

# BitPesa

**Blockchain Technology  
for Africa**

BitPesa

# Blockchain Technology for Africa

What is Blockchain Technology? Distributed Ledgers?

How does it compare to current technology?

Who is using it?

Why is it important?

How does BitPesa use it?

How can Central Banks regulate Blockchain businesses?

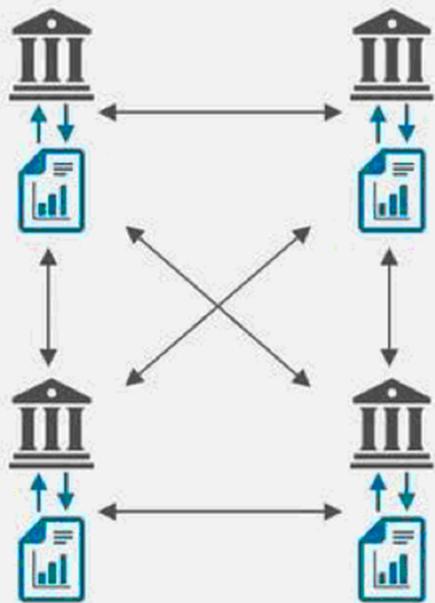
# What is a blockchain?

A blockchain is a type of distributed P2P network

CENTRALIZED



DISTRIBUTED



# P2P Distributed Networks

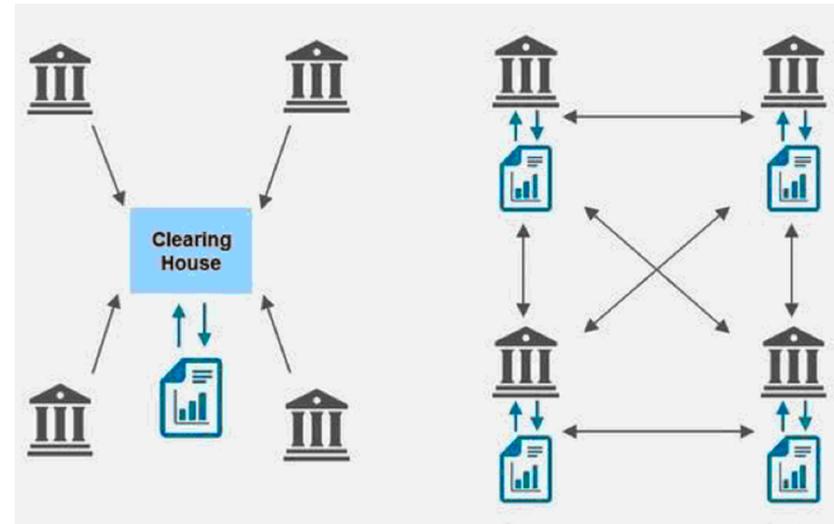
Safe, cheap, scalable

Less vulnerable to attack

Get stronger as they get bigger

Extremely low-cost to maintain

Low barrier to entry for new entrants to participate



# Current Global Financial System

## Inefficient centralized networks

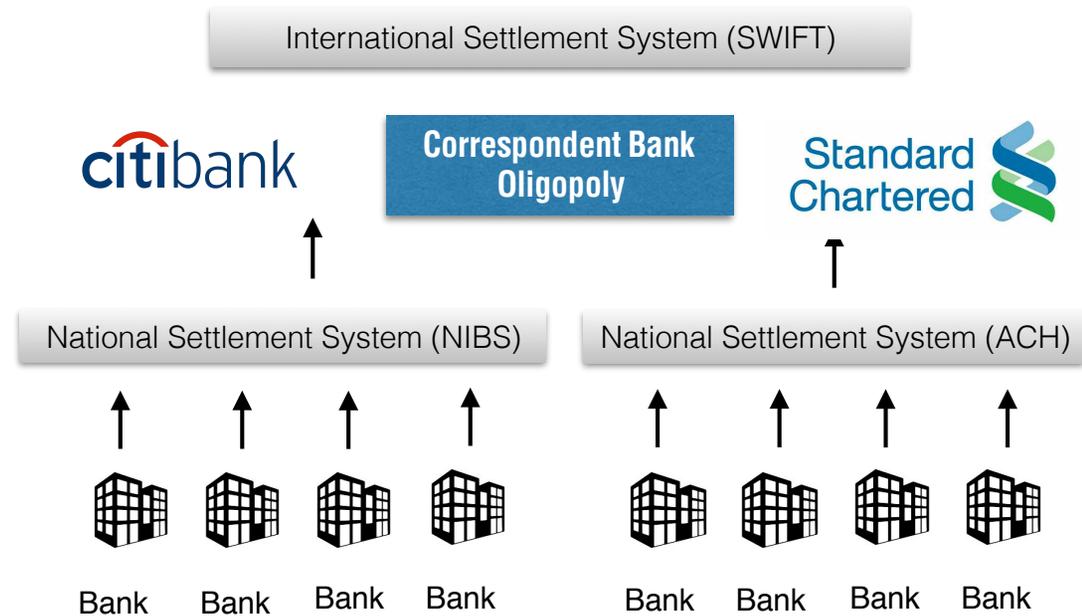
Higher costs to maintain

Get weaker as they get bigger

Low interoperability -> exclusion

Difficult for smaller players to participate

Easy to exclude countries or corridors (“de-risking”)



# Blockchain Financial Systems

## Use Distributed Ledgers

Still need banks to participate

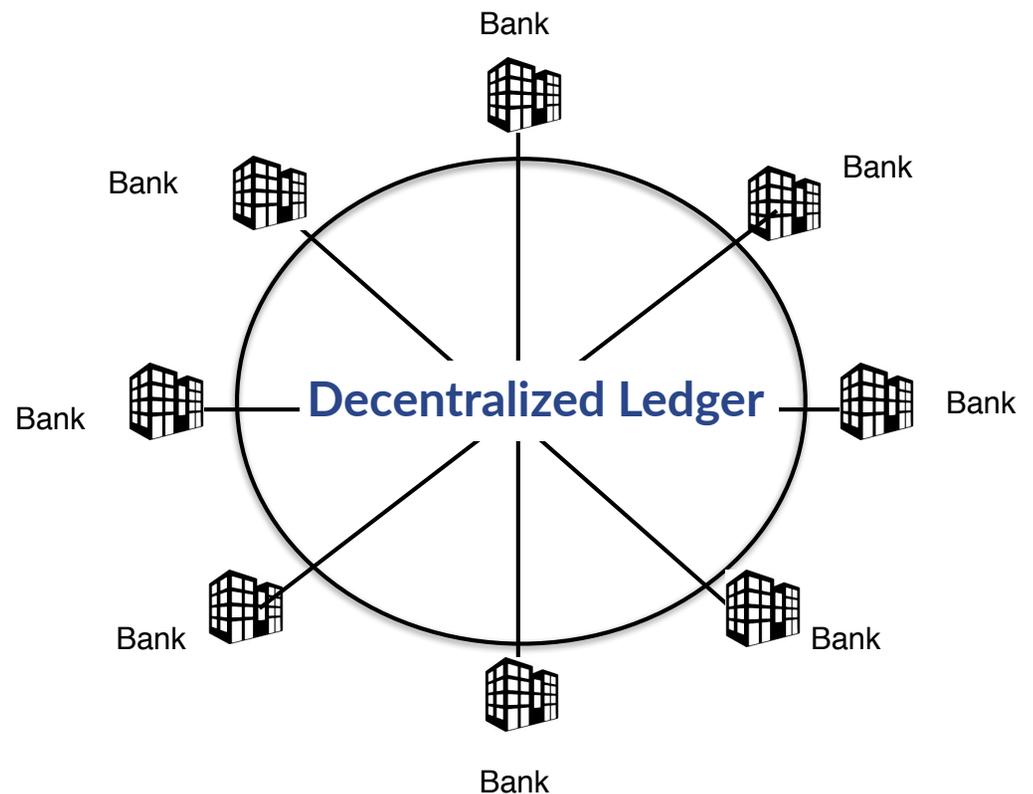
Direct connectivity to all participants

Cryptographically secure

More inclusive

Reduced Corruption

Easier to monitor



# Blockchain Financial Systems

## No correspondent bank oligopoly

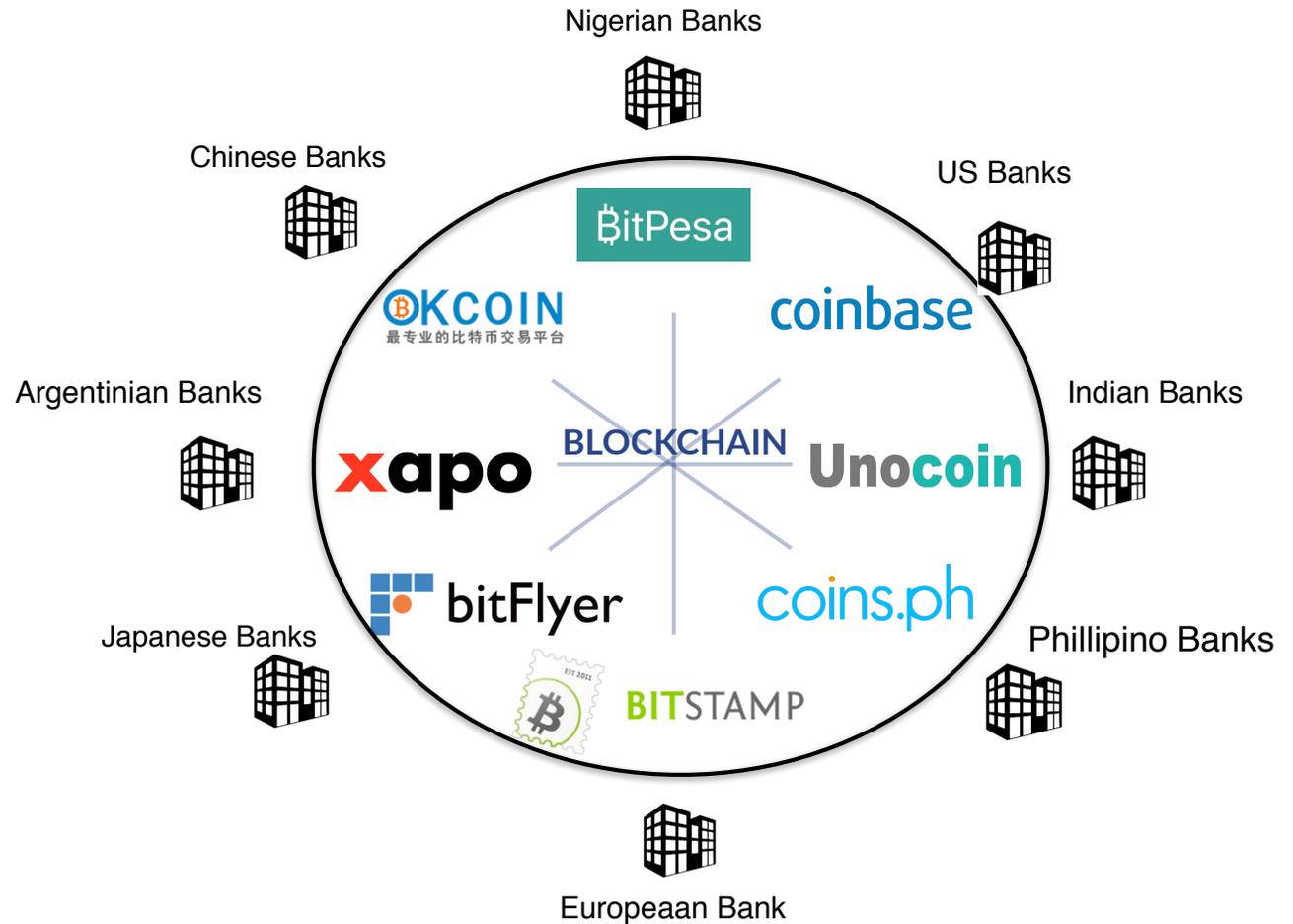
Each currency has its broker

Banks still have essential role

Multiple entrants allowed

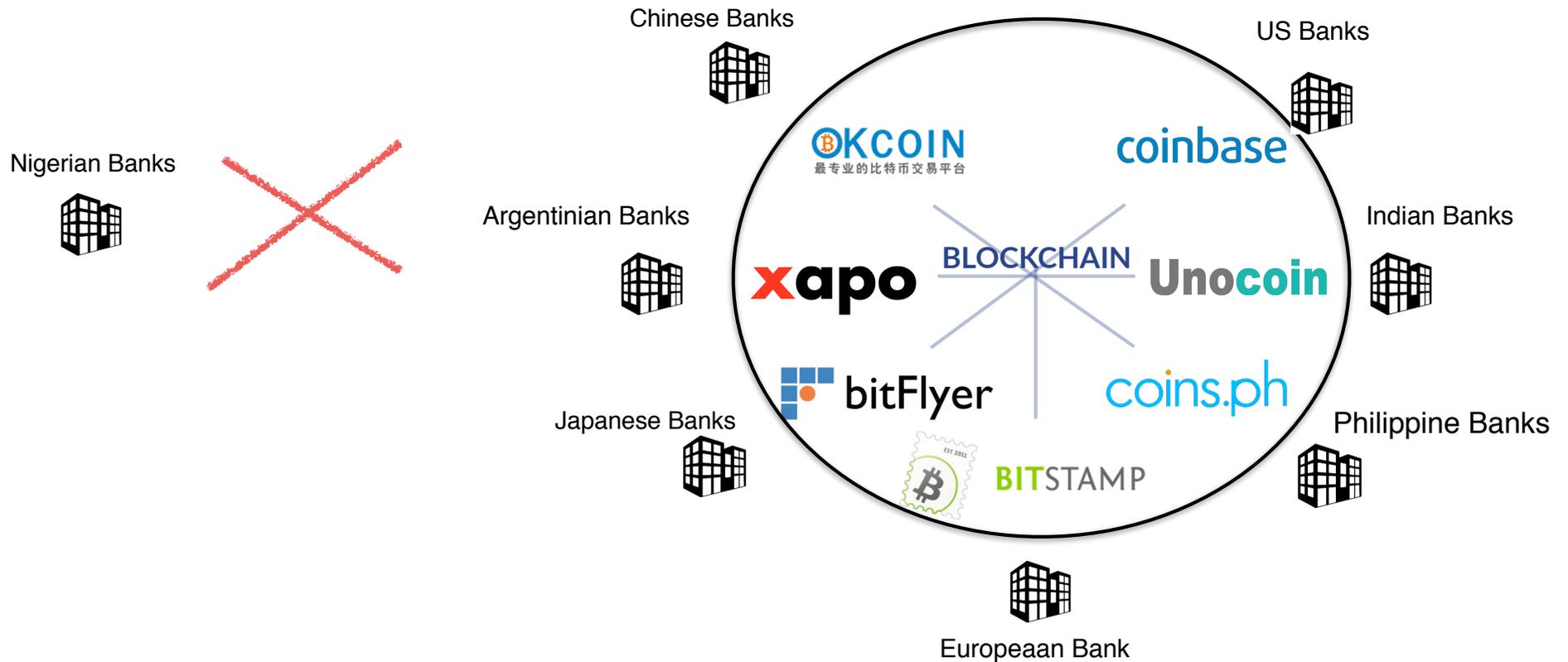
Complete interoperability

Very easy to monitor



# Banning Blockchain Removes Nigeria from Global System

Every major global bank is already participating



# Benefits of distributed ledgers

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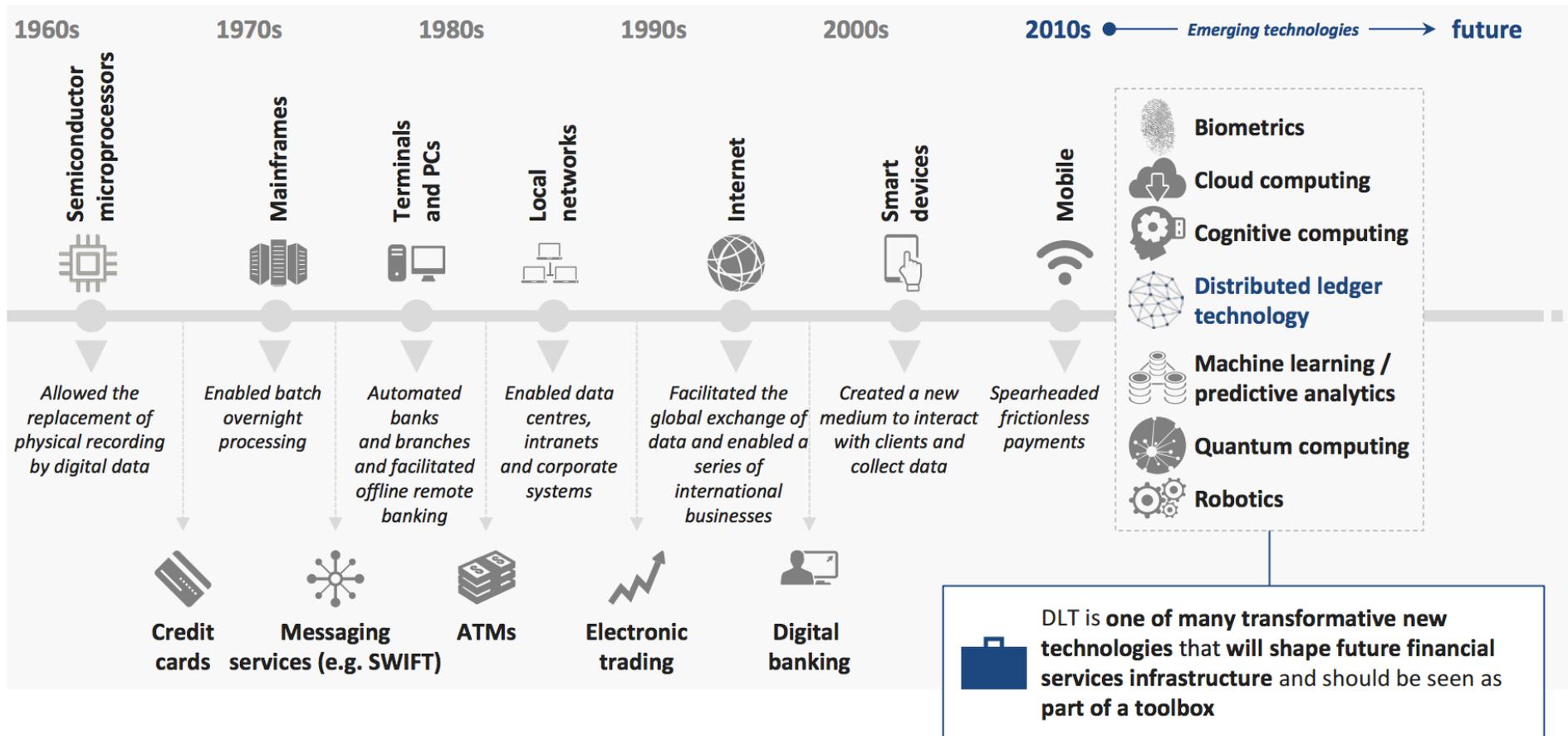


**Distributed ledger technology has great potential to drive simplicity and efficiency through the establishment of new financial services infrastructure and processes**

## Value drivers

- **Operational simplification**  
DLT reduces / eliminates manual efforts required to perform reconciliation and resolve disputes
- **Regulatory efficiency improvement**  
DLT enables real-time monitoring of financial activity between regulators and regulated entities
- **Counterparty risk reduction**  
DLT challenges the need to trust counterparties to fulfil obligations as agreements are codified and executed in a shared, immutable environment
- **Clearing and settlement time reduction**  
DLT disintermediates third parties that support transaction verification / validation and accelerates settlement
- **Liquidity and capital improvement**  
DLT reduces locked-in capital and provides transparency into sourcing liquidity for assets
- **Fraud minimization**  
DLT enables asset provenance and full transaction history to be established within a single source of truth

# Blockchain is transformative

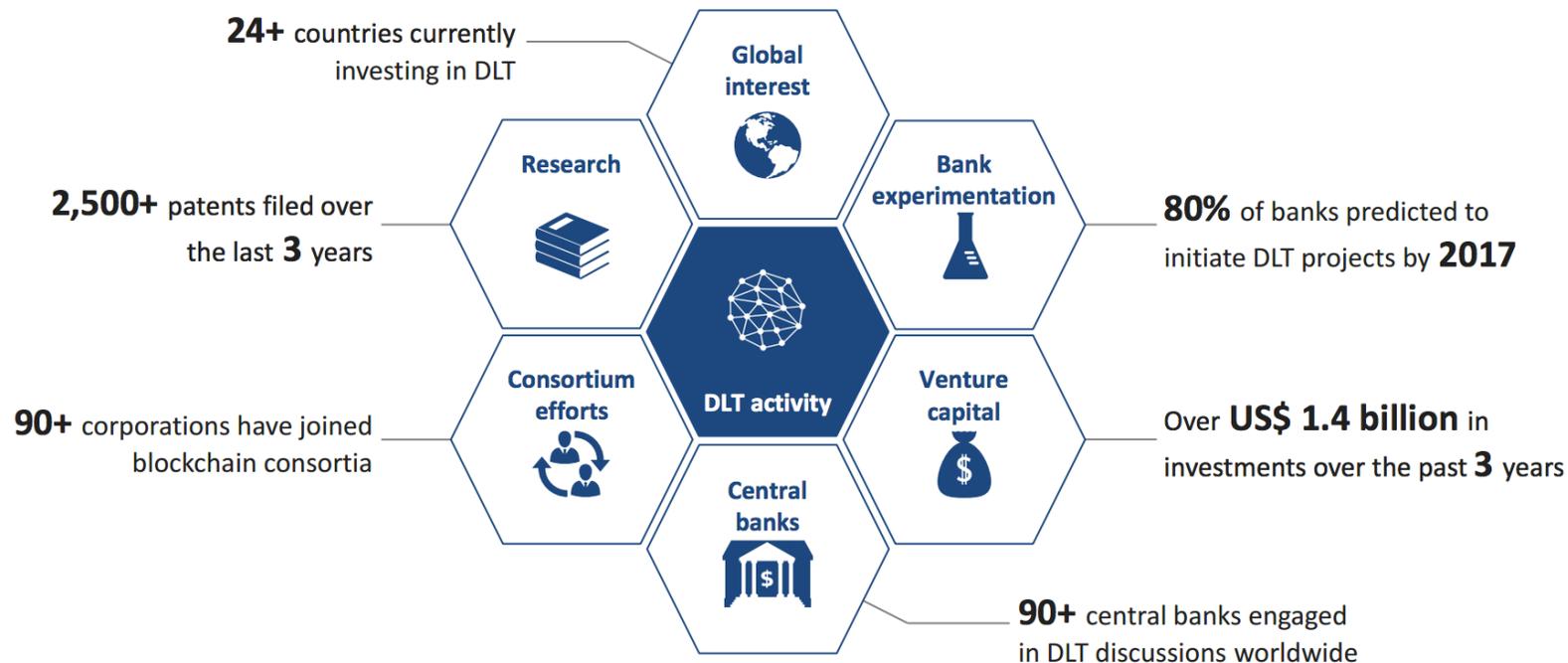


# Blockchain reaching critical mass



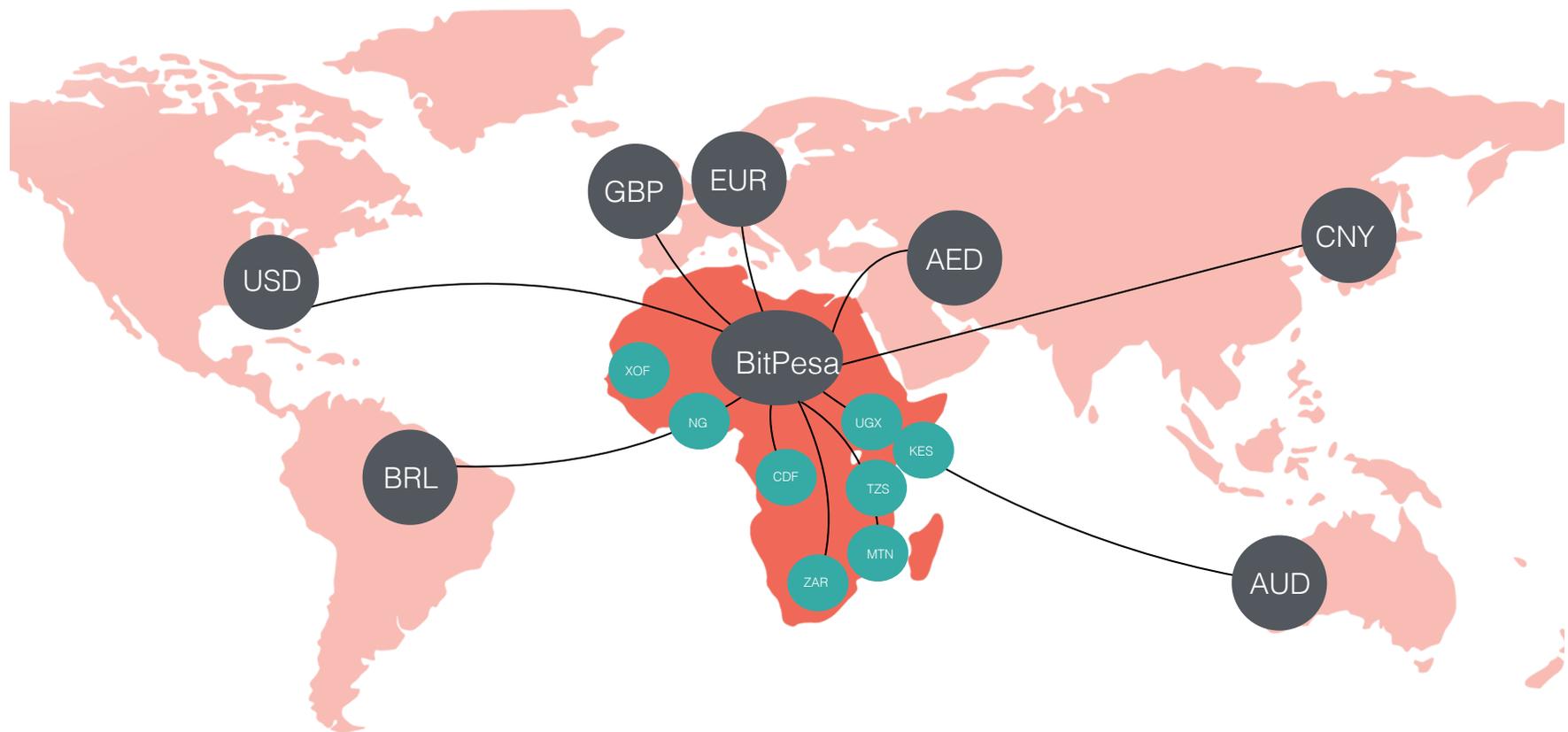
COMMITTED TO  
IMPROVING THE STATE  
OF THE WORLD

Distributed ledger technology (DLT), more commonly called “blockchain”, has captured the imaginations, and wallets, of the financial services ecosystem



# BitPesa uses Blockchain for B2B Payments

Fast, easy, inclusive and digital

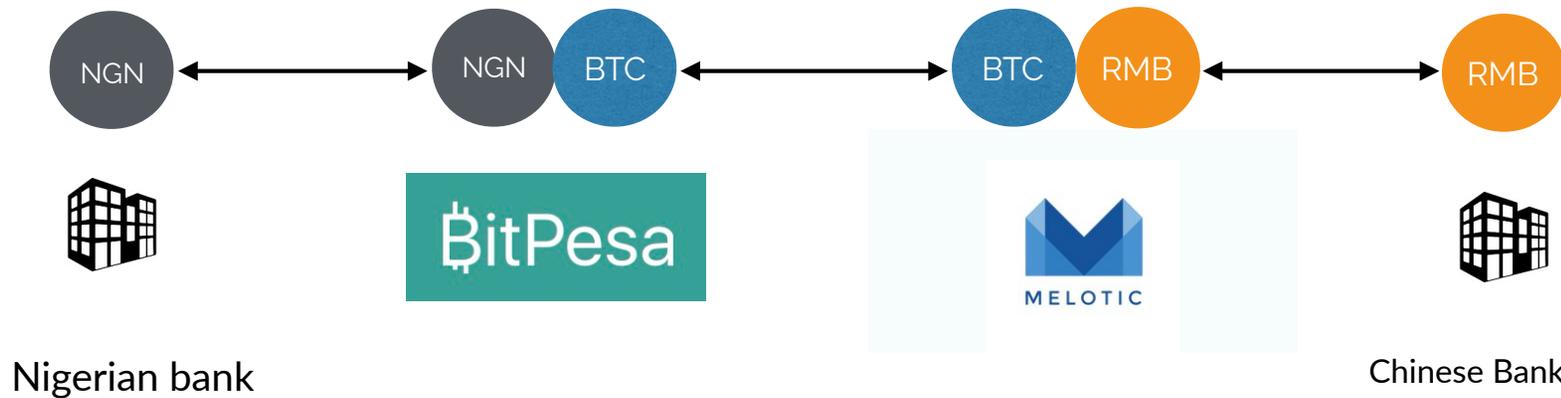


# BitPesa transactions still require banks

but are less dependent on correspondent bank system

Does not accept cash transactions

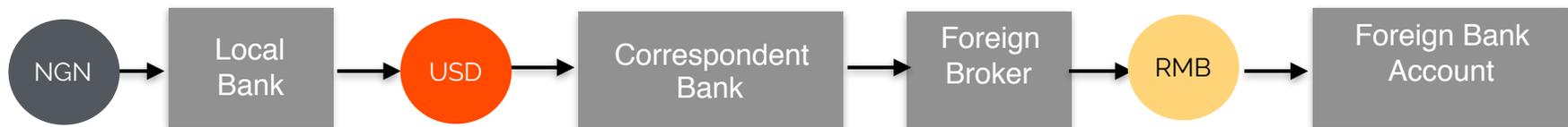
Brings informal payments into the formal sector and reduces corruption



# BitPesa Transactions

remove the need for USD as a middle currency

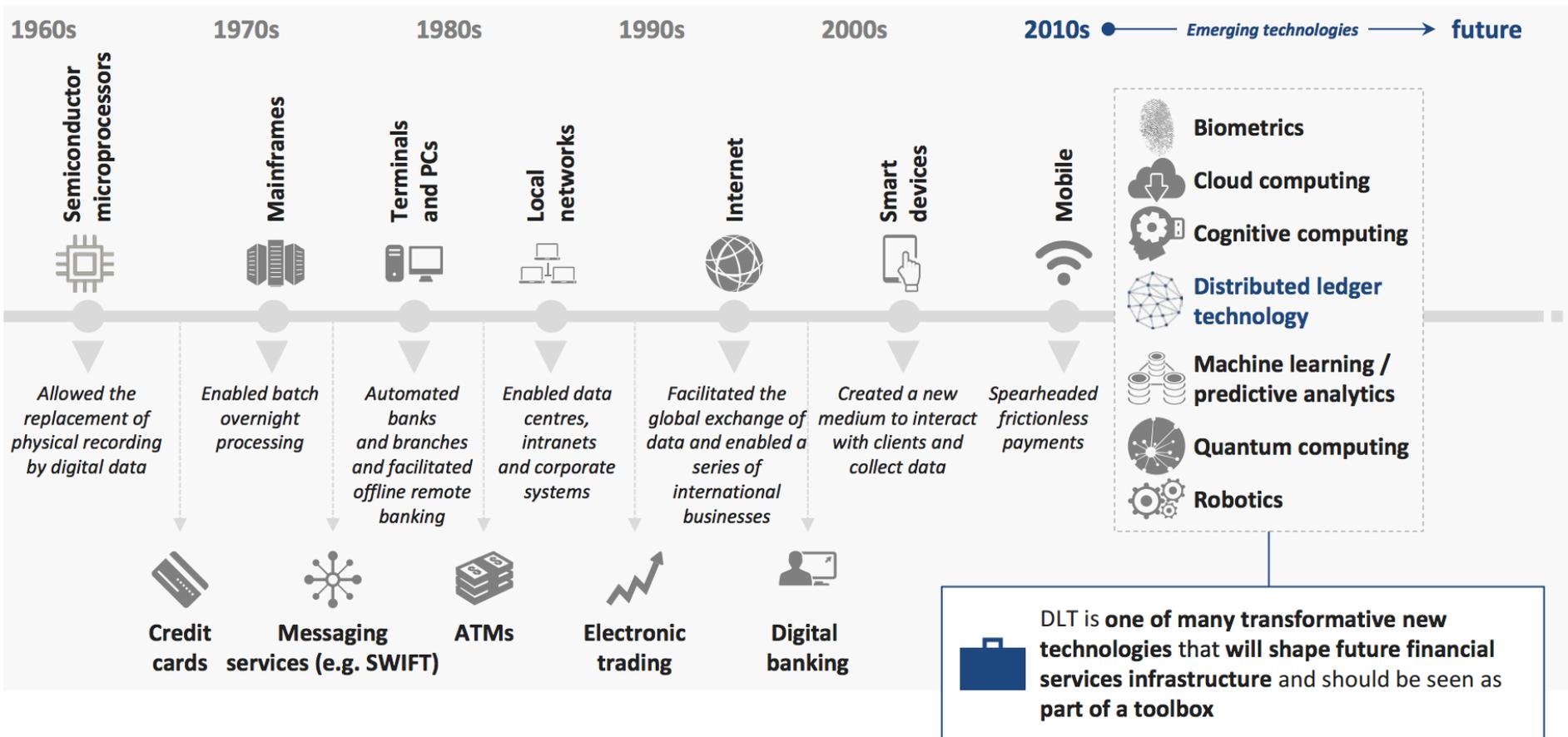
## Current System



## BitPesa

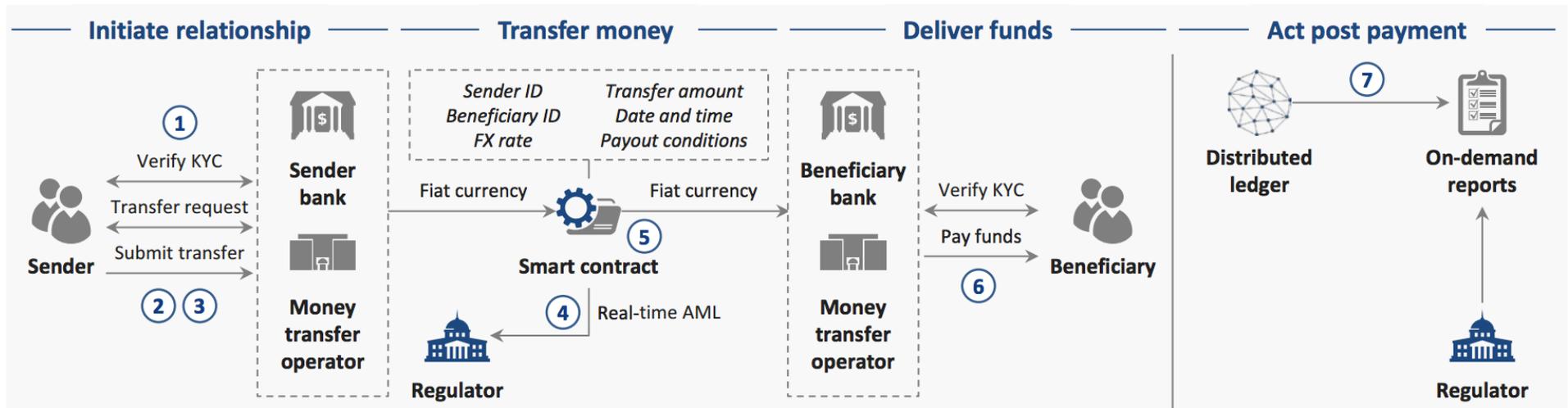


# Blockchain is transformative



# Important to enforce KYC/AML/CFTC

Businesses using blockchain should be licensed



# Many types of Blockchain businesses

Not all types of blockchain-using businesses should be legal

Digital Currency Payment Providers	Digital Currency Exchanges	Digital Currency Wallets	Investment Schemes
<p>Directly transacts with customer</p> <p>Straight-through-payment-processing</p>	<p>Platform for customers transacting with each other</p>	<p>Holding funds on behalf of customer</p>	<p>Pyramid Investments</p>
<p>Should collect KYC directly from customer</p> <p>Should vet all counterparty brokers to ensure compliance</p>	<p>Should vet all users of platform</p> <p>Should enforce that users collect KYC</p>	<p>Should hold core capital in NGN</p> <p>Should be regulated as deposit-taking-institution</p>	<p>Strong warnings for consumer protection</p> <p>Similar to gambling regulations</p>
		 	 

# Policy Recommendations

on how to easily adjust legislation for this technology

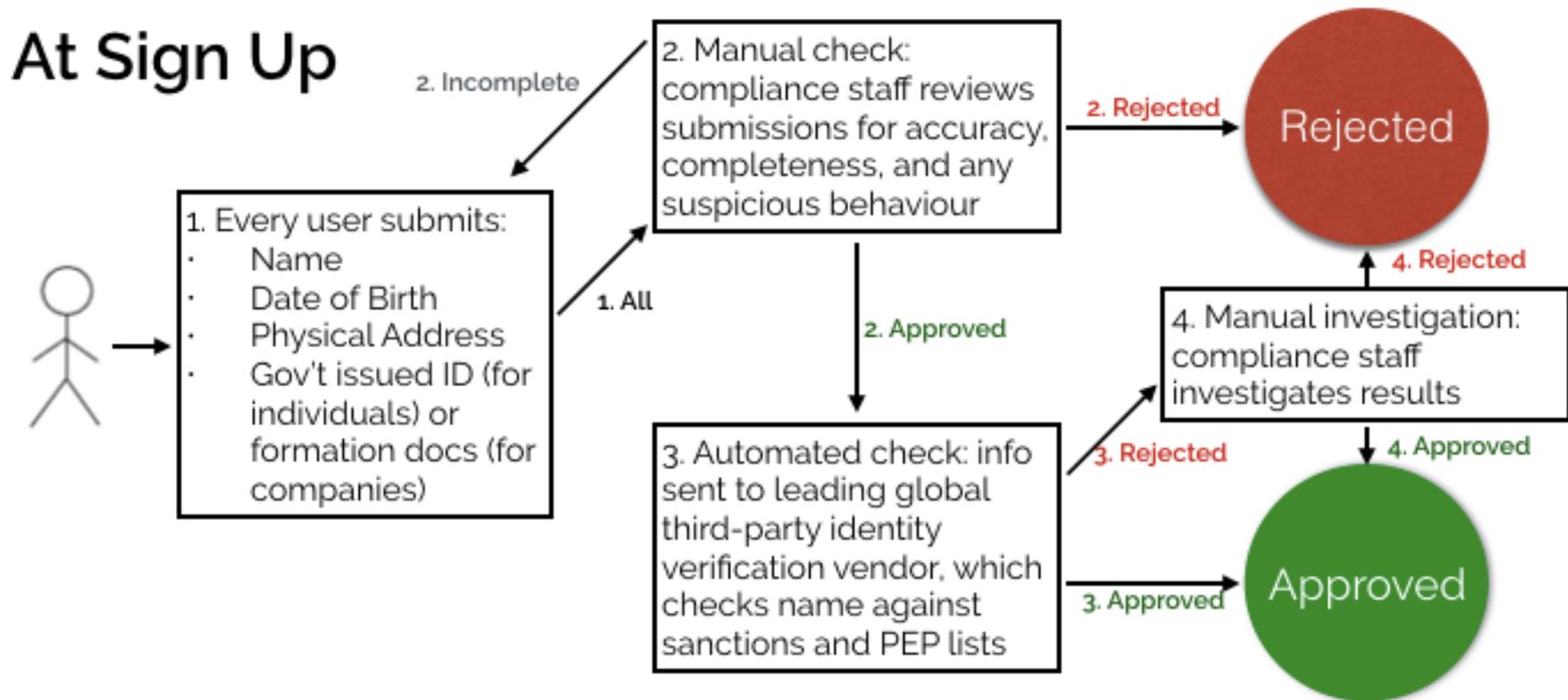
Foreign Exchange	E-Money	Commodities	Payment Service Providers
<p>Defines “currency” as legal tender</p> <p>Digital currencies are not legal tender anywhere except Japan</p>	<p>“e-money” is “monetary value stored electronically in a centrally-held electronic device.”</p> <ul style="list-style-type: none"><li>• Digital currencies are not “centrally-held,”</li><li>• Digital currencies are not “monetary value,” they are not legal tender.</li></ul>	<ul style="list-style-type: none"><li>• Digital currencies are not a physical, tangible good, but rather exist completely online in digital form</li><li>• Digital currencies have no inherent value, but rather exist as a medium of exchange</li></ul>	<p>Non-cash payment modes do not currently include virtual or digital currency payments</p>
<p>CBN could seek to modify the definition of currencies to include “digital currencies”</p>	<p>CBN could modify rules so they apply to digital asset wallet holders</p>	<p>CBN could work with SEC to expand definition of commodities to include “digital assets”</p>	<p>CBN could include digital currency payment providers in existing regulation</p>

# BitPesa

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# BitPesa KYC / AML

Every customer has full KYC at Sign-up and for each transaction



# Mandatory KYC / AML

Transact only with regulated entities

Ensuring multiple checks on each party for each transaction.

Monitor every transaction for suspicious activity.

