

Offline Transactions

Introducing Payala and how to integrate with
Mojaloop



Structure of this talk



- Who we are
- What Payala is
- How to integrate technically
- How to integrate financially
- Our ask

Who we are



- Financial Empowerment Partners
- US-Based private sector company
- We're experts in cybersecurity, finance, public policy
- We have real world operational experience
- We developed Payala

Who I am



- Julian Finn
- Based in Hamburg, Germany
- CTO and Co-Founder

Introducing Payala



- Peer to Peer Payment system. Secure, resilient, inclusive
- Works in intermittently offline scenarios
- Designed for challenging environments
- Designed to help ease liquidity availability problems
- Designed for low cost and light infrastructure footprint

How Payala works

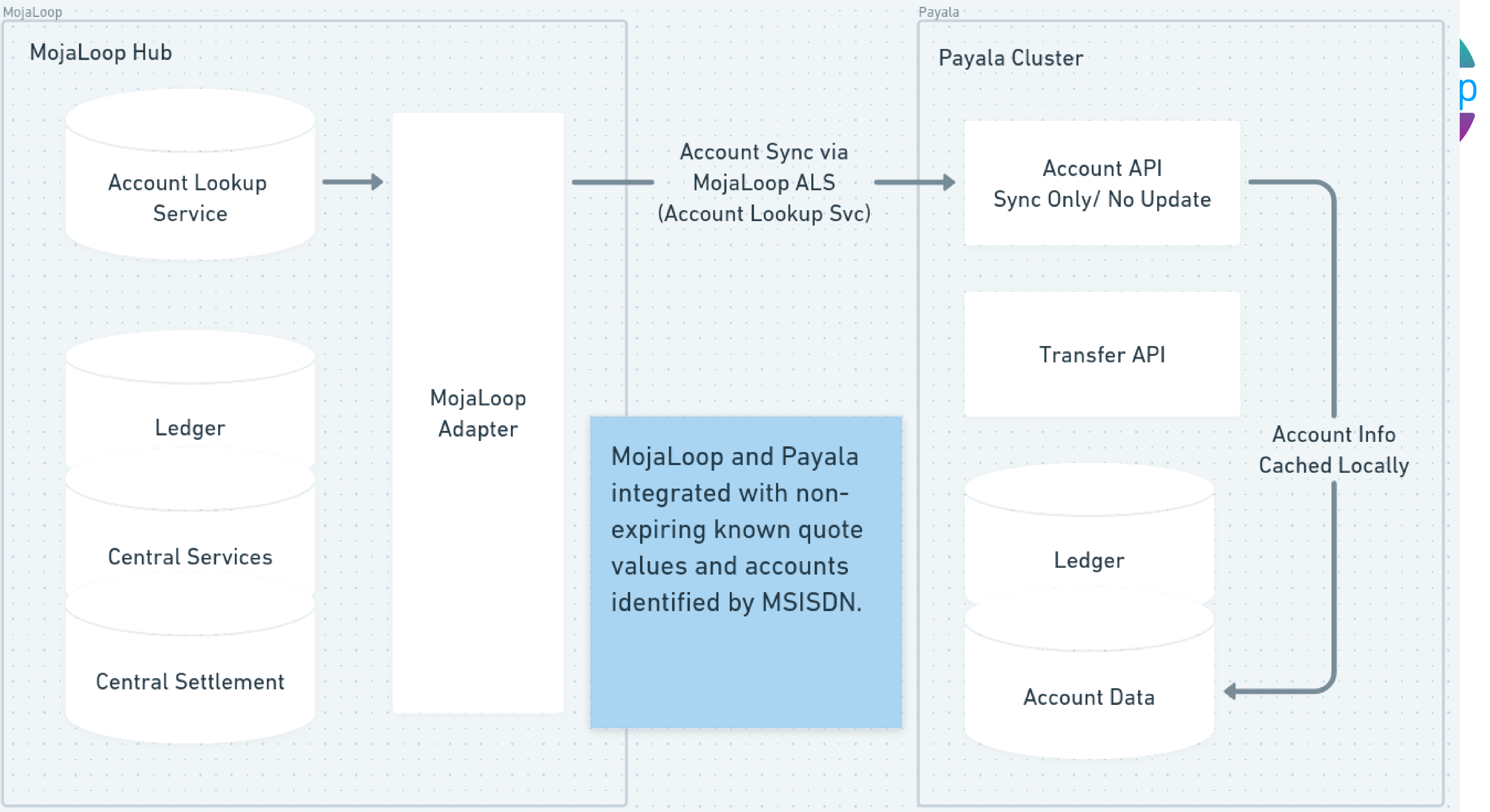


- Every user holds a smart card
- Smartphones act as terminals / transport layers
- Three different transaction modes, depending on connectivity
 - Remote
 - Local and Online
 - Local and Offline

Integrating with Mojaloop



- Right now: Closed policy.
- Payala should stay that way, but attach to Mojaloop
- Monies need to be kept separate



Financial Integration



- Money Separation
- Offline Transfers and Eventual Sync
- Cashing Out

MojaLoop Hub

Account Lookup
Service

Ledger

Central Services

Central Settlement

MojaLoop
AdapterMint Transfer via
Payer Initiated Transfer

Mint funds are monies
reserved by the FSP
until loaded onto
members smartcards
for use within the
program.

Payala Cluster

Account API
Sync Only/ No Update

Transfer API

Transfer to Payala Mint
for distribution.

Ledger

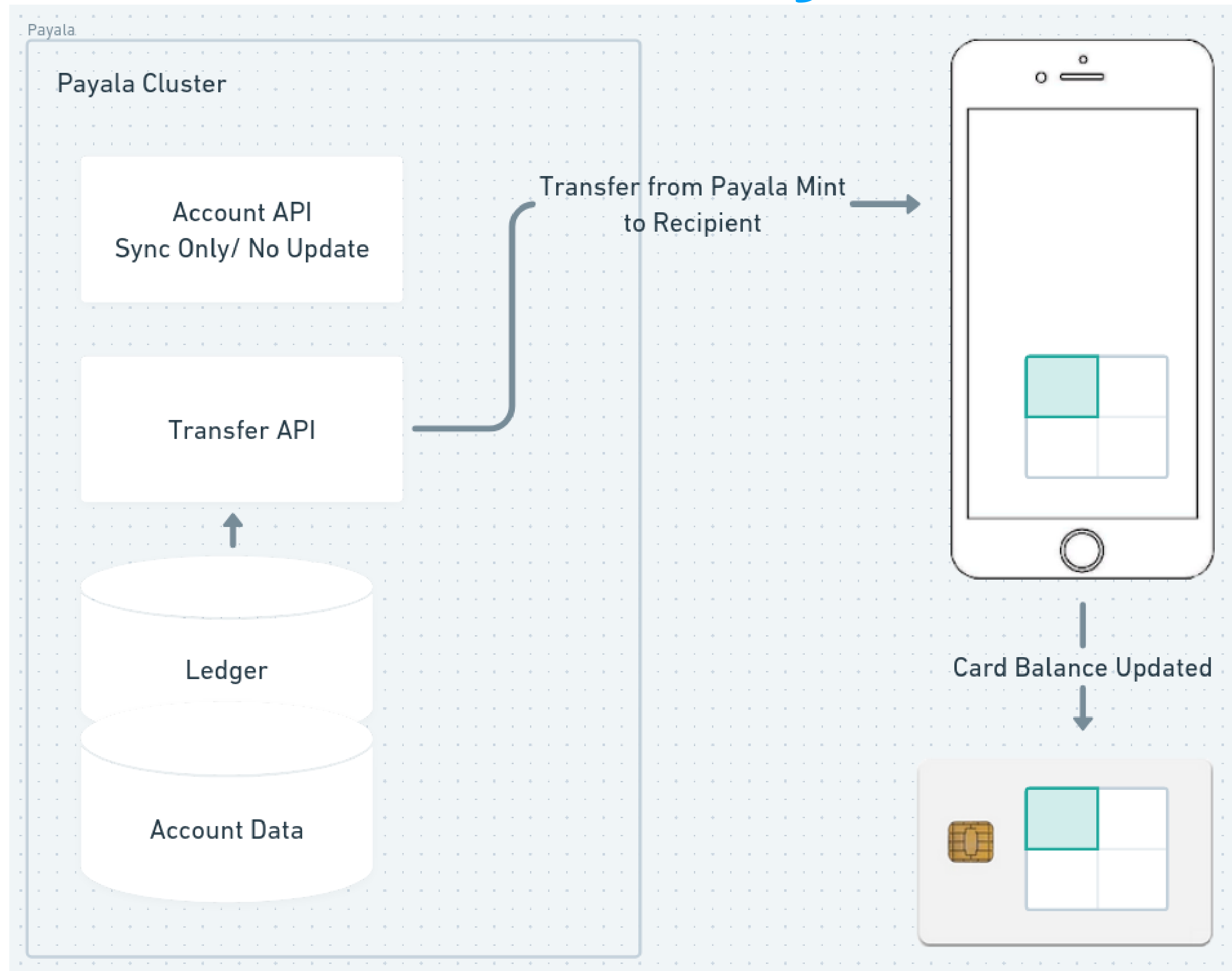
Account Data

Money Separation



- Mint funds: Monies reserved by FSP until loaded onto Smartcards
- Funds minted into Payala are held in escrow accounts
- Ensure offline transfers never result in a negative balance

Offline Transfers and Sync



Offline Transfers and Sync



- Transfers made offline are stored on payer and payee smartcards
- Opportunistically synced once connectivity restored
- Limited Use Keys prevent duplicate spend
- Offline amounts can be constrained

Cashing Out



- Moving money out of Payala via MojaLoop
- Fixed fees and auto-accepted transactions

Our Ask



- We're open to talk, we want to go country by country building ecosystems
- Pilot in Timor-Leste with great results
- We're looking for partnerships

Questions?



- My name is Julian Finn
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