Centaur Capital Project Overview

Introduction

Centaur Central Bank Digital Currency built on Corda with the following APIs :

- Mobile Payments API (MPESA) *Problem Statement 3 offline issues and no internet *Problem Statement 8 - country's main payments api
- APIX core banking system
- AWS Cloud Server
- Bank Payments API (Mastercard) *Problem Statement 8-country's main payments api

Features

1. Ability to generate digital currencies per country using the Centaur Currency Standard (CCS) *Problem Statement 5 money supply | Problem Statement 9 decentralisation | **Problem Statement 12 interoperability**
2. Ability to match and reconcile currency exchanges using CCS
3. Ability to generate digital assets register using Centaur Digital Asset Standard (CDAS) *Problem Statement 5 money supply | **Problem Statement 12 interoperability**
4. Ability to create, exchange and redeem digital assets created by CDAS
5. Ability to create banking and financial services applications on Centaur blockchain *Problem Statement 1 other functionalities *Problem Statement 10 other features
6. Ability to generate a marketplace for exchanging digital currencies and assets

Objectives

1. To create a unified system for creating, managing and exchanging digital currencies
2. To create a unified system for creating, managing and exchanging digital assets
3. To ease development and upgrades of the said digital currencies & digital assets using CCS and CDAS *Problem Statement 10
4. To open financial services to the unbanked and informal sector *Problem Statement 1 other functionalities
5. To create confidence in the cryptocurrency and blockchain products
6. To educate the public on how digital currencies and assets are created, managed and exchanged
7. To offer custodial services to the public

Architectural Design

CCS workflow

1. Generate token SDK for the required country's currency eg. Centaur dollar token { all currencies generated by CCS will have the same X functions for interoperability}

2. Generate user wallets using country's identification API eg. Social Security number

3. Issue CBDCs of the equivalent currency minted in various quantities of Notes and Coins

4. Distribution of the issued CBDCs on the Centaur Exchange

5. User exchanges the various CBDCs with other Users from other countries during trade of goods n services.

CDAS workflow

1. Generate asset SDK for the required country's asset registry I.e all assets digitized by CDAS will have the same X functions for interoperability

2. User Adds Non-Current Assets of various classes into the registry and issue Centaur Bonds *users can also be governments**

3. Distribution of the issued bonds on the Centaur Exchange

4. The Central Banks of various countries will buy and issues CBDCs to the various User Wallets.

Distribution Model

Central Bank and Government using the centaur wallet application; app, web and USSD (Digital) *Problem Statement 1 no internet

Commercial banks, telcos and financial institutions using the agent centres (Physical) *Problem Statement 1 no internet *Problem Statement 8-country's main payments api

Blockchain Exchanges

Authenticity & Verification

Certification and endorsement from Central Bank of every country as a legal tender

Advertisement and user education material of the above

Mass usage and Social Media activities

Wallet Types

1. Based on user type eg. Govt, Institution, Person
2. Based on asset type eg. Financial instruments, Tangible & Virtual Assets
3. Based on amount

Non - Technical Design *Problem Statement 2 ease of use UX only , security comes with the blockchain

Digital Representation of Cash

Digital Representation of Assets

Disruption of Central Banking

Changing from the global village concept to the global home

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Legal

Anti-Money Laundering

KYC for custodial services only *Problem Statement 4 recovery of funds

*Since the system does not track the user ID and only the transaction ID, there is a possibility for money laundering** Problem Statement 11

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Future Considerations

*Problem Statement 6 -We cannot protect the user and the transaction data while allowing monitoring due to 3rd part risk

*Problem Statement 11 - Conflicting with Problem Statement 6

*Problem Statement 7 - We can offer harnessing of data from the system to improve financial services but we cannot control data monopolies unless we partner with various data stakeholders (eg. Google) on the distribution of the same.

This can be improved by adding a feature where the user authorises and activates selling transactional data to the highest bidder to have a feel of being part of the financial system.

*Problem Statement 9 - As we provide a standard that will create a decentralised central bank using CCS, we need to introduce a DAO for the users to participate in the management and maintenance of the Centaur system and the said users to be skilled and competent

Not So Sure

Problem #3 3rd party risk ,
Problem #4 for non custodial
Problem #9 central point of failure
Problem#10 excess computing power

CCS,CDAS central banking assumptions

Summary of Problem Statements

A.Very sure -**Problem Statement 12-interoperability**

B.Sure

Problem Statement 1-other functionalities & no internet
Problem Statement 2 ease of use UX only , security comes with the blockchain
Problem Statement 5 money supply
Problem Statement 8-country's main payments api

C.Not so sure - 3,4,9,10
D.Unsure/Future Considerations - 6,7,9,11