digitization space are to be successful.



4. DEVELOPING A FRAMEWORK

SUMMARY: This section describes the analytical framework designed for this report and explains why this frame was chosen.

TAKEAWAYS

- The analytical framework is comprised of an ecosystem level analysis and a customer journey level analysis.

To better understand how digital financial services can be adjusted to more effectively minimize the gender gap we will be looking at two levels of analysis: ecosystem level, and customer journey level.

4.1. Ecosystem level analysis

It is important to understand how the market at large is thinking and working on gender issues in the financial inclusion space. Analyzing the financial inclusion ecosystem using a gendered lens gives us a grasp of supply side dynamics. Based on the topics brought up by experts during discussions for this report we are focusing on examining the following pieces of the ecosystem.

Theory of change - Especially in a top down environment like Pakistan where the financial inclusion agenda really has been taken on by regulators, and where both the regulators and providers are very responsive to one another, a concrete theory of change could prove to be extremely impactful. Therefore, we are interested in understanding if there a deliberate theory of change around female financial inclusion in the market which clearly describes how the gender gap is being tackled, and that backward maps long term goals to activities.

Business model - At the end of the day providers are really the first point of the contact for customers. While providers in the market all pursue their own independent business strategies, by and large the business models are quite similar. We need to examine if the current dominant business model - by which we mean how these organizations create, deliver, and capture value - is appropriate for tackling the largely untapped potential female customers in the market. To understand this, we will be examining the customer facing parts of the business model, specifically the agent network, pricing structure of customer fees, and outreach methodologies.

4.2. Customer journey level analysis

Given the many ways in women customers are distinct from male customers, it is important for us to examine the lifecycle of the female mobile wallet user. To do this we will be examining key



touchpoints that women experience across the four stages of their customer journey. These touchpoints are as follows:

Pre-conditions for use: Do women have a SIM enabled device that they can use to connect and transact with the mobile money network?

Onboarding: Can women open a mobile money account?

CICO (cash-in, cash-out): Can women easily put money in and take money out of the system?

Finding and using the right product: Are there products out there that fit women's needs and women informed about them?

We will examine these touchpoints across the three most high impact barriers that we identified in the previous section, namely literacy, socio-cultural norms and regulations. This analysis will give us a sense of how the mobile money lifecycle for women specifically is impacted by both demand side and supply side dynamics. The goal is to identify where the greatest opportunities and challenges to digital enabled female financial inclusion lie. A summary of the complete customer journey analytical framework can be seen in Table 4 below.

Table 4: Creating a framework to analyze the female customer journey

Stage	Touchpoint	Why	LITERACY	SOCIO-CULTURAL NORMS	REGULATIONS
I. Pre-condition for use	Phone and SIM	Do women have access to mobile phones? What is the degree of access? (time, actual control)			
II. Onboarding	KYC	Can women open independent accounts and operate these autonomously?			
III. CICO	Agent or ATM	How is CICO happening? Have gender considerations been considered?			
IV. Finding and using the right product	Product offerings	Are products tailored to women's needs?			
	Marketing	How are mobile money products marketed to women?			



5. APPLYING THE FRAMEWORK

SUMMARY: In this section we analyze where the Pakistani market currently stands at each level of the framework.

TAKEAWAYS:

- Existing business models are not geared towards female customer acquisition.
- Socio-cultural norms are by the far the biggest inhibitor to female financial inclusion via digital financial services, followed closely by literacy.

5.1. Ecosystem level analysis

5.1.1. Gendered theory of change

The broad consensus across stakeholders is that no unifying theory of change for financially including women exists in the market. Though women are often mentioned as a key target audience, they tend to be grouped into the broader category of “marginalized groups” or only receive fleeting recognition within wider strategy documents. As a result, three things happen.

First, the expectation set in the market is that as long as work is done to advance the sector, women will automatically get swept up into the mobile money net. This is misleading; as we have learnt, women have very different needs than traditional mobile money users (i.e. young, urban, men) and doing more work that is not applicable to the female segment is less useful than doing a reduced amount of work but for the right group.

Second, the market gravitates towards the few female centric solutions that are explicitly called out as important, and against which well-defined targets are set. In Pakistan the one solution that the industry really appears to be coalescing around is digitization of G2P payments, specifically BISP. The attractiveness of further advancing BISP digitization is not hard to understand as this is a huge, woman-only government program under centralized control and successfully targeting this would fulfill not one but two targets laid out in the NFIS strategy. And yet it is important to acknowledge that (i) G2P digitization needs to be done carefully (see Box 2), and (ii) BISP customers represent the poorest of the poor and fall into female segments that are the least comfortable with using technology (“conservative individualists” or “careful strivers”); onboarding them on digital financial services is not an easy proposition.

Third “women issues” are treated as niche problems that only specialized institutions can deal with. The reality is that each target set in the NFIS should have a gender specific lens applied to it, and related gender disaggregated metrics established against it.

5.1.2. Provider business model



For this section we will be focusing on MNO supported deployments as these accounted for almost 89% of total mobile wallets, and approximately 87% of active wallets in 2018⁷⁸. Figure 4 provides a quick snapshot of how such deployments are structured. The largest player in the ecosystem is Easypaisa which was the first mover in the market, and the second largest is Jazzcash.

Figure 4: Typical structure of MNO supported mobile money providers in Pakistan

Deposit holder	Bank	Telenor Microfinance Bank	Mobilink Microfinance Bank
E-money issuer	3rd Party	Easypaisa	Jazzcash
Payments service provider			
Agent network manager	MNO	Telenor	Mobilink
Channel provider			

Source: *Mobile Money in Emerging Markets, McKinsey & Company*⁷⁹

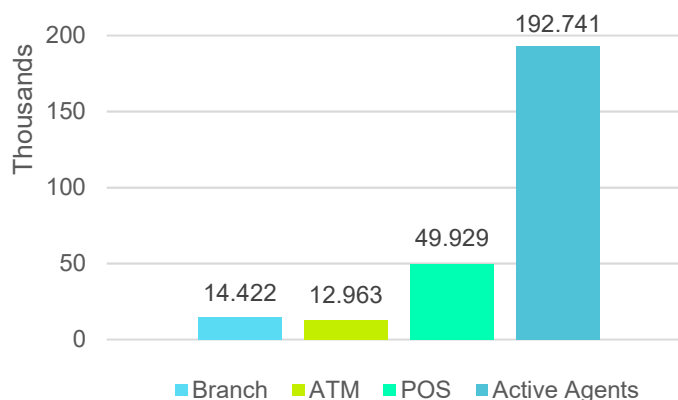
5.1.2.1. Agent network

While providers do leverage ATMs and POS machines, they are mostly dependent upon their agents to act as their distribution channel. This is partially because the agent footprint is significantly larger and has greater reach than other financial service access points (see Figure 5 for side by side comparison).

Agents act as primary points of contact for customers; they assist customers with account opening, facilitate CICO (cash-in, cash-out) in the system, and help customers complete transactions. In Pakistan, agents are typically either dedicated retail locations owned by the provider, or existing merchants who have been recruited by the provider.



Figure 5: Financial Service Access Points



Numbers as of Q3 2017

Source: Payment System Statistics, SBP⁸⁰

Around 60% of active agents in Pakistan are concentrated in urban areas and almost 100% of agents are men. As we mentioned earlier (see Box 1) from a gender perspective having only male agents in the system is problematic as women are less comfortable interacting with them especially at earlier stages of the customer journey. This is both because of socio-cultural norms governing female interaction with men outside their social network, and also because some women feel like male agents act dismissively towards them⁸¹.

Part of the reason that agents are so male dominated is that providers tend to recruit them from their own existing GSM owner base, and because they tend to recruit local shopkeepers who are literate enough to conduct mobile money services on behalf of others. Since women rarely (if ever) fall into either category, they tend to fall out of the agent recruitment pool altogether. New recruitment methods that broaden the pool of potential agents to include owners of female oriented businesses (e.g. tailors, beauty parlors, etc.) could help bring women back into the pool of potential agents.

Notably, current recruitment techniques also tend to favor stable agents over roving ones. However, given the higher mobility restrictions on women in conjunction with the fact proximity to an agent is a high determinant of mobile money usage⁸², exploring opportunities to reach these potential customers via a network of travelling agents may be worthwhile.

Currently, even though agent training is associated with higher performance, in the Pakistani market induction training tends to be weak with only 50% of new agents receiving training within 6 months of joining the agent network⁸³. There is an opportunity to strengthen induction training generally and to also build in a gender sensitivity training component; this will make women feel more welcomed at agent locations and will build greater trust in the wider mobile money system.

5.1.2.2. Pricing structure: customer fees



Pricing structures on mobile money services can determine if people take the leap into using the service in the first place; women are no exception to this. Pricing structures can take several forms: slab based, percentage based, or free. In Pakistan Easypaisa has percentage-based pricing, while Jazzcash has slab-based pricing; most other providers fall into one of these camps, and only one provider – FINCA Bank’s SimSim – offers free services³.

Based on current pricing structures mobile wallet customers pay a fee on every transaction they make beyond P2P (person to person), and everything that is off-network⁴. Both slab-based and percentage fee structures are regressive, with customers paying higher amounts in percentage terms on lower transaction amounts. This is particularly damaging for women as they tend to have smaller incomes than men, and thus logically might also tend towards smaller transaction values on average. Pricing structures can also have an impact on account usage in non-income related ways. For new customers slab based fees might be easier to understand but are more regressive than percentage fees and thus may negatively impact repeat service use⁸⁴.

Given the facts laid out above, does it make sense then to eliminate fees altogether so as to increase female use of financial services? This is a complicated issue to unravel from a gendered perspective. Research on no-fee savings accounts in Nepal show that lowering fees increased use of savings accounts by female heads of households by a statistically significant amount⁸⁵. On the other hand, research in the Philippines showed that lowering fees decreased use of savings accounts by women living in male headed households as women were more likely to face demands on their income from family and friends⁸⁶.

What such conflicting research does tell us though is that pricing experimentation itself is the key to hitting on what the right fee structure for different women segments in Pakistan is. Ultimately molding fee structures to incentivize high use will allow providers to develop a robust service in the long-run⁸⁷. Notably, though today the biggest providers in the country are sustaining their businesses off transaction volume and value, offering free services is a viable model which shifts provider dependence off consumer transaction revenue and instead allows them to experiment with other pricing mechanisms⁸⁸.

5.1.2.3. Outreach

Customer outreach methods are an important way of attracting people towards the formal financial sector and helping them move through the full customer journey. In Pakistan, 29% of mobile money non-users said that they did not know what mobile money was used for, while 33% thought that mobile money could only be used for transferring money⁸⁹. This shows that current outreach methods are not wholly successful in reaching their target market.

There are two main forms of outreach methods⁹⁰:

³ SimSim received regulatory approval for operation in 2017. According to experts, today SimSim has approximately 400,000 users. There is insufficient data at this stage to analyze how successful SimSim has been in entering the market with an alternative pricing strategy, or to analyze how female users respond to the service versus other market alternatives. This is worth exploring in the future.

⁴ Sending money from an Easypaisa wallet to a Jazzcash wallet is an example of an off-network transaction.



- *Above-the-line (ATL)*: mass media marketing including traditional advertising channels like television, radio, newspapers etc.
- *Below-the-line (BTL)*: non-media marketing methods like direct mail or face-to-face sales

Research shows that a combination of ATL and BTL methods are most impactful in successfully converting potential customers into actual users.

In Pakistan providers have primarily utilized ATL methods. While ATL methods are great for increasing general awareness, advertisements on this channel must be designed carefully with the target segment in mind lest they create an image that mobile money services are not usable by “average people”⁹¹. When it comes to attracting female customers, ATL methods in Pakistan are sadly lacking. Most ads lean into gender stereotypes or imply that mobile money is only used by elite segments of society.

In contrast to ATL methods, BTL methods are used to create trust which as we noted earlier is a barrier to gender inclusion⁹². It is estimated that most new mobile money customers need “10 to 15 minutes of face time with an agent or other mobile-money representative in order to feel comfortable using the product.”⁹³ Unfortunately, there is little emphasis on BTL methods in Pakistan which would be especially helpful for targeting female customers. M-Pesa used such methods to great effect in Kenya. Through “targeted groups, education on market days, and through informal women’s groups” they worked with 30,000 women groups across Kenya to educate them on M-Pesa⁹⁴. These trained women then went back home and trained other members of their community in one-on-one, highly personalized engagements.

Adjusting ATL methods appropriately and simultaneously scaling up BTL methods in line with what M-Pesa did in Kenya could prove to be a winning combination to reach new female customers.

5.2. Customer journey level analysis

To do the customer journey analysis we first mapped out the intersection points between the journey touchpoints and the three issue areas that we identified as being most potentially impactful if targeted (i.e. literacy, socio cultural norms, and regulations). The summary of these intersections can be seen in Table 5 below.

Table 5: Identifying intersections between the journey touchpoints and the top three identified issue areas

Stage	Touchpoint	LITERACY	SOCIO-CULTURAL NORMS	REGULATIONS
I. Pre-condition for use	Phone and SIM	Literacy Numeracy Digital literacy	Ability to use connected phone privately Ability to register in own name	Consumer privacy regulations (SBP) SIM regulations (PTA)



II. Onboarding	KYC	Understanding of terms and conditions	Ability to register in own name Ability to manage financial services	Branchless Banking Regulations (SBP)
	Agent or ATM	ATM literacy	Ability to travel to CICO points	Branchless banking agent regulations (SBP)
IV. Finding and using the right product	Product offerings	Ability to navigate mobile money screen	Comfort with current products	6-month pilot required before product is greenlit for mass consumer market. (SBP)
	Marketing	Ability to understand written materials describing product purpose.	Audience of marketing efforts	N/A

5.2.1. Stage I. Precondition for use: Phone and Sim

9 of 10 households have access to a phone and a SIM card⁹⁵. But only 39% of women say that they own their own SIM enabled phone⁹⁶. We believe that independent ownership and control of a SIM enabled phone is a critical precondition to opening a mobile wallet account since the goal is for women to be able to autonomously manage their own finances.



Literacy barrier: Most people in Pakistan can only use their mobile phones to make calls. Only 24%⁹⁷ of all adult women with a SIM enabled phone say that that can “complete text [messages]”⁹⁸ which is the proxy used to assess an individual’s ability to use mobile money.



Socio-cultural barriers: A woman owning a phone and using it privately is a big issue. The perception is that women will be led into vice if they have their own communication device; the biggest fear is that they will pursue inappropriate romantic relationships. When asked, 45% of women without a phone said that their family does not allow them to own a phone⁹⁹.

Even when families are willing to allow women in the house their own private line, the phones tend to be registered under an older relative’s name (generally a man) due to negative perceptions around privacy and security. During focus group discussions women mentioned that even when they requested to have a SIM registered in their own name, their families told them that there is “no need” for this¹⁰⁰.



Regulatory barriers: Anecdotal reports indicate that privacy and security are big concerns for women when it comes to owning a mobile phone¹⁰¹. There are multiple cases of gendered harassment on mobile phones. This is not an issue area that is currently being addressed by regulators.



To get access to a SIM, women need to have a CNIC (computerized national identity card). To get a CNIC, among other documentation, women need to have access to their birth certificates, a citizen certificate, and copies of their blood relatives' CNIC¹⁰². Since 99% of the Pakistani population has a CNIC, this is not a significant problem.

5.2.2. Stage II. Onboarding: KYC

Pakistani providers have leveraged biometric SIM verification to allow for remote wallet account opening¹⁰³ since 2015. The underlying conditions for this innovation were created when SBP introduced tiered bank accounts with tiered KYC (know your customer) requirements in 2014.

Under the updated KYC system customers can open a basic account (known as a level 0 account in Pakistan) by simply showing their CNIC (computerized national identity card) which is backed by biometric technologies. Since biometric identity verification is also needed to open a SIM, providers saw an opportunity to ease account opening. Today anyone with a biometrically verified SIM can instantaneously open an account by using their biometrics, or even remotely open accounts by inputting a simple USSD string¹⁰⁴.



Literacy barrier: Opening a mobile wallet account – especially when done either biometrically or remotely – is not significantly impacted by low literacy. However, low literacy individuals may not be able to understand terms and conditions related to their new account at the time of opening.



Socio-cultural barrier: Only women with a registered SIM in their own name can open a private mobile wallet account. As we mentioned earlier this is a problem.

Furthermore, as we learned in Section 2, according to research done by the Human Account women are not seen as capable of handling their finances independently; this message is both externally enforced and internalized by women.



Regulatory barrier: The recent biometrics related innovations in the market remove several documentation barriers linked to account opening which disproportionately impact disenfranchised groups such as low-income people, minorities and women. However, the condition of a verified SIM in one's own name may be hard for women to achieve. It would be useful to get more gender disaggregated information on SIM registration and mobile wallet opening trends.

5.2.3. Stage III. CICO: Agent and/or ATM

As we noted earlier CICO happens primarily through agents and ATMs.



Literacy barrier: Low literacy is a big barrier when it comes to doing CICO at ATM points as basic literacy is required to operate the machine.



Socio-cultural barrier: Travelling far from home is not possible for some women. The further away a woman is



from a CICO point the higher the likelihood that she can't go herself and will have a male relative transact on her behalf¹⁰⁵.

As we mentioned earlier the fact that agents are overwhelmingly male is seen as a barrier to female use (see 5.1.2.1).



Regulatory barrier: According to agent regulations bad agents are supposed to be kicked off the network. Since Pakistan has very low incidences of fraud and theft, enforcement has not been a huge issue¹⁰⁶. However, it's not clear what the rules are if an agent acts inappropriately with a female customer. Building in a specific complaint channel for such situations as well as clear guidance on how to act would help increase trust in the system.

5.2.4. Stage IV(A). Finding and using the right product: Product offerings

The current product offering suite is quite narrow and largely limited to P2P fund transfer, mobile top ups and bill payments¹⁰⁷. More complex products that were launched in the market such as savings and health insurance products, had really low uptake and faded fast¹⁰⁸. None of these products are female centric, though as we saw earlier there is at least one product in the market development pipeline that is explicitly female oriented.



Literacy barrier: Unless products are simply designed using human-centric principles, they will be hard for most women to understand and use.



Socio-cultural barrier: Products that are not designed for actual female behavior are unlikely to be successful.



Regulatory barrier: Adopting a more open regulatory sandbox approach towards experimentation around female-centric products, may spur greater innovation around this space.

5.2.5. IV(B). Finding and using the right product: Marketing

As we saw in section 4.1.2, marketing efforts are not geared towards women.



Literacy barrier: Text dependent marketing materials are inappropriate for female segments.



Socio-cultural barrier: Marketing that leans into the stereotype that women are not capable independent financial users, or that only elite women can use financial services, – which is currently the norm in Pakistan¹⁰⁹ – is unlikely to be successful in the long run.



Table 6: Summary of barrier impact at each touchpoint

Stage	Touchpoint	LITERACY BARRIERS	SOCIO-CULTURAL BARRIERS	REGULATORY BARRIERS		
I. Pre-condition for use	Phone and SIM	High	Very High	Medium		
II. Onboarding	KYC	Medium	Very High	Medium		
III. CICO	Agent or ATM	High	Very High	High		
IV. Finding and using the right product	Product offerings	High	High	Medium		
	Marketing	High	High	N/A		
		N/A	Low	Medium	High	Very High



6. RECOMMENDATIONS & IMPLEMENTATION

SUMMARY: This section lays out actionable policy recommendations to tackle Pakistan's gender gap.

TAKEAWAYS:

- Stakeholders need to think about and act now to solve the gender gap as the next decade will be an industry defining one for financial inclusion.
- Recommendations run the gamut from things that can be picked up and implemented tomorrow, to much longer-term plays that may take a few years to truly materialize.

6.1. The story so far

If there is one overarching takeaway from this report, it is that stakeholders in the financial inclusion space need to be thinking about and acting now to solve the gender gap if we wish to unlock the benefits associated with formal female financial inclusion.

Even as the overall financial inclusion pie grows, simultaneously formally financially including women through new gender positive policies is critical or else gender inequality will persist. Targeting the gender gap will require proactive gendered action across a variety of fronts, and by the whole ecosystem of stakeholders from the government, to businesses, to public oriented organizations. It will also require stakeholders to remember that women represent a very different market from men and that within this market all women aren't the same. One size fit all policies are not going to work.

6.2. Looking ahead: assessing different possible scenarios

The next decade promises to be a defining period for mobile wallet use and uptake, and we are currently standing at a critical juncture. How organizations in the financial inclusion space deal with the gender question today, will determine their long-term scale of impact.

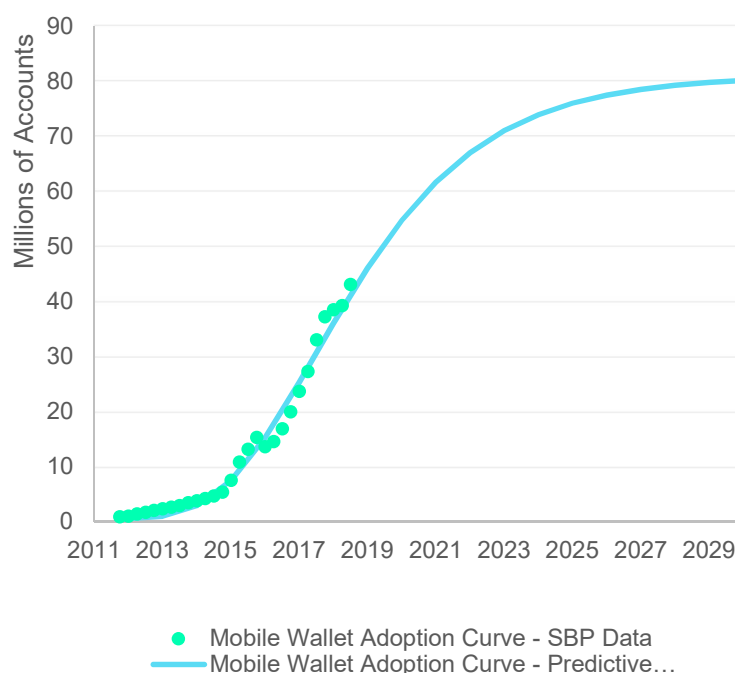
Based on mobile wallet adoption trends from 2011-2018, we created a predictive model to assess when the mobile wallet market will reach saturation (see Figure 6) if the gender gap remains unchanged⁵. The model shows us that under such a scenario the mobile money market will reach saturation point at 80 million users by approximately 2028 (see Figure 6). To be clear, while adoption will never totally plateau, it will have leveled by 2028. Significantly, the market is

⁵ The predictive model was created using a 3 parameter Gompertz curve (see Wikipedia for more information). Since we were missing data for the 209-2011 period an offset of 500,000 accounts was utilized. The model is statistically significant across all parameters.



already halfway to the saturation point for this scenario, and also already appears to be operating at the steepest uptake rate (i.e. greatest number of mobile wallet accounts opened per unit of time, throughout the modelled time period) that the industry can expect. Notably, 80 million users account for approximately 56% of Pakistan's adult population⁶. In other words, under this scenario it is unlikely that Pakistan will achieve universal financial inclusion upon the basis of technology enabled solution.

Figure 6: Mobile Wallet Adoption Over Time



Of course, if the base of users for the market is replenished by a new group of female entrants due to a significant reduction in the financial inclusion gender gap, the predictive model will likewise change and the industry can expect robust growth and uptake, far beyond the next decade. To achieve this alternative scenario, stakeholders should start planning now and leverage the wave of pro-women trends that are sweeping the nation.

6.3. Recommendations

Based on the analysis throughout this report we have identified a few different avenues of action. For each recommendation we have attempted to give a sense of how the recommendations would be operationalized in practice, the resources required, and the main stakeholders needed to make it happen.

⁶ Estimated using World Bank Data; Total Population = 207mn; Adult Population (aged 15+) = 68%



Given CGAP's role as a long-term convener and a patient influencer in the Pakistani market we believe that the organization can help create appropriate momentum around these recommendations.

1. Creating an ecosystem-wide female specific theory of change.

As we established earlier, the current theory of change or lack thereof when it comes to female financial inclusion isn't working (see 5.1.1.). Creating a specific theory of change could help the sector move in the right direction by focusing attention around a few key issues and creating significant momentum around these. A well-articulated theory of change is also going to help gender financial inclusion move from a niche topic area that only a few organizations work on, to one that everyone embeds in their broader programming and works towards.

How would this work in practice? To create a theory of change, the industry needs to collectively identify a set of assumptions that drive its work on gender inclusion and link these to specified activities and goals with granular associated targets embedded. Further research needs to be done before this can happen.

To drive the work the industry could create a specific gender inclusion task force on the NFIS Council and empower them to develop a theory of change. Since gender is one of the NFIS's key focus areas, this is likely to be a good fit.

At the same time, to learn about industry best practices from other countries working in this space, Pakistan should leverage the GWFIC (Gender and Women's Financial Inclusion Committee)¹¹⁰ at AFI (Alliance for Financial inclusion) since they are already a member of the organization. Current GWFIC champions include representatives from Zambia and Rwanda, two countries that have successfully shrunk their financial inclusion gender gap in the last 5 years.

Main resources needed to make this happen? Leadership and people.

Who needs to spearhead the effort? While several stakeholders will have to get involved, given SBP's influence in the space, their leadership of the NFIS council, and their ownership of the country-wide financial inclusion agenda, they are the logical organization to drive this work. Significantly, SBP itself is currently assessing different ways to target the gender gap and is likely to be open to different suggestions.

Implementation timeline? Medium term (6 months – 1 year).

2. Experimenting with different business models which are more female friendly in anticipation of long-term client cultivation and retention.

As we have seen, existing business models are really geared towards acquiring male customers. Anecdotally experts in the field have shared that pilots aimed at increasing female clientele don't go to scale because of the high related costs, and low expected



outcomes¹¹¹. Given the reality that in the long-term women will have to be cultivated for mobile money providers to continue their growth trajectories, as the industry shifts gears towards female customer acquisition, experimentation with current ways of working will be required before providers hit on the “right” business model formula. It’s worth mentioning that just because a shift is taking places doesn’t mean that acquisition of male customers will end; as we said earlier the purpose of a revised strategy would be to grow the pie for all parties.

At this initial stage, some ideas for experimentation across different parts of the business model are as follows; this is a summary of ideas that were introduced earlier in this report:

- *Agents* – change agent recruitment methods to bring more women into the net and explore the idea of roving agents.
- *Customer Fees* – experiment with alternative fee models that are rooted in creating revenue off of float and other adjacencies like data monetization as opposed to transactions.
- *Outreach* – engage in more BTL marketing efforts. In addition, shift all future marketing efforts (whether ATL or BTL) towards a) targeting women specifically, and b) targeting men in new ways to encourage them to allow women in their spheres of influence access to mobile money services.

How would this work in practice? To experiment with new ways of working providers should start by targeting the low-hanging fruit such as new outreach methods. Obviously, any new initiatives should be piloted first. At this stage it might make sense to focus pilots specifically around targeted industrial clusters and value chains that have a high number of female workers such as the fashion industry, or the dairy value chain. Importantly, these women represent the middle class, and so are likely to be more able and willing to use financial services.

Main resources needed to make this happen? The right player, and money.

Who needs to spearhead the effort? Providers will have to take the lead in figuring out what works best for them. There is a compelling argument to be made for providers getting on the ground floor of such experimentation early. Whoever hits on the right business model blend first, will be able to capture first mover advantage in the market. Figuring out which providers to target is a trickier proposition and worth further analysis. While bigger players have the resources and market penetration to test, adapt and scale quickly, their current market success makes them less likely to pursue potential expensive changes to their fundamental way of working.

Implementation timeline? Long-term (>1 year)

3. Piloting new gender literacy programs that are “pull-dependent “and draw customers in in an experiential, tailored and gender specific way.



As we saw earlier, literacy is the second largest barrier to female financial inclusion. Huge strides have been made in developing literacy programs, particularly financial literacy programs for Pakistanis over the last few years. With the scope expansion of the NFLP (National Financial Literacy Program) in January 2019¹¹² there is a real attempt to reach and educate more Pakistanis than ever before on a wide range of financial topics through a wide range of channels.

However, both the NFLP and most other financial literacy efforts otherwise launched in Pakistan have some key limitations. First, they assume that the individuals using their materials have at least some level of literacy/numeracy; thus, these materials are not appropriate for particularly disenfranchised segments. Second existing programs do not differentiate between digital financial literacy and other types of financial literacy. Third, current programs are wholly push dependent, meaning that the average citizen must want to access the materials of their own volition if they are to benefit from this work. Fourth, the programs are not gender specific. And finally, current programs are not experiential.

Based on user research that the author engaged in during the Hack for Inclusion design sprint and other findings from the broader literature on this topic, current financial literacy training models in Pakistan should be adjusted in the following ways:

- *Focus on reaching children and young adults* - the earlier a target population is reached, the greater the value to them of financial literacy training.
- *Focus on experiential learning* - programs that incentivize learners to implement the concepts that they are being taught are more likely to succeed in the long run.
- *Leverage women's horizontal networks to incentivize learning* - women depend on familial and friendship bonds for encouragement and are more likely to engage in learning if they are encouraged to do so by their network.
- *Make modules more specific* - materials will be better received by their target audience if they are gender specific and goaled (i.e.: instead of developing modules on index insurance, organizations should develop modules on protecting agricultural income from weather fluctuations.)

How would this work in practice? Proof of concept of this new literacy program strategy is needed. One way to go about pursuing this would be to recruit a local partner which is an expert in creating financial literacy programs and offering them grant funding to design and test a new solution.

Main resources needed to make this happen? Grant funding, and the right partner.

Who needs to spearhead the effort? Players like Karandaz Pakistan which a dedicated pool of money for experimentation related grant funding and have the capacity to recruit an appropriate local partner for such work, would be the logical organization to drive this agenda.



Implementation timeline? Medium term (6 months – 1 year).

4. Researching how stakeholders can seed behavior change instead of just accommodating - or ignoring - existing behaviors and socio-cultural norms relating to women.

The few existing female centric financial inclusion solutions in the market either don't attempt to fully understand the intricacies of female behavior or are concerned with accommodating both existing behaviors and existing socio-cultural norms. However, there are opportunities to *change* these norms over time through carefully chosen interventions that incentivize female financial decision-making and use of financial services.

Research in this realm is limited and worth pursuing from a gendered financial inclusion lens. One interesting model type to explore is a “wedge and spread model” where an organization shares desired services to a community in exchange for institutionalizing structures that promote gender equality¹¹³.

How would this work in practice? A basic scope of work around this piece of research would have to be designed, so that a research partner can be identified through an open request for proposals.

Main resources needed to make this happen? Money.

Who needs to spearhead the effort? CGAP itself, either independently or in partnership with a local Pakistani think tank institute can drive such research forward.

Implementation timeline? Immediate term (within the next 6 months).

5. Evaluating all existing regulations through a gender lens, and seriously assessing all available regulatory options.

While we did assess how policy and regulatory barriers impacted women along their customer journey, we did not conduct a complete gendered assessment of the existing branchless banking regulations. This is worth pursuing.

As part of this work there is a need to assess the feasibility, viability, and desirability of the full range of action options that are available to regulators at this point in time. Based on our existing analysis, pursuing some or all of the following options could have dramatic impact on female financial inclusion in Pakistan; these options have been presented in order of most doable to least doable:

- Create more granularity in gendered financial inclusion targets and better gender-disaggregated data collection mechanism.
- Revise the existing branchless banking regulations and the NFIS to include a section dedicated to gender issues.



- Establish a separate unit within SBP's financial inclusion team that spearheads all branchless banking efforts related to women.
- Incentivize experimentation specifically around female oriented financial inclusion ideas and products.
- Automatically open bank accounts for all citizens a la the India model.
- Work with provincial governments to provide free cell phones to every citizen in Pakistan.

How would this work in practice? A basic scope of work for this research would have to be developed, and permission for such a regulatory assessment sought from the regulator.

Main resources needed to make this happen? Money, and stakeholder buy-in.

Who needs to spearhead the effort? CGAP or another institution that is a trust partner of SBP's would have to take the lead on this work.

Implementation timeline? Immediate term (within the next 6 months).

6. Using human centered design (HCD) principles to improve both product and process.

In the last few years providers have really focused on improving product experience by improving the user design and user interface of mobile money solutions. In fact, two years ago Jazzcash in partnership with Karandaaz Pakistan created smartphone wireframes for mobile money apps that were tailored for low-literacy, poor, women.

Such thinking needs to be integrated into future products as well. New female targeted products should be designed keeping in mind the "job" they will perform and with the recognition that a successful product will replace and enhance an experience that a woman already undergoes.

It's also critical that providers move beyond looking at the product alone, and also bring design thinking principles to the broader mobile money process for women. Looking across the female customer journey, it's clear that there is no single point acting as bottleneck; indeed, each part of the customer journey is linked and materially impacts the next one. So, for example if a new customer has a poor experience with cash-in, they are likely to drop out of the cycle before they actually make a transaction, even if the transaction itself represents an easier and faster way for them to get their job done.

How would this work in practice? Seeding HCD thinking in product and process development would have to come about through a cross sectoral partnership structure that brings together a funder, a provider, and a design firm. The long-term goal here would be to eventually have such thinking embedded within all provider deployments without need of external incentivization.

Main resources needed to make this happen? Stakeholder buy-in.



Who needs to spearhead the effort? Experimentation oriented funders like Karandaaz Pakistan would have to be targeted to encourage sustained efforts in this space.

Implementation timeline? Long-term (>1 year)

Table 7: Summary of recommendations

Recommendation	Main Resources Needed	Primary Stakeholder	Implementation Timeline
1. Creating an ecosystem-wide female specific theory of change.	Leadership and people.	SBP NFIS Council	Medium term (6 months – 1 year).
2. Experimenting with different business models which are more female friendly in anticipation of long-term client cultivation and retention.	The right player. and money.	Providers.	Long-term (>1 year)
3. Piloting new gender literacy programs that are “pull-dependent “and draw customers in in an experiential, tailored and gender specific way.	Grant funding, and the right partner.	Karandaaz Pakistan and literacy focused organization.	Medium term (6 months – 1 year).
4. Researching how stakeholders can seed behavior change instead of just accommodating - or ignoring - existing behaviors and socio-cultural norms relating to women.	Money.	Research organization.	Immediate term (within the next 6 months)
5. Evaluating all existing regulations through a gender lens, and seriously assessing all available regulatory options.	Money, and stakeholder buy-in.	SBP and research partner.	Immediate term (within the next 6 months)
6. Using human centered design principles to improve both product and process.	Stakeholder buy-in.	Funders, providers and design firms.	Long-term (>1 year)

6.4. Concluding thoughts

Increasing female financial inclusion through mobile financial services is not an easy ask, but it is a critical one. The industry as a whole is facing both an unprecedented challenge, and – at this stage – unclear outcomes. At the same time, it is also facing an opportunity of enormous scale. We hope that this document provides some guidance as to how we can begin to understand the problems that lie before us, and also shares some concrete opportunities for action. As always, continuous iteration is the key to success, and as we learn more about the



gender financial inclusion space our strategies will have to change. The brightest days for Pakistani women still lie before us.



APPENDIX

List of interviewees

Insights for this report were gained through semi-structured interviews with the following field experts. Note that the views these individuals shared were based on personal expert opinions and are not reflective of any organizational affiliation.

Walid Ahmed | Senior Consultant for Digital Financial Services

Tughral Ali | Former Head of Digital Financial Services, FINCA Microfinance Bank

Fatima Arshad | Assistant Manager Corporate Communications, Unilever

Syeda Ammara Batool | Head of Jazzcash OTC, Channel, IR & Insurance, Jazzcash

Yasmin Klaudia Bin Humam | Financial Sector Specialist, CGAP

Meghan Flaherty | Former Project Manager, Women's World Banking

Murium Hadi | Women Financial Inclusion Advisor, Karandaaz Pakistan

Imran Khan | Research Manager Pakistan, Intermedia and MicroSave

Ayesha Khan | Pakistan Director, Acumen

Robin Lewis | Research Analyst and Associate Fellow for the Center of Technology Innovation, Brookings Institution

Syed Ali Mahmood | Pakistan Program Officer - Financial Services for the Poor, Bill & Melinda Gates Foundation

Jennifer McDonald | Former Director of Product Development, Women's World Banking

Faiqa Naseem | Policy Expert on Gender

Swetha Totapally | Associate Partner, Dalberg Global Development Advisors

Questions for interviews

The following questions formed the basis of all expert interviews; the questions were adjusted slightly depending upon the expertise of the interviewee.

- Research shows that literacy, norms, and regulatory barriers are the main inhibitors of female financial inclusion. What is your perspective on the main issues that are driving the FI gender gap in Pakistan?



- Some would argue that Pakistan's branchless banking regulations as gender neutral. Would you agree with that? What specific regs support this viewpoint?
- How are regulators and businesses reacting to the widening gender gap? Are there any particular initiatives that you feel excited about?
- What else could organizations in the financial inclusion space be doing to narrow the gender gap? What practical barriers prevent them from acting?
- Long term, what is the outlook for the financial inclusion gender gap in Pakistan (5-10 year view)?



ENDNOTES

- ¹ “Home | Global Findex,” accessed February 9, 2019, <https://globalfindex.worldbank.org/>.
- ² “Helen Clark: Speech at Side Event ‘Governments Leading the Way: Digitizing Payments and Advancing Inclusive Finance to Achieve the Sustainable Development Goals,’” UNDP, accessed February 28, 2019, <https://www.undp.org/content/undp/en/home/presscenter/speeches/2015/09/26/helen-clark-speech-at-side-event-governments-leading-the-way-digitizing-payments-and-advancing-inclusive-finance-to-achieve-the-sustainable-development-goals-.html>.
- ³ IMFBlog, “Economic Gains from Gender Inclusion: Even Greater than You Thought,” *IMF Blog* (blog), accessed February 28, 2019, <https://blogs.imf.org/2018/11/28/economic-gains-from-gender-inclusion-even-greater-than-you-thought/>.
- ⁴ “The Power of Parity: Advancing Women’s Equality in Asia Pacific” (McKinsey & Company, 2018), <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Gender%20Equality/The%20power%20of%20parity%20Advancing%20womens%20equality%20in%20Asia%20Pacific/MGI-The-power-of-parity-Advancing-womens-equality-in-Asia-pacific-Executive-summary.ashx>.
- ⁵ Kristalina Georgieva, “The Gender Gap in Financial Inclusion Won’t Budge. Here Are Three Ways to Shrink It,” Text, Voices, May 23, 2018, <https://blogs.worldbank.org/voices/gender-gap-financial-inclusion-three-ways-shrink-it>.
- ⁶ Mayada El-Zoghbi, “Measuring Women’s Financial Inclusion: The 2017 Findex Story,” *CGAP* (blog), accessed December 19, 2018, <https://www.cgap.org/blog/measuring-womens-financial-inclusion-2017-findex-story>.
- ⁷ “Measuring Women’s Financial Inclusion: The 2017 Findex Story,” *CGAP*, accessed December 19, 2018, <https://www.cgap.org/blog/measuring-womens-financial-inclusion-2017-findex-story>.
- ⁸ IMFBlog, “Economic Gains from Gender Inclusion.”
- ⁹ IMFBlog, “Economic Gains from Gender Inclusion.”
- ¹⁰ Yasmin Bin-Humam, “Women’s Financial Empowerment Is the Tide That Can Lift All Boats,” *CGAP* (blog), accessed February 28, 2019, <https://www.cgap.org/blog/womens-financial-empowerment-tide-can-lift-all-boats>.
- ¹¹ “The Power of Parity: Advancing Women’s Equality in Asia Pacific.”
- ¹² “Home | Global Findex,” accessed February 9, 2019, <https://globalfindex.worldbank.org/>.
- ¹³ Naeha Rashid, Expert Interview for PAE | “Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan,” Phone, 2019.
- ¹⁴ “Home | Global Findex,” accessed February 9, 2019, <https://globalfindex.worldbank.org/>.
- ¹⁵ “Inclusive Finance for All: Powering Inclusive Growth for Digital Economies,” McKinsey, accessed March 18, 2019, <https://www.mckinsey.com/~media/mckinsey/featured%20insights/Employment%20and%20Growth/How%20digital%20finance%20could%20boost%20growth%20in%20emerging%20economies/MG-Digital-Finance-For-All-Full-report-September-2016.ashx>.
- ¹⁶ “The Mobile Gender Gap Report 2018,” GSMA, accessed February 11, 2019, https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2018/04/GSMA_The_Mobile_Gender_Gap_Report_2018_32pp_WEBv7.pdf.
- ¹⁷ “Gender & Women’s Financial Inclusion,” Alliance for Financial Inclusion | Bringing smart policies to life, accessed March 2, 2019, <https://www.afi-global.org/gender-women-financial-inclusion>.
- ¹⁸ “Challenges,” HACK FOR INCLUSION, accessed March 3, 2019, <http://www.mitbreakingthemold.com/challenges-2>.



- ¹⁹ Naeha Rashid and Stefan Staschen, “Applying the RIA Lite Methodology: An Example from Pakistan,” Working Paper (CGAP), accessed March 28, 2019, <https://www.cgap.org/sites/default/files/Working-Paper-RIA-Lite-Methodology.pdf>.
- ²⁰ “Mobile Financial Services: Basic Terminology,” Guideline Note (Alliance for Financial Inclusion), accessed March 28, 2019, <https://www.afiglobal.org/sites/default/files/publications/MFSWG%20Guideline%20Note%20on%20Terminology.pdf>.
- ²¹ “Portal,” accessed March 28, 2019, <https://karandaz-mosaic.livestories.com/chart-collection/2b1c56ed-8bb9-403e-8018-03ce7f795f63>.
- ²² Stephen Rasmussen, “Pakistan Enigma: Why Is Financial Inclusion Happening So Slowly?,” *CGAP* (blog), accessed March 3, 2019, <https://www.cgap.org/blog/pakistan-enigma-why-financial-inclusion-happening-so-slowly>.
- ²³ “Branchless Banking Newsletter Jul-Sep 2018,” Branchless Banking Newsletter (State Bank of Pakistan), accessed March 28, 2019, <http://www.sbp.org.pk/publications/acd/2018/BranchlessBanking-Jul-Sep-2018.pdf>.
- ²⁴ “State Bank of Pakistan,” accessed March 28, 2019, <http://www.sbp.org.pk/publications/acd/branchless.htm>.
- ²⁵ “NFIS 2018” (Government of Pakistan), accessed March 18, 2019, <http://finance.gov.pk/NFIS.pdf>.
- ²⁶ “NFIS 2018.”
- ²⁷ Charles Niehaus, “An Overview of Digital Finance Interoperability in Pakistan,” Field Visit Insights (CGAP, 2016).
- ²⁸ “Telenor Opens Mobile Money APIs for Third Party Developers | Center for Financial Inclusion,” accessed March 3, 2019, <https://www.centerforfinancialinclusion.org/telenor-opens-mobile-money-apis-for-third-party-developers>.
- ²⁹ “Mobile Money API Manager for JazzCash,” *Arcana Info* (blog), accessed March 3, 2019, <https://www.arcanainfo.com/mobile-money-api-manager-jazzcash/>.
- ³⁰ “Capitalizing on the Potential Benefits of Open Banking | McKinsey,” accessed March 29, 2019, <https://www.mckinsey.com/industries/financial-services/our-insights/data-sharing-and-open-banking>.
- ³¹ “Capitalizing on the Potential Benefits of Open Banking | McKinsey.”
- ³² Rasmussen, “Pakistan Enigma.”
- ³³ “ANA Pakistan 2017,” Survey Report (The Helix Institute, 2018), <http://www.helix-institute.com/sites/default/files/Publications/Pakistan%20Report.pdf>.
- ³⁴ “Corporate Sector to Empower Women through ‘Guddi Baji’ Programme,” accessed March 3, 2019, <https://www.thenews.com.pk/print/256881-corporate-sector-to-empower-women-through-guddi-baji-programme>.
- ³⁵ “Expanding Opportunities in Our Retail Value Chain,” Unilever global company website, accessed March 3, 2019, <https://www.unilever.com/sustainable-living/enhancing-livelihoods/opportunities-for-women/expanding-opportunities-in-our-retail-value-chain/>.
- ³⁶ Imran Khan, “ROSCAs and Mobile Wallet Adoption in Pakistan,” *Intermedia | Financial Inclusion Insights* (blog), accessed March 30, 2019, <http://finclusion.org/blog/roscas-and-mobile-wallet-adoption-in-pakistan.html>.
- ³⁷ Khan.
- ³⁸ “Policy Brief on Female Labor Force Participation in Pakistan,” ADB Briefs (Asian Development Bank, October 2016), <https://www.adb.org/sites/default/files/publication/209661/female-labor-force-participation-pakistan.pdf>.
- ³⁹ “NFIS 2018.”



⁴⁰ Alia Chughtai, “Pakistani Women Hold ‘aurat March’ for Equality, Gender Justice | Pakistan News | Al Jazeera,” *Al Jazeera*, accessed March 30, 2019, <https://www.aljazeera.com/news/2019/03/pakistani-women-hold-aurat-march-equality-gender-justice-190308115740534.html>.

⁴¹ “ANA Pakistan 2017.”

⁴² Meghan Flaherty, “The Power of Partnership: A Corporate Collaboration to Advance Women’s Financial Inclusion in Pakistan,” *Women’s World Banking* (blog), October 1, 2018, <https://www.womensworldbanking.org/news/blog/the-power-of-partnership-a-corporate-collaboration-to-advance-womens-financial-inclusion-in-pakistan/>.

⁴³ Flaherty.

⁴⁴ Rashid, Expert Interview for PAE | “Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan.”

⁴⁵ Rashid.

⁴⁶ Flaherty, “The Power of Partnership.”

⁴⁷ Flaherty.

⁴⁸ Flaherty.

⁴⁹ Rashid, Expert Interview for PAE | “Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan.”

⁵⁰ Rashid.

⁵¹ Rashid.

⁵² Rashid.

⁵³ “Pakistan,” November 27, 2016, <http://uis.unesco.org/country/PK>.

⁵⁴ “Pakistan’s Literacy Rate Stands at 58pc,” accessed March 24, 2019, <https://www.thenews.com.pk/print/309542-pakistan-s-literacy-rate-stands-at-58pc>.

⁵⁵ “Why the Gender Dummy Doesn’t Speak: Explaining the Gender Gap in Financial Inclusion | Center for Financial Inclusion,” accessed March 24, 2019, <https://www.centerforfinancialinclusion.org/why-the-gender-dummy-doesnt-speak-explaining-the-gender-gap-in-financial-inclusion/>.

⁵⁶ “Women, Business, and the Law 2019” (World Bank), accessed March 24, 2019, <https://openknowledge.worldbank.org/bitstream/handle/10986/31327/WBL2019.pdf>.

⁵⁷ “A Buck Short.”

⁵⁸ “THA_Pakistan_Women Product Concepts,” The Human Account, accessed March 24, 2019, https://drive.google.com/file/d/1f-ZzPvcWjKDZxROBq-oW82D55F381U1Z/view?usp=drive_open&usp=embed_facebook.

⁵⁹ “A Buck Short.”

⁶⁰ “THA_Pakistan_Women Product Concepts.”

⁶¹ “A Buck Short,” accessed January 28, 2019, https://www.omidyar.com/sites/default/files/file_archive/Pdfs/16-07-01_A_Buck_Short_Report_Digital_FINAL.pdf.

⁶² “Wage Growth and Gender Pay Gap in Pakistan,” The Express Tribune, December 22, 2018, <https://tribune.com.pk/story/1872135/6-wage-growth-gender-pay-gap-pakistan/>.



63 “A Buck Short.”

64 “A Buck Short.”

65 “THA_Pakistan_Women Product Concepts.”

66 “A Buck Short.”

67 “A Buck Short.”

68 “THA_Pakistan_Women Product Concepts.”

69 “THA_Pakistan_Women Product Concepts,” The Human Account, accessed March 24, 2019, https://drive.google.com/file/d/1f-ZzPvcWjKDZxROBq-oW82D55F381U1Z/view?usp=drive_open&usp=embed_facebook.

70 “The Human Account | Segment Index,” The Human Account, accessed March 4, 2019, <https://www.thehumanaccount.com/copy-of-segment-index-1>.

71 Guy Stuart, “Government-to-Person Transfers: On Ramp to Financial Inclusion?,” Accion, accessed March 24, 2019, https://content.centerforfinancialinclusion.org/wp-content/uploads/sites/2/2018/10/Government_to_Person_Transfers.pdf.

72 Guy Stuart, “G2P and Gender: When Will Pakistani Women Be Able to Withdraw Their Own Money?,” *Center for Financial Inclusion* (blog), accessed February 26, 2019, <https://www.centerforfinancialinclusion.org/g2p-and-gender-when-will-pakistani-women-be-able-to-withdraw-their-own-money>.

73 Stuart.

74 Stuart, “Government-to-Person Transfers: On Ramp to Financial Inclusion?”

75 Stuart.

76 Stuart, “G2P and Gender.”

77 Stuart.

78 “Branchless Banking Newsletter Jul-Sep 2018.”

79 “Mobile Money in Emerging Markets: The Business Case for Financial Inclusion” (McKinsey & Company), accessed March 31, 2019, <https://www.mckinsey.com/~media/mckinsey/industries/financial%20services/our%20insights/mobile%20money%20in%20emerging%20markets%20the%20business%20case%20for%20financial%20inclusion/mobile-money-in-emerging-markets.ashx>.

80 “Payment Systems Statistics,” Summary Statistics (State Bank of Pakistan, 2018), <http://www.sbp.org.pk/psd/pdf/2018/PS-Q1FY18.pdf>.

81 “ANA Pakistan 2017.”

82 “FII Wave 5 Pakistan,” FII Intermedia, accessed February 13, 2019, http://finclusion.org/uploads/file/pakistan-wave-5-report_final.pdf.

83 “ANA Pakistan 2017.”

84 “Do Mobile Money Fee Structures Support the Poor? | BFA,” accessed March 26, 2019, <http://bfaglobal.com/projects/do-mobile-money-fee-structures-support-the-poor/>.

85 “To Fee or Not to Fee? Designing Inclusive Savings Products for Women,” Innovations for Poverty Action, April 13, 2018, <https://www.poverty-action.org/blog/fee-or-not-fee-designing-inclusive-savings-products-women>.



⁸⁶ “To Fee or Not to Fee? Designing Inclusive Savings Products for Women,” Innovations for Poverty Action, April 13, 2018, <https://www.poverty-action.org/blog/fee-or-not-fee-designing-inclusive-savings-products-women>.

⁸⁷ “Do Mobile Money Fee Structures Support the Poor? | BFA,” accessed March 26, 2019, <http://bfaglobal.com/projects/do-mobile-money-fee-structures-support-the-poor/>.

⁸⁸ “Do Mobile Money Fee Structures Support the Poor? | BFA.”

⁸⁹ “FII Wave 5 Pakistan,” FII Intermedia, accessed February 13, 2019, http://finclusion.org/uploads/file/pakistan-wave-5-report_final.pdf.

⁹⁰ “Mobile Money: Getting to Scale in Emerging Markets | McKinsey,” accessed March 27, 2019, <https://www.mckinsey.com/industries/social-sector/our-insights/mobile-money-getting-to-scale-in-emerging-markets>.

⁹¹ “Mobile Money.”

⁹² “Mobile Money.”

⁹³ “Mobile Money.”

⁹⁴ Kathryn Ripley, “How M-PESA Innovates New Business Models for Its Base of the Pyramid Customers,” Business Fights Poverty, January 10, 2014, <https://businessfightspoverty.org/articles/how-m-pesa-innovates-new-business-models-for-its-base-of-the-pyramid-customers/>.

⁹⁵ “FII Wave 5 Pakistan.”

⁹⁶ “FII Wave 5 Pakistan.”

⁹⁷ “Mapping the Gender Gap in Pakistan,” FII Intermedia, accessed February 13, 2019, <http://finclusion.org/uploads/file/reports/InterMedia%20FII%20Gender%20Report.pdf>.

⁹⁸ “FII Wave 5 Pakistan.”

⁹⁹ “FII Wave 5 Pakistan.”

¹⁰⁰ “Mapping the Gender Gap in Pakistan.”

¹⁰¹ “Mapping the Gender Gap in Pakistan.”

¹⁰² “Women’s Financial Inclusion and the Law,” World Bank, accessed February 11, 2019, <http://pubdocs.worldbank.org/en/610311522241094348/Financial-Inclusion.pdf>.

¹⁰³ Naeha Rashid and Stefan Staschen, “Unlocking Financial Inclusion Using Biometrically Verified SIMs,” *CGAP* (blog), accessed March 29, 2019, <https://www.cgap.org/blog/unlocking-financial-inclusion-using-biometrically-verified-sims>.

¹⁰⁴ Naeha Rashid and Stefan Staschen, “Applying the RIA Lite Methodology: An Example from Pakistan,” Working Paper (CGAP), accessed March 28, 2019, <https://www.cgap.org/sites/default/files/Working-Paper-RIA-Lite-Methodology.pdf>.

¹⁰⁵ “FII Wave 5 Pakistan.”

¹⁰⁶ “ANA Pakistan 2017.”

¹⁰⁷ “FII Wave 5 Pakistan.”

¹⁰⁸ Rashid, Expert Interview for PAE | “Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan.”



¹⁰⁹ Rashid.

¹¹⁰ "Gender & Women's Financial Inclusion."

¹¹¹ Rashid, Expert Interview for PAE | "Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan."

¹¹² "SBP Expands the Scope of National Financial Literacy Program to All over Pakistan," *Daily Times* (blog), January 15, 2019, <https://daillytimes.com.pk/344337/sbp-expands-the-scope-of-national-financial-literacy-program-to-all-over-pakistan/>.

¹¹³ Imran Chowdhury and Filipe Santos, "Scaling Social Innovations: The Case of Gram Vikas," n.d., 35.



BIBLIOGRAPHY

- “A Buck Short.” Accessed January 28, 2019.
https://www.omidyar.com/sites/default/files/file_archive/Pdfs/16-07-01_A_Buck_Short_Report_Digital_FINAL.pdf.
- “ANA Pakistan 2017.” Survey Report. The Helix Institute, 2018. <http://www.helix-institute.com/sites/default/files/Publications/Pakistan%20Report.pdf>.
- Bin-Humam, Yasmin. “Women’s Financial Empowerment Is the Tide That Can Lift All Boats.” *CGAP* (blog). Accessed February 28, 2019. <https://www.cgap.org/blog/womens-financial-empowerment-tide-can-lift-all-boats>.
- “Branchless Banking Newsletter Jul-Sep 2018.” Branchless Banking Newsletter. State Bank of Pakistan. Accessed March 28, 2019. <http://www.sbp.org.pk/publications/acd/2018/BranchlessBanking-Jul-Sep-2018.pdf>.
- “Challenges.” HACK FOR INCLUSION. Accessed March 3, 2019.
<http://www.mitbreakingthemold.com/challenges-2>.
- “Capitalizing on the Potential Benefits of Open Banking | McKinsey.” Accessed March 29, 2019.
<https://www.mckinsey.com/industries/financial-services/our-insights/data-sharing-and-open-banking>.
- Chowdhury, Imran, and Filipe Santos. “Scaling Social Innovations: The Case of Gram Vikas,” n.d., 35.
- Chughtai, Alia. “Pakistani Women Hold ‘aurat March’ for Equality, Gender Justice | Pakistan News | Al Jazeera.” *Al Jazeera*. Accessed March 30, 2019.
<https://www.aljazeera.com/news/2019/03/pakistani-women-hold-aurat-march-equality-gender-justice-190308115740534.html>.
- Cook, Will. “How Do Mobile Money Fee Structures Impact the Poor?” *CGAP* (blog). Accessed March 26, 2019. <https://www.cgap.org/blog/how-do-mobile-money-fee-structures-impact-poor>.
- “Corporate Sector to Empower Women through ‘Guddi Baji’ Programme.” Accessed March 3, 2019.
<https://www.thenews.com.pk/print/256881-corporate-sector-to-empower-women-through-guddi-baji-programme>.
- “Do Mobile Money Fee Structures Support the Poor? | BFA.” Accessed March 26, 2019.
<http://bfaglobal.com/projects/do-mobile-money-fee-structures-support-the-poor/>.
- El-Zoghbi, Mayada. “Measuring Women’s Financial Inclusion: The 2017 Findex Story.” *CGAP* (blog). Accessed December 19, 2018. <https://www.cgap.org/blog/measuring-womens-financial-inclusion-2017-findex-story>.
- “Expanding Opportunities in Our Retail Value Chain.” Unilever global company website. Accessed March 3, 2019. <https://www.unilever.com/sustainable-living/enhancing-livelihoods/opportunities-for-women/expanding-opportunities-in-our-retail-value-chain/>.
- “FII Wave 5 Pakistan.” FII Intermedia. Accessed February 13, 2019.
http://finclusion.org/uploads/file/pakistan-wave-5-report_final.pdf.



- Flaherty, Meghan. "The Power of Partnership: A Corporate Collaboration to Advance Women's Financial Inclusion in Pakistan." *Women's World Banking* (blog), October 1, 2018. <https://www.womensworldbanking.org/news/blog/the-power-of-partnership-a-corporate-collaboration-to-advance-womens-financial-inclusion-in-pakistan/>.
- "Gender & Women's Financial Inclusion." Alliance for Financial Inclusion | Bringing smart policies to life. Accessed March 2, 2019. <https://www.afi-global.org/gender-women-financial-inclusion>.
- "Home | Global Findex." Accessed February 9, 2019. <https://globalfindex.worldbank.org/>.
- "Helen Clark: Speech at Side Event 'Governments Leading the Way: Digitizing Payments and Advancing Inclusive Finance to Achieve the Sustainable Development Goals.'" UNDP. Accessed February 28, 2019. <https://www.undp.org/content/undp/en/home/presscenter/speeches/2015/09/26/helen-clark-speech-at-side-event-governments-leading-the-way-digitizing-payments-and-advancing-inclusive-finance-to-achieve-the-sustainable-development-goals-.html>.
- IMFBlog. "Economic Gains from Gender Inclusion: Even Greater than You Thought." *IMF Blog* (blog). Accessed February 28, 2019. <https://blogs.imf.org/2018/11/28/economic-gains-from-gender-inclusion-even-greater-than-you-thought/>.
- Khan, Imran. "ROSCAs and Mobile Wallet Adoption in Pakistan." *Intermedia | Financial Inclusion Insights* (blog). Accessed March 30, 2019. <http://finclusion.org/blog/roscas-and-mobile-wallet-adoption-in-pakistan.html>.
- "Inclusive Finance for All: Powering Inclusive Growth for Digital Economies." McKinsey. Accessed March 18, 2019. <https://www.mckinsey.com/~media/mckinsey/featured%20insights/Employment%20and%20Growth/How%20digital%20finance%20could%20boost%20growth%20in%20emerging%20economies/MG-Digital-Finance-For-All-Full-report-September-2016.ashx>.
- Lal, Rajiv, and Ishan Sachdev. "Mobile Money Services - Design and Development for Financial Inclusion." Harvard Business School - Working Paper. Accessed March 27, 2019. https://www.hbs.edu/faculty/Publication%20Files/15-083_e7db671b-12b2-47e7-9692-31808ee92bf1.pdf.
- "Mapping the Gender Gap in Pakistan." FII Intermedia. Accessed February 13, 2019. <http://finclusion.org/uploads/file/reports/InterMedia%20FII%20Gender%20Report.pdf>.
- "Mobile Financial Services: Basic Terminology." Guideline Note. Alliance for Financial Inclusion. Accessed March 28, 2019. <https://www.afi-global.org/sites/default/files/publications/MFSWG%20Guideline%20Note%20on%20Terminology.pdf>.
- "Mobile Money API Manager for JazzCash." Arcana Info (blog). Accessed March 3, 2019. <https://www.arcanainfo.com/mobile-money-api-manager-jazzcash/>.
- "Mobile Money: Getting to Scale in Emerging Markets | McKinsey." Accessed March 27, 2019. <https://www.mckinsey.com/industries/social-sector/our-insights/mobile-money-getting-to-scale-in-emerging-markets>.
- "Mobile Money in Emerging Markets: The Business Case for Financial Inclusion." McKinsey & Company. Accessed March 31, 2019. <https://www.mckinsey.com/~media/mckinsey/industries/financial%20services/our%20insights/mobile%20money%20in%20emerging%20markets%20the%20business%20case%20for%20financial%20inclusion/mobile-money-in-emerging-markets.ashx>.



- “NFIS 2018.” Government of Pakistan. Accessed March 18, 2019. <http://finance.gov.pk/NFIS.pdf>.
- Niehaus, Charles. “An Overview of Digital Finance Interoperability in Pakistan.” Field Visit Insights. CGAP, 2016.
- “Pakistan,” November 27, 2016. <http://uis.unesco.org/country/PK>.
- “Pakistan’s Literacy Rate Stands at 58pc.” Accessed March 24, 2019. <https://www.thenews.com.pk/print/309542-pakistan-s-literacy-rate-stands-at-58pc>.
- “Payment Systems Statistics.” Summary Statistics. State Bank of Pakistan, 2018. <http://www.sbp.org.pk/psd/pdf/2018/PS-Q1FY18.pdf>.
- “Policy Brief on Female Labor Force Participation in Pakistan.” ADB Briefs. Asian Development Bank, October 2016. <https://www.adb.org/sites/default/files/publication/209661/female-labor-force-participation-pakistan.pdf>.
- Rashid, Naeha. Expert Interview for PAE | “Doing Digital Right: Addressing the Growing Financial Inclusion Gender Gap in Pakistan.” Phone, 2019.
- Rashid, Naeha, and Stefan Staschen. “Applying the RIA Lite Methodology: An Example from Pakistan.” Working Paper. CGAP. Accessed March 28, 2019. <https://www.cgap.org/sites/default/files/Working-Paper-RIA-Lite-Methodology.pdf>.
- . “Unlocking Financial Inclusion Using Biometrically Verified SIMs.” *CGAP* (blog). Accessed March 29, 2019. <https://www.cgap.org/blog/unlocking-financial-inclusion-using-biometrically-verified-sims>.
- Rasmussen, Stephen. “Pakistan Enigma: Why Is Financial Inclusion Happening So Slowly?” *CGAP* (blog). Accessed March 3, 2019. <https://www.cgap.org/blog/pakistan-enigma-why-financial-inclusion-happening-so-slowly>.
- Ripley, Kathryn. “How M-PESA Innovates New Business Models for Its Base of the Pyramid Customers.” *Business Fights Poverty*, January 10, 2014. <https://businessfightspoverty.org/articles/how-m-pesa-innovates-new-business-models-for-its-base-of-the-pyramid-customers/>.
- “State Bank of Pakistan.” Accessed March 28, 2019. <http://www.sbp.org.pk/publications/acd/branchless.htm>.
- “SBP Expands the Scope of National Financial Literacy Program to All over Pakistan.” *Daily Times* (blog), January 15, 2019. <https://dailytimes.com.pk/344337/sbp-expands-the-scope-of-national-financial-literacy-program-to-all-over-pakistan/>.
- Stuart, Guy. “G2P and Gender: When Will Pakistani Women Be Able to Withdraw Their Own Money?” *Center for Financial Inclusion* (blog). Accessed February 26, 2019. <https://www.centerforfinancialinclusion.org/g2p-and-gender-when-will-pakistani-women-be-able-to-withdraw-their-own-money>.
- . “Government-to-Person Transfers: On Ramp to Financial Inclusion?” *Accion*. Accessed March 24, 2019. https://content.centerforfinancialinclusion.org/wp-content/uploads/sites/2/2018/10/Government_to_Person_Transfers.pdf.
- “Telenor Opens Mobile Money APIs for Third Party Developers | Center for Financial Inclusion.” Accessed March 3, 2019. <https://www.centerforfinancialinclusion.org/telenor-opens-mobile-money-apis-for-third-party-developers>.



- “THA_Pakistan_Women Product Concepts.” The Human Account. Accessed March 24, 2019. https://drive.google.com/file/d/1f-ZzPvcWjKDZxROBq-oW82D55F381U1Z/view?usp=drive_open&usp=embed_facebook.
- “The Human Account | Segment Index.” The Human Account. Accessed March 4, 2019. <https://www.thehumanaccount.com/copy-of-segment-index-1>.
- “The Power of Parity: Advancing Women’s Equality in Asia Pacific.” McKinsey & Company, 2018. <https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Gender%20Equality/The%20power%20of%20parity%20Advancing%20womens%20equality%20in%20Asia%20Pacific/MGI-The-power-of-parity-Advancing-womens-equality-in-Asia-pacific-Executive-summary.ashx>.
- “To Fee or Not to Fee? Designing Inclusive Savings Products for Women.” Innovations for Poverty Action, April 13, 2018. <https://www.poverty-action.org/blog/fee-or-not-fee-designing-inclusive-savings-products-women>.
- “Wage Growth and Gender Pay Gap in Pakistan.” The Express Tribune, December 22, 2018. <https://tribune.com.pk/story/1872135/6-wage-growth-gender-pay-gap-pakistan/>.
- “Why the Gender Dummy Doesn’t Speak: Explaining the Gender Gap in Financial Inclusion | Center for Financial Inclusion.” Accessed March 24, 2019. <https://www.centerforfinancialinclusion.org/why-the-gender-dummy-doesnt-speak-explaining-the-gender-gap-in-financial-inclusion/>.
- “Women, Business, and the Law 2019.” World Bank. Accessed March 24, 2019. <https://openknowledge.worldbank.org/bitstream/handle/10986/31327/WBL2019.pdf>.
- “Women’s Financial Inclusion and the Law.” World Bank. Accessed February 11, 2019. <http://pubdocs.worldbank.org/en/610311522241094348/Financial-Inclusion.pdf>.