IOTA Flow

A merchant liquidity protocol built on IOTA.

Tokenize sales into Receipt NFTs (R-NFTs) for immediate cash flow and real-world DeFi yield on the feeless, scalable IOTA Tangle

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Event: IOTA Moveathon 2025 — Track: DeFi / Tokenization

Merchant Cashflow & Financing Challenges

Working capital gaps, slow settlements, and costly or unavailable financing

Settlement cycles of **T+15 to T+30 days** create cashflow delays

Working capital gaps that **restrict merchant growth**

Many small merchants **denied bank financing**

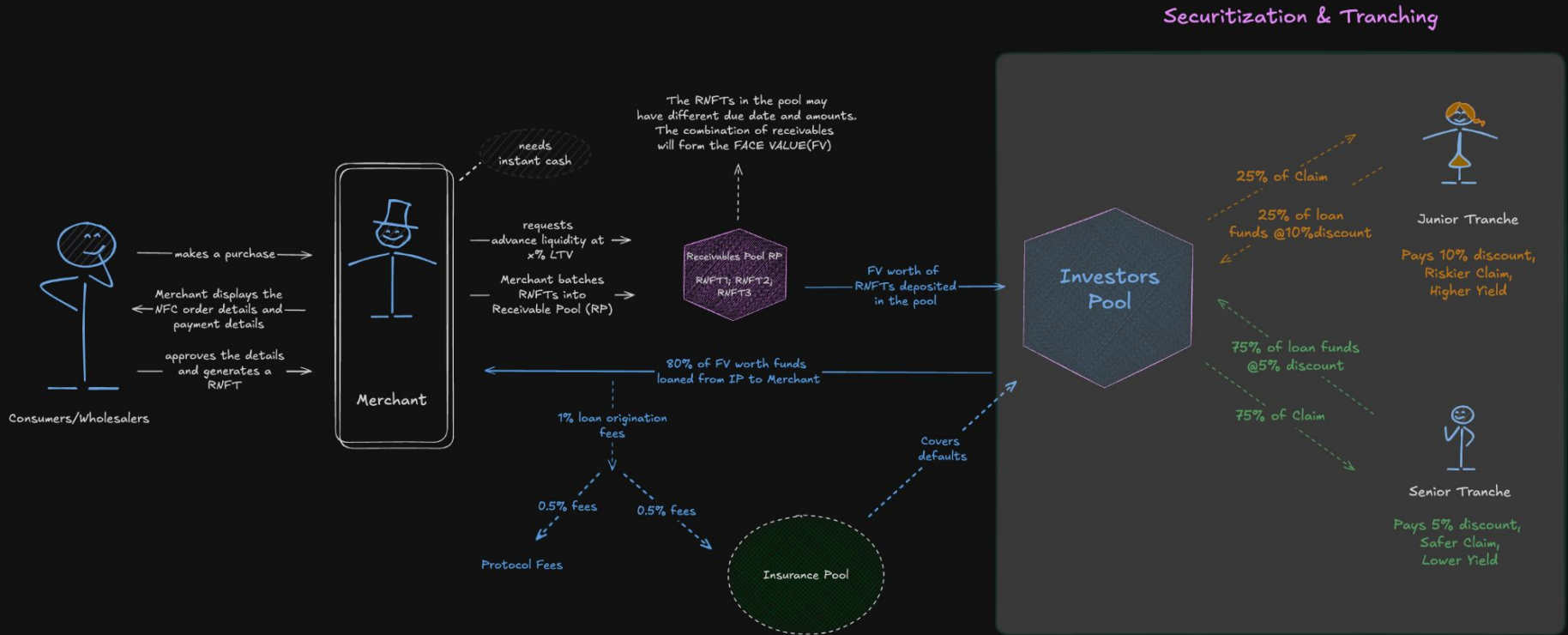High borrowing costs: **15–30% APR** for alternative credit

No transparent way to leverage **daily sales receivables** for liquidity

Critical need: **instant liquidity** tied to actual merchant sales

Our Solution – IOTA Flow

IOTA Flow User Journey

Turn every merchant sale into immediate liquidity with tokenized receipts, tranche financing, automated repayments, and insurance-backed yields

○ Record Sale

○ Merchant logs a sale on IOTA Flow; data anchored on-chain for transparency.

○ Customer Verify & Mint

○ Customer scans QR/NFC to verify the sale and mints a **Receipt NFT (R-NFT)**.

○ Customer approves order details

○ Pool Receivables

○ R-NFTs pool receivables with staggered payment schedules to diversify timing risk.

○ Advance Liquidity

○ Merchant receives **80%** advance upfront funded by investors in tranches.

○ Tranche Financing

○ Investors buy **senior** and **junior** tranches; risk/return split across tranches.

○ Automated Waterfall

○ Consumer repayments trigger an on-chain waterfall contract distributing payments by tranche.

○ Insurance Buffer

○ An insurance pool covers junior tranche shortfalls to stabilize investor yields.

Core Architecture: Components of IOTA Flow

Receipt NFTs (R-NFTs)
On-chain tokens representing individual merchant sales; base units for pooling.

On-chain Settlement Router
Real-time settlement engine ensuring transaction finality and transparent flows.

Receivable Pools
Aggregations of R-NFTs with staggered payment dates to spread risk.

Merchant NFC/QR App
Merchant interface for accepting payments and minting R-NFTs via NFC/QR.

Senior & Junior Tranches
Tokenized tranche layers offering different risk/reward profiles for investors.

Insurance Pool
Backstop fund that covers shortfalls in the junior tranche to protect seniors.

Automated Waterfall Contract
On-chain logic that enforces prioritized repayment order across tranches.

Receivable Pools & Tranching

Diversify payment timing, balance protection and yield for investors
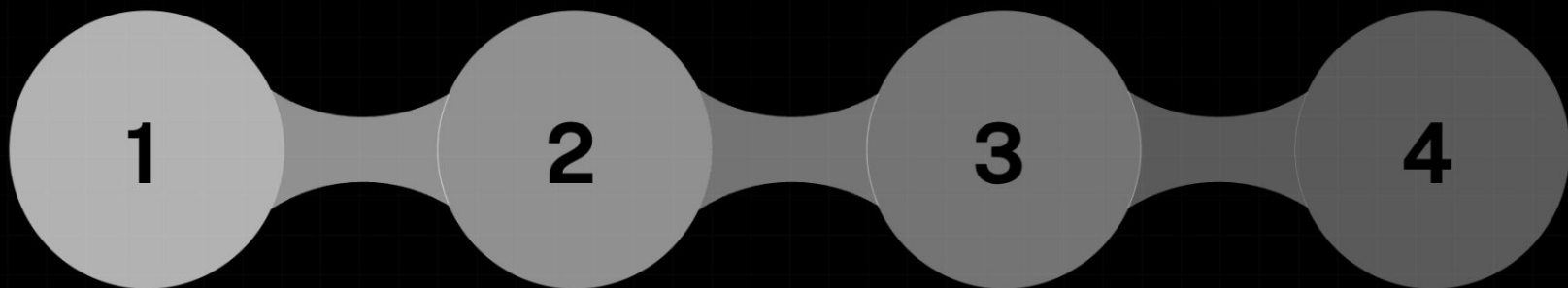
Senior Tranche

1. Priority repayment over junior tranche

2. Lower risk; capital protected first

3. 5% discount example (lower yield, higher safety)

4. Attracts risk-averse investors seeking stability

Junior Tranche

1. First-loss buffer absorbing defaults

2. Higher risk; absorbs variability in receivables

3. 10% discount example (higher yield, higher risk)

4. Appeals to yield-seeking investors

Repayment Waterfall & Insurance — Investor Protection

Senior paid first → Insurance covers junior shortfalls → Junior paid → Merchant residuals. 1% origination fee funds Insurance and protocol

1

2

3

4

Senior Investors

Receive payments first — designed to be nearly risk-free due to insurance coverage

Insurance Pool Coverage

Covers junior tranche shortfalls; funded by 1% origination fee split equally between insurance and protocol

Junior Investors

Paid after insurance covers shortfalls; exposure partially protected (target ≤ min(50% junior exposure, 10% receivables))
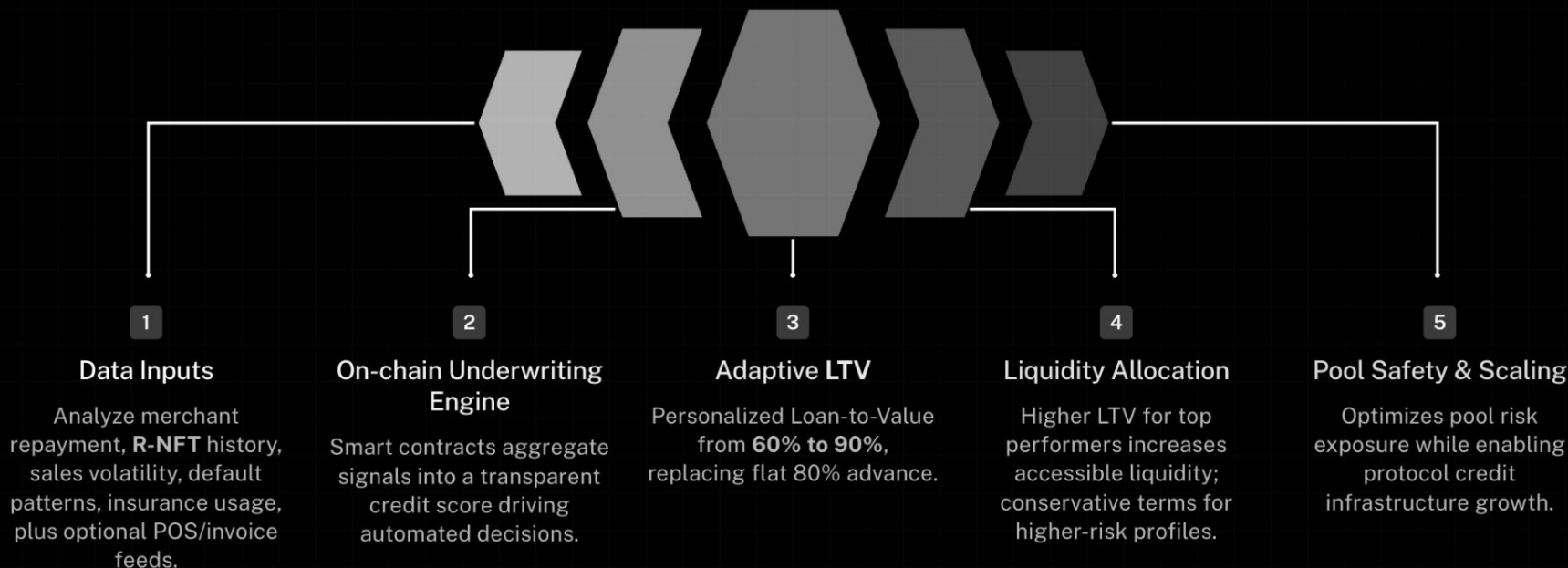
Merchant Residuals

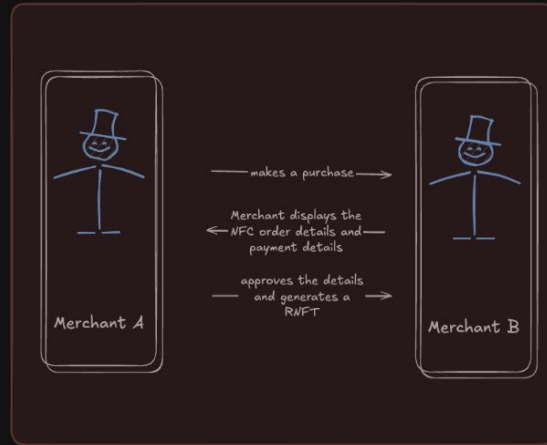Any remaining funds after investor payments and insurance allocations go to the merchant

Future Scope-Dynamic Credit Scoring & Adaptive Loan-to-Value

On-chain underwriting to personalize LTV (60%–90%) and scale safe merchant liquidity
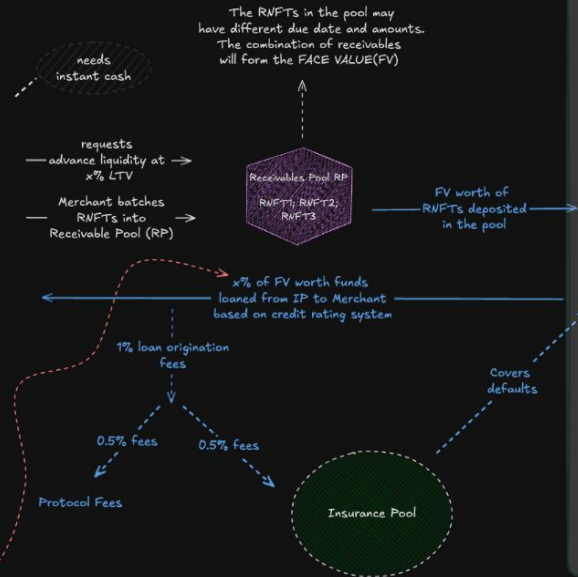

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Data Inputs

Analyze merchant repayment, **R-NFT** history, sales volatility, default patterns, insurance usage, plus optional POS/invoice feeds.

2

On-chain Underwriting Engine

Smart contracts aggregate signals into a transparent credit score driving automated decisions.

3

Adaptive LTV

Personalized Loan-to-Value from **60% to 90%**, replacing flat 80% advance.

4

Liquidity Allocation

Higher LTV for top performers increases accessible liquidity; conservative terms for higher-risk profiles.

5

Pool Safety & Scaling

Optimizes pool risk exposure while enabling protocol credit infrastructure growth.

Future Scope– IOTA Flow Pro
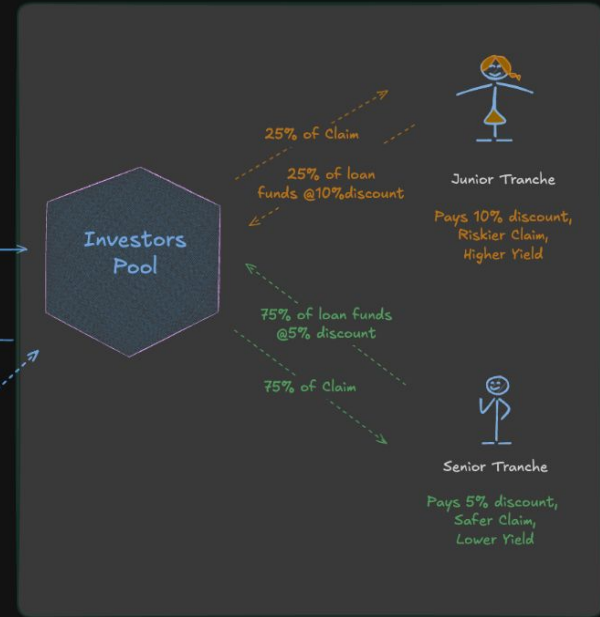
Impact: Benefits for Merchants, Investors, and the IOTA Ecosystem

Instant capital for merchants, real-world yield for investors, and growth for IOTA Flow

Merchants: Instant working capital without collateral; transparent financing terms for smoother growth and operational efficiency

Investors: Access to real-world yields with flexible risk exposure via tranche protection and insurance mechanisms

IOTA Ecosystem: IOTA Flow as flagship RWA protocol driving genuine transaction volume, merchant adoption, and new decentralized credit markets

Collective Impact: Promotes financial inclusion and innovation using blockchain technology

Thank You — IOTA Flow

Join us in enabling instant merchant liquidity, tokenized receivables, and real-world yield