PAYOJANA

"Together We Grow, Fee-Free."

Finance

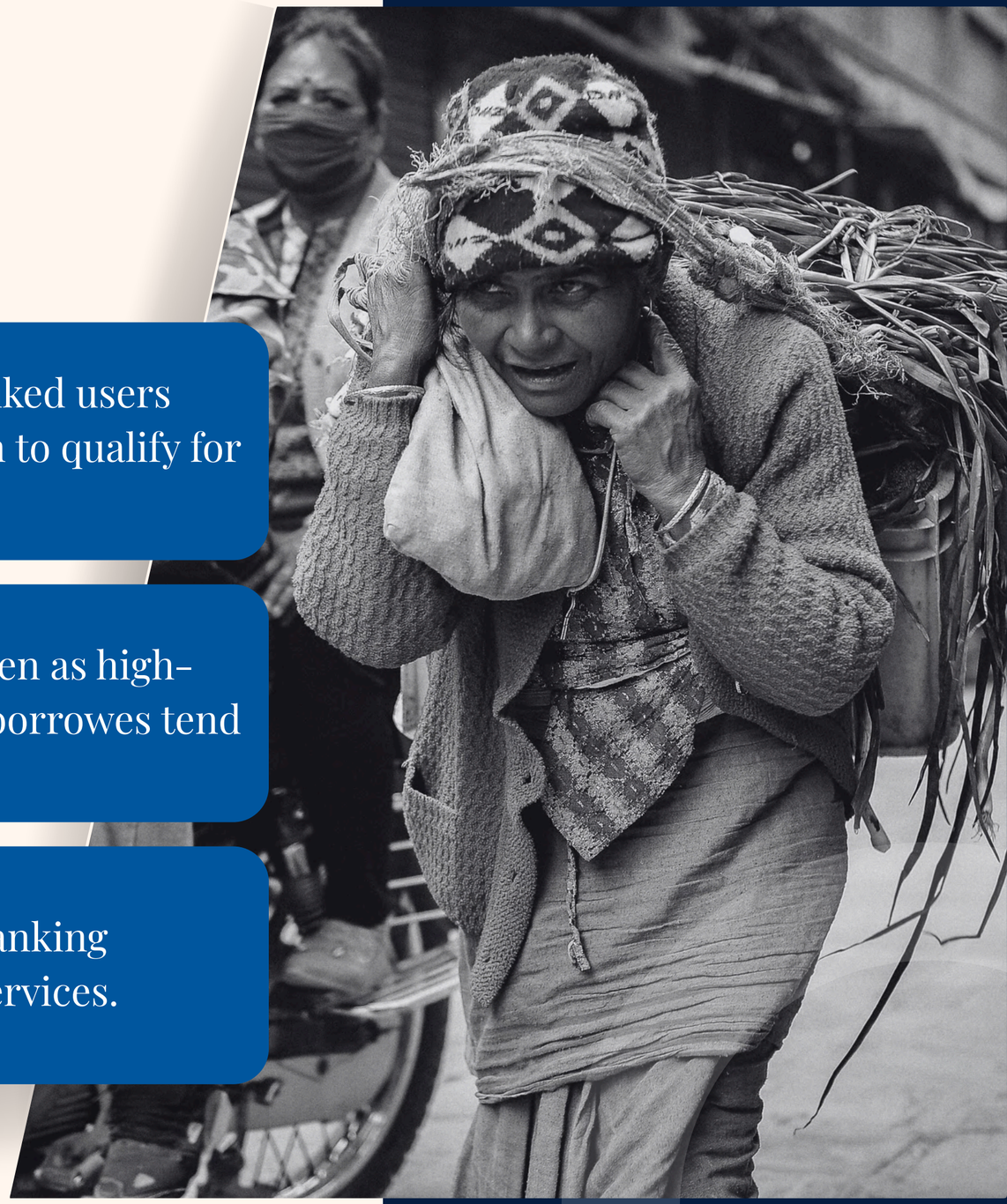
How can fintech innovations improve financial accessibility for underbanked communities, enhancing credit access, reducing transaction costs, and making banking services more inclusive?

Problems

Lack of Credit History & Traditional Credit Scores: Most underbanked users lack formal banking history or credit scores, making it hard for them to qualify for loans.

Exploitation of underbanked borrows : Unbanked borrowers are seen as high-risk due to lack of data, making loans either unavailable. Desparate borrowes tend to take loans with high interst

Low Accessability and poor infrastructure: Rural users face poor banking infrastructure, high service fees, and difficulty accessing financial services.



Case Problem

580 M UNDERBANKED IN INDIA

190 M UNBANKED

11200 SUICIDES OVER THE DECADE

borrow from local landlords or informal moneylenders who charge exploitative interest rates of 36–60% annually, often compounded.

mostly small and marginal farmers (over 86% of India's farming population

particularly in states like Maharashtra, Telangana, and Punjab.

Our Solution

Payojana - a fintech solution to the rural credit crisis by enabling group-based microloans for any communities without formal credit histories by analysing risk signals through machine learning and AI

01

Payojana will initially launch as a loss-making zero-fee utility bill payment platform, providing rural users with an easy, accessible way to pay for essential services like electricity, water, and mobile recharges.
To scale its reach, Payojana will partner with Aajeevika Yojana (NRLM), leveraging their grassroots trust to offer accessible digital banking, cut agent dependence, and promote financial inclusion

02

Once SHG and government partnerships are secured, Payojana will expand hyperlocally with its zero-fee, multilingual bill payment platform. Supporting regional languages, IVR help, and low-data use, it enables easy access.
Habitual adoption will be driven by local panchayat tie-ups, referral rewards, cashback, and timely SMS/WhatsApp reminders.
This phase is essential for embedding Payojana into daily rural financial behaviour and creating a foundation for long-term user engagement.

Our Solution

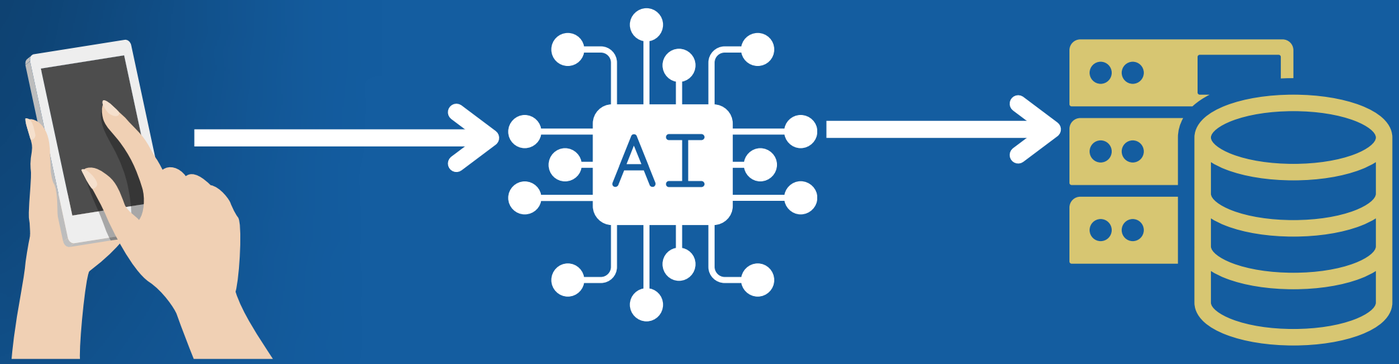
Risk Profiling Using AI

03

As Payojana transitions from payments to credit, it will construct individual risk profiles using Bayesian statistical modelling and AI. Each user's e-KYC data acts as a Bayesian prior, reflecting identity, demographics, and socio-economic signals.

As users make utility payments and interact with the platform, behavioural data updates the prior to a posterior probability of repayment. Loan decisions are modelled as Bernoulli variables to capture repayment uncertainty

These risk signals feed into supervised models—gradient boosting, TCNs, and transformers—that learn patterns in payment behaviour. This generates personalised, high-resolution risk vectors for data-driven, inclusive lending without needing credit scores.



Our Solution

Community based micro loans

With individual risk profiles built, Payojana will begin micro-lending to panchayat-level community clusters. Using a covariance matrix of repayment probabilities, it applies Mean-Variance Optimization to balance community risk and return for smarter capital allocation.

04

Loan amounts will typically range ₹5,000–₹25,000, with interest rates linked to community risk. Auto-repayment via Payojana's platform ensures frictionless collections, marking a shift from infrastructure to revenue through interest spreads, partnerships, and data monetisation.

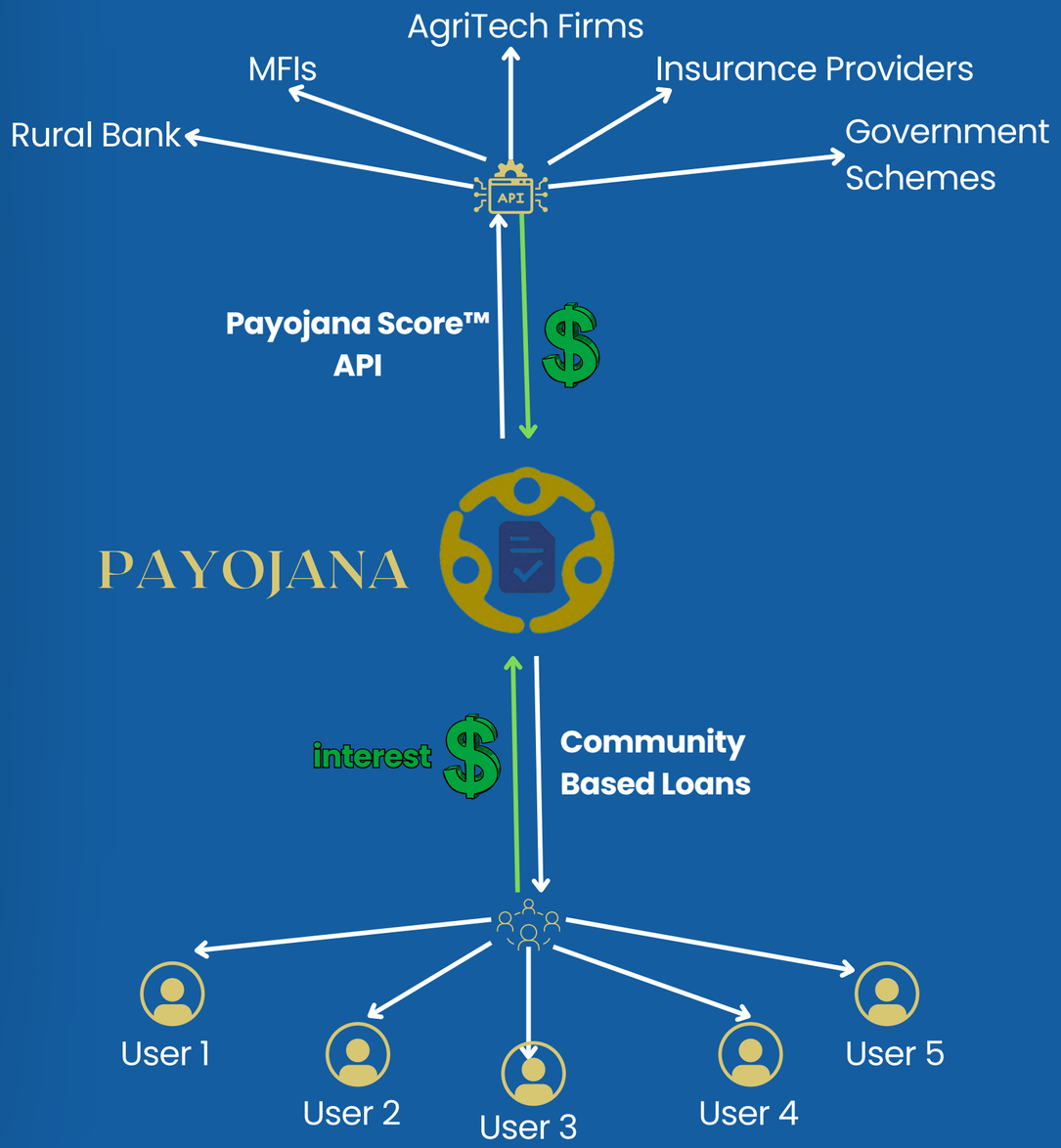
This stage marks the transition from utility infrastructure to **revenue generation**—through interest spreads, risk-sharing agreements, or data licensing models for institutional lenders.

05

Payojana generates revenue through community-based microloans and by licensing its behavioural credit scoring API to financial partners.

Our Solution

Revenue Structure



Business Model

Partner with existing community hubs to onboard users

Enable zero-fee digital utility payments for communities

Provide community-based loans through alternative credit scoring

Monetize user-generated data from utility bills and credit behavior

Measure of Success: Monthly active users of Payojana App

Market Size & Validation

India selected as initial launch market due to high underbanked population and smartphone access.

510
Million
Potential Users

88% of underbanked households have internet and smartphone access

$2.05
Trillion
Total Loan

Total loan market in India

$45.2
Billion
Microfinace Loan

Total microfinance loan market in India

$22.6
Million
Targeted Value

Based on 0.05% market share

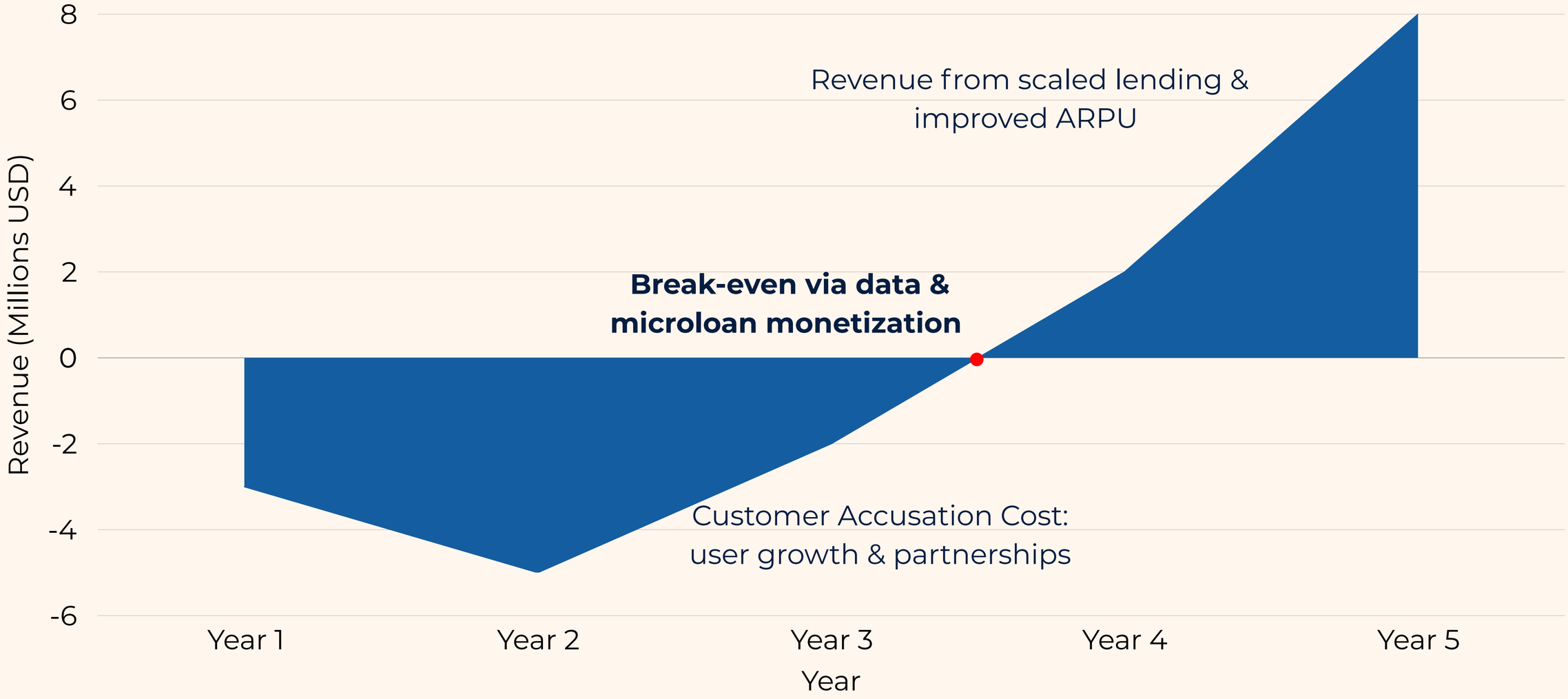
Competitive Advantage

CATEGORY	Credit Assessment	Target Segment	Loan Structuring
TRADITIONAL	**MUDRA Loans** – CIBIL-based, asset-linked	**Bandhan Bank** – Focus on credit-worthy microloans	**SKS Microfinance** – Fixed group lending models
PAYOJANA	Behavioural risk scoring using Bayesian inference & ML	Focused on high-friction, excluded rural underbanked	Dynamic loan terms based on individual repayment probabilities

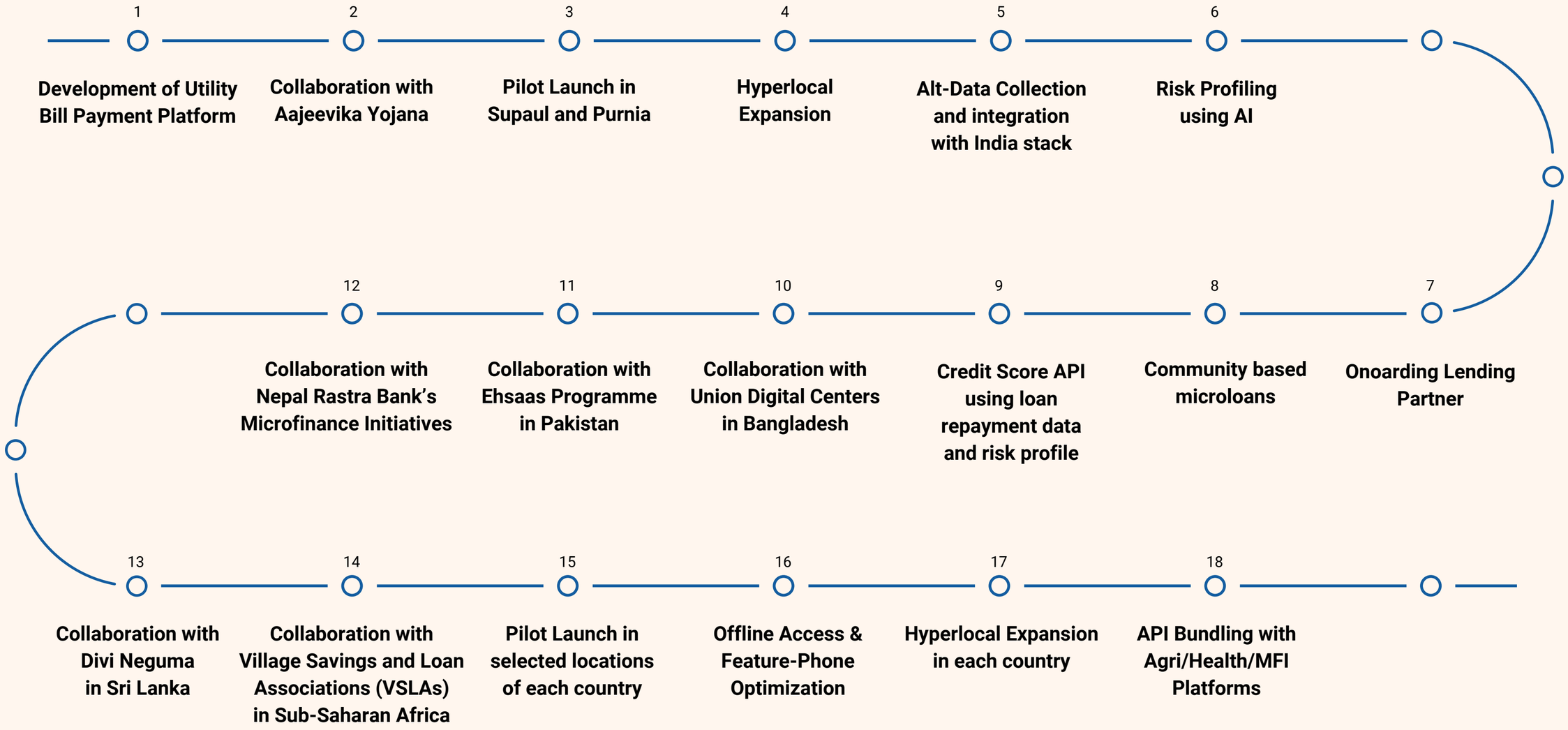
CATEGORY	Technology Integration	Distribution Model	Revenue Streams
TRADITIONAL	**Grameen Koota** – Partially digitised operations	**State Bank of India (Rural)** – Branch & agent based	**Janalakshmi Bank**– Interest-driven
PAYOJANA	End-to-end digital onboarding with UPI, eKYC, IVR, and regional language support	Distributed via SHGs, Panchayats, and DBT-linked community hubs	Interest, embedded credit partnerships, and API-based data monetisation

Projected Revenue

(First 5-Years)



Scaling


1
Development of Utility Bill Payment Platform
2
Collaboration with Aajeevika Yojana
3
Pilot Launch in Supaul and Purnia
4
Hyperlocal Expansion
5
Alt-Data Collection and integration with India stack
6
Risk Profiling using AI
7
Onoarding Lending Partner
8
Community based microloans
9
Credit Score API using loan repayment data and risk profile
10
Collaboration with Union Digital Centers in Bangladesh
11
Collaboration with Ehsaas Programme in Pakistan
12
Collaboration with Nepal Rastra Bank's Microfinance Initiatives
13
Collaboration with Divi Neguma in Sri Lanka
14
Collaboration with Village Savings and Loan Associations (VSLAs) in Sub-Saharan Africa
15
Pilot Launch in selected locations of each country
16
Offline Access & Feature-Phone Optimization
17
Hyperlocal Expansion in each country
18
API Bundling with Agri/Health/MFI Platforms

THANK YOU!

DESIGN OPTIMIZERS

Siripong Siripongpisit
Varsha Ramesh
Utkarsh Raj Sutihar