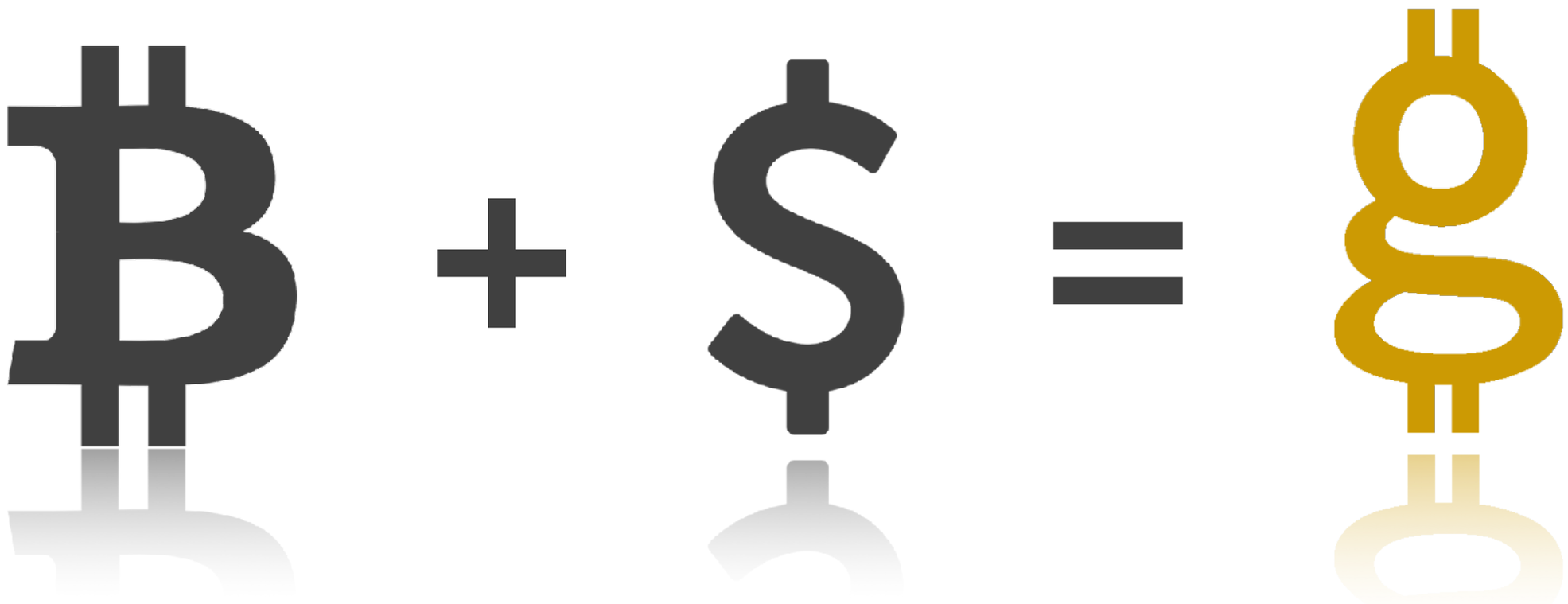
GILDAGE



Customer Experience Platform bridging on-chain & off-chain

Apurva Shah

PIXAR ANIMATION STUDIOS

WHAMIX
creative studio + tech lab

Capital One

kids & art
healing pediatric cancer through the arts

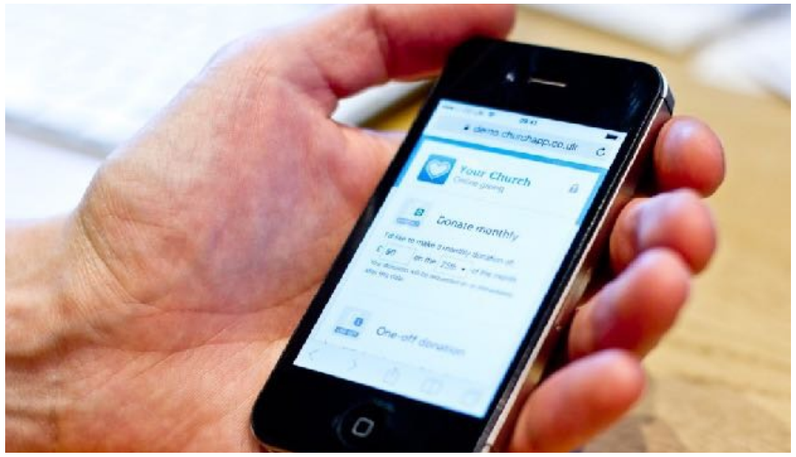
CCA California College of the Arts

Apurva Shah

GOOD QUESTIONS
create
GREAT STORIES
Layered stakes
CUSTOMER
NEED
SOCIAL
CHARACTER
PLOT

On-chain

Off-chain

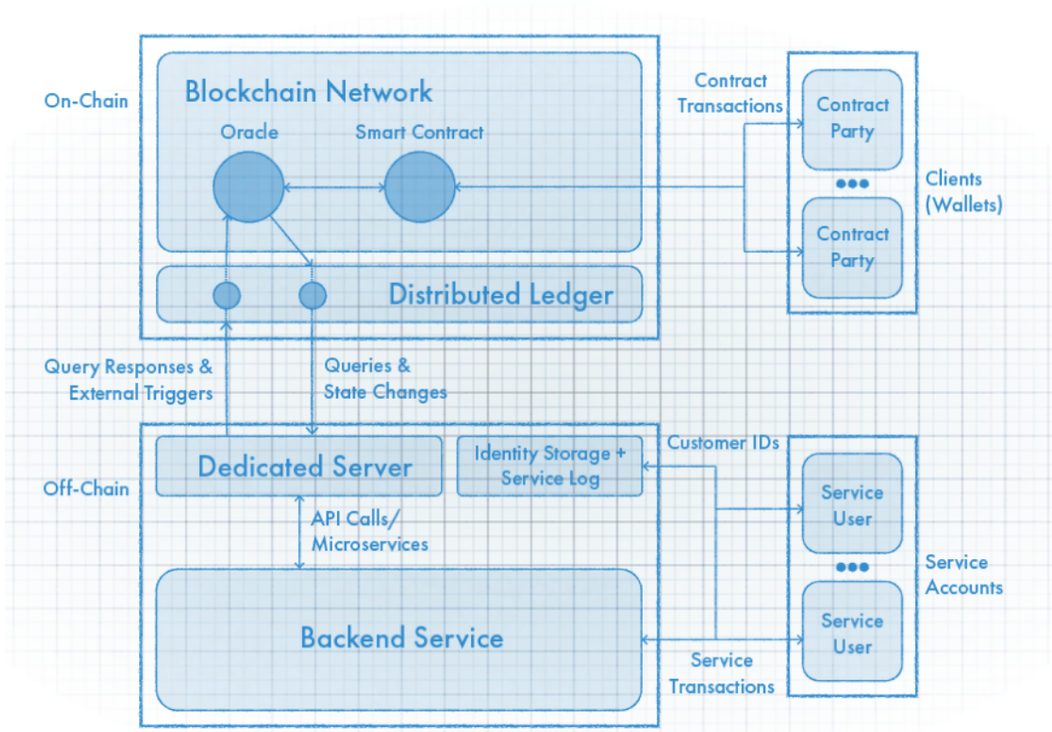


Use Cases

- Automated Escrow Accounts for buying used cars
- SC managed home purchases including title & escrow
- SC capable of sending texts
- Venture rounds and kickstarters
- *SC embedded insurance markets*
- *Full Load*

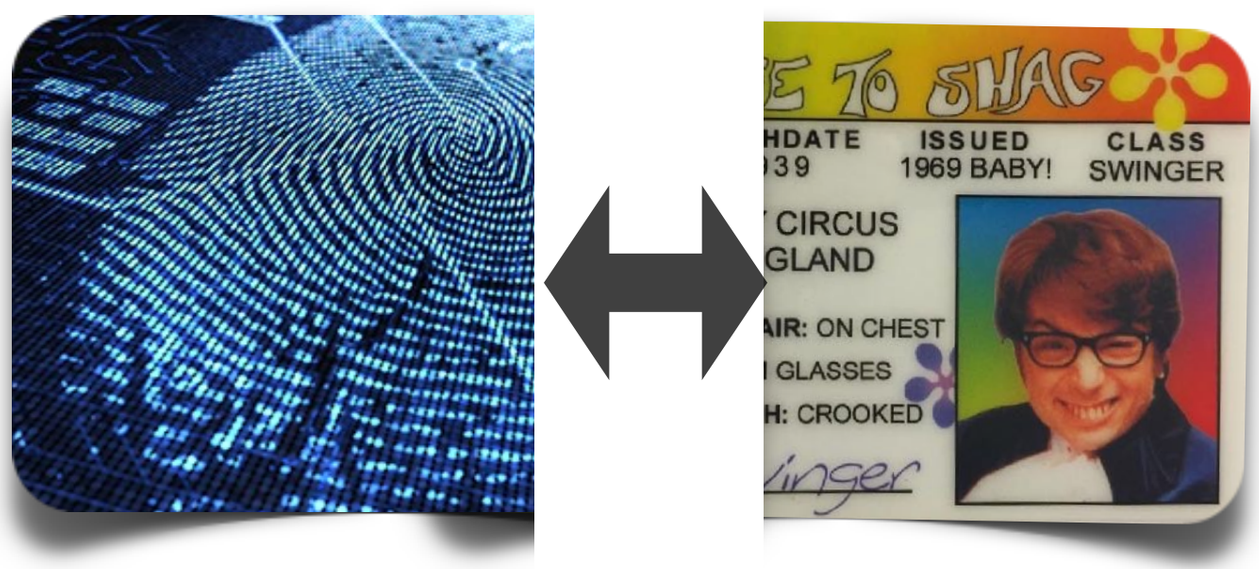
Oracles…not so wise!

- Forcing distributed architecture on a centralized world
- Inherently suspicious of off-chain information and entities
- Platform focus on reliable and secure message passing



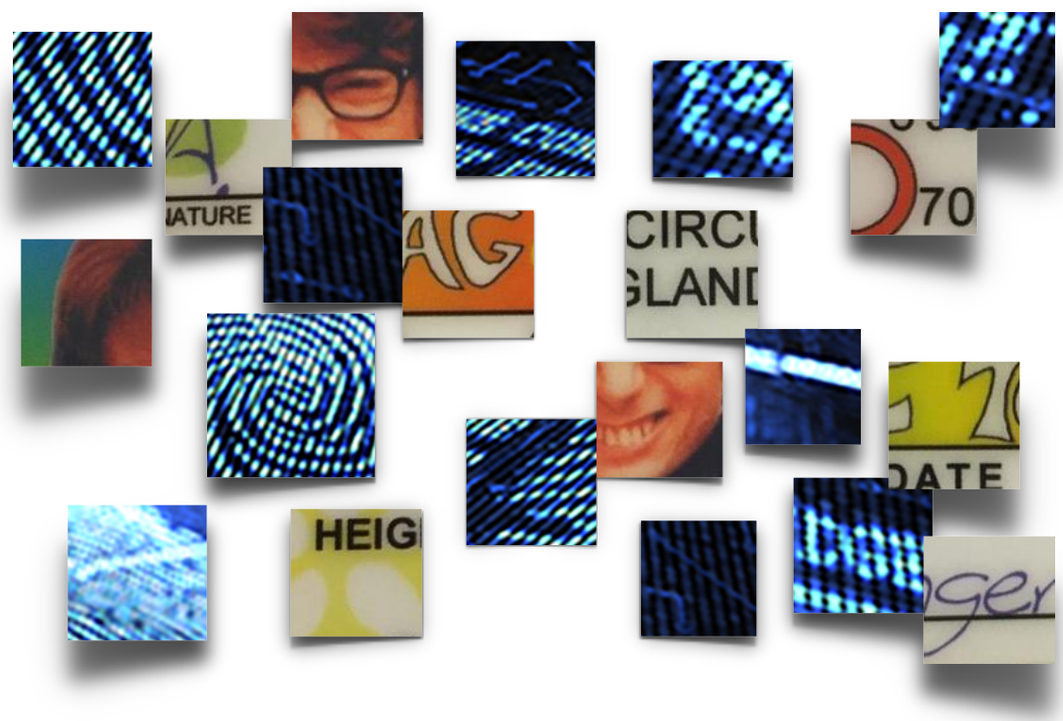
Key Hypothesis

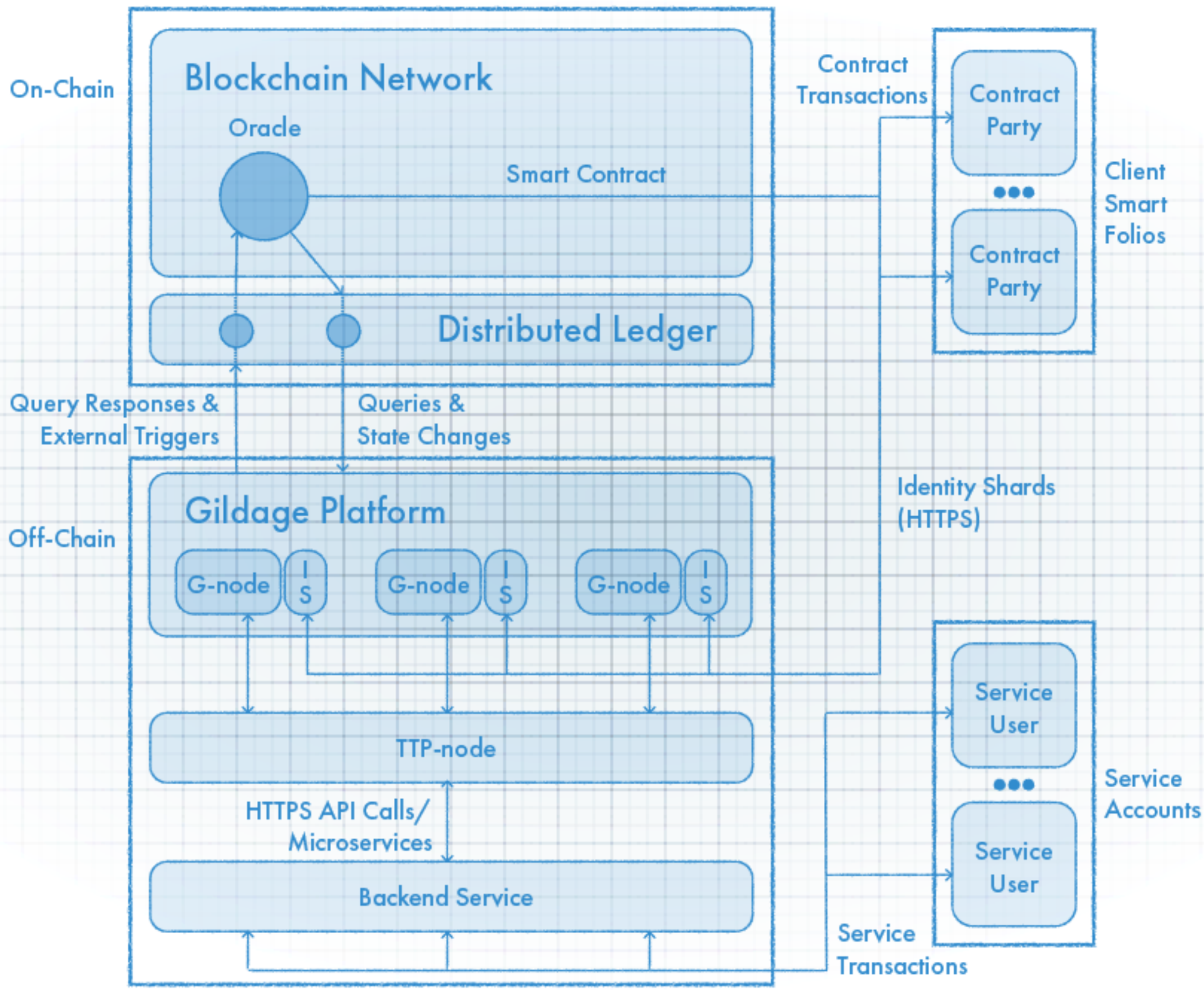
In addition to reliable and secure message passing, Identity transposition is key to solving the problem of combining smart contracts with off-chain trusted third party services (TTPs)



Proposed Solution

Distributed architecture implementing Shamir’s Shared Secrets to shard identity information — only customer’s Smart Folio in possession of the identity pair




On-Chain
Blockchain Network
Oracle
Smart Contract
Distributed Ledger
Contract Transactions
Contract Party
Contract Party
Client Smart Folios
Query Responses & External Triggers
Queries & State Changes
Off-Chain
Gildage Platform
G-node
I S
G-node
I S
G-node
I S
Identity Shards (HTTPS)
TTP-node
HTTPS API Calls/ Microservices
Backend Service
Service User
Service User
Service Accounts
Service Transactions

Smart Folio

ROPSTEN

Cryptonite Inc.
0x5fc4c2...

7.8428 Gilds
37.5000 ETH

Buy Send

Investor Pool: 0x2fA867... | Leader Board: 0x66F88F... | Random Dice: 0x1871FF... | +

SERVICES

ACH Clearing (0x16FA37..) 321076470|238400673389

Timer (0xAB7712...)

Identity Shards Refresh Delete

OPERATIONS

Required	$250,000	
Minimum	$25,000	
Closing	6/15/18	
Total Balance	$150,000	Refresh
My Balance	$0	Refresh
Invest		Send

HISTORY

DATE	TRANSACTION/EVENT	SENDER	SERVICE	ATTRIBUTES
4/2/18	Contract Created	0x281055...		(required:250000, minimum:25000, closing:6/15/18)
4/4/18	Set Timer	Contract	Timer	(date: 6/15/18)
4/8/18	Timer Set	Timer		(date: 6/15/18)
4/4/18	Invest	0x6f46cf...		(amount:150000)
4/4/18	Initiate Transfer	Contract	ACH Clearing	(from:0x6f46cf..., to:0x2fA867..., amount:150000)
4/8/18	Transfer Complete	ACH Clearing		(from:0x6f46cf..., to:0x2fA867..., amount:150000)
4/22/18	Invest	**Self**	ACH Service	(amount:37000)
4/4/18	Initiate Transfer	Contract		(from: 0x5fC4C2..., to:0x2fA867..., amount:37000)
4/23/18	Transfer Failed	ACH Clearing		(from: 0x5fC4C2..., to:0x2fA867..., amount:37000, status:"insufficient funds")

White paper and this prezo:

https://github.com/apuzinio/gildage

Prototype implementation for Ropsten coming soon…