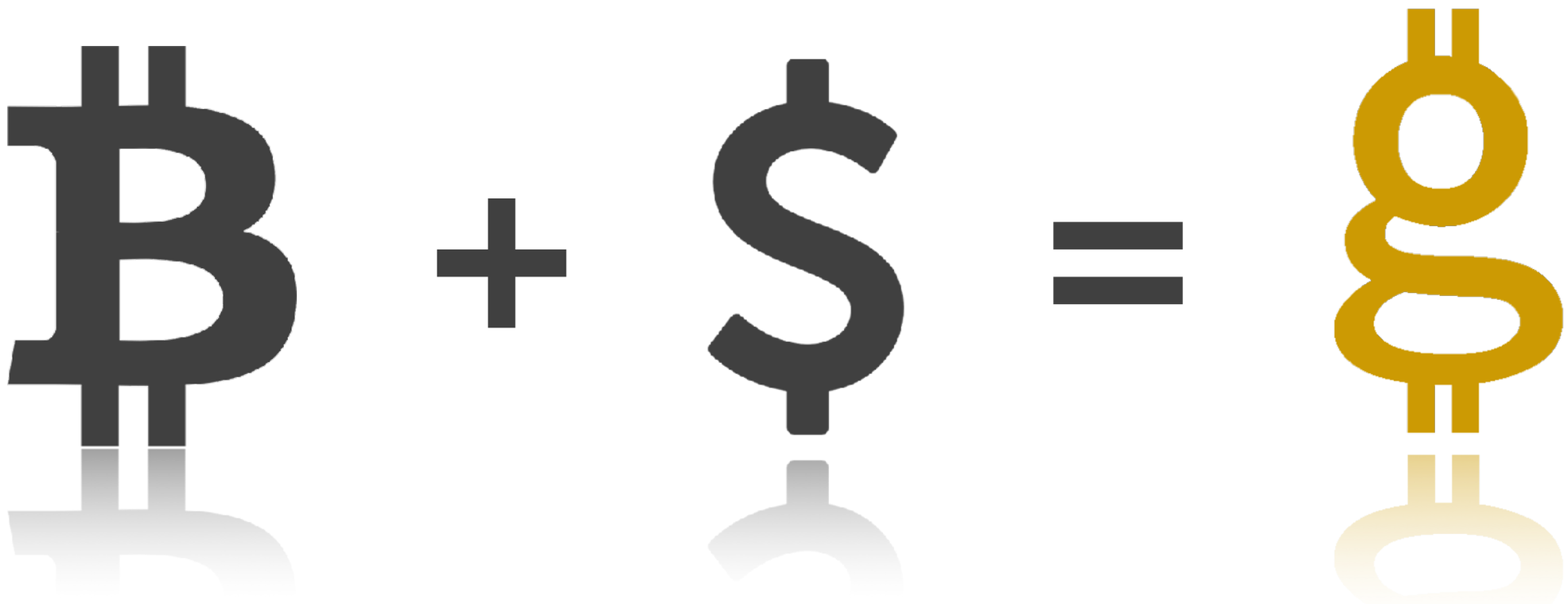
GILDAGE



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

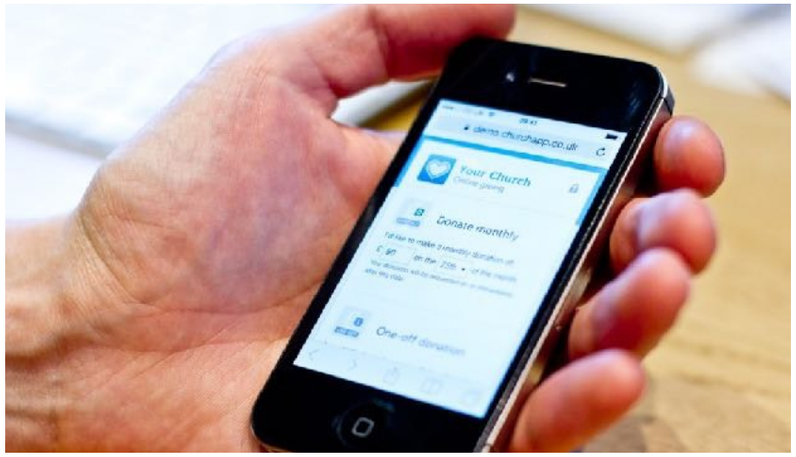
CCA California College of the Arts

Apurva Shah

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

On-chain

Off-chain

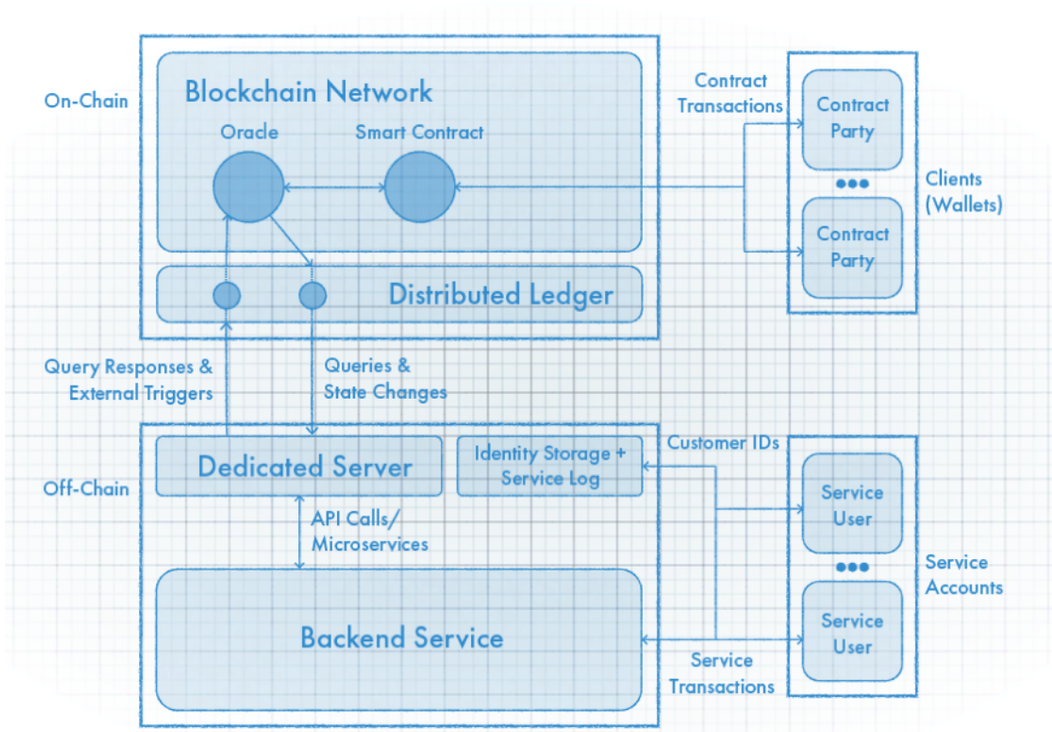


Use Cases

- 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*

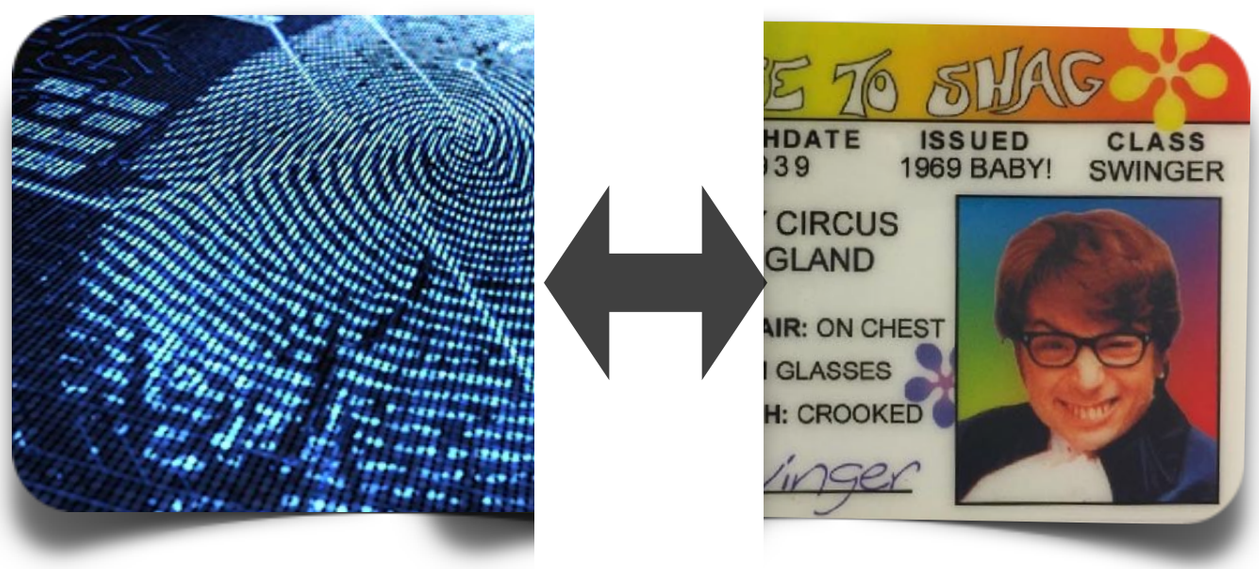
Oracles…not so wise!

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



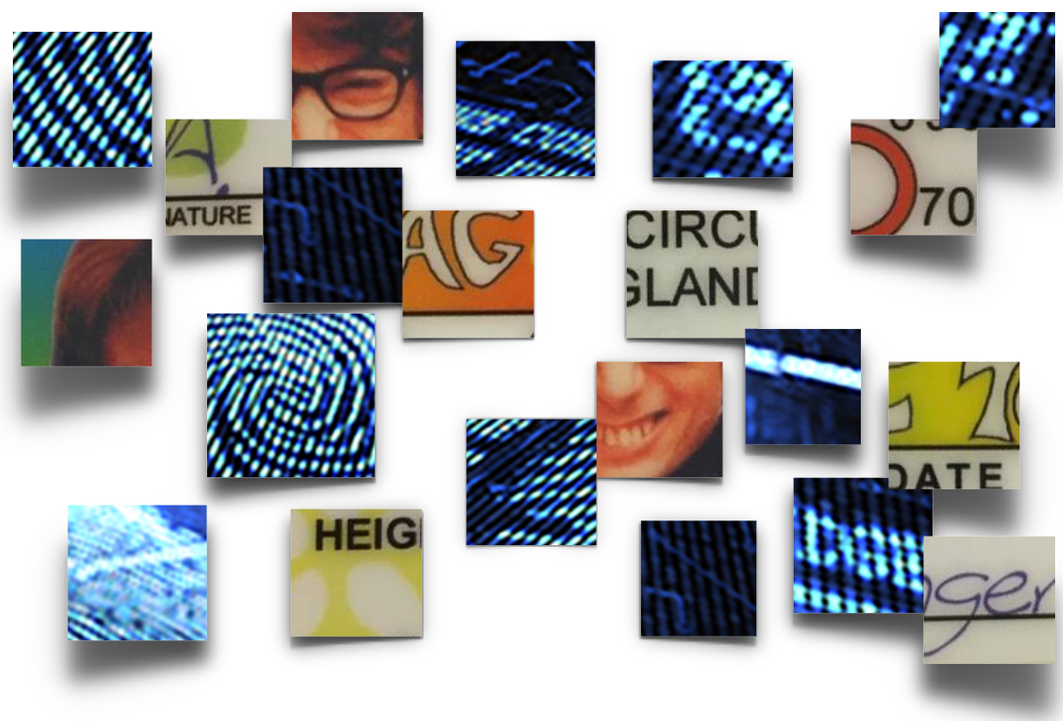
Key Hypothesis

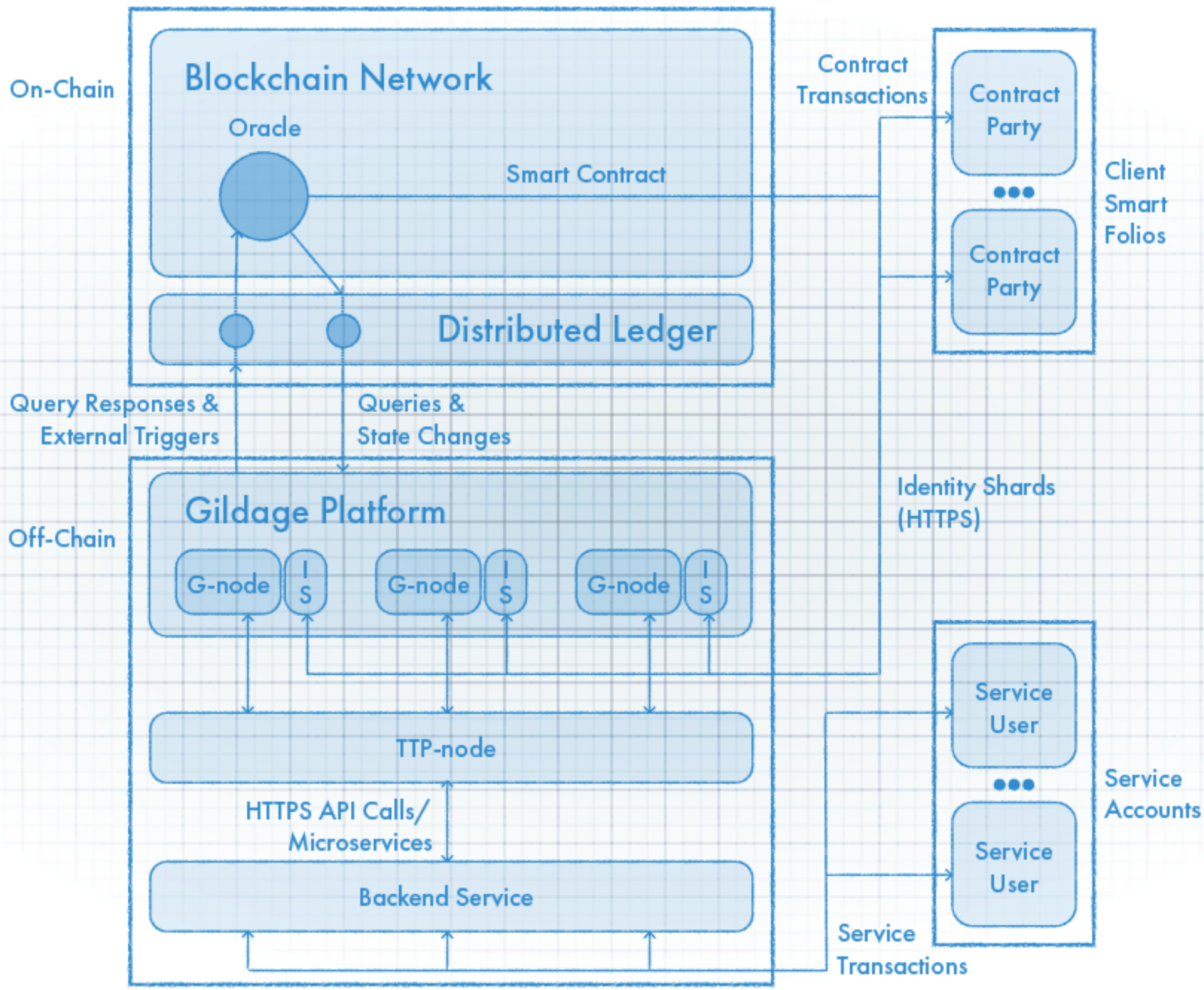
In addition to reliable message passing, Identity transposition is key to solving the problem of combining smart contracts with off-chain trusted third party services (TTPs)



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…