



ACCELERATING FINANCIAL INCLUSION FOR WOMEN'S SHGs WITH ACCOUNT AGGREGATORS

October 2023

Acknowledgements

Authors

Prerit Shukla, Asawari Luthra, Akshata Jain and Abhishek Yadav

Review

Abhishek Modi and Tripti Naswa

Contributors

We are grateful to the following contributors for their valuable insights into the scope of Account Aggregators in enabling financial inclusion of SHG women, which helped us shape this document:

A Krishna Prasad

Founder & CEO, Onemoney

Anjan Roy Choudhury

Director, Partnerships & Customer Success, Onemoney

Arjun Singh

Former Managing Director, Asia, Envestnet Yodlee

Arvind Kumar Malik

CEO, Udyogini

Kanika Kumar

Director, IDEO

Mallika Ghosh

Executive Director, Parinaam Foundation

Mohammed Riaz

CEO & MD, Xtracap Fintech

Monami Dasgupta

Head of Research, D91 Labs, Setu

Nita Mahuvakar

CEO, Anarde Foundation

Saibal Paul

Associate Director, Sa-Dhan

Shailesh Dixit

Co-founder, Gromor Finance

Vanita Shinde

Chief Administrative Officer, Mann Deshi Foundation

Venkatram Jayanthi

CEO & MD, Indian Post Payments Bank

Vikram Regunathan

Vice President, Samunnati Financial Services

Disclaimer

This report has been produced by a team from Sattva Consulting as a product for the Sattva Knowledge Institute (SKI). The authors take full responsibility for the contents and conclusions. Any participation of industry experts and affiliates who were consulted and acknowledged here, does not necessarily imply endorsement of the report's contents or conclusions.

This report only provides the findings of our limited search and is based on information acquired through conducting interviews of the organizations named/featured/attributed in the report, publicly available information on such organizations, and publicly accessible documents/information that may have been submitted/filed/reported by these organizations. SKI has not conducted any independent searches of any information or data presented in the report or on the organizations named/featured/attributed in the report, nor have we conducted searches using any specialized diligence software/tools/vendors/third parties/regulators.

SKI does not comment on, nor has it reviewed the compliance status of the organizations mentioned in this report, which remains the sole responsibility of the users of the report.

This report is provided for information purposes only. No advice or services are being offered or provided by Sattva Media and Consulting Private Limited (“Sattva”) or SKI in or pursuant to this publication. This report is not a substitute for professional advice or availing services. Users of this document should seek advice or other relevant assessments regarding the appropriateness of recommendations referred to in this report and should consult their advisors before making any decisions. Sattva and SKI accept no liability and will not be liable for any loss or damage arising from any use of this report, howsoever arising. To quote this primer, please mention: Sattva Knowledge Institute, *Accelerating Financial Inclusion for Women’s SHGs with Account Aggregators*, October 2023. Use of the report’s figures, tables or diagrams, must fully credit the respective copyright owner where indicated. Reproduction must be in original form with no adaptations or derivatives. For use of any images in the report please contact the respective copyright holders directly for permission.

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License:

Attribution - You may give appropriate credit, provide a link to the licence, indicate if any changes were made.

Non-Commercial - You may not use the material for commercial purposes.

Share A Like - If you remix, transform, or build upon the material, you must distribute your contributions under the same licence as the original.



To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/4.0/>

About Sattva Knowledge Institute

Sattva Knowledge Institute (SKI), established in 2022, is our official knowledge platform at Sattva. The SKI platform aims to guide investment decisions for impact, shedding light on urgent problems and high potential solutions, so that stakeholders can build greater awareness and a bias towards concerted action. Our focus is on offering solutions over symptoms, carefully curating strong evidence-based research, and engaging decision-makers actively with our insights. Overall, SKI aims to shift intent and action toward greater impact by influencing leaders with knowledge. All of our content proactively leverages the capabilities, experience and proprietary data from across Sattva.

Editors: Anagha Wankhede and Arshiya Gupta

Design: Usha Sondhi Kundu; cognitive.designs@gmail.com





CONTENTS

1	Abbreviations	06
2	Executive Summary	07
3	Formal Credit Can Boost Income-generating Activities for SHGs	10
4	Women's Participation in Formal Finance Continues to Lag in India	11
5	The Emergence of Account Aggregator (AA) Framework: What and Why of AA	14
6	AA Makes the Lending Process Simpler, Faster and Secure for SHGs	17
7	Enabling Financial Inclusion for Women SHGs through AA	22
8	Conclusion	27
9	References	28

Abbreviations

AA	: Account Aggregator
BC	: Business Correspondent
CBDT	: Central Board of Direct Taxes
CBO	: Community-Based Organisations
CGAP	: Consultative Group to Assist the Poor
CSR	: Corporate Social Responsibility
DPI	: Digital Public Infrastructure
EPFO	: Employees' Provident Fund Organisation
FIP	: Financial Information Provider
FIU	: Financial Information User
GSTN	: Goods and Services Tax Network
IPPB	: India Post Payments Bank
JAM	: Jan Dhan, Aadhar, Mobile
KYC	: Know your Customer
LSP	: Loan Service Provider
MLE	: Measurement Learning Evaluation
MSME	: Micro, Small and Medium Enterprise
OCEN	: Open Credit Enablement Network
NABARD	: National Bank For Agriculture And Rural Development
NBFC	: Non-Banking Financial Corporation
NGO	: Non-Governmental Organisation
NRLM	: National Rural Livelihoods Mission
PAN	: Permanent Account Number
RBI	: Reserve Bank of India
SHG	: Self Help Group
SRLM	: State Rural Livelihood Mission
UPI	: Unified Payments Interface

Executive Summary

The emergence of Digital Public Infrastructure like Account Aggregators (AA) paves the way for financial inclusion of many underserved communities in India. **It has the potential to empower millions of customers to digitally access and share their financial data across institutions, resulting in the creation of their digital financial identity.** The adoption of AA among banks has resulted in optimised user journeys, higher conversion rates, and reduced operating costs. In some cases, **the cost of processing a loan application has come down to ₹90-110 from ₹440 per case**, owing to lesser manual intervention and lower drop-offs.

The financial inclusion of women is one of the critical indicators that determine and enable women's economic empowerment. Across the country, SHGs have played an important role in bringing women together to build a habit of saving, enable access to formal banking services, and potentially transform groups into micro-businesses to boost their livelihoods. **However, over 44 lakh SHGs are still not credit-linked with banks**, due to three major challenges – recent formation of the businesses, lack of records pertaining to the financial history of the group and the complicated loan application process of banks, with a typical disbursement cycle of 3-6 months. These impediments often compel SHGs to go back to informal sources of credit.

Digital public goods such as AA have the potential to close the credit gap SHGs face today. This perspective uncovers the promise AA holds for SHGs in India and elaborates on two use cases that can be implemented on the ground to actualise AA-enabled digital financial inclusion.

- (i) **Loan disbursement through Loan Service Providers:** AA shortens the existing Know Your Customer (KYC) process of assessing loan applications from **3-4 days to 10-20 minutes**. With simple bank account linkages through OTP, AA enables real-time underwriting of SHG financial data for comprehensive credit assessment.
- (ii) **Loan monitoring to determine repayment abilities of SHGs:** Recurring consent in AA enables the sharing of banking data to study SHG bank statements. This helps in **analysing the financial health of SHGs** during the loan tenure in order to establish an early detection system for defaulting borrowers.

To ensure that the fundamental barriers to formal financial inclusion are overcome, AA service delivery has to be designed to cater to the needs of SHGs. **AA implementation requires assistance.** Assisted AA is a phygital model for obtaining AA services with the help of on-ground human assistance. It creates the much-needed trust and comfort in the digital lending journeys for SHGs.

AA also needs to be tested on mature SHG businesses. It can be tested with emerging and established business SHGs which currently have a digital financial trail and are primed to adopt it as first movers. **New and emerging SHGs need support.** For expanding AA services

to all SHGs and low-income communities, it is critical to develop a digital financial trail of linked savings and emerging SHGs.

The AA ecosystem needs more investment in evidence-based research. Its success is critical in developing relevant user profiles and testing pilot-based interventions to generate learnings. Philanthropy should demonstrate the applicability of the AA framework in small settings to highlight its potential. **Last-mile financial inclusion requires suitable financial products.** Lenders should prioritise the development of relevant financial products for underserved communities based on their business needs, context and repayment abilities.

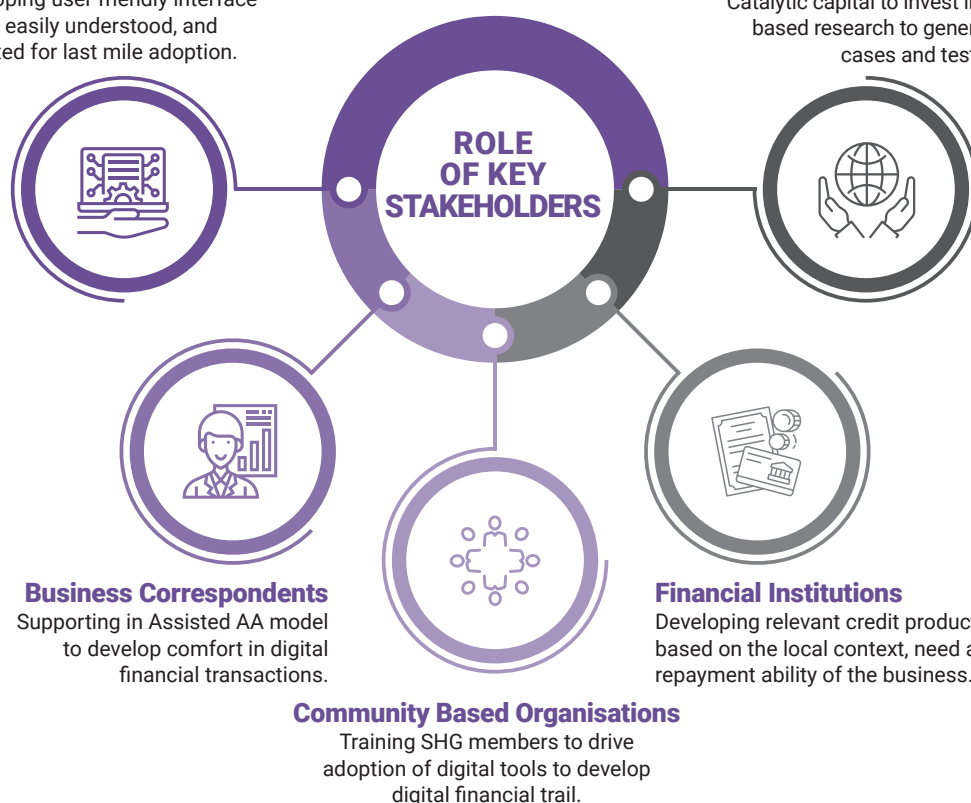
Finally, the digital experience for last-mile applications needs to be strengthened. The technology service provider and AA companies should simplify the digital lending experience so that it is easily understood, trusted and operated by SHGs.

Technology Service Providers

Developing user friendly interface that is easily understood, and operated for last mile adoption.

Philanthropy

Catalytic capital to invest in action-based research to generate use-cases and tests pilots.



Account Aggregators have the potential to empower millions of Self Help Groups (SHGs) to digitally access and share their financial data across institutions, resulting in the creation of their digital financial identity.

There are more than **86 lakh** SHGs in India. However, half of these SHGs, about **44 lakh**, have not obtained bank loans or actively used banking services.



The credit gap among SHGs across India remains at **43.3%**, with significant regional differences.



Painful and tedious data-sharing processes prevent SHGs from gaining access to formal financial services.



An extra **₹2.25 lakh crore** is necessary to meet the credit needs of SHGs in India.



Account Aggregator makes the lending process simpler, faster and more secure for SHGs.



Simplified loan process

AA reduces the existing know your customer (KYC) process of assessing loan applications from 3-4 days to 10-20 minutes.



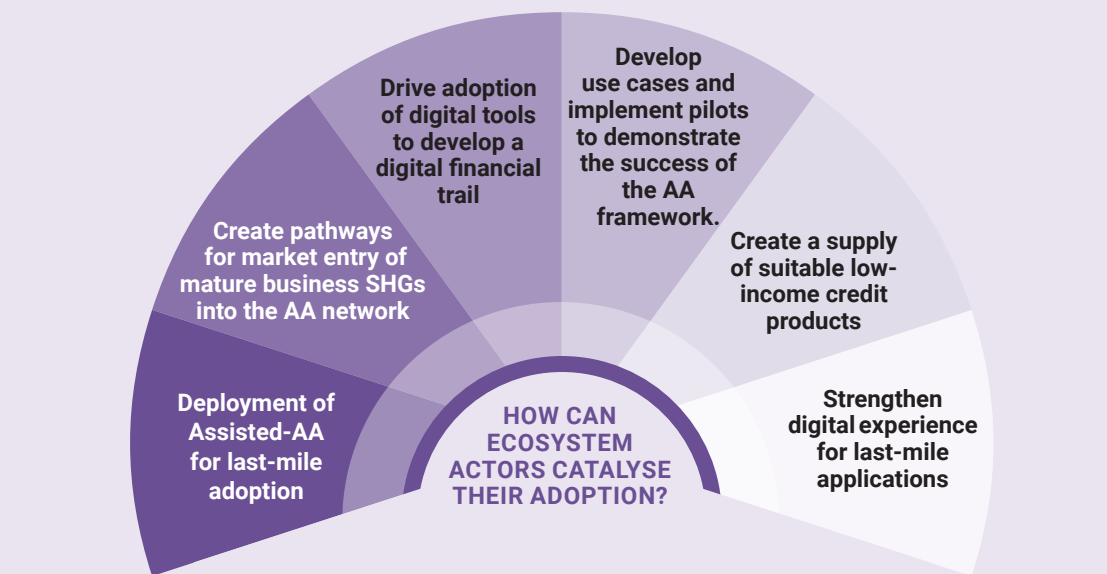
Comprehensive credit assessment

AA builds a credit history and proof of creditworthiness by providing a digital record of financial transactions.



Optimised user journey

The process of AA ensures a smoother user journey, which results in lower drop-offs and reduced operating costs. 90% of people who used it went on to finish their loan applications



Formal Credit Can Boost Income-generating Activities for SHGs

With the prospect of generating more income and getting financial assistance, five women in the village of Valli in Pauri Garhwal district, Uttarakhand, formed a self-help group to start a micro food processing business. Facilitated by Uttarakhand State Rural Livelihood Mission (USRLM), the group was able to establish credit linkages of ₹50,000 through a local bank at 7% interest to start the operations. Armed with new skills and financial support, Gaura SHG started the sale of mango and amla pickles and soon expanded into traditional recipes using local fruits and vegetables. In a year, the SHG has been able to sell enough to cover its expenses and earn a nominal profit. The group is now working to expand and diversify its business operations, and is looking to avail credit of ₹5 lakh from formal financial institutions. This process is currently being facilitated by the USRLM team.¹

Gaura SHG is one of the many SHGs in India that have benefited from credit linkage with banks through the support of SRLM. The growth of the rural livelihood missions has enabled the formation of more than 86 lakh SHGs² in India and their linkages with financial institutions. However, half of these SHGs, about 44 lakhs³, have not obtained bank loans or actively used banking services. The small size of these businesses and their restricted capital needs contribute to the lack of credit linkage with banks. Banks also refuse credit to SHGs due to a lack of business records, mainly as a result of dealings in cash, and the relatively high cost of servicing these loans.

Furthermore, in the absence of a support ecosystem such as an SRLM, women frequently struggle to navigate complex loan application processes and interact with banking personnel. Women SHGs, therefore, remain an underserved consumer segment due to a lack of assets and financial records.

People at the bottom of the pyramid are involved in activities such as handicrafts or farming for generations, and to scale and bring market linkage that help them scale – for all this, they require loans and capital which is hard to access for them. They will have Aadhaar but not PAN which banks require, they are often seen as untrustworthy with respect to repayment, and banks often see their loan requirements as too small.

– Arvind Kumar Malik, Udyogini

In a rapidly evolving digital landscape, with technology reshaping industries and societies, Digital Public Infrastructure (DPI) has emerged as a catalyst for financial inclusion. DPIs hold the promise to accelerate inclusive digital transformation, boosting women's economic participation through digital means, and enhancing access to different financial services.

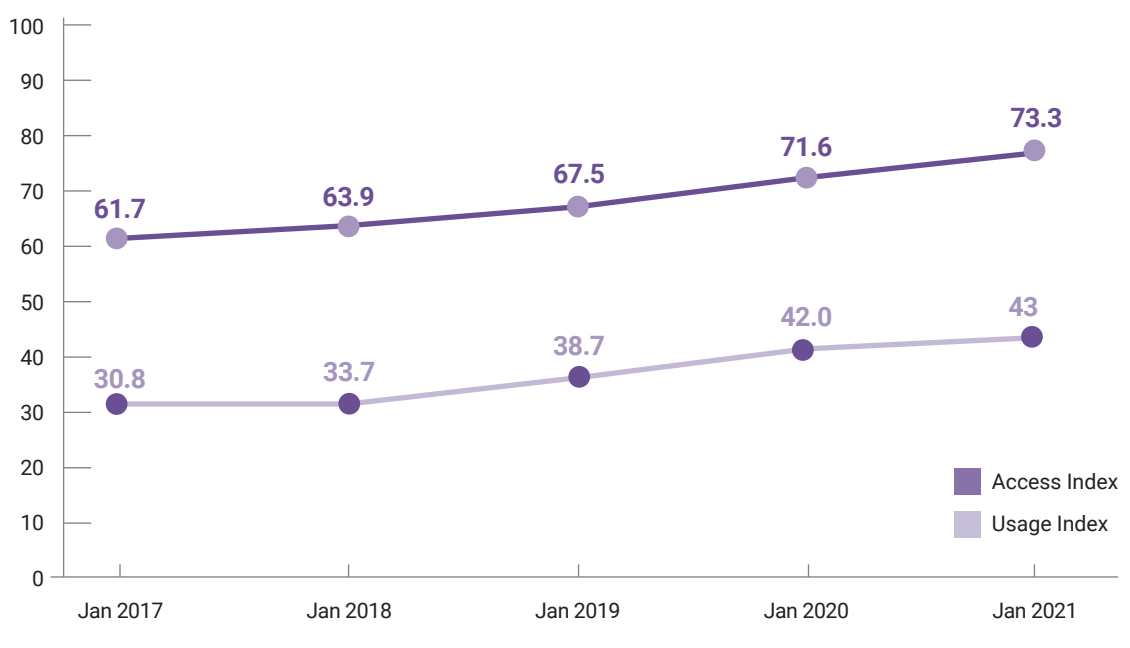
The Account Aggregator (AA) is one such DPI that can propel financial service providers to move from an *asset-based* lending approach to a *cash flow-based* lending model. AA is the first step towards bringing open banking in India and empowering millions of customers to digitally access, and share their financial data across institutions in a secure and efficient manner.

This perspective articulates how AA can be leveraged to promote the financial inclusion of women, contextualised to the need for linking SHGs with formal institutions. It aims to bring the right set of stakeholders together to drive the implementation of AA for the underserved population, especially women-led groups such as SHGs.

Women's Participation in Formal Finance Continues to Lag in India

The Reserve Bank of India's (RBI) Financial Inclusion Index (FI-Index) quantifies the extent of financial inclusion in the country by measuring ease of access, usage, and quality of financial services. The 2021 FI index measured out of 100 stood at 53.9,⁴ driven mainly by the access sub-index, which stood at 73.3.⁵ This is due to increased access to financial inclusion via the total number of savings accounts, post offices, and the Jan Dhan Yojana, Aadhaar and Mobile numbers (JAM) ecosystem. Despite these gains, regular usage and penetration of these services amongst the vast majority of women remain low. The usage sub-index, which represents the active usage of financial infrastructure through savings, digital, insurance, pension, and credit facilities remained at only 43.⁶

Figure 1: RBI's FI-index score contrasts high access with low usage of financial services



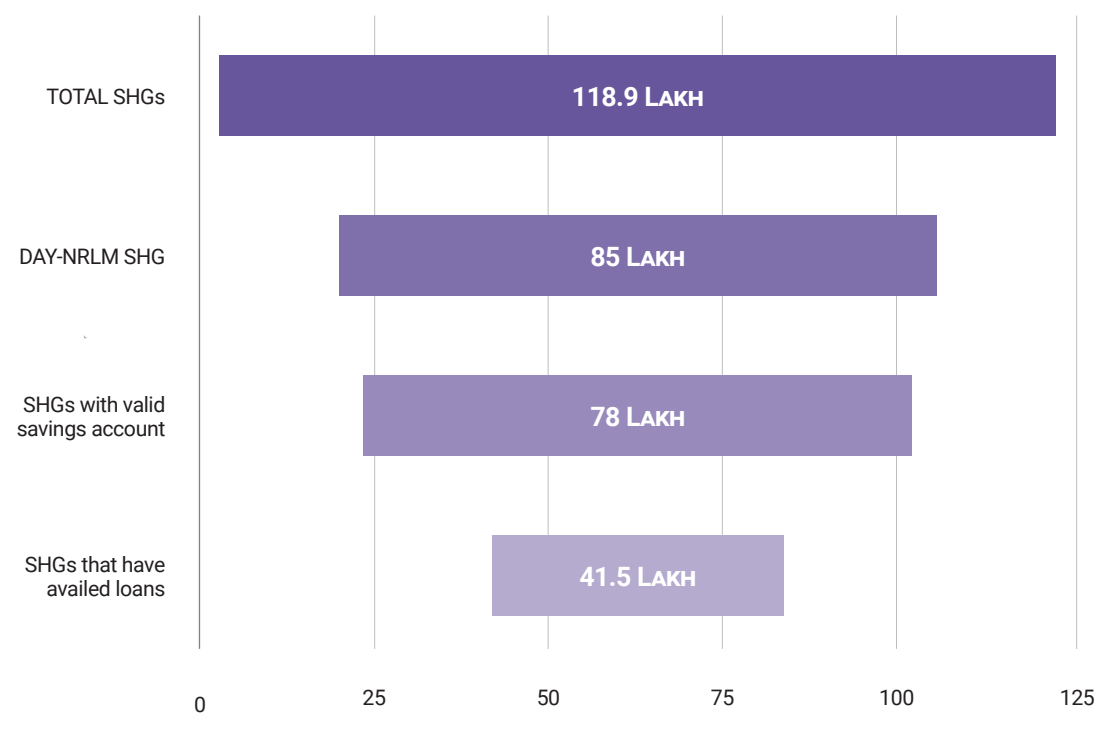
While access to credit has been increasing year-on-year, there is a long way to go for the universal access to credit for women SHGs.

Self Help Groups represent a distinctive approach to financial intermediation that allows access to low-cost financial services with a process of self-management and development of SHG members.⁷ The credit gap among SHGs across India remains at 43.3%, with significant regional differences.⁸ The cumulative number of SHGs that have availed loans stands at only 41.5 lakh.⁹ This large gap in credit linkage arises due to two significant reasons. First, several women see SHGs as a collective for savings only – they do not aim to conduct any income-generating activities, but prefer to have an informal savings fund to borrow from, whenever the need arises.¹⁰ Second, even those SHGs seeking credit for new income-generating ventures or scaling existing ones face several challenges and frequent rejections due to lack of documentation, perceived lack of creditworthiness, and lack of support for scaling, such as business development services, market linkages and technology upgrades.¹¹

Loans are used by SHGs for various different kinds of businesses- both for day-to-day functioning (working capital for raw materials etc.) and for scaling of their businesses from one shop to multiple and so on.

– Vanita Shinde, Mann Deshi Foundation

Figure 2: More than half of the DAY-NRLM SHGs have not been credit-linked with banks.¹²



Painful and tedious data-sharing processes prevent SHGs from gaining access to formal financial services.

A cumbersome process of obtaining loans from banks makes it difficult for savings-linked SHGs to become credit-linked SHGs.

1. **The loan application process is complex and time-consuming:** At both individual and SHG levels, multiple documents are necessary to avail loans. SHGs need to create credibility through proper micro-credit plans, letters of continuity, resolution agreements signed by all members, and copies of bylaws along with other relevant documents. Consolidating and validating all relevant paperwork takes significant time.

Banks require a large amount of data before sanctioning loans and take a significant amount of time to process such applications. They require personal identification for the client (PAN, Aadhaar, relevant education and caste documents for special schemes) along with business documents such as licenses, detailed operating plans and vendor/supplier details, and CIBIL Scores.

– Vanita Shinde, Mann Deshi Foundation

2. **Credit assessment of SHG members is difficult due to scattered and incomplete financial information:** Most SHGs are unable to provide the necessary financial information to obtain a loan due to a lack of effective book-keeping. Credit evaluation sources such as credit bureau data, tax records, and income statements are not readily available to SHG members. Moreover, SHG members must visit the bank branches multiple times, which are often far away and unwelcoming to female clients.¹³ Women unfamiliar with the banking process are less likely to approach banks and seek clarity on the loan disbursement process. Even when all documents are submitted, banks might reject applications by SHGs without disclosing the reasons.¹⁴

Whenever these women want loans, even small ones, the process is very cumbersome – many of them do not have PANs and other documentation that is now mandatory. Poor women are also underconfident, and they have this fear that they will be turned away and not serviced.

– Arvind Kumar Malik, Udyogini

Borrowing needs of SHGs must be met to turn them into sustainable, job-creating livelihood enterprises.

The NRLM aims to turn SHGs into viable micro-enterprises by addressing their credit requirement based on groups' livelihood credit plans. The current per-member credit is ₹25,000, and an extra ₹2.25 lakh crores is necessary to transform SHGs into flourishing

firms with an average credit of ₹50,000 per member.¹⁵ Simultaneously, mature SHGs engaged in livelihood activities would have higher financing requirements, to expand the scale of their operations. The financial inclusion process in India needs to be designed to digitally serve rural SHGs.

The Emergence of Account Aggregator Framework: What and Why of AA

AA empowers users to share information between one financial institution where they have an account, and any other regulated financial institution in the AA network. AA gathers data from multiple sources, such as banks, mutual funds, insurance companies, and tax authorities to present a holistic view of the user's financial information. Account Aggregator empowers the individual with control over their personal financial data, which otherwise remains in silos.¹⁶

To learn more about Account Aggregators and their functioning, please refer to SKI's primer on *Revolutionising India's Financial Ecosystem with Account Aggregators*.

AA acts as a consent manager for all your financial data, and as a blind conduit for that data to be reliably accessed by any financial institution that needs it from you.

– Anjan Roy Choudhury, OneMoney

Figure 3: Stakeholders in the Account Aggregator Ecosystem in India: Driving Consent-Based Financial Data Sharing

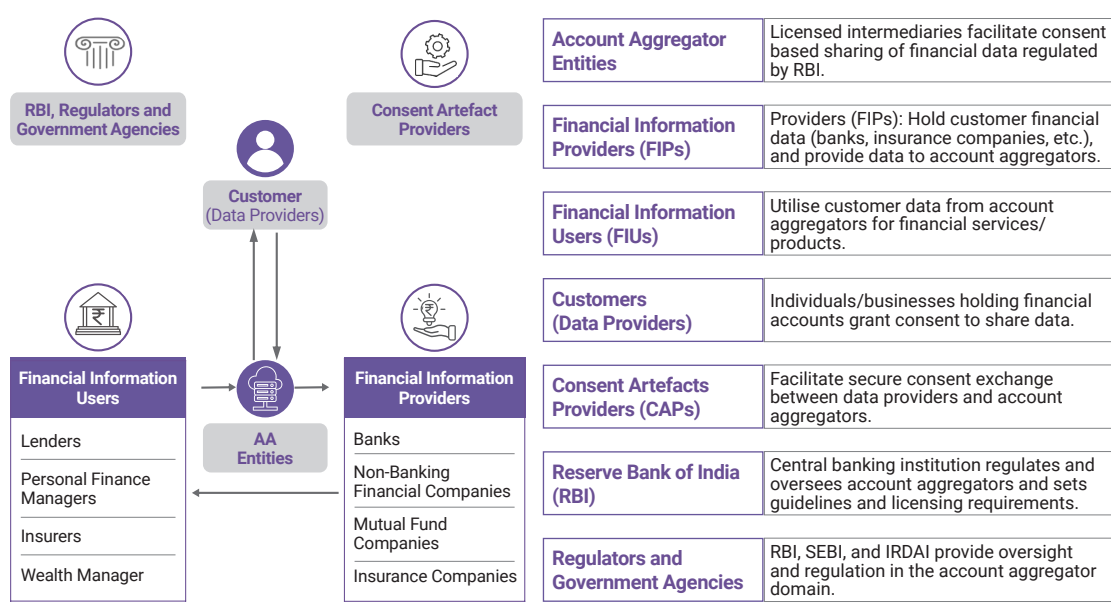
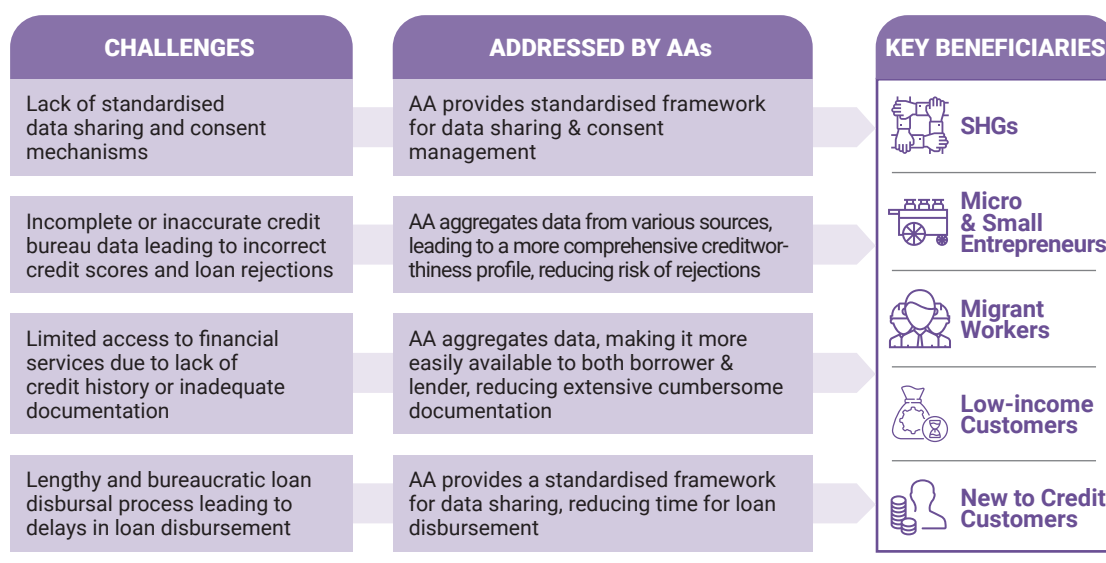


Figure 4: AA framework benefits underserved stakeholders in the financial services ecosystem



Banks and NBFCs are the prominent users of AA in the process of providing various types of loans.

AA provides numerous advantages to financial service providers by furnishing real-time, tamper-proof, digitised data, which allows them to offer cost-effective financial services to customer segments that were previously unviable due to high processing and servicing costs. 126.6 lakh accounts have been linked as of July 2023, and more than 140 lakh cumulative consent requests have been successfully fulfilled through AA.¹⁷

Banks and non-banking financial corporations (NBFCs) have been at the forefront of adopting AA, with retail lending and micro, small and medium enterprise (MSME) lending use cases constituting around 74% of the cumulative successful consents given on AA.¹⁸ AA is sourcing customer consented data for underwriting personal loans, invoice financing for MSMEs, unsecured business loans, and auto loans and credit cards. The securities sector has been the second largest user of AA, comprising 25% of the data transfers for personal finance management and demat account opening.¹⁹ In the next five years, accessing bank account statements for underwriting and monitoring use cases for banks and NBFCs is expected to constitute 58% of the total data transactions on AA.²⁰ The reported benefits have resulted in lower drop-offs for optimised journeys, higher conversion rates, zero fraud rates, reduced operating costs, and lower default rates.

AA creates an opportunity to drive the adoption of a range of financial services.

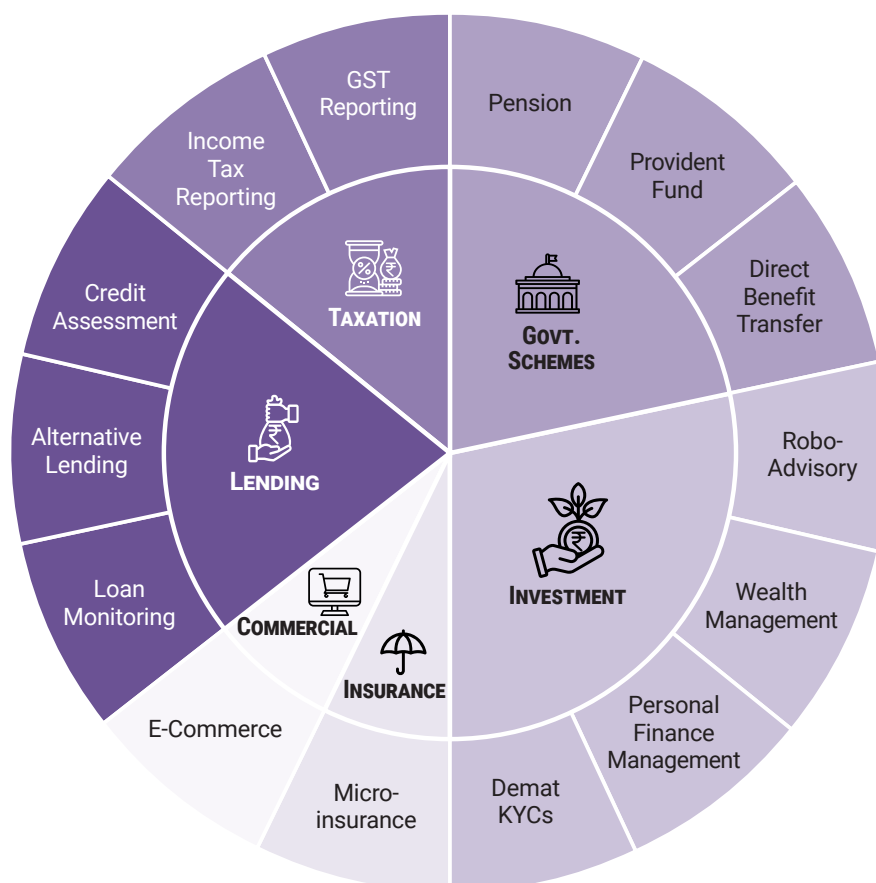
One of the primary objectives of AA is to improve access to financial services. It opens up the possibility of numerous use cases as it scales up to its full potential. Further, widening the base of Financial Information Providers (FIPs) to include all large entities from the financial sectors, and onboarding government databases such as the Goods and Services

ACCOUNT AGGREGATORS FOR SHGs

Tax Network (GSTN), Central Board of Direct Taxes (CBDT), and Employees' Provident Fund Organisation (EPFO) will allow financial services providers to access varied information through a single channel. As more customers join the AA ecosystem, multiple use cases for a range of financial products and services will emerge.

The lack of affordable, trustworthy information is one of the barriers to the ecosystem of inclusive financial services. The AA Framework can democratise this data sharing by bridging the gap between FIPs and financial information users (FIUs), through a carefully managed consumer consent architecture that prioritises customer interest. It has the potential to revolutionise investing and credit, giving millions of consumers greater access and control over their financial records and expanding the potential pool of customers for lenders and fintech companies.

Figure 5: AA can be applied to a range of financial services to enable access to newer markets



AA is transformational because the consumer finally has agency on the type of financial information an FIU (such as fintech) can access. It is convenient and safe, because it is accessible on the phone and is governed by guardrails set and managed by regulated industry bodies.

– Kanika Kumar, IDEO

AA Makes the Lending Process Simpler, Faster and more Secure for SHGs.

Financial inclusion for the rural poor is full of hassles. Distant bank branches demand high time and travel costs. The credit needs of the SHGs are urgent – while they require a small amount of loans, the application procedure compels them to do multiple rounds for signed and stamped copies of bank statements. Often, the credit need of the customer is inadequately assessed, resulting in a loan offer that they cannot afford. The Account Aggregators network would replace all these with a mobile-based, digital data access and sharing process.

Most small businesses and entities do not have enough financial data such as bank statements readily available. AA will help reduce that friction and facilitate easy access.

– Shailesh Dixit, Gromor

Integration of AA in the lending process has mutual benefits for both borrowers and LSPs.

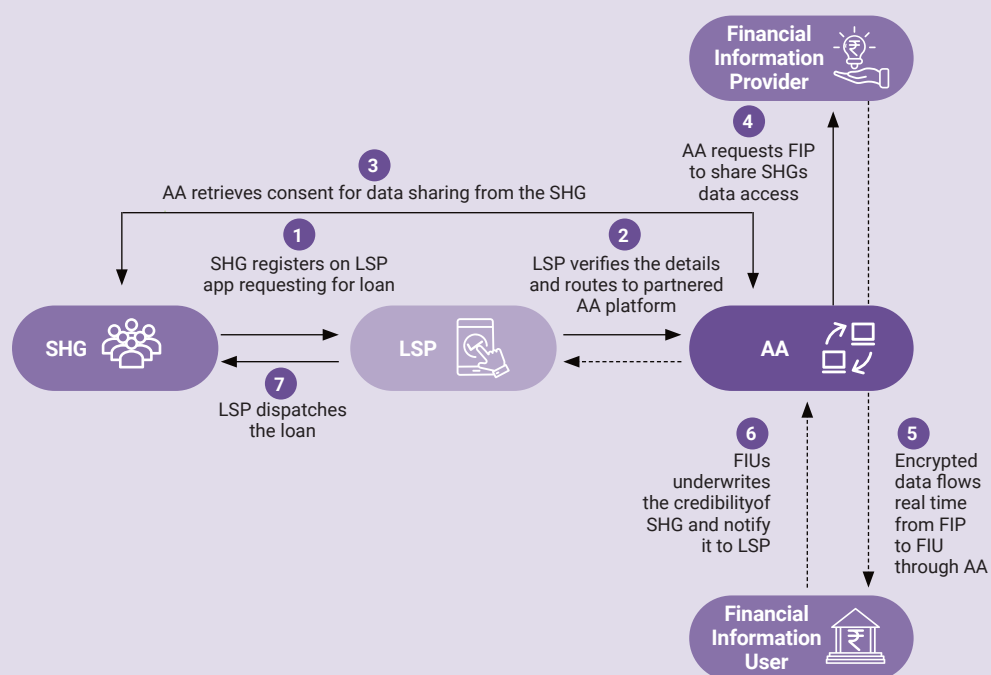
The biggest value of AA for SHGs is in the simplification of credit linkages:

- (i) **Simplified loan process:** AA reduces the existing know your customer (KYC) process of assessing loan applications from 3-4 days to 10-20 minutes.²¹ The essence of AA lies in the simplicity of use while empowering the user with their data. By replacing existing physical documentation with digitally plugged-in financial data, AA improves the process of credit linkages for SHGs.
- (ii) **Comprehensive credit assessment:** AA builds a credit history and proof of creditworthiness by providing a digital record of financial transactions. It gathers financial data from multiple sources, such as banks, mutual funds, insurance companies, and tax authorities, to present a holistic view of the user's financial information, thereby resulting in better underwriting of borrowers' financial health.
- (iii) **Optimised user journey:** The process of AA ensures a smoother user journey, which results in lower drop-offs and reduced operating costs. Users simply enter their phone number and approve the request for access, and the system fetches the required information automatically. As many as 90% of people who used it went on to finish their loan applications. The conversion rates for manual PDF uploads and internet banking stood at 56.8% and 49.8% respectively.²²

Below is an illustration of how AA integrates into the loan servicing requirements of an SHG:

Use case I: Loan disbursement to SHGs using Account Aggregator with LSPs

PROBLEM: Sparsh, a collective of five women, came together to form an SHG and have been saving for over a year now. They have deposited their savings in bank accounts and opened a fixed deposit account. Based on their savings, they are now seeking a loan of ₹1 lakh to start a business. They are seeking a loan to kickstart operations for their business and invest in machinery. In our hypothetical example, we explain what the journey of availing loans through AA would look like.



KEY STEPS

- SHG women create an account in the LSP app, and fill in personal and business details.
- SHG selects their business bank account and verifies details via OTP.
- LSP verifies the details such as bank account name, number and routes to the partnered AA platform.
- AA seeks consent to access bank statements for the past twelve months, insurance, pension and other available FIP data. AA verifies the nature, purpose, and duration of the consent.
- SHG enters OTP for consent validation. SHG decides only to grant access to bank account information to AA.
- AA sends the request to the customer bank to transfer the customer's financial data through open APIs.
- Encrypted data flows in real-time through FIP to FIU.
- Lender underwrites the financial data and makes a suitable loan offer.

AA's utility lies in decreasing costs of customer acquisition, allowing financial services providers to focus on building valuable and lasting customer relationships through multiple different services.

– Kanika Kumar, IDEO

AA brings efficiency to LSPs' business model and holds the promise to bring down the cost of servicing loans:

- (i) **Enhanced loan underwriting:** AA optimises the process of credit underwriting by plugging in multiple forms of financial and non-financial information, leading to better underwriting of the loan offer. Snapmint, an NBFC offering retail loans, reduced its cost of processing a loan application to ₹90-110 from ₹440 per case, owing to lesser manual intervention and lower drop-offs.²³

Efficiency during the underwriting process increases manifold with automation enabled by AA and online data aggregation, instead of analytics being run on submitted documents and manual underwriting.

– Arjun Singh, former Managing Director, Asia, Envestnet Yodlee

- (ii) **Early detection systems:** AA reduces the operating costs involved in loan recovery by setting in early warning systems. It allows better visibility of loan utilisation by SHG groups. Based on users' consent, LSP tracks all incomes and expenses of SHG banking transactions to determine the loan collectability of the borrower. LSPs that have implemented AA have reported zero fraud rates. This has reduced the operational costs of investigating and filtering out a bank statement submitted by a customer.²⁴ The LSPs, therefore, place early detection systems in place to identify risky customers and ensure targeted interventions to reassess repayment structure.

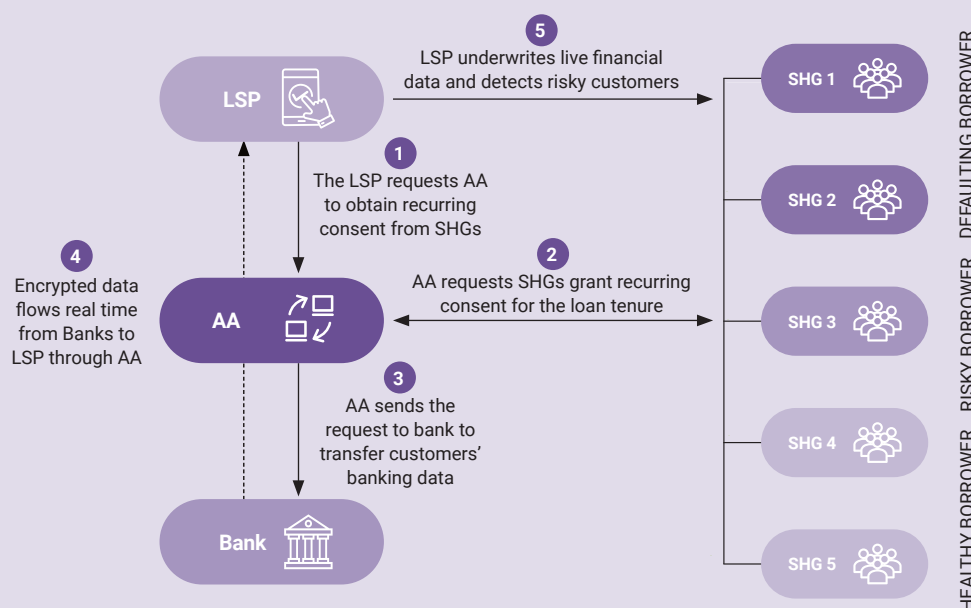
Costs of processing loans with respect to assessing creditworthiness will decrease and eventually become minimal, as AA becomes the default method to access borrower information, while maintaining the veracity and robustness required by FIU to determine risk. This will allow lenders to bring even smaller enterprises into the formal lending ecosystem.

– Mohammed Riaz, Xtracap Fintech

- (iii) **Personalised credit offerings:** AA provides a holistic view of the customer's financial information. LSPs can offer faster, secure and customised credit offerings with real-time and accurate data. Every SHG transaction is a possible source of financial data for LSPs. Instead of asset-backed collateral, it can use better data to offer relevant loan products to SHGs based on a detailed examination of their cash flow.

Use case II: Loan Monitoring of SHGs' bank accounts to determine loan collectability

PROBLEM: Suvidha Limited, a microfinance company, plans to expand into the district of Bhagalpur in Bihar. It has offered over 100 micro-loans to SHGs in the last month based on their credit needs. Suvidha lacks visibility into the SHGs' revenue streams and a network of partners for loan monitoring. In our hypothetical scenario below, we show how a lender gains confidence in a borrower's repayment capabilities by loan monitoring in AA.



KEY STEPS:

- During the loan disbursement, AA will seek to obtain a recurring consent for the entirety of the loan period.
- AA requests for customer bank accounts and other available FIP data.
- SHG women grant recurring consent of bank account statements for the loan tenure.
- AA public infrastructure enables the acquisition of data related to account receivables (bank statements), and new sales and purchase data.
- Recurring bank statements allow LSP to study the financial health of the borrower.
- LSP determines loan collectability of their SHG and sets up early warning systems.
- LSP identifies potential risky customers and ensures targeted intervention with SHGs.

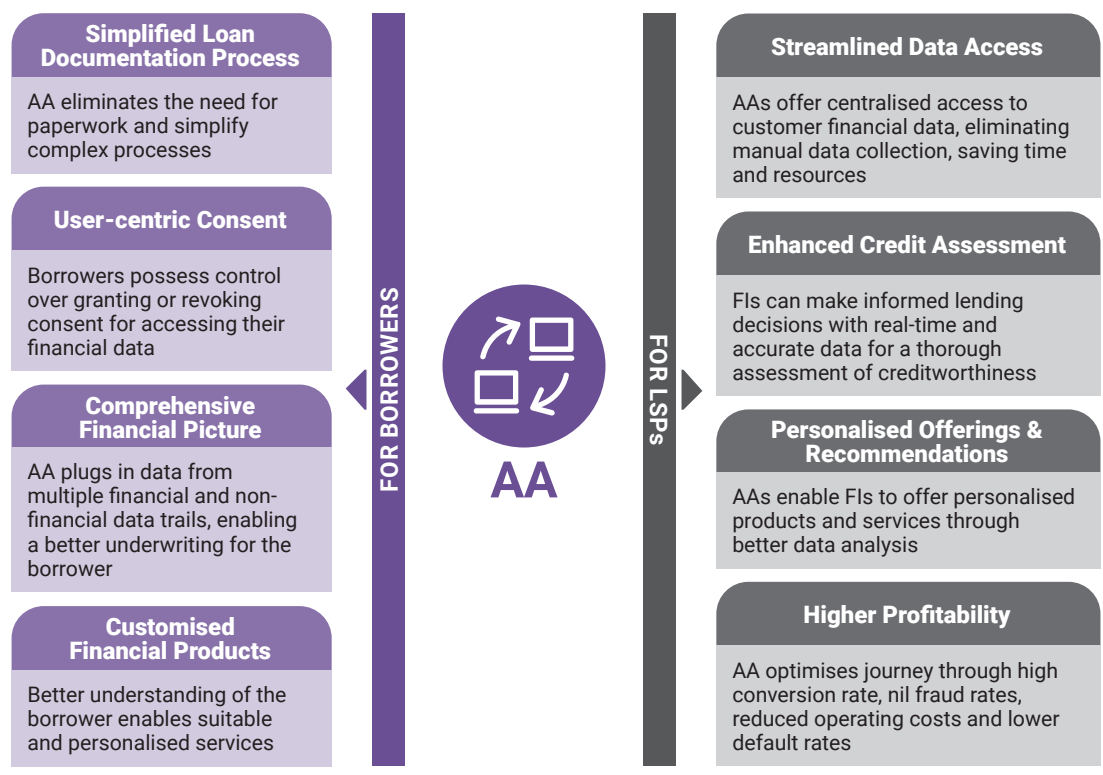
When there is trustworthy information available about amount usage, LSP can create an alert for discrepancies in usage when access to this information is shared regularly through AA. This can help flag possibilities of default and bring down collection costs.

– Shailesh Dixit, Gromor

AAs will be very helpful when it comes to loan monitoring, if users allow bank statements or other similar access. It will add to confidence while underwriting larger ticket loans to such groups.

– Vikram Regunathan, Samunnati Financial Services

Figure 6: AA offers benefits to both borrowers and LSPs making the entire loan journey simple, faster and secure



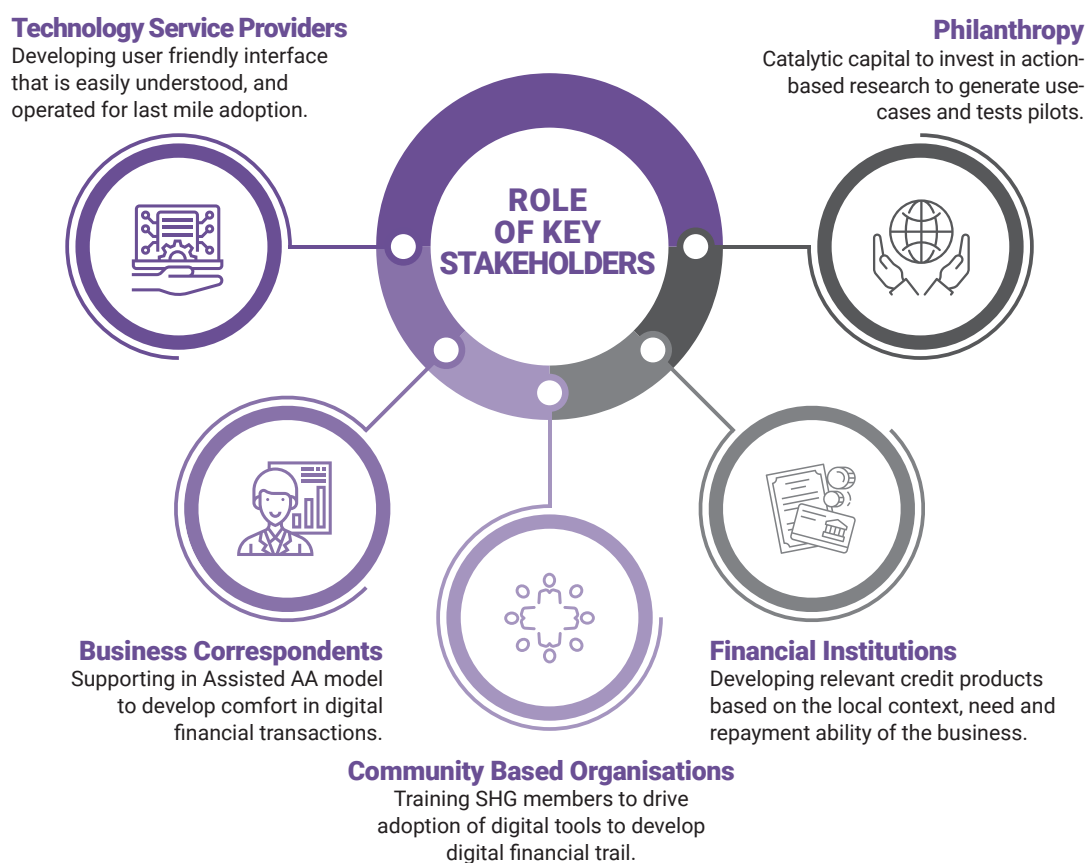
Interest rates will decrease due to better credit visibility and more information to assess and monitor the flow of capital (regarding borrower and their business), arising from the AA framework.

– Shailesh Dixit, Gromor

Enabling Financial Inclusion for Women SHGs Through AA

To actualise AA-enabled digital financial inclusion, as described in the preceding section, it is critical to bridge the gap between last-mile users and digital lending solutions. Philanthropists, financial service providers (banks, NBFCs, fintech), implementation partners such as foundations, corporates, NGOs, Corporate Social Responsibility (CSR) wings, social enterprises, and the government, must all work together to foster innovations and develop regulations that allow consumers to access, adopt, and benefit from the AA framework.

Figure 7: Multi-stakeholder participation will drive the last-mile adoption of AA



1. Deployment of Assisted-AA for last-mile adoption

Assisted AA framework is a key tool to test, pilot and scale account aggregator-led services in India. It is a *phygital* model for obtaining AA services with the help of on-ground human assistance. The user will control the phone and the app completely, with the agent guiding them through the procedure and providing support as needed. The loan disbursement method remains entirely digital.

The assistance can be fulfilled by Business Correspondents (BCs) in rural areas who carry their own devices to check details and conduct e-KYC for the user using an Aadhaar-

Figure 8: Assisted AA creates much-needed trust and comfort in the digital lending journey for SHGs

SHG Integration Stages	Key Milestones in AA Journey	Areas of Support Required in Assisted AA Model
1 Preparation Stage	Usage of digital devices	Developing trust in digital tools. Accessibility and independent usage of mobile phones.
	Comfort with financial transactions	Building financial trail for SHG business through digital means (Cash deposits/UPI/netbanking).
2 Credit-linkage Stage	SHG Registers on the LSP app	Enable onboarding on the app. Assistance in filling key information details about the self and business.
	AA seeks consent for bank account linkage	Explaining the terms, duration and purpose of the consent for the SHG to take an informed decision.
	Lender makes the loan offer	Assistance in evaluating the loan offer and terms and condition of repayment.
3 Loan Utilisation Stage	Loan is disbursed to the SHG	Support in utilising the loan amount to generate revenue for the business.
	Repayment of the loan	Facilitating timely repayments to the lender.

enabled fingerprint scanner. The role of BCs is to provide on-the-ground assistance as well as smooth integration with financial services. Integrating SHGs through them helps build trust before moving to more complex financial transactions.

“It is also imperative to build assisted models to onboard underserved and underbanked users onto AA, to increase awareness, enhance confidence and trust in the system.”

– Kanika Kumar, IDEO

2. Create pathways for market entry of mature business SHGs into the AA network

The applicability of the AA framework will vary, depending on the digital and financial maturity of the SHG. On the basis of this, different models can be tested with SHGs. The SHG maturity index highlights the readiness of SHGs to adopt emerging digital public infrastructure.

Digital maturity emphasises SHGs' access to, usage of, and comfort with digital technologies that assess their willingness to adopt digital lending tools. Financial readiness assesses business preparedness based on credit demands, financial literacy, and record-keeping systems, which are critical in gathering relevant data on SHGs for loan underwriting. The current SHG market is segmented into four types which are dormant, savings-linked, emerging business SHGs and established business SHGs. As highlighted in the figure above, emerging and established business SHGs are better suited as early movers in the AA framework. LSPs can penetrate the SHG segment through testing AA with SHGs that have a strong business presence and a robust digital trail.

Figure 9: Emerging and established business SHGs are primed to adopt AA as first movers

Influencers	Enablers to Adoption	Dormant SHGs	Savings Linked SHGs	Emerging Business SHGs	Established Business SHGs
Digital Maturity (Behaviour of the group and ease of adoption of digital lending tools)	Access to Devices	Smartphone is either absent or shared among family members for personal use		-Shared smartphone among family members -Few members having personal smartphone	
	Digital Usage	Dormant Bank a/c	Bank a/c usage limited for accessing welfare schemes and UPI usage being constrained to personal expenses	Bank a/c usage extending for personal transactions. UPI is increasingly used for business	Advanced financial transactions such as net-banking, loan repayments being performed
	Digital Comfort	Low digital understanding	Limited digital comfort for personal finance	Experimental and more comfortable in using digital for accessing markets and financial services	
Financial Maturity (Financial behaviour of the SHG and ease of adoption of digital lending tools)	Credit Need	None as SHG is inactive	Credit for personal use met by group savings	Preliminary need for establishing the business and working capital	Varying credit needs to scale up the enterprise
	Financial Literacy	Low knowledge of financial planning for business but trained in managing personal finances		Limited hands-on experience due to recency of the business. Requires support in financial planning	Informed and experienced with loan processes, with some members demonstrating capabilities to manage finances
	Record Keeping	Paper-based record keeping	Paper-based record keeping with some digitised records with banks	Paper-based record keeping but individual members track their own savings using mobile messages/ passbooks	Large SHGs may have digital business records or may move towards it. Digitised records of business loans with banks
AA applicability and its potential impact		Potential to leapfrog financial services through assisted AA for e.g., increasing coverage of pension, insurance benefits, etc.		Assisted AA (Strengthen access to financial services)	AA (Enhanced access to financial services for business growth)

3. Drive adoption of digital tools to develop digital financial trail

Training SHG members to digitalise bookkeeping and other regular functions enables comfort with digital tools, familiarity with processes with higher accuracy and lower time expenditure.²⁵ NABARD's E-Shakti project enables 'one-click' availability of the social and financial information of SHGs with savings accounts. The initiative is meant to record all forms of financial transactions and non-financial operations at the SHG level, such as meetings and decisions, and keep them in digital form on the E-Shakti portal and monitor progress in real-time.²⁶ CBOs' involvement in on-ground operations can prepare SHGs for the Assisted AA journey through:

- (i) incentivising regular savings to log and maintain all SHG-related information;
- (ii) ensuring that the grading of SHGs which is based on regular meetings, regular savings, internal lending, regular repayment and bookkeeping can be digitalised across all SHG functions, and
- (iii) training women on independent usage of mobile phones to drive financial transactions that generate comfort with digital modes of payment.

It is necessary to drive entrepreneurship training along with tech literacy (specifically mobile phones and/or smartphones) for AA to help make loans accessible.

– Arvind Kumar Malik, Udyogini

Handholding of the SHG segment is absolutely necessary, to drive comfort with both digital lending and repayment.

– Saibal Paul, Associate Director, Sa-Dhan

4. Develop use cases and implement pilots to demonstrate the success of the AA framework.

Investing in action-based research to uncover the correct use case for relevant user profiles is critical to AA's success. As its ecosystem is in its early stages, catalytic capital from philanthropy is necessary to spur the ecosystem forward. Philanthropy should demonstrate the applicability of the AA framework in small settings to highlight its potential. The success of early pilots paves the way for AA framework applications for other market players to adopt. Philanthropy can invest in strengthening research and testing pilots to drive AA's adoption to last-mile users for accessing financial services, with a particular focus on

1. Extensive needs assessments to understand use cases for underserved segments:
 - (i) Developing relevant user profiles of AAs such as SHGs, women entrepreneurs, and migrant workers;
 - (ii) Commissioning of landscape studies to establish use cases of AA for different demographics amongst SHG (credit, pension, insurance, personal finance management), and
 - (iii) Showcasing the digital and financial maturity of distinct SHG groups to find appropriate interventions for digital lending.

2. Developing and testing pilot-based interventions to generate evidence and learnings:
 - (i) Facilitating innovation capital to pilot assisted AA that promotes experiential models of learning, providing hands-on experience of digital technology and financial execution;
 - (ii) Defining the scope for partners to test AA models for identifiable improvement in access to financial services, and
 - (iii) Focusing on strong Measurement Learning Evaluation practice (MLE) to record key learnings.

5. Create a supply of suitable low-income credit products

Lenders should prioritise the development of relevant financial products for underserved communities. LSP should work with CBOs to test the viability of Assisted AA using hyperlocal financing models. Organisations such as Rang De and Avanti Finance are using a community of network partners to facilitate loans for last-mile financial inclusion.²⁷ Their work is supplemented by community partners who identify entrepreneurs in need of financing, undertake due diligence, assist entrepreneurs in properly utilising funds, and facilitate timely repayments.²⁸ LSPs can create relevant financial services for SHGs through:

- (i) Leveraging the network of CBOs to develop hyperlocal lending models: Based on the information flow about the need, context and cash flow of the business from on-ground partners, lenders can create a more comprehensive credit product. Along with traditional financial trails, utilising alternate data points from the CBO, such as GSTN data, invoices, and utility payments helps the LSP to underwrite the SHG accurately.

- (ii) Innovating on sachet-sized loans for SHGs: Since SHGs borrow for a specific time and purpose, LSPs can disburse loans in multiple cycles. For example, an SHG engaged in producing organic food items requires capital to invest in different stages of the business such as sowing, maintenance, harvesting and storage. Sachet-sized loans for different phases ensure cheaper overall loan costs for SHGs and time-bound utilisation of loans.

Subsequent loans taken after successful repayment and income generating activities tend to have higher amounts and possibly more favourable terms as part of an iterative process.

– Nita Mahuvakar, Anarde Foundation

6. Strengthen digital experience for last-mile applications

Account Aggregators are very new to most users, and the network needs to be introduced in a way that explains why AA is beneficial and also builds trust in the technology. There should be a clearly articulated benefit of AA data sharing that promotes transparency and confidence.²⁹ The AA interface in the LSP will be a crucial point in the data-sharing process. As most users have not tried anything similar before, the digital lending experience with AA needs to be user-friendly, so that it is easily understood, trusted and operated by SHGs.

- (i) **Simplify user experience with an easy-to-navigate interface:** The AA product interface needs to be easy to operate for the users to increase its penetration. One key reason for UPI's wide adoption has been its user-friendly interface and adoption by both industry and users. UPI is conveniently accessible via mobile devices, offers quick payment initiation methods like QR codes, and ensures banking institution compatibility. These design decisions have aided the improvement of digital and financial literacy, as well as the onboarding of first-time users to UPI. Furthermore, UPI integration in well-established payment front-end solutions by well-known companies, such as Google Pay, PhonePe and Paytm has resulted in a positive user experience and increased adoption.³⁰ AA has to build upon similar features as UPI like developing multilingual language support, voice-enabled assistance and help buttons to manage consent which simplify the user experience.
- (ii) **Build on transparency and trust for last-mile adoption:** As AA involves dealing with sensitive financial information, it is essential for it to be transparent with user data and provide meaningful control. The user journey should begin with the secure connection of bank accounts, followed by a clear listing of the information that AA will retrieve, such as the time duration, consent type, and purpose of the data transfer. A clear call to action at each step in authorising a bank account is critical in AA to prompt people to make the right selections.³¹ Features like one-time bank account linkage, single-click approval for authorisation and a dashboard for consent monitoring will drive greater trust and comfort in the user journey.

Grameen dAAk Sevaks: Delivering credit to the doorstep using AA

India Post Payments Bank (IPPB) is working on a pilot to test the applicability of the AA framework with support from Sahamati and Consultative Group to Assist the Poor (CGAP). The programme aims to provide unsecured loans in under ten minutes through the IPPB customer app. The primary objective of the pilot programme is to develop a customer app for IPPB, transforming it into a Loan Service Provider (LSP) capable of disbursing instant loans. It aims to bridge the credit gap for the underserved rural segment and provide access to instant and unsecured loans from multiple lenders. IPPB is utilising a network of 1.3 lakh postal service employees, known as Grameen Dak Sevaks, to provide door-to-door financial services in rural areas. The pilot programme utilises bank statement data through AA, ensuring a 100% digital and instantaneous process. By leveraging the standard Open Credit Enablement Network (OCEN) rails, it allows customers to effortlessly apply for loans without the hassle of lengthy paperwork or complex procedures.³²

It is important for lenders to communicate information required and already available to the SHG women – whether they can see savings history and information contributing to credit score, and what else is good to have. You can also tell them about their finances and what else they can do.

– Monami Dasgupta, Setu

Pure independent AA is more suited to an urban, tech-savvy population – for this niche segment, you need more involvement with an agent assisting them which is very less additional cost, and this will slowly transition into doing this on their own.

– Venkatraman Jayanthi, India Post Payments Bank

Conclusion

Assisted Account Aggregator unlocks new segments of first-time borrowers and enables formal lending for last-mile beneficiaries. To expedite the adoption of the AA framework among SHGs, philanthropy should be able to demonstrate the benefits of AA. This would necessitate strategic efforts, capable of producing high-value insights and measurable outputs on the impact of AA on the ecosystem, such as impacted users, adoption rates, cost savings, and loans issued. The success of these initial pilots will boost industry confidence and facilitate greater adoption of AA across financial institutions. While India has made significant progress in extending access to financial services, the next step is to improve usage among low-income populations. To achieve that, technologies such as Account Aggregators will be crucial in bringing financial services to the country's underbanked women.

References

1. NITI Aayog 2023, *Best Practices in Social Sector: A Compendium 2023*, viewed 15 August 2023.
2. National Rural Livelihoods Mission, *NRLM Mapped SHGs Details*, viewed 15 August 2023.
3. Ibid, 2.
4. Reserve Bank of India 2021, *Reserve Bank of India – RBI Bulletin*, viewed 15 August 2023.
5. Ibid, 4.
6. Ibid, 4.
7. Hundekar, VR 2019, *An Empirical Study on ‘Financial Inclusion through Self Help Groups Bank Linkage Programme – An Economic Catalyst to Transform Rural India*.
8. NABARD (National Bank for Agriculture and Rural Development) 2022, *Status of Microfinance in India 2021-22*, viewed 15 August 2023.
9. Ibid, 2.
10. Bhattacharya, R and Joseph, V 2023, *Concept Notes and Background Papers of the National Workshop – Development of A Framework For Linking Corporates to Strengthen Shg-Led Entrepreneurship Development*, National Institute of Rural Development & Panchayati Raj (NIRDPR) and Ministry of Rural Development, viewed 15 August 2023.
11. Vishwanathan, NS 2023, *Inclusive Finance India Report 2022*, viewed 15 August 2023.
12. Ibid, 2.
13. Women’s World Banking 2021, *The Power of Jan Dhan: Making Finance Work for Women in India*, viewed 15 August 2023.
14. National Rural Livelihoods Mission 2017, *A Handbook on SHG – Bank Linkage*, viewed 15 August 2023.
15. Ibid, 8.
16. *Know all about Account Aggregator Network – A Financial Data-sharing System*, viewed 15 August 2023.
17. Sahamati 2023, *AA Dashboard | Account Aggregator Industry Dashboard – Sahamati*, viewed 15 August 2023.
18. Sahamati 2023, *Expected Evolution of Account Aggregator Ecosystem 2023-2027 – Sahamati*, viewed 15 August 2023.
19. Ibid, 18.
20. Ibid, 18.
21. Sahamati 2023, *SuperChAARGE Lending to Small Enterprises – FinBox, IIFL, FinVU*, viewed 15 August 2023.
22. Case Study on FinBox Account Aggregator, viewed 15 August 2023.
23. Ibid, 18.
24. Ibid, 18.

25. Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE) 2019, *Digitisation of Self Help Groups in India – Roadmap for State Rural Livelihood Mission-led Initiatives*, viewed 15 August 2023.
26. NABARD 2022, *Project for Digitisation of SHGs – EShakti – User Manual – Access and Use by Banks*, viewed 15 August 2023.
27. *Avanti Finance*, viewed 15 August 2023.
28. *Know About Rang De Impact Partners*, Rang De P2P Financial Services Private Limited, viewed 15 August 2023.
29. IDEO and Sahamati, *Building a Citizen Friendly Consent Flow for Account Aggregators*, viewed 15 August 2023.
30. Alonso, Bhojwani, Hanedar, Prihardini, Una and Zhabaska, (2023) *Stacking up the Benefits: Lessons from India's Digital Journey, International Monetary Fund*, viewed 15 August 2023.
31. Ibid, 29.
32. Sahamati 2023, *Grameen dAAk Sevaks: Delivering Credit to the Doorstep Using AA!*, viewed 15 August 2023.

