



WOMEN LED DIGITAL FINANCIAL INCLUSION AND ENTREPRENEURSHIP

LEARNING NOTE



Authors

Kanika Joshi, Research Manager, LEAD at Krea University *Shruti Sheopurkar,* Research Associate, LEAD at Krea University

About the study

This formative study was undertaken by LEAD at Krea University and supported by Nearby Technologies Pvt. Ltd. (PayNearby)¹. As part of LEAD's strategic vision to promote women entrepreneurship through an evidence-based approach, the formative study explored women's participation in the economy, and how digital and financial inclusion can empower women by providing them a source of livelihood and supplemental income streams. The study aimed to look at the landscape for women-led digital and financial inclusion from the lens of entrepreneurship and capture granular perspectives of women groups. Insights from the study will be used to develop targeted interventions that can be tested in collaboration with industry partners.

About LEAD at Krea University

LEAD (formerly IFMR LEAD) is an action-oriented research centre of IFMR Society (a not-for-profit society registered under the Societies Act). It leverages the power of research, innovation and co-creation to solve complex and pressing challenges in development. LEAD has strategic oversight and brand support from Krea University (sponsored by IFMR Society) to enable synergies between academia and the research centre.

LEAD has extensive institutional experience in cultivating strategic research partnerships, creating knowledge platforms, and managing complex programs in its areas of expertise - financial inclusion, MSME & entrepreneurship development, governance, and health systems. Since 2005, the centre has been at the forefront of development research and programming in India, and has managed a portfolio of over 200 projects in collaboration with over 300 academics, governments, NGOs and private sector organizations from across the globe.

¹ PayNearby is a DIPP Certified Fintech Company registered under The Startup India program of Government of India, set up in April 2016 by a team of professionals with experience in Digital Banking and Payments industry PayNearby operates a B2B2C model, and seeks to work with interested women groups and help them get their business online, reach a wider audience and expand their earnings by offering granular financial services.

Acknowledgements

The authors would like to thank and acknowledge the support of Bhavin Khona, Abhijith Shetty, Manish Bihari Sharan, Garima, and Madhura Auddy. Special thanks to Diksha Singh for her editorial reviews and feedback, John Arun and Anand Kumar Bajaj for their consistent support, leadership and encouragement, and to Allan Macdonald for his contribution in the design of the report. The authors would like to thank the PayNearby team for sharing insights from market surveys conducted by them in the past, and for agreeing for a potential collaboration for the proposed FinTech interventions as part of their Digital Naari Program.

Contents

1.	Introduction		6
2.	Research and learning questions		
3.	Insights 3.1 3.2	Profiles of women based on the formative study Motivators and drivers of mobile phone utilization	8 9 11
4.	Recommendations		13
	Appendix: Approach		
	References		



1

Introduction

In the past few years, India has witnessed an explosive growth in mobile phone penetration coupled with increasing access to internet and internet-based services. Mobile phone ownership, and smartphone ownership in particular, enables individuals to access a wide range of products and services that can add value to their lives.

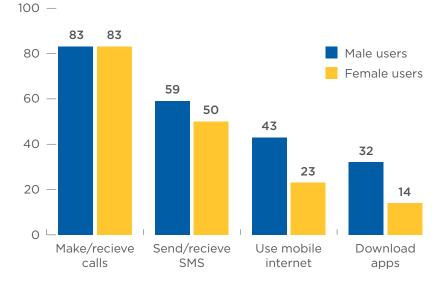
Mobile phones can open up new avenues for people and advance socio-economic well-being, by facilitating better connectivity, access to agricultural and health services and job markets, and linkages with formal financial services.

One of the key areas in which mobile internet has shown promise is women's social and economic empowerment. Studies on mobile phone usage in low and middle income countries have found that access to mobiles help women stay in touch with friends and family, and mitigate women's fear of isolation, loneliness and boredom by helping them cope better with low mobility due to social and cultural norms and living away from their family members and friends (Frissen 1995, Rakow 1998). This effect can be larger in communities where women's status is lower

and they face more significant barriers to communication. Features like portability, text messaging, data downloading, and streaming media may also give them access to life enhancing services such as mobile money, educational material, and employment opportunities. Mobile applications like Mobile Financial Services (MFS) and e-commerce stores can also help optimize time use and reduce costs associated with domestic responsibilities.

While there is growing consensus about the gains from ownership and use of mobile phones and internet, this technology and the opportunities it unlocks have not percolated to all segments of the population. Phone ownership and levels of digital literacy are higher among men, urban residents, and those living above the poverty line. Data also suggests that while the levels of basic mobile activities (such as making and receiving calls) are similar among men and women, women's engagement in internet-based activities (such as downloading and streaming media and undertaking money transfers) is significantly lower than men (FII Tracker, Wave 5, 2018).

Percentage of male and female mobile owners by phone activity (%)



Source: GSMA Intelligence Consumer Survey

This gender gap in mobile ownership and utilization has been widely studied and the existing literature identifies the following barriers to universal mobile connectivity and digital inclusion of women.

- 1. Affordability: Despite the availability of low-cost devices in the market, the cost of a handset is a significant expense for households at the base of the pyramid. A key reason behind low mobile ownership among women is that they typically have less financial autonomy than men. Hence, the cost of such technology is an even more significant barrier to owning a mobile, especially internet enabled mobile, for women.
- 2. Literacy, numeracy and digital skills:
 The digitally unconnected population of women is disproportionately illiterate or has low levels of literacy. Women are often less confident in independently acquiring the skills required to use a mobile phone, and are discouraged by the consequences of making mistakes.
- 3. **Safety and security:** Women are sensitive to negative news about mobile applications and experiences with them.

The fear of losing their hard earned money, a lack of confidence in setting up new technology, and anecdotes and experiences of fraudulent activity that led to monetary and non-monetary loss to other users lead women to question digital applications. Trust and reliability are a priority for them.

On account of these barriers and factors such as conservative social norms and concerns about fradulent activities a large proportion of women, especially those from low-income segments, in urban and rural areas alike, are deterred from owning and using mobile phones and mobile internet. At the same time, there are instances of positive deviance, with women overcoming these barriers at various levels.

The impediments faced in accessing and using a mobile phone and mobile internet have been widely studied and improve our understanding of the context of women users and non-users. This study aims to look more closely at the factors that have motivated women to overcome these barriers, and become digitally empowered agents of change.



Research and learning questions

This study looks closely at women from low-income households, their ownership of and interaction with mobile phones, the various use cases they derive from the device, and the avenues it opens up for them. Specifically, this study seeks to answer the following research question:

What are the drivers and motivators of mobile phone ownership and mobile internet utilization among women from low-income households?

3

Insights

3.1

Profiles of women based on the formative study

Women in rural, urban and peri-urban settings alike, lead very busy lives. A common thread across responses from all participants is the pattern of their daily routine - days begin early with household chores. Among the constant juggle between domestic responsibilities and livelihood activities, they typically have limited time to themselves, usually in the afternoon. However, participants vary widely, with respect to other aspects of their lives. Our exploratory research suggests that women in this demographic can broadly be segmented based on their different levels of preparedness, risk perceptions, and exposure to mobile phone. Based on these insights, we have created three user profiles that can be used to inform strategies for strengthening mobile phone uptake and use among women from low-income segments.

PROFILE 1: Low preparedness

Barriers to using mobile phones and applications for these women are two-fold. First, owning and using a smartphone

is a challenge for these, on account of high entry costs, lack of literacy and numeracy, and no previous exposure to similar technology. Second, they are unable to fully understand how mobile-based services work, and hence, do not see value in such services.

PROFILE 2: High averseness

These women perceive digital applications to be of no use to them and also do not trust such technology . Their opinions are largely based on anecdotes of fraudulent activity or bad experiences as told by people they know. They have a strong affinity for the familiar, which is the status quo.

PROFILE 3: Potential adopters and promoters

These women are enterprising, and are excited to learn new use cases of the mobile phone if they see value in it. They are familiar with the applications of mobile internet. Some of these women have used their phones to make online purchases, search for job notices, access educational material and undertake banking transactions.

Profiles of women users and non-users of mobile internet applications

Metrics	Low preparedness to adopt smartphone technology and/or MFS	High averseness towards smartphone technology and/or MFS	Potential adopters and promoters of smartphone technology and/or MFS
EDUCATION	Not all women fitting this profile are literate, some reported lack of literacy and numeracy. Those who are literate, have low levels of formal education.	Women fitting this are profile are literate and have received some formal education. Most of these women having attended school up to the 5th grade, with some having passed 9th grade.	Women fitting this profile are more educated compared to their peers. They typically have finished higher secondary (12th grade) or technical/college level education. They also display basic bilingual proficiency. Some women can read English in addition to their regional language.
DOMESTIC AND CAREGIVING RESPONSIBILITY	Report being 'burdened' with the bulk of domestic responsibilities.	Have to take onus of household finances in addition to domestic work, taking care of children and elderly, and helping with small store/farm if the household has one.	Domestic responsibilities are shared among household members. Women fitting this profile report high level of support from their household members (parents, in-laws and partners)
COMMUNITY	Are not active members of SHGs or other women's groups.	Are active members of SHGs and savings groups.	Connected to peers through SHGs, savings groups, and other women's groups in which they participate regularly, often in leadership roles.
CURRENT WORK AND LIVELIHOOD ACTIVITIES	Those who are employed face high amount of employment and wage uncertainty and work largely as casual labour.	Those who are employed are working as casual labour. Women whose households have small businesses such as kirana stores often help with running these stores.	Seasonal, demand driven production of eatables, clothes, bags, etc. produced depending on the order. For example, some women reported that they were received orders for making rakhis, snacks for Diwali season, etc. Some women fitting this profile have advanced degrees (Masters and above) and work from home as tuition teachers.

...contd. to next page

Metrics	Low preparedness to adopt smartphone technology and/or MFS	High averseness towards smartphone technology and/or MFS	Potential adopters and promoters of smartphone technology and/or MFS
WORK PREFERENCES	Are actively looking for casual labour work to reduce gaps in employment and wage generation. Are not enthusiastic about investing time in skills training.	Are actively looking for alternative and/ or additional work to supplement family income. Are positive, but reticently so, about investing time in further skills training and professional development.	Are actively looking for alternatives to labour intensive jobs that allow them the flexibility of time and decision making. Show creative thinking and entrepreneurial spirit. Are enthusiastic about undertaking skills training and willing to invest time in professional development
SMARTPHONE OWNERSHIP	At least one member of the participant's household owns a smartphone. Women who fit this profile, however, do not have a smart phone, or even a feature phone, for personal use.	At least one member of the participant's household owns a smartphone. Some own a feature phone, used for making and receiving calls.	Most women fitting this profile have used a smartphone that belongs to them or a household member. Not all women own a personal device, but have easy access to one.
DIGITAL LITERACY	Low digital literacy. They have never/seldom independently interacted with a smart phone. Rely on household members to make/ receive phone calls.	Low digital literacy coupled with lack of perceived relevance of a smart phone. Are wary of uploading payment information and personal details on mobile devices.	Are connected and active on messaging apps like WhatsApp. Some women are also users of social networking apps like Facebook. Comparatively higher level of digital literacy. Women fitting this profile understand what an 'app' is. Some women in peri-urban and urban areas report making purchases online using popular E-Commerce apps.
PERCEPTION ABOUT SMARTPHONES AND MFS	Feel that smartphones and MFS are not for 'someone like them'. Do not see value in learning how to use a smartphone, given the high cost to income ratio.	Feel that smartphones and MFS can be addictive and/or a risk to the individual's safety because of exposure to scams and fraudulent schemes.	See value in smartphones and MFS. Are curious about the opportunities that can be unlocked using this device and technology.

3.2

Motivators and drivers of mobile phone utilization

Value proposition and perception of relevance

The perception that mobile would not be relevant or helpful in one's life can prevent non-owners from seeing the value for money in buying one, even if they can afford it. The following emerged as some features and services of the mobile phone that can motivate non-users to invest in a device.

Mobile Financial Services (MFS)

Women use MFS when they need to send or receive money. However, there is a host of use cases available on these platforms can add value to women's potentially improve their quality of life by enabling access to other services such as insurance, booking tickets, mobile recharge, bill payments and EMI payments. Women who need to conduct transactions more frequently but do not have a bank branch close to them stand to benefit largely from these applications.

Additionally, programs such as *Bank Sakhi*, women can earn a commission based income by conducting transactions through their mobile phones for individuals in their community.

Bank Sakhis can play a vital role in financial inclusion of poor, which is a key thrust area under the National Rural Livelihoods Mission. Bank Sakhis are women community banking facilitators who facilitate last-mile access to services such as bank account opening, SHGbank linkage to SHGs, credit counseling, among others.

Employment opportunities

Owning a mobile phone or having access to a shared device in the household can improve information flow and enable women to access job markets. An ILO study found that a significant proportion

of women who are engaged in domestic duties would accept work if the work was made available at or near their household premises. 34 percent of women in rural areas and nearly 28 percent of women in urban areas who are solely engaged in domestic work reported that they want to work. Among these women who were willing to accept work at their household premises, about 95 per cent in both rural and urban areas preferred work on regular basis. About 74 percent in rural areas and about 70 percent in urban areas preferred 'part-time' work on a regular basis. All these women stand to benefit from information about work opportunities, especially the ones that allow them the flexibility to work remotely, or part time.

Social networking, connectivity and media

Women in India, especially those who have migrated to a new village, district or state due to marriage, face significant barriers in communicating with their kin. Hence they have fewer opportunities to voice their concerns, viewpoints, ideas or plans and to form and strengthen networks. Social networking applications can enable women to participate in forums where they can connect with peers, discuss challenges, as well as learn about solutions.

2. Success stories and positive experiences of peers

Persons of trust have a large role to play in accelerating women's use of mobile applications. Women tend to trust the experiences of their female peers, especially those from their own community or village. As women support one another and learn from their peers, they become more confident in their own ability to successfully use mobile applications, especially when they see that others have had positive experiences with this technology. It makes the

internet less intimidating, more relevant and easier to learn, and creates a feeling that usage is inevitable.

3. Support from family and household members

Traditional social norms regarding women's mobility and their primary role as family caretakers limit women's participation in paid economic work. There are many official and public spaces that are not considered appropriate for women to frequent, or where they feel discomfort. There are distances that women are not expected to travel alone, and most women need permission and cooperation from family members to

undertake a job or start a business, while juggling their domestic responsibilities. Family and household members are important parts of women's social networks. Securing the support of family members has been critical to ensuring that women's needs are given equal importance. For most of the participants in our study, acceptance and support of their engagement in the ICT sector by family has facilitated women's use of mobile phones for entrepreneurship and personal development. In addition, several women cited that their status within the family has improved as a result of their more prominent role as incomeearners.

From reluctance to acceptance

The story of Kusum - a Bank Sakhi from Dhamtari, Chhattisgarh

Till a few months ago, Kusum found herself doing multiple jobs such as manual labour and tailoring to support her family of five, while juggling household chores and looking after her children. Often, she would find herself on construction projects away from home in faraway villages- conflicted about giving up work to spend more time with family.

Today, as a Bank Sakhi, Kusum supplements her income from tailoring with commission earned from facilitating mobile-based financial transactions for people in and around her village. Today, she confidently navigates the MFS application and conducts as many as 30 transactions daily- whether it is Aadhar-enabled banking, money transfer, recharges, bill payments, insurance and more. "My husband, he would always try to teach me how to use his touch screen phone. I had no interest in learning how to use it", she says. "At times, we would have fights about it- "I will never be able to learn how to use this thing" I would think. But he did not give up on me. Every evening after dinner, he would sit beside me and teach me - how to send WhatsApp message, how to change the ringtone, how to download an app. And today, with his support, I have an additional income."

The cost of a smartphone was a significant barrier for Kusum and her family. "My husband gave me his touch screen phone so that I could work. He uses my old (feature) phone now, and I use his touch phone." Kusum said. Initially reluctant to learn and use a smartphone, Kusum crossed that bridge with help from her husband. Support from family members, especially male members who are primary decision makers in some family settings, can help women feel confident in their decision to take up mobile phones and use it to add value to their lives.

4

Recommendations

Using a qualitative approach, this report has attempted to provide a deeper insight into the access and use patterns of mobile phones by women from low-income segments, as well as their perceptions regarding the relevance and utility of mobile-based technologies in their lives. Increasing mobile phone access and use can positively impact economies and provide a valuable tool through which both public and private services can be delivered (e.g., G2P payments, mHealth services, and mobile money). For women,

access to mobile phones and services offers the benefits of feeling connected, autonomous and safer, the ability to access critical information and services, and the potential to access increased employment and education opportunities. Hence, the following steps can be taken to motivate more women to become digitally empowered, by not only addressing the barriers they face, but also capitalizing on motivators of adoption of these technologies.

Recommendations to address barriers to mobile phone access and use

Barrier	Intervention
Affordability	Promote mobile affordability through handset financing schemes. Partner with local NGO networks and local grassroots female-led networks, such as women's savings groups to plan and implement these schemes.
	Review sector-specific taxes that may lessen the cost barrier to mobile ownership and use, which has a disproportionate impact on women.
Literacy, numeracy and digital skills	• Ensure mobile apps and operating systems are user friendly for those who are less confident and literate. Clear user menus with fewer steps, simplified content, simple terminology, local language, using icons/symbols/ pictures/videos in addition to (or instead of) text.
	• Improve customers' digital skills, including providing assistance to new users who may need additional support. e.g. Train women from within the community to become mobile agents and deliver digital skills training and support to customers.
Safety and security	Develop Grievance Resolution Mechanisms (GRMs) as a built in application feature or a helpline based support system for grievance redressal, reporting unusual activity, etc.
Confidence in digital skills	Partner with organizations that have expertise in technical literacy training to teach potential users the various applications of mobile internet. Groundbreaking work is being done in this area by programs like Internet Saathi and Bank Sakhi.

Proposed interventions that leverage motivators and drivers of mobile phone adoption

Motivators	Intervention		
Value proposition and perception of relevance	• Incorporate the content, features and services that have multiple use cases for women from low income households. Mobile Financial Services (MFS), video calling and social media, and access to educational material and employment information are use cases that have personal appeal and justifiable, rational benefits.		
Support from family and household members	 Identify women with supportive family and household members and leverage their support to make women confident about mobile phone adoption and use. 		
Success stories and positive experiences of peers	 Identify trusted members of communities such as teachers, pancha- yat members, SHG leaders, etc. who can inspire confidence among women. 		
	Communicate the relevance of mobile ownership and mobile internet use for women's day-to-day lives. Showcase relatable use cases and share experiences of experienced and new users from their communities		

The above recommendations, while not exhaustive, highlight important levers to promote mobile phone access and use among underserved segments of women.



Appendix: Approach

This is a dipstick qualitative study. Given the nature of the research questions and the importance of understanding women's experiences in depth, we used qualitative research methods for this study- mainly focus group discussions and in-depth interviews. For the focus group discussions, we purposively sample three groups of six to eight women each. Women in Group one and two were from low-income households in rural and peri-urban Raipur, Chhattisgarh respectively. Women in Group three were from a low-income urban neighborhood of Mumbai, Maharashtra. For the in-depth interviews, we purposively sampled three women from low-income households near Dhamtari, Chhattisgarh. These women were selected for the study as recent owners of a smartphone and have adopted it in their personal lives, as well as a means of securing livelihood through the BC Sakhi model.

We aimed to seek input from women who perform a wide range of economic activities. Participants included women currently running their own small businesses on Gruh Udyog basis, are SHG members, are self-employed in services like home tutions, Bank Sakhis, beauty and grooming, and also

non-working housewives to understand the fundamentals of the nature of their work engagements.

Following are some of the key questions that were discussed with participants:

- 1. What is your routine from dawn to dusk on a typical day?
- 2. How much spare time/leisure time do you get for yourself on a typical day, after accounting for time spent in domestic work and employment activity?
- 3. How do you feel about smartphones?
 Please describe your current interaction with these devices.
- 4. What are the various functions and tasks you perform using your mobile?
- 5. What are your thoughts on skills training that could support your search for work? What skills would you like to be trained in?

By analyzing the variations and patterns in responses from participants, we create user profiles, based on their preparedness for and attitude towards adopting mobile phones and using them for personal and income-generating activities.

References

Anderson, S., & Eswaran, M. (2009). What determines female autonomy? ScienceDirect, 179-191.

BCG. (2018). Digital Lending. Mumbai: Boston Consultancy Group.

Cheston, S., & Kuhn, L. (2002). Empowering Women through MicroFinance. 4-47.

Economic Survey. (2018). Government of India. Retrieved from https://www.indiabudget.gov.in/economicsurvey/.

GSMA (2019). The Mobile Gender Gap Report 2019. Retrieved from: https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/GSMA-The-Mobile-Gender-Gap-Report-2019.pdf

Hafkin, N., & Taggart, N. (2001). Gender, Information Technology, and Developing Countries. Academy for Educational Development, 2-101.

India Wave 5 Report, Fifth Annual FII Tracker Survey, June 2018

ILO. (2014). ILO Asia- Pacific Working Paper Series. India: International Labor Organization.

Mohapatra, K. (2012). Women Workers in Informal Sector in India. International Journal of Humanities and Social Science, 197-207.

ORF. (2018). Cashless India: Getting incentives right. New Delhi: Observer Research Foundation .

Rustagi, P. (2010). Changing Patterns of Labour Force Participation and Employment of Women in India. The Indian Journal of Labor Economics.

Slabbert, A. D., Ukpere, C., & Ukpere, W. I. (2014). Rising Trend in Social Media Usage by Women Entrepreneurs. Mediterranian Journal of Social Sciences.

UNCTAD. (2014). A survey of Women's Entrepreneurship and Innovation. Geneva: United Nations Conference of Trade and Development .

WEF. (2015). World Economic Forum. Retrieved from https://www.weforum.org/events/world-economic-forum-annual-meeting-2015.

Frissen,V. (1995). Chapter 3 Gender is calling: Some reflections on the past, present and future uses of the telephone. In Grint, K. & R. Gill (Eds.) The gender-technology relations

Rakow, L.F. (1992). Gender on the line: Women, the telephone, and community life. Urbana, IL: University of Illinois Press.



