What does it take to nudge low- and moderate-income (LMI) population segments to adopt DFS?

A dipstick study on the adoption journeys of first-time users of Digital Financial Services (DFS)

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MSC
MicroSave Consulting

About the study

Digital Financial Services (DFS) offer a wide variety of benefits, especially for the low- and middle-income (LMI) segment. DFS specifically helps women use financial services, given the unique challenges that they face. These include their restricted mobility and socio-cultural constraints that limit their usage of brick-and-mortar banks. However, the adoption of DFS among the LMI segment remains limited.

The objective of this study was to understand the experience of users who used DFS for the very first time in the past six months and the challenges that they faced. We also offer recommendations for financial service providers (FSPs) and policymakers to accelerate the sustainable adoption of DFS by the LMI segment.

We interacted with more than 72 DFS users from the LMI segment across 27 aspirational districts in India between July and August, 2020 and identified 15 first-time users. We spoke with these 15 users in depth over multiple sessions through telephonic and video calls.

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The need for adoption of DFS by the LMI segments

The subsequent slides explain the larger need to encourage the adoption of DFS and our key approach for the study

The adoption of DFS helps address inequalities in gender and promotes economic development for the country as a whole—yet its adoption has been extremely limited

BMGF's Digitize, Direct and Design (D3 approach) presents clear principles that if adopted by programs could support women's empowerment. With development programs aligning to D3, there is an increasing focus on directing government payments and cash transfers in women's accounts. It is critical to ensure that the ecosystem allows women to access this money and use it with full autonomy and confidence. Their ability to do so is essential for their empowerment process.

MSC'S Financial Services Space has helped us understand the key paradigms that influence a women's decision to use formal financial services. Please see slide 5 for details on the concept of FSS.

Despite enrolling for bank accounts, the use of conventional financial services through brick-and-mortar structures is often restricted for women owing to existing socioeconomic norms and limited mobility. DFS has proved to be a solution that could overcome these challenges.

The use of DFS instead of cash offers increasing merit for financial transactions.

DFS supports women's agency		DFS also promotes overall economic development	
Reduction of time poverty for women	Increased access to finances and control over it	**10%-12%** Increase in GDP in developing countries owing to the use of digital finance[1]	**USD 7 billion** Savings by GoI by using DFS for cash transfers, owing to reduced leakages[2]

However, the adoption of DFS is limited across the LMI in India. Despite access to infrastructure—women find it more challenging to adopt DFS

19% Registered bank users reported using ATMs to withdraw cash[3]	**3%** Registered bank users reported using mobile phones for payment[3]	**21% points** Gender gap in reading and sending SMSs in India[3]	**8 to 19% points** Gender gap in using digital payments and transfers[3]

[1.] McKinsey, How digital finance could boost growth in emerging economies
[2.] World Bank, DFS 2020
[3.] Financial inclusion insights, 2018

MSC's Financial Services Space model helps understand women's usage of formal financial services

The Financial Services Space is a three-dimensional model that explains the financial behavior adopted by different personas of women, and behavioral "triggers" that could lead to increased financial inclusion.

The woman should have a regular inflow of cash (both frequency and volume) in her account.

Example:
- An NGO worker gets her monthly salary in her bank account
- A son sends money to his mother's account regularly

Volume/frequency

The woman can be motivated or influenced by somebody else to start using or continue using formal financial services.

Example:
A man motivates his wife to open a bank account of her own, so that he can send remittance money from time to time.

Influence/motivation

The woman should have a "felt convenience" to visit the financial outlet.
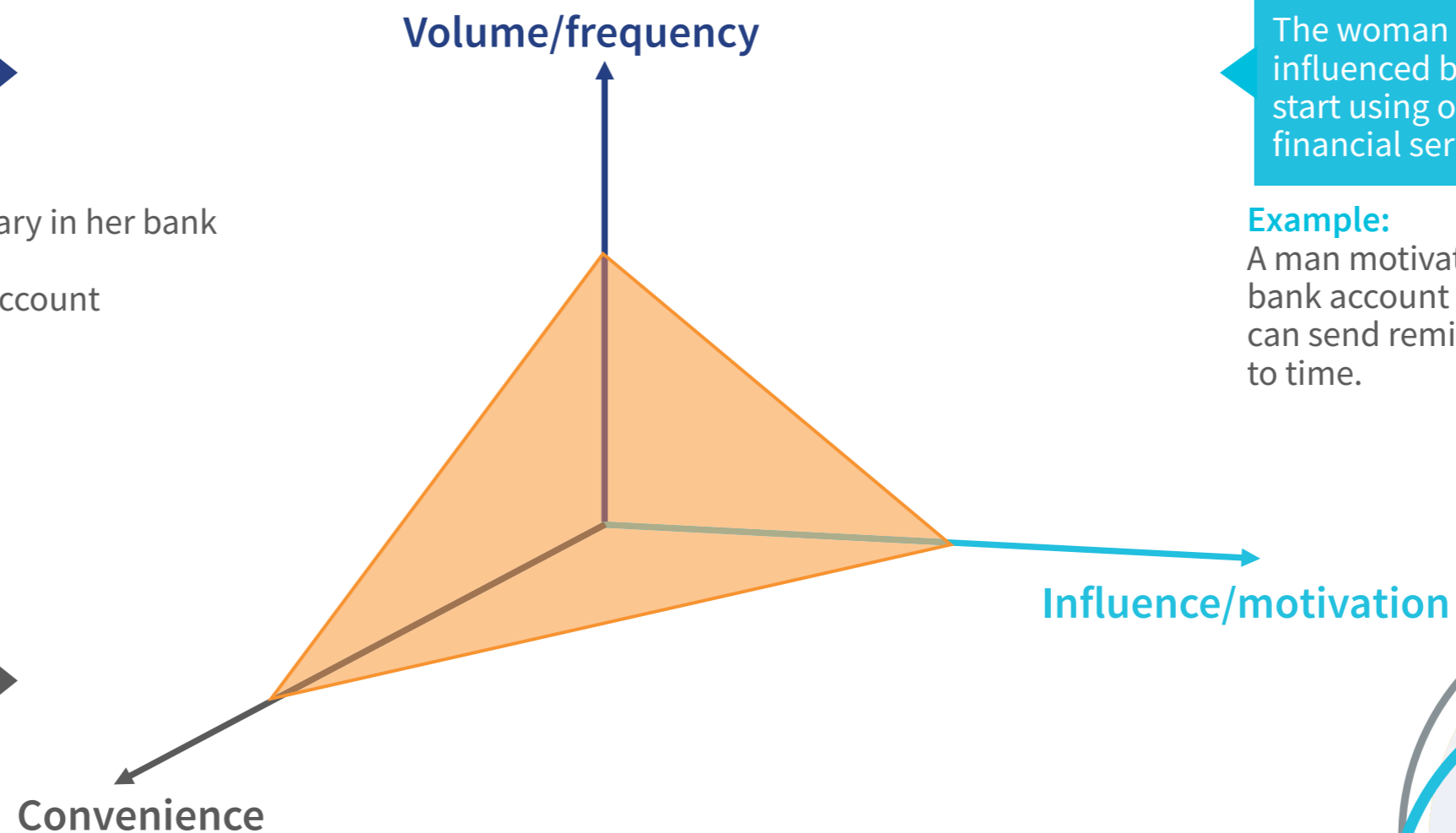
Example:
The convenience of depositing the day's earning in a bank account on daily basis by depositing it at a BC agent outlet.

Convenience

The increased relevance and need for digital payment methods has made it crucial to understand the drivers of adoption, especially among women

Studies by MSC show that the adoption of digital payments among enterprises and women collectives was low even during the pandemic. The studies focused on the underline impact of COVID-19 on the LMI segment and reported that at a global level, 15% of women and 22% of men reported an increase in the use of digital platforms for transactions. In India, 12% of women have reported an increase in the use of DFS, compared to 22% of men. Another study focused on 1,921 women members of collectives in India, which are known as self-help groups (SHGs). Findings from the study indicate that:
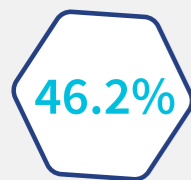
46.2% Women used bank branches to withdraw cash

8.8% Women used ATMs to withdraw money

1.8% Women who owned a smartphone used mobile wallets to transfer their individual savings contribution to the group

**3.2%** Women who owed a smartphone used wallets for other financial transactions

Considering the increasing need for digital payments, MSC conducted a dipstick study across 27 aspirational districts. The objectives of the study were to understand:

- If the adoption of DFS saw a relative increase during the pandemic among new individuals
- What the experience of individuals was who tried to adopt DFS for the first time

MSC contacted 72 beneficiaries across 27 aspirational districts in India and identified 15 first-time users of DFS. We conducted in-depth interviews through phone and video calls to help answer the above questions.

Contacted 72 beneficiaries

Identified **15** first time users

9
6

11 Wallets

7
4

4 ATM

2
2
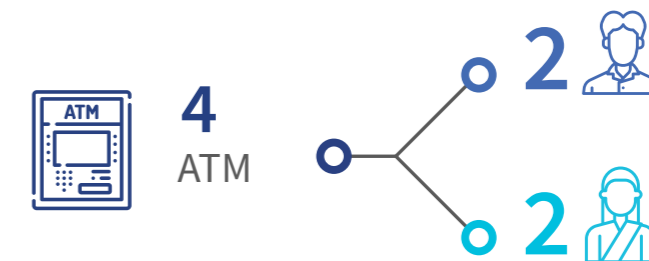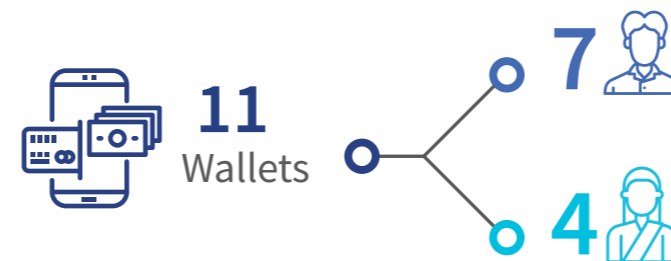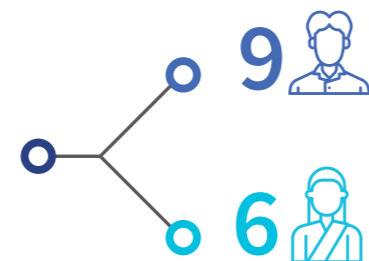
Key findings
from the study

First-time users were apprehensive and intimidated by difficult user interfaces…but a strong use-case and the availability of a troubleshooter nudged them to use digital services

Insight 1: Not all first-time users had all the information about the DFS product
First-time users had limited information on the what, when, how, and why of using a DFS product. While they tried to use DFS with the limited information at hand, nudges on using DFS shared over television and newspapers largely failed to influence them. Instead, push and support from someone the potential user knows makes them confident enough to try DFS. See Tamanna's Journey for more on this.

Insight 2: Fears overpower potential gains
The LMI segment is intimidated by the task of migrating from cash to digital—largely due to their fear of fraud and cybercrimes. They either do not know of existing avenues to address grievances or have limited and vague knowledge of recourse mechanisms. This leads them to believe that the grievance mechanism is ambiguous, which further adds to their fears. Yet again, the presence and assurance of someone they know help them overcome their fears. See Kajal's Journey for more on this.

Insight 3: Men and women are nudged by different attributes or incentives
The user journeys, as shown in later slides, reveal that both men and women exhibit different needs, aspirations, perceptions, and behaviors while using DFS for the first time. Women are more cautious and hence need assurance that DFS is safe and reliable. Men, on the other hand, look for monetary benefits, such as cashback to try DFS.

Insight 4: DFS users need more practice than merely a test transaction to adopt DFS sustainably; this is more evident in the case of women users
They need external handholding or support through regular practice to gain more confidence and use DFS. See Mumtaza's Journey.

Insight 5: The user interface of DFS services is often intimidating; lack of support in regional languages aggravate the challenge
Users need detailed directions and guidance from a trusted or knowledgeable person or the provider before they can adopt a DFS product for the first time. more on this.
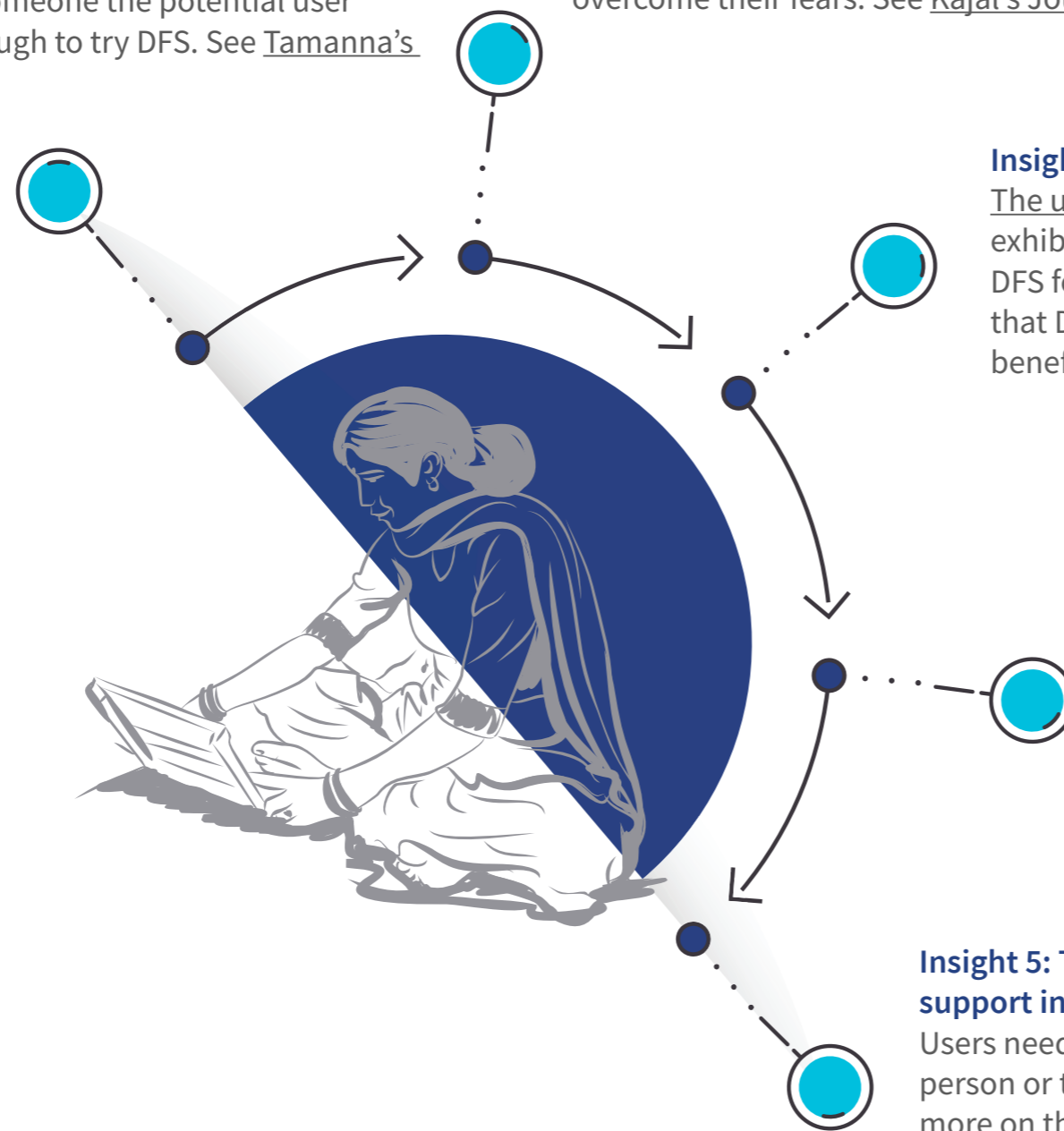
Encouraging the use of DFS is a clear design challenge for FSPs—our study identifies a few critical questions

How can we "shrink" the change for women?
Simply telling the user to start using a DFS product instead of using cash will not work. What worked for users like Arun was telling him of the exact steps involved to use an ATM.
Also, men and women tend to resort to a trial transaction or seek in-person guidance for their first transaction. Video tutorials are helpful but only to enhance their confidence. Providers should reach out to women users in remote locations and help "shrink" this change (or reduce the perceived quantum of change) by providing step-by-step instructions. This will help them perceive their progress at each stage.

How can we mitigate "loss aversion" among women?
The most significant risk for potential and first-time users is the risk of losing money. Apart from being informed of the benefits of DFS over cash, making customers aware of the gains in the use of DFS is imperative—including monetary benefits, savings in time, and reduced risk of falling sick. For most first-time users, such as Kajal, family members disaggregated the losses and consolidated the gains for her while explaining the benefits of DFS. This was the tipping point for Kajal that led her to try DFS for the first time.

How can we help the women "feel" the need for the product?
All the first-time users described an emotion or feeling attached to their use of DFS for the first time. The most striking "feelings" likely to motivate the individual include the joy of increased convenience, the fear of losing reputation due to missed or delayed payments (which is more prominent among women), and the fear of missing out (which is more prominent among men). See Tamanna's journey for more on this.

How can we tweak the product experience[1] for women?
Product processes must not be intimidating and should be both easy to understand and use—specifically when it comes to the design of the interface, that is, the ATM or application, and the provision of grievance support. Sadly, for most users this was not the case—all of them had to take support from the troubleshooter.

How can we build habits and give incentives to LMI women?
Incentives work best for each segment by nudging them toward the regular use of DFS. While LMI people respond more to incentives like cashbacks, LMI women are more likely to continue with DFS solutions after a successful test trial.

Why must we design specifically for women users?
IA product design that covers the undifferentiated mass market may not work for women. For example, communications around the product and its features are typically gender-neutral. The communication would hence fail to address the critical needs of most women—their fear of an incorrect transaction. Adding specific features in the DFS interface that could mitigate this fear, and constant communication of these features along with the avenues to resolve grievances would substantially help women like Mumtaza adopt DFS.

This also resonates with the D3 principals conceptualized by BMGF

Segment-wise user journeys

This section details User journeys for women and men when they tried using different DFS products for the first time

We use the "Elephant, Rider, Path" framework to examine a user's journey and experience of using DFS for the very first time

This report identifies the challenges that the LMI customer segment, particularly women, face in adopting DFS from a behavioral perspective[1]. The "Elephant, Path, Rider" Framework by psychologist Jonathan Haidt has been the key underlying basis for this analysis. The framework provides an analogy for thinking about behavior change

> Perched atop the elephant, the rider holds the reins and seems to be the leader. But the rider's control is precarious because the rider is so small, compared to the elephant. Anytime the six-ton elephant and the rider disagree about which direction to go, the rider is going to lose.

The framework highlights three important contributors to change and their interaction. These are:

1 The **emotional side of a user's mind:** depicted by the elephant

2 The information that the **rational side of the user's mind** demands: depicted by the rider

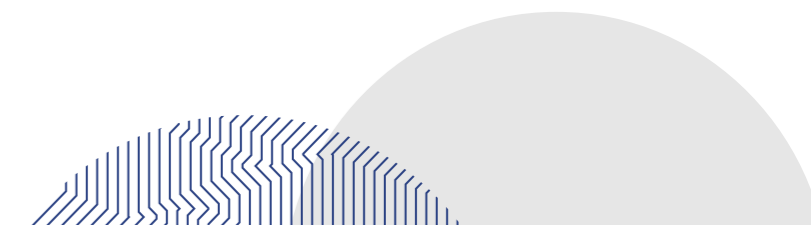**3** How the **external environment** influences DFS adoption: depicted by the path and barriers

Status of DFS adoption by the LMI (MSC studies) and research design
Detailed information on the approach and framework of the study
[1,] Increasing need to identify ways to support adoption of DFS among women

Using mobile payment services for the first time

The experience of female customers

The need to conduct a digital financial transaction and the support of family members or friends, or both, triggers the use of DFS among women

	Emotional mind	Rational mind	Barriers	Hidden risks
Introduction to DFS	Women are scared to explore the unknown, mostly because they fear losing money—they believe "losses loom larger than gains," which is also known as <u>loss aversion</u> bias	Friends, agents, and office colleagues provide **first-hand information** and reassure the emotional mind of the benefits by providing experience-based evidence	• Lack of access to bank accounts that allow for internet banking • Lack of literacy or numeracy • Inadequate access to smartphones	Selling experiences or services in bundles results in <u>bundling bias</u>, which reduces the chances of users using any service at all
First time usage	• They generally exhibit <u>status quo bias</u>, and are motivated to try DFS for the first time only when faced with situations that affect their reputation negatively • They seek <u>social proofing</u> from a trusted person to be convinced that DFS works and is safe to overcome fears	• They find help videos to be more helpful • They try to experience the app for the first time. If successful, experience **peak-end rule** and proceed to an actual transaction after a successful test	• Limited access to consistent internet services • Limited ability to comprehend the application and its features	If the test transaction fails, and the money being used does not belong to the user, the chances of gender-based violence (from other male members in her family) increase
Subsequent usage	After a transaction is successful, they feel more motivated to continue usage, but they limit their use of DFS mostly to critical transactions that affect their reputation and do not use it for self-consumption	They try to inform more people in their social network of the benefits of the application, especially family members, which creates **a ripple effect**	• Limited ability to comprehend the application and its features • Limited access to consistent internet services (**hassle factor**) • Limited use-case	If the user fails to comprehend the application completely and has limited access to grievance resolution mechanisms, it could lead to transactions to incorrect accounts or other issues

■ Areas of opportunity for FSPs   ■ Critical areas, where more intervention is needed, and where gender norms play an important role

Detailed information on the approach and framework of the study
Definition of specified biases

Name: Kajal

Age: 38

Location: Rayagada, Odisha

Education: Graduate

Occupation: Volunteer at Odisha Livelihood Mission (OLM)

Income: INR 6,000 per month. She also practices stitching at home for extra income

Family: Four members—husband, son, and mother-in-law

Current financial services: Two accounts-an active account without internet banking services and a dormant account

Financial goals: Save for son's education

Technology: Owns a smartphone

Personality: Active, cautious, and family-oriented

> "My son told me that a mobile payment service can resolve problems like long queues at the bank and the low availability of cash in ATMs. He also said it is not safe to visit an over-crowded bank during the lockdown in March.

> I still fear losing money due to small mistakes in entering the amount or the mobile number."

Kajal's journey of using a mobile payment service for the first time

Awareness

Kajal first heard about Google Pay from her colleagues at OLM. Initially, she did not pay much attention because she thought it might not be of any significant use for her.
However, her son installed the Google Pay app on her husband's phone before he left for college in a nearby district.

Evaluation

During the lockdown, Kajal had to pay the monthly rent for her son's hostel. She was planning to visit the bank but her son pointed out the potential risks during the pandemic. He suggested a mobile payments app to make the payment instead.
After some persuasion, Kajal decided to give it a shot. However, she was extremely worried about the money going into the wrong bank account. Kajal also feared her money could be deducted again after making the transaction. She decided to do a test trial using the Google Pay app.

First use

Kajal's son who was at home due to the lockdown showed her how to use the payment app. He transferred INR 200 to their landlord as a test transaction. To ease her fears of payment failures and the money being transferred to a wrong account, Kajal called the landlord to check if he received the right amount. She also checked her account balance for 2-3 days after the payment to ensure there was no mistake. Once Kajal was assured that the payment was successful, her son transferred the rest of the pending amount worth INR 1,000 to the landlord.

Regular use

After the successful trial, Kajal made the same payment in full the next month. She still needs some support from her son to pay anyone whose contact is not already saved on Google Pay. This is because Kajal finds the interface difficult to understand and intimidating, despite her ability to read English numbers. Though Kajal's fear of making a transaction to the wrong number persists, she likes the application and has also shared its benefits with her friends. Kajal now relies on the app for quick transactions.

Approach and framework of the study

Kajal's journey of using a mobile payment service for the first time as examined through the Elephant, Rider, Path framework

Kajal has a consistent fear of transferring money to the wrong account or phone number

The elephant enthusiastically informs her friends of her experiences

Once successful, the rider understands that the efforts are worth emulating and paves the way for regular usage

Hidden risk: Does Kajal have access to their own savings? If not, and if she loses money, will it lead to gender-based violence?

Access to consistent internet services

Ability to comprehend the app

The rider looks at the **bright spot**, her son who avails the benefits of DFS

The elephant is relieved happy, and confident after a successful test trial

Ownership of a bank account

The rider gets clear and specific step-by-step instructions from her son, which points to the destination

Access to a smartphone

Hesitant and scared to transfer a large sum directly for the first time, the elephant opts for a test transaction to **mitigate risks**

The larger fear is losing money that Kajal may or may not have earned

The elephant becomes more confident after looking at successful examples of her friends and son

Emotions motivate the elephant upon realizing this is an alternative that can help make timely payments and save reputation with the landlord

After first-time use

Journey during first-time use

Stages before first-time use

Text in green represents the elephant

Text in black represents the rider

overall status of fear by the user

Blue comment boxes represent the boulders

Grey comment box represents the hidden risks

Approach and framework of the study

Meet the user: **Tamanna**

Name: Tamanna

Age: 27

Location: Barpeta, Assam

Education: M. Com

Occupation: Former faculty at a management college

Income: Currently not earning; earlier was a faculty member in a management college

Family: Three members—mother and maternal grandmother

Current financial services: Active bank account

Financial goals: Saving for her education

Technology: Owns a smartphone

Personality: Intelligent, skeptical, aspirational, and an extrovert

> " When I was using it for the first time, I only transferred an amount I could afford to lose. So I paid INR 100 as my contribution through the app

> Even though I knew about the app, I did not find any need to use it. I am always a bit skeptical about trying new things but I only saw the need when my friends told me about the benefits and I realized I may be missing out. "

1. PhonePe is a mobile payment service in India, which offers services like bill payments, P2P transfers among others

Approach and framework of the study

Tamanna's journey of using a mobile payment service for the first time

Awareness

Tamanna remembers opening her bank account at the State Bank of India when she was in the 9th standard at around age 15. She later opened another account at UCO Bank as it was closer to her house. Tamanna got to know about payment apps like PhonePe[1] earlier this year. She heard about the brand from her friends at her old workplace and also through newspapers and advertisements on TV. Tamanna learned that it is an online platform to make payments, linked directly linked to one's personal account. However, since she did not have any significant reason to install the app, Tamanna was not that interested.

Evaluation

Before the lockdowns started in India, Tamanna went out with her friends to a restaurant. While paying for her share, Tamanna realized she did not have enough change with her. This is when her friends suggested she use PhonePe. They shared how most of them used it regularly to make payments, especially whenever they had to go out. On her friend's insistence, Tamanna installed the application. She checked with her friend whether she was installing the right app as there were many different versions available on the Google Play Store.

First use

Tamanna activated her wallet once she reached home and did not face any challenges at this step. She used it first to pay for her share while out with her friends again. Tamanna contributed around INR 100 at that time. She believed this amount was small enough to test out, and she could afford to lose this money if the transaction went wrong.
Upon asking if she now feels confident about transferring large amounts, Tamanna revealed that she did not get a chance to make a large payment yet.
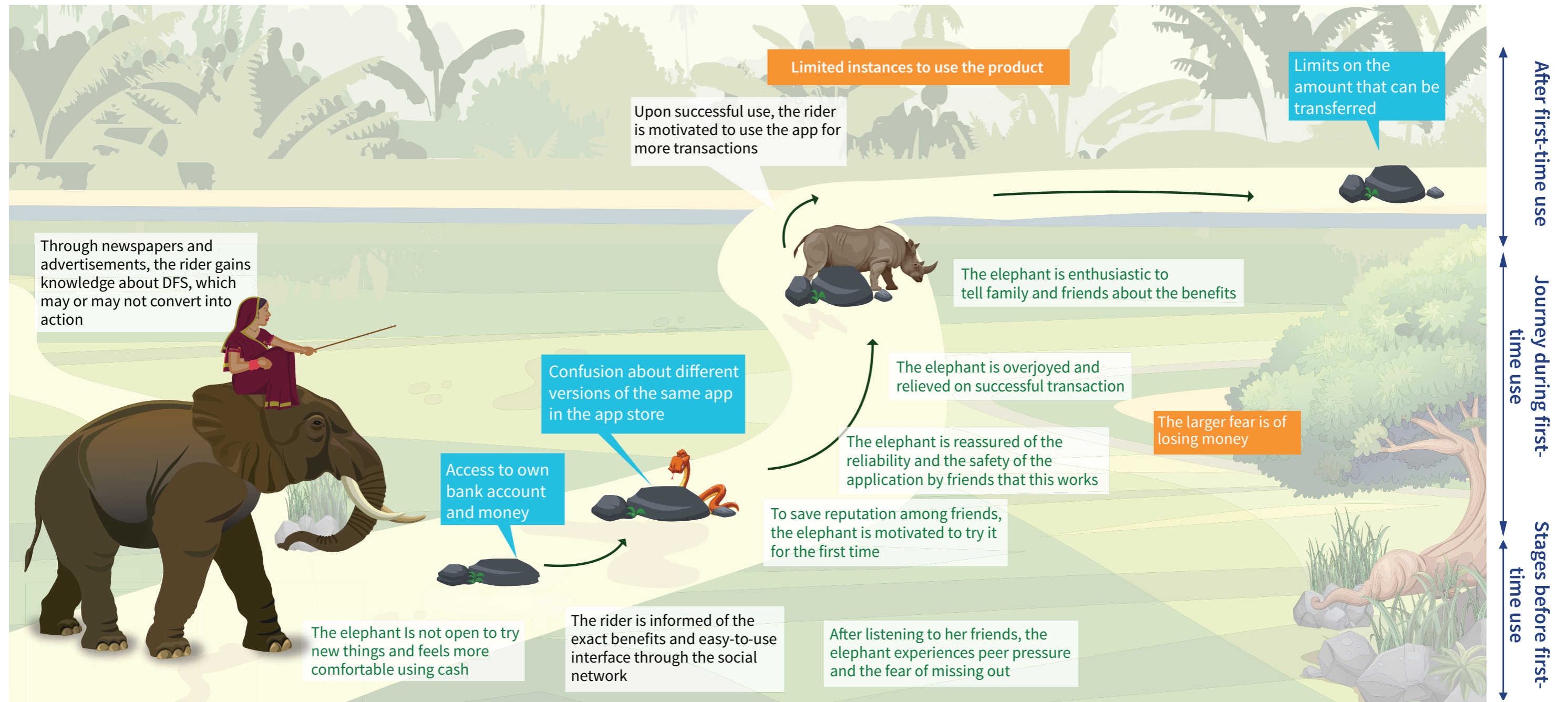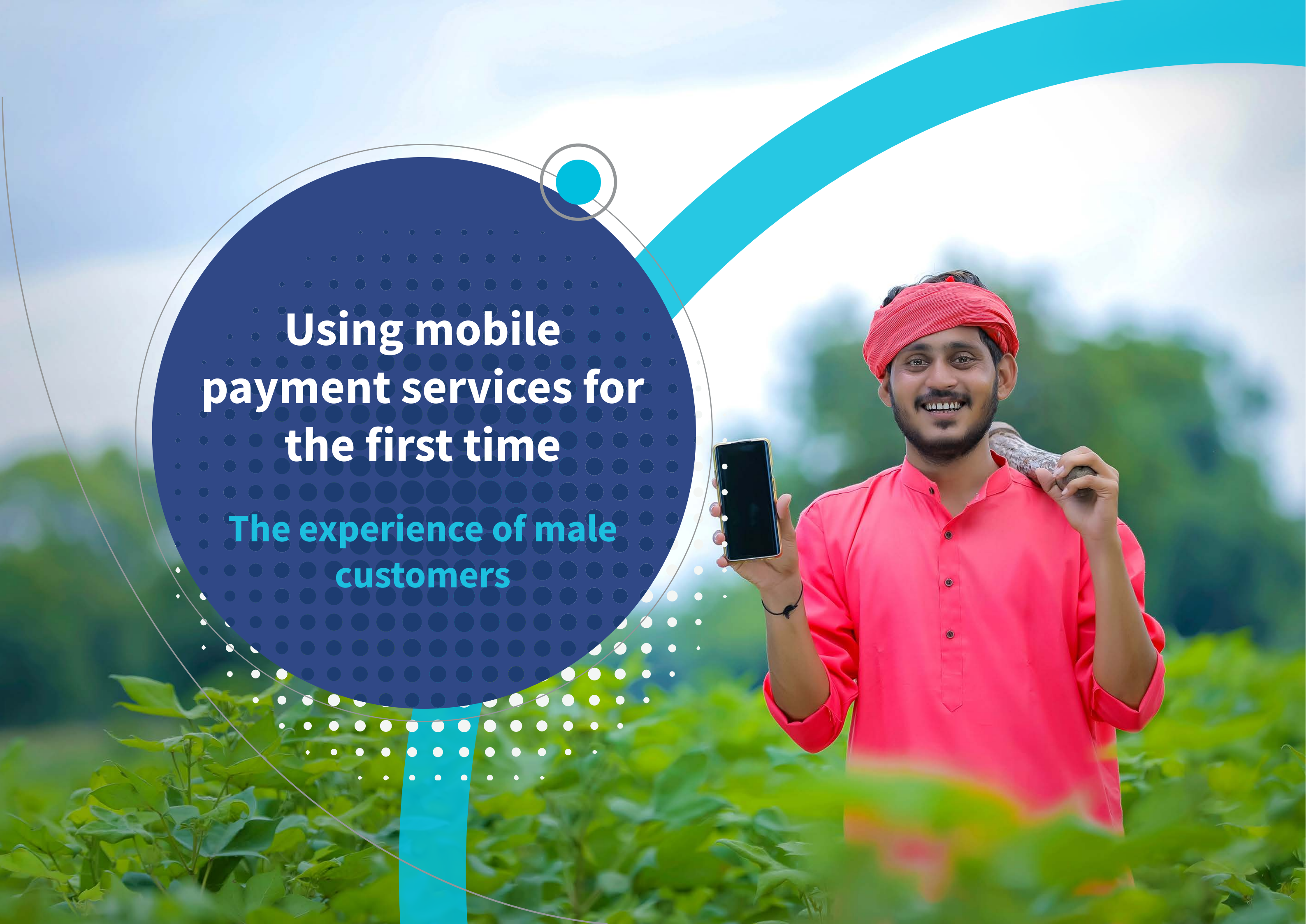
Regular use

Tamanna has only used the wallet 2-3 times more since the first use, once when she ordered food at home and once at a grocery store to purchase a few items. As for other tasks, such as paying bills and recharging phones, Tamanna states that her brother takes care of these payments and she might resort to PhonePe if needed. Tamanna now feels comfortable with the app and does not hesitate to use it for different purposes. She installed Google Pay on her father's phone as he wanted to pay a due sum of INR 11,000 to his friend. However, when she tried to transfer the whole amount in one go, the transaction failed. Since the sum was large, she did not try the transaction again and a few days later, her father paid his friend in cash.

Tamanna's journey of using a mobile payment service for the first time as examined through the Elephant, Rider, Path framework

After first-time use

Journey during first-time use

Stages before first-time use

Limited instances to use the product

Limits on the amount that can be transferred

Upon successful use, the rider is motivated to use the app for more transactions

Through newspapers and advertisements, the rider gains knowledge about DFS, which may or may not convert into action

The elephant is enthusiastic to tell family and friends about the benefits

The elephant is overjoyed and relieved on successful transaction

Confusion about different versions of the same app in the app store

The elephant is reassured of the reliability and the safety of the application by friends that this works

The larger fear is of losing money

Access to own bank account and money

To save reputation among friends, the elephant is motivated to try it for the first time

The elephant Is not open to try new things and feels more comfortable using cash

The rider is informed of the exact benefits and easy-to-use interface through the social network

After listening to her friends, the elephant experiences peer pressure and the fear of missing out

Text in green represents the elephant   Text in black represents the rider   overall status of fear by the user   Blue comment boxes represent the boulders   Grey comment box represents the hidden risks

Approach and framework of the study

Using mobile payment services for the first time

The experience of male customers

Men are motivated to use a mobile payment service if they find it more convenient than traveling to the bank for transactions

Providing detailed instructions that can convince women to try using the ATM is crucial

	Emotional mind	**Rational mind**	**Barriers**	**Hidden risks**
Introduction to DFS	• Curious to try something new and open to learning about the potential benefits • More likely to use these services if a friend who already uses the application guides them through the process	The rational mind (rider) trusts the employer, colleague, or a friend for information on details that he is curious to learn about	• Limited access to banks, bank accounts, and active internet banking service • Lack of ownership of a smartphone • Limited ability to comprehend the benefits of the application	None
First time usage	Motivated to try when they have strong use-cases that offer convenience	• Tries to gain more knowledge from friends and online videos • May sometimes conduct a test transaction to learn more	• Limited ability to comprehend the application • Limited access to consistent internet services	Risk of losing money due to incorrect transactions, cybercrimes, or fraud
Subsequent usage	After a successful transaction, men feel more motivated to continue usage once they are aware of the various benefits, such as rewards (**peak-end rule**)	• Motivated to try different wallets for more benefits • Motivated to share information about the benefits in their network	• Limited access to consistent internet services creates a **hassle effect** • Limited use-cases • Limited expenses and limited frequency in which cash is deposited in the bank account	Inability to comprehend the application completely and having no one to reach out to in case of doubts could lead to transactions to incorrect accounts or other issues

☐ Areas of opportunity for FSPs   ☐ Critical areas, where more intervention is needed, and where gender norms play an important role

Detailed information on the approach and framework of the study
Definition of specified biases

Meet the user: Shiv

Name: Shiv Kumar

Age: 25

Location: Pakur, Jharkhand

Education: 10th standard, secondary school

Occupation: Driver at SBI Bank

Income: INR 7,000 per month

Family: Five members

Current financial services: Active account at a prominent public sector bank

Financial goals: Saving for daughter's future

Technology: Owns a smartphone, understands net banking

> I did not want to go to the bank to make a payment of INR 2,000 as it always takes a lot of time and the queues move very slowly.

> My boss told me once that he prefers to transfer my monthly salary to my account as he does not like to carry a lot of cash with him. He also said that with SBI YONO, I will be able to track my expenses better.

1. India's leading PSU Bank- State Bank of India (SBI)'s mobile wallet application

Approach and framework of the study

Shiv's journey of using a mobile payment service for the first time

Awareness

Shiv purchased his first smartphone recently. During the lockdown, he required some money and initially wanted to approach the bank to acquire this amount. When Shiv learned that the banks would allow a limited number of people inside during the lockdown, he reached out to a friend. The friend agreed to gave him some cash and Shiv promised to return the money to him in a few days.

Being a driver at SBI, Shiv has heard about SBI's YONO[1] internet banking app from his boss, who told him he can use the app to check his balance and also make payments, such as transferring money to his friend. Shiv installed the app after purchasing his smartphone.

Evaluation

Shiv was excited to use the app but he could not since his account did not have active internet banking facilities. He inquired about this in the bank and got it activated. The process took around 15 days since Shiv also had to change the mobile number associated with his bank account.

After this, he decided to try the app for the first time.

First use

The first time he used the app, Shiv wanted to pay INR 2,000 to a friend. His friend had gone back home to a nearby district 50km away from his hometown. Shiv wanted to transfer this money using SBI YONO[1] to his bank account.
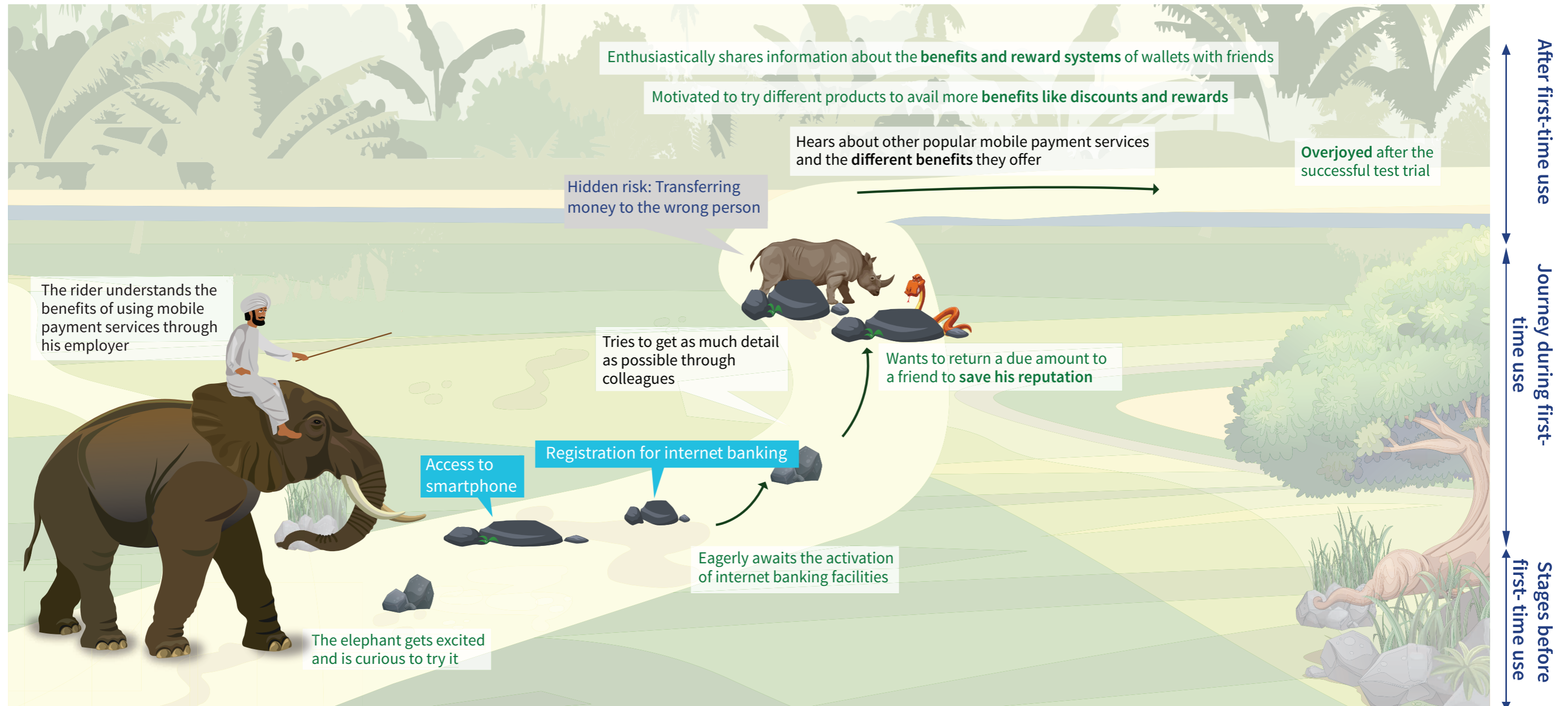
However, both Shiv and his friend were afraid of the amount being transferred to a different person. So he called his colleague at the bank who reassured him. The colleague told him to "copy and paste" the number to ensure the amount is transferred to the right person. Shiv conducted his first transaction while carefully following these instructions. Once it was successful, he was relieved and happy that he did not have to go to the bank for this, especially during the lockdown.

Regular use

Since the first transaction, Shiv has used the mobile payment service around 10 more times. He also noticed many people around him using Google Pay and has seen stickers advertising the app in shops around him.

Since Shiv also had to transfer money to his friend who only used Google Pay, he installed the Google Pay app on his phone. He used it to pay for groceries at a shop and recharge his phone as well. Shiv finds the app very easy to use as he does not have to enter a lot of details.

After overcoming his fears, Shiv did not need any further support. He also made another friend install Google Pay and helped him with his first transaction. Shiv mentions that no one else in his family owns a smartphone. If they did, he would have told them about this service.

Shiv's journey of using a mobile payment service for the first time as examined through the Elephant, Rider, Path framework

After first-time use

Enthusiastically shares information about the **benefits and reward systems** of wallets with friends

Motivated to try different products to avail more **benefits like discounts and rewards**

Hears about other popular mobile payment services and the **different benefits** they offer

Overjoyed after the successful test trial

Hidden risk: Transferring money to the wrong person

Journey during first-time use

The rider understands the benefits of using mobile payment services through his employer

Tries to get as much detail as possible through colleagues

Wants to return a due amount to a friend to **save his reputation**

Registration for internet banking

Access to smartphone

Eagerly awaits the activation of internet banking facilities

The elephant gets excited and is curious to try it

Stages before first-time use

Text in green represents the elephant

Text in black represents the rider

overall status of fear by the user

Blue comment boxes represent the boulders

Grey comment box represents the hidden risks

Approach and framework of the study

Using an ATM for the first time

The experience of female customers

Women battle the persistent fear of forgetting the different steps involved in using a digital interface and this fear multiplies with age

A "knowledgeable" or "trusted" person who can explain the benefits of the application aids adoptions

	Emotional mind	Rational mind	Barriers	Hidden risks
Introduction to DFS	• The user is a **cognitive miser** due to the tendency to avoid taking hard decisions • They are not convinced of the benefits of an ATM over the potential risks of losing money due to their **loss aversion** bias	They understand the benefits when they hear about them from a trusted family member but they lack the technical know-how of how to do the transaction	• Lack of an ATM card, especially for older accounts • Limited information on how to use the ATM card safely • Deep rooted fears anchored (**anchoring bias**) from learning about fraudulent practices	None
First time usage	Different age brackets and personalities have distinct aspects that motivate them. Younger and curious women are motivated to adopt DFS if they get to learn about the benefits while older women are motivated by pressing use-cases	• They gain more information about clear steps on how to use the ATM • They need assistance, reassurance, and handholding during the transaction alongside multiple demos	• Limited step-by-step support on how to use the ATM card • Limited regional language support on the ATM interface	They may fall prey to fraudulent practices, cybercrimes, and lose their money, thereby increasing the chances of gender-based violence
Subsequent usage	After a successful transaction, women feel more motivated to continue usage. However, limited usage persists unless a pressing need arises. Older women may need some handholding	Limited or no communication on sharing the experience and benefits with others in the social networks	• Limited practice and understanding of using an ATM • Usage only in case of an urgency (**status quo bias**) • Limited support for regional languages on the ATM interface	Limited grievance resolution in case of fraudulent activities could influence the individual to convey the poor experience in their network, reducing potential uptake by others

■ Areas of opportunity for FSPs   ■ Critical areas, where more intervention is needed, and where gender norms play an important role

Detailed information on the approach and framework of the study
Definition of specified biases

Meet the user: **Mumtaza**

Name: Mumtaza Rahman

Age: 53

Location: Barpeta, Assam

Occupation: Volunteer at an NGO

Income: Not earning, but receives a pension

Family: Three members—two daughters

Current financial services: Opened her own bank account 10 years ago

Financial goals: Saving for medical expenses

Personality: Fearful of trying new things, conservative, slow learner

> " I keep forgetting the steps involved in making a transaction. The numbers in English scare me.

> I heard about ATM frauds in the news and the person at the bank told me to never reveal the PIN to anyone. I am always fearful of that. "

Mumtaza's journey of using an ATM for the first time

Awareness

Mumtaza opened her bank account around 10 years ago. She still uses it to receive her pension and occasionally saves some money for her medical expenses.

Mumtaza received her ATM card almost seven years after opening her account. However, she did not use it until this year since she developed fears after watching news related to ATM frauds.

Mumtaza also felt that she did not know how to operate the ATM. She was unclear on the processes, such as inserting the card and entering the right PIN. This is why, even after receiving the ATM card, Mumtaza never tried to use the service.

Evaluation

Her daughter Alisha tried to explain the benefits of using an ATM to Mumtaza, such as easy withdrawals and avoiding long queues at the bank. However, Mumtaza remained unconvinced.

During the lockdown, Mumtaza had to withdraw her pension and wanted to visit the bank. Alisha was concerned that given Mumtaza's age, visiting an overcrowded bank branch during the pandemic might not be a good idea. Alisha again tried to persuade Mumtaza. She told her mother about the user-friendly nature of an ATM card and offered to go with her to the ATM to help her learn how to withdraw money. As Mumtaza urgently wanted cash for daily household purposes, she finally agreed and they went to the ATM together.

First use

The first time they went to the ATM, Alisha conducted the transaction for Mumtaza. Alisha inserted the card, the PIN, and the amount Mumtaza wanted to withdraw.

Alisha repeated this process a few times times to help Mumtaza learn. Mumtaza was relieved when Alisha conducted the transaction smoothly and withdrew the money. She realized that Alisha was correct in trying to convince her about the benefits of the ATM.
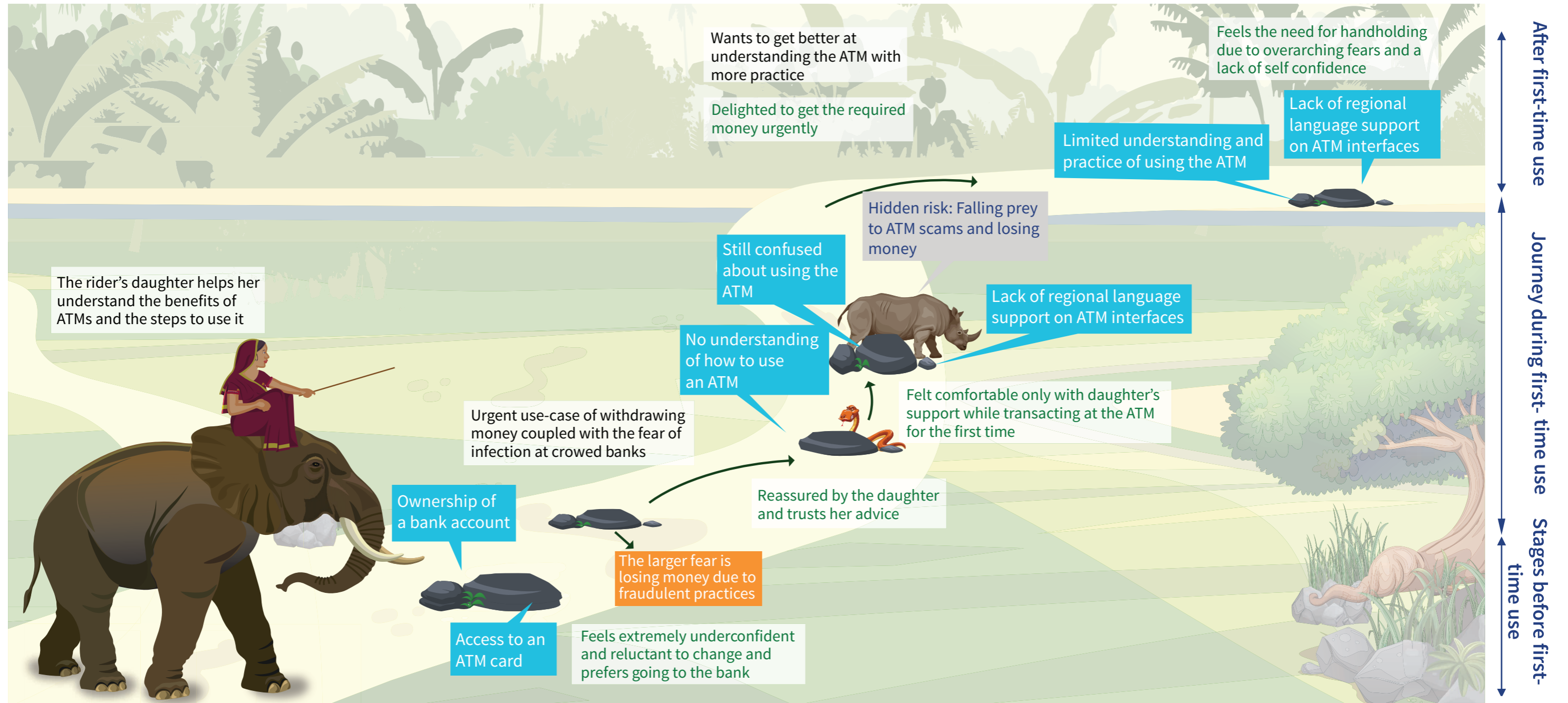
Regular use

Mumtaza feels she needs to visit the ATM with Alisha a few more times before she is confident enough to use the service on her own. Since their family expenses during the lockdown have been low and she is afraid of stepping out, she does not have a reason to go to the ATM again.

After the lockdown, Mumtaza wishes to re-learn how to operate the ATM since she sometimes forgets the steps involved.

Mumtaza is also uncomfortable with the numbers, which appear in English. She says the process might have been easier had the numbers been in Assamese, the regional language.

Mumtaza's journey of using an ATM for the first time as examined through the Elephant, Rider, Path framework

Wants to get better at understanding the ATM with more practice

Delighted to get the required money urgently

Feels the need for handholding due to overarching fears and a lack of self confidence

Lack of regional language support on ATM interfaces

Limited understanding and practice of using the ATM

Hidden risk: Falling prey to ATM scams and losing money

Still confused about using the ATM

Lack of regional language support on ATM interfaces

No understanding of how to use an ATM

The rider's daughter helps her understand the benefits of ATMs and the steps to use it

Felt comfortable only with daughter's support while transacting at the ATM for the first time

Urgent use-case of withdrawing money coupled with the fear of infection at crowed banks

Reassured by the daughter and trusts her advice

Ownership of a bank account

The larger fear is losing money due to fraudulent practices

Access to an ATM card

Feels extremely underconfident and reluctant to change and prefers going to the bank

After first-time use

Journey during first- time use

Stages before first-time use

Text in green represents the elephant   Text in black represents the rider   overall status of fear by the user   Blue comment boxes represent the boulders   Grey comment box represents the hidden risks

Approach and framework of the study

Using an ATM for the first time

The experience of male customers

Men are more curious to try ATM once they become aware of the benefits, especially the added convenience that it offers

Older people may need more assistance to conduct transactions, someone to provide a demonstration, and handholding support

	Emotional mind	Rational mind	Barriers	Hidden risks
Introduction to DFS	Older men are afraid of exploring the technology, mostly owing to the fear of loss of money but they express interest after hearing of the benefits	The rational mind (rider) trusts a colleague or a friend for information on details he is curious to learn	Limited information on how to use the ATM card safely	None
First time usage	They are motivated to try only when they lack any practical alternatives, for instance, when banks are situated far away and there are long queues to transact at them	They need information on the steps to be followed in advance, for instance, how they should enter the details asked for by the ATM machine while conducting a transaction. This helps build their confidence during the test	Limited step-by-step support on how to use the card	The chance of falling for fraudulent practices and losing money
Subsequent usage	After a successful transaction, men feel more motivated to continue usage Older men might need some handholding	They try to inform more people in their social network and family about the benefits of using an ATM	• The tendency of older customers to forget the PIN and hence discontinue usage • The need of older or uneducated customers for more assistance	Cases of fraudulent activities could reduce the potential uptake of ATM by other users in the individual's network

■ Areas of opportunity for FSPs   ■ Critical areas, where more intervention is needed, and where gender norms play an important role

Detailed information on the approach and framework of the study
Definition of specified biases

Meet the user: **Arun**

Name: Arun Dhakkad

Age: 23

Location: Vidisha, Madhya Pradesh

Education: 12th standard

Occupation: Contract laborer for manual work

Income: INR 4,000-6,000 per month, depending on the availability of work

Family: Lives in a joint family of seven

Current financial services: Opened his bank account recently, has an ATM card

Financial goals: Stable income for his family

Personality: Calm, composed, curious, and enthusiastic

> " I decided to open a bank account as banking details were required for paperwork related to disbursal of my wages, which is important to me.

> I am thankful I opened a bank account before the lockdown. If not, it would have been difficult for me to travel such a distance and stand in long queues to withdraw money. The ATM is close to my house. "

Arun's journey of using the ATM for the first time

Awareness

Arun opened a bank account recently with the State Bank of India. He felt the need for a bank account while conducting formalities for selling a small piece of land his family owned. Arun also needed an account to receive wages under MGNREGA, the government's livelihood security program.

Arun received his ATM card a few days after opening the account. He does not use his bank account proactively since he does not have much to save.

Evaluation

Arun learned about ATM services through his friends. They told him that he will not have to visit the bank if he starts using the ATM.

Since he needed to withdraw his wages for daily household expenses, Arun considered using an ATM. However, he was not confident and was unsure if he would be able to transact successfully. While at the bank for some work, Arun decided to approach Babloo, someone he knew at the bank. Babloo explained how the ATM works and shared step-wise details. Arun then decided to visit an ATM the next day.

First use

Arun visited the ATM the next day, located a few kilometers from the bank branch. His father accompanied him. While using it for the first time, Arun followed the instructions Babloo had shared with him a day earlier. He was happy to make a withdrawal without any issues.
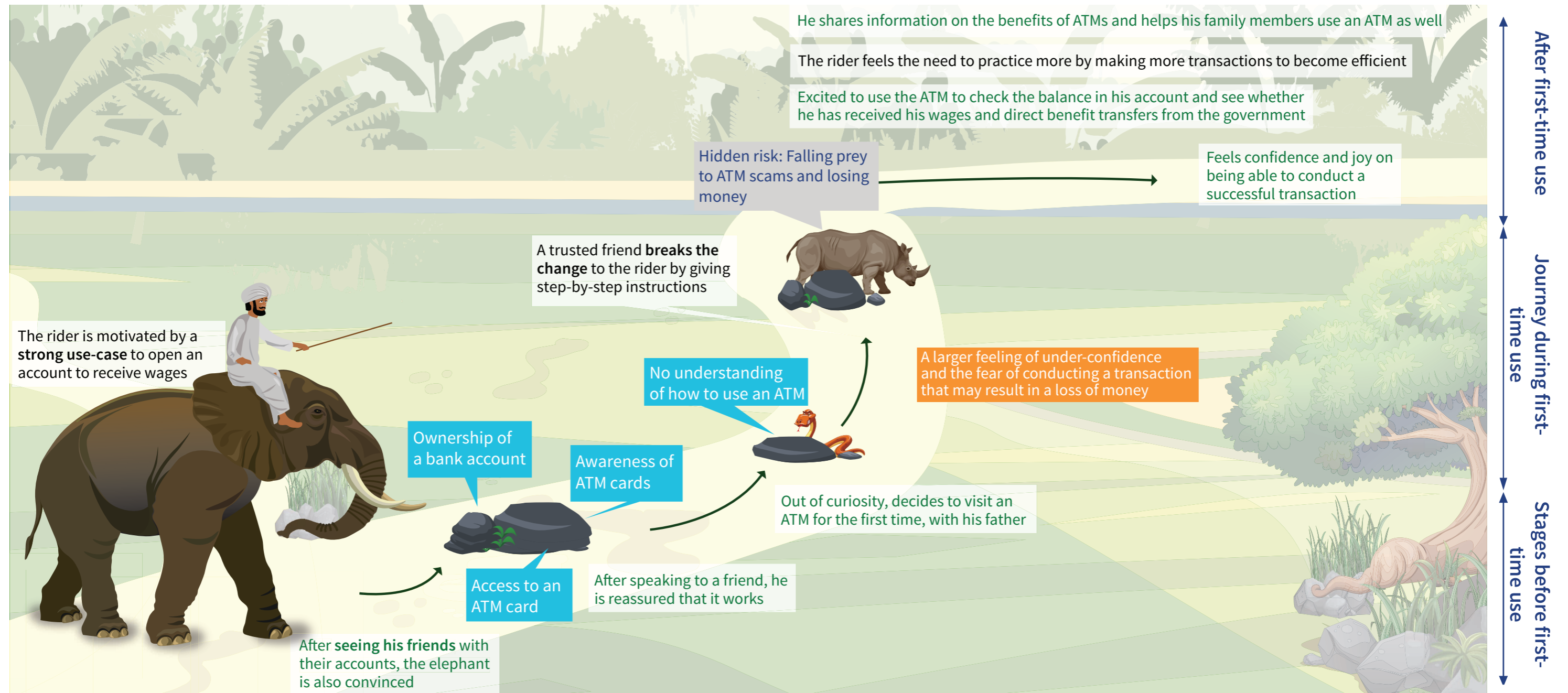
Arun felt confident after the successful transaction and realized he could use the ATM card whenever he needed money.

Being a manual laborer, Arun does not have the time to visit a bank branch and stand in long queues since he ends up losing wages for that day. Through an ATM card, he could now transact at his convenience.

Regular use

Arun became a confident user immediately after his first transaction. He now also visits the ATM to check his account balance and to confirm if he has received his payments. Arun uses these transactions as practice to get better at using the ATM. He also taught his father and younger brother how to use ATMs and communicated its benefits with his mother and friends.

Arun's journey of using a ATM for the first time as examined through the Elephant, Rider, Path framework

He shares information on the benefits of ATMs and helps his family members use an ATM as well

The rider feels the need to practice more by making more transactions to become efficient

Excited to use the ATM to check the balance in his account and see whether he has received his wages and direct benefit transfers from the government

Hidden risk: Falling prey to ATM scams and losing money

Feels confidence and joy on being able to conduct a successful transaction

A trusted friend **breaks the change** to the rider by giving step-by-step instructions

No understanding of how to use an ATM

A larger feeling of under-confidence and the fear of conducting a transaction that may result in a loss of money

The rider is motivated by a **strong use-case** to open an account to receive wages

Ownership of a bank account

Awareness of ATM cards

Out of curiosity, decides to visit an ATM for the first time, with his father

Access to an ATM card

After speaking to a friend, he is reassured that it works

After **seeing his friends** with their accounts, the elephant is also convinced

After first-time use

Journey during first-time use

Stages before first-time use

Text in green represents the elephant

Text in black represents the rider

overall status of fear by the user

Blue comment boxes represent the boulders

Grey comment box represents the hidden risks

Approach and framework of the study

Annexes

Studies show that women find it more challenging to adopt DFS (including mobile payment services) as compared to men[1]

Key barriers faced by women in India in using mobile phones include:

- Limited access to phones

- Access generally limited to a shared phone or a phone with limited features

- Ability or comfort in using fewer features on the phone as compared to men;

- Mobile interfaces that are generally not suitable for use by the "oral" segment

- Constraints faced in terms of location and duration of phone usage and

- Socio-cultural barriers that include notions of women not needing a phone, or women potentially compromising family honor through the use of phones. This leads to women self-censoring their usage. They are also more frequently scrutinized in their phone usage.

There is a need to identify more ways to support the adoption of DFS among women[1]. We at MSC have been trying to contribute to the following research areas:

1 Research is needed to better understand how women in different contexts access and use their phones. There is a need to understand the kind of features they most use, how their use is determined based on constraints in every-day life, the barriers they face, and how they negotiate those barriers. Our research work with BSR has presented insights on how women employed in garment factories use DFS.

2 More insights on how oral users interact with DFS are a critical need. These would include what good phone and app features look like for low-income women in India and how phones and apps can be made user-friendly, especially in contexts where literacy may be limited. At MSC, we has been undertaking extensive research in this field and the findings are available here.

3 India has seen a push toward digital financial inclusion, at a time when we have no published research on the use of mobile phones for digital finance by low-income women. There is a need for more and better data on how women use digital finance and the kinds of physical and socio-cultural constraints they will face.

1. DVARA RESEARCH, What Do We Know About Women's Mobile Phone Access & Use?, A review of evidence, Dr. Lina Sonne, August 2020

Several aspects influence an individual's decision to try DFS and their journey

We use the "Elephant, Rider, Path" framework to segregate and analyze these aspects beyond a simple approach that is limited to access and awareness

MSC analyzed all customer journeys using the "Elephant, Rider, Path" framework to identify key participants in the journey and the behavioral biases they face

We identified key takeaways for specific stakeholders based on the elephant rider path

1 Motivate the elephant

2 Direct the rider

3 Shape the path by removing obstacles

About the framework

Jonathan Haidt, a psychologist, introduced the model as an analogy for thinking about behavior change. Daniel Kahneman and Steve Peters suggested similar approaches in their research and books (*Thinking Fast and Slow* and *The Chimp Paradox*)

> Perched atop the elephant, the rider holds the reins and seems to be the leader. But the rider's control is precarious because the rider is so small compared to the elephant.

> Anytime the six-ton elephant and the rider disagree about which direction to go, the rider is going to lose. He is completely overmatched.

Participants in the framework

The elephant is a metaphor for the conative or emotional mind. It represents emotions and attitudes and is the power behind the journey

The emotional mind or the elephant

The rider is a metaphor for the cognitive or rational mind. It represents the analytical and rational side and is the guide of the journey, equipped with knowledge and insights

The rational mind or the rider

The path is a metaphor for the environment. It represents access and agency to be able to do something

The external environment or the path

Boulders on the path represent the challenges and obstacles during the journey toward the destination
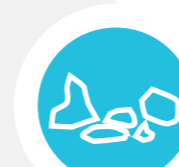
Boulders on the path

The rhino is a metaphor for hidden risks that the customer might not be aware of

Hidden threats or rhinos

Representation in journey slides

Text in green represents the elephant

Text in black represents a rider

The image describes the path of DFS adoption

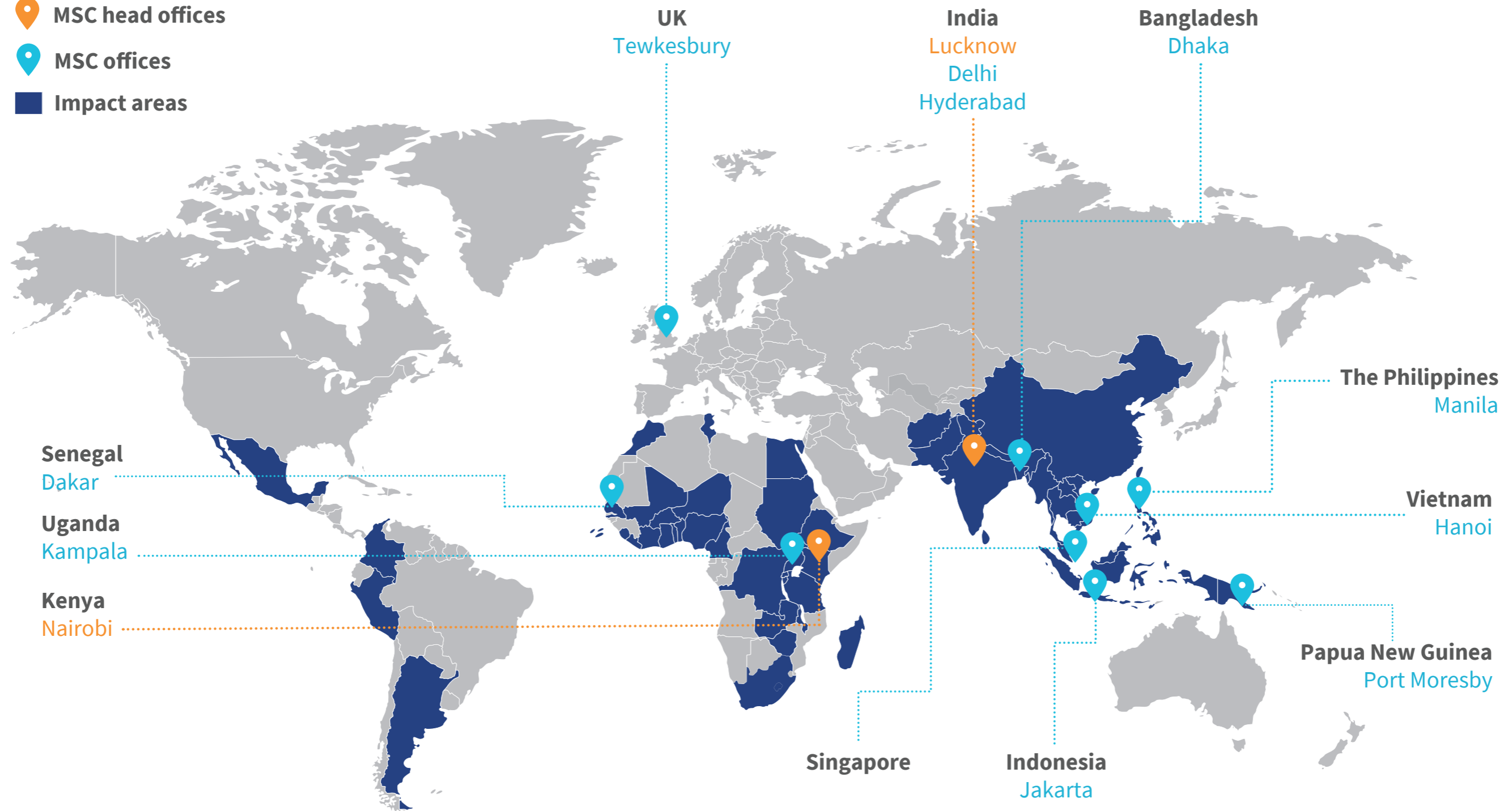Blue comment boxes represent the boulders

Grey comment boxes represent the hidden risks

Glossary: Behavioral biases identified through the study

Term used	Definition
Definition	The tendency to rely too heavily upon, or "anchor," on a past reference or one piece of information while making decisions
Cognitive miser	Tendency to avoid taking hard decisions—we are intellectually lazy and prefer to avoid hard questions where possible
Hassle factor	Small contextual or situational factors that either prevent/constrain or improve/compel individuals to a specific behavior are called hassle factors. These often include barriers, such as distance, service downtime, and a lack of adequate distribution support through agents or loan officers.
Loss aversion	The expression "losses loom larger than gains" explains the concept of loss aversion. The pain of losing something is said to be psychologically about twice as powerful as the pleasure of gaining something. Since people are more willing to take risks to avoid a loss, loss aversion can explain the differences in risk-seeking as compared to aversion.
Peak-end rule	Experiences are mostly judged by their end or peaks. We judge an experience by its most intense point and its end, as opposed to the total sum or average of every moment of the experience.
Ripple effect	A ripple effect occurs when an initial disturbance to a system propagates outward to disturb an increasingly larger portion of the system, like ripples expanding across the water when an object is dropped into it.
Risk of bundling	Selling experiences in a bundle reduces their individual use.
Status quo bias	The preference for things to remain the same, such as a tendency to avoid changes in behavior unless the incentive to do so is strong, is termed as the "status quo bias"
Social proofing	The tendency of people to follow the actions of the masses

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