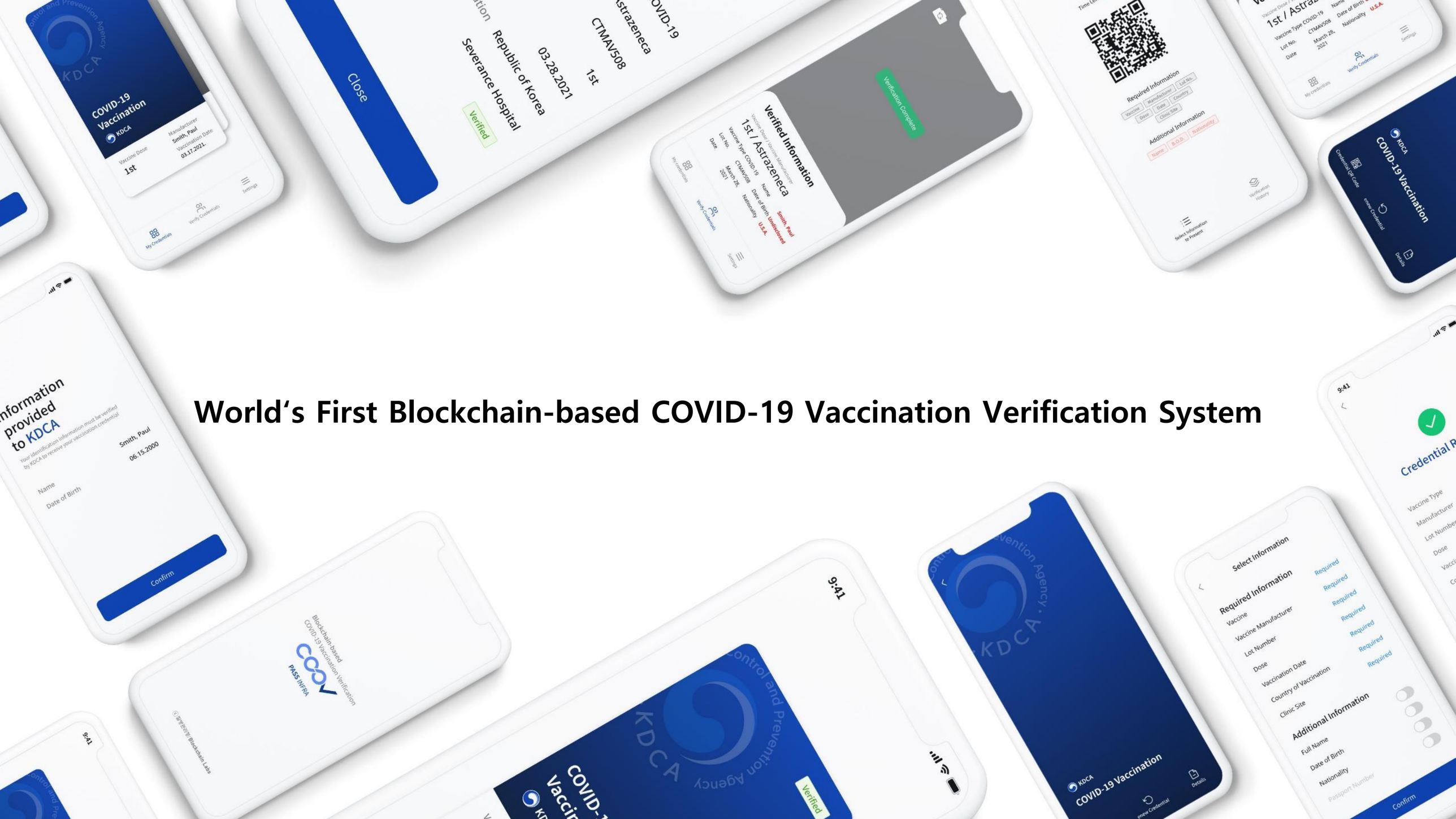
KDCA Blockchain Labs



World's First Blockchain-based COVID-19 Vaccination Verification System

Digital COVID-19 Vaccination Verification System

A digital vaccination verification system is a digital credential stored on the mobile device, which can be used to prove the owner's COVID-19 vaccination status. Through the use of a QR code that makes the verification process quick and easy, vaccinated individuals are able to present their proof of vaccination to be exempt from social restrictions associated with international travels and attending large social gatherings

Problems with the Vaccination Verification System

- ✓ Vaccination verification system holds the users' personal and vaccination information, which can risk exposing sensitive data to an unintended audience
- ✓ A normal digital vaccination verification system is vulnerable to fraud/tampering because it is difficult to verify the authenticity of the proof of vaccination
- ✓ If the vaccination verification system is not designed to be compliant with the global standards, its international interoperability is severely limited

Blockchain-based
COVID-19 Vaccination Verification System

- Complete Privacy Protection
- Cross-Verification of Digital Credentials
- Prevent forgery and fraudulent use
- Include Additional Information
- Multi-purpose Credential Verification
- International Compatibility

How COOV works

Issuing the digital credentials

Vaccination Institutions

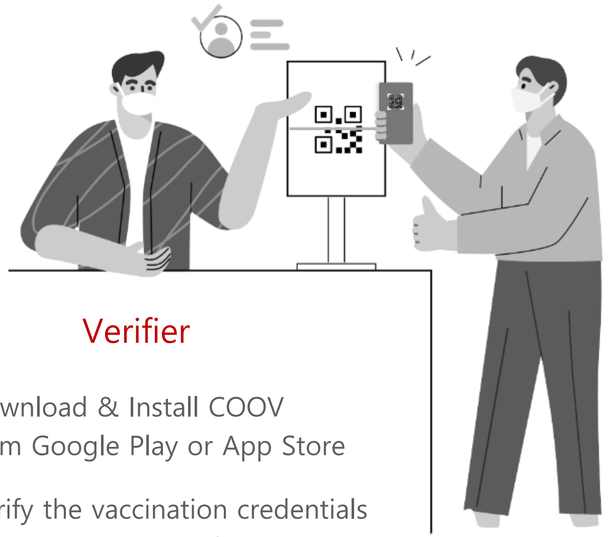
Record vaccination Information

KDCA(Issuer)

Issue the digital vaccination credentials

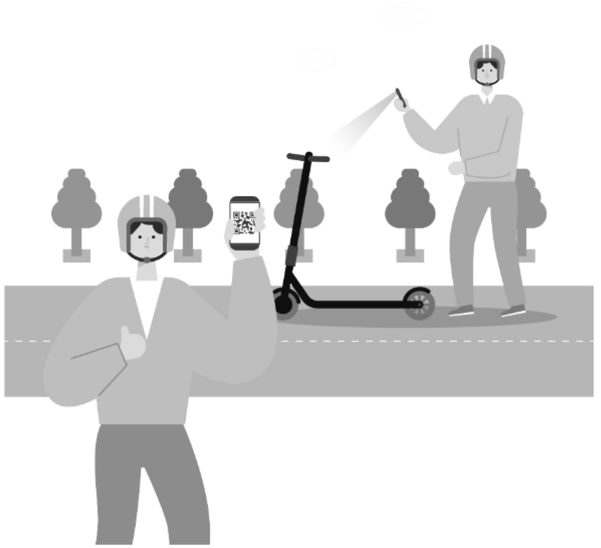
Vaccinated Individual

Using COOV



Verifier

- Download & Install COOV from Google Play or App Store
- Verify the vaccination credentials - Scan user's QR code



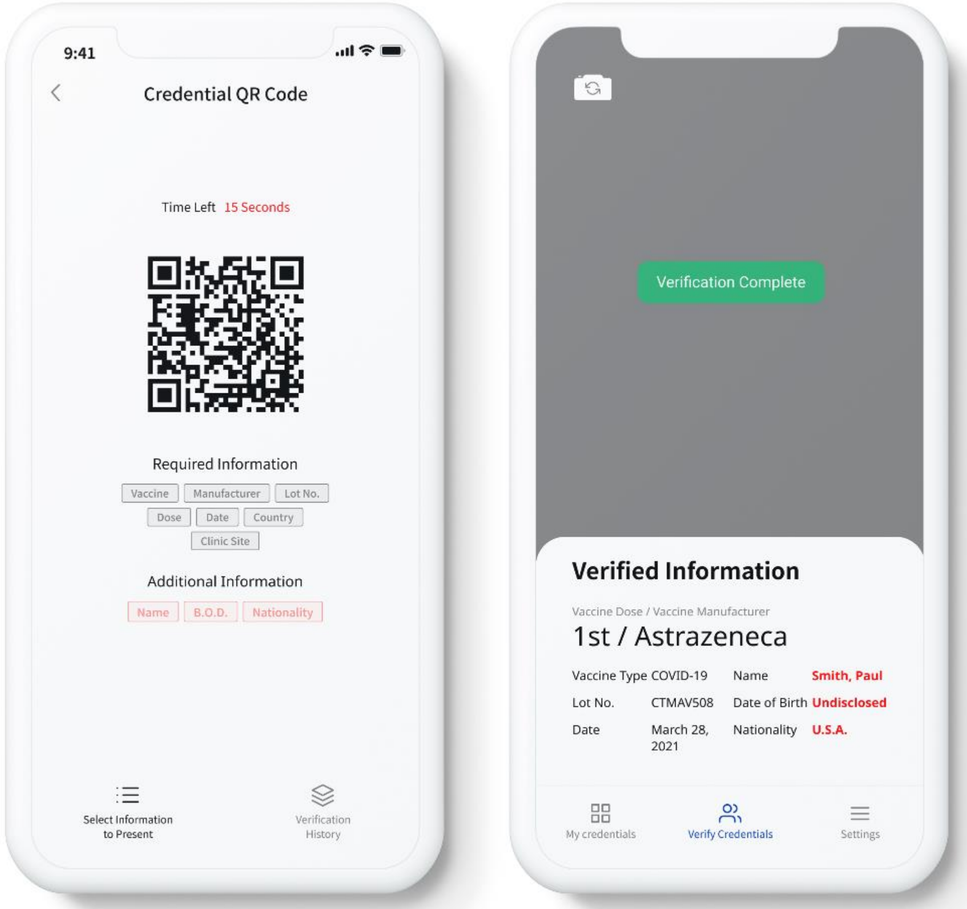
User

- Download & Install COOV from Google Play or App Store
- Receive the COVID-19 vaccination credential
- Present the credential QR code to an interested party

※ Users can access public places like airports, sports centers, hotels by presenting the QR code. And the credential allows users to be exempt from quarantines, and to hold private gatherings with more than 5 people

Complete Privacy Protection

COOV perfectly protects users' privacy by utilizing the blockchain technology to provide immutable digital credentials and to verify them without a traceable server



Cross-Verification of Digital Credentials

Users can present their digital credentials to interested parties, and also verify someone else's credentials by scanning their QR code

Prevent forgery and fraudulent use

COOV prevents forgery and fraudulent use of the credential by validating the issuer's and the owner's IDs[1)] recorded on the credential, and checking whether the credential written in the blockchain[2)] are revoked.

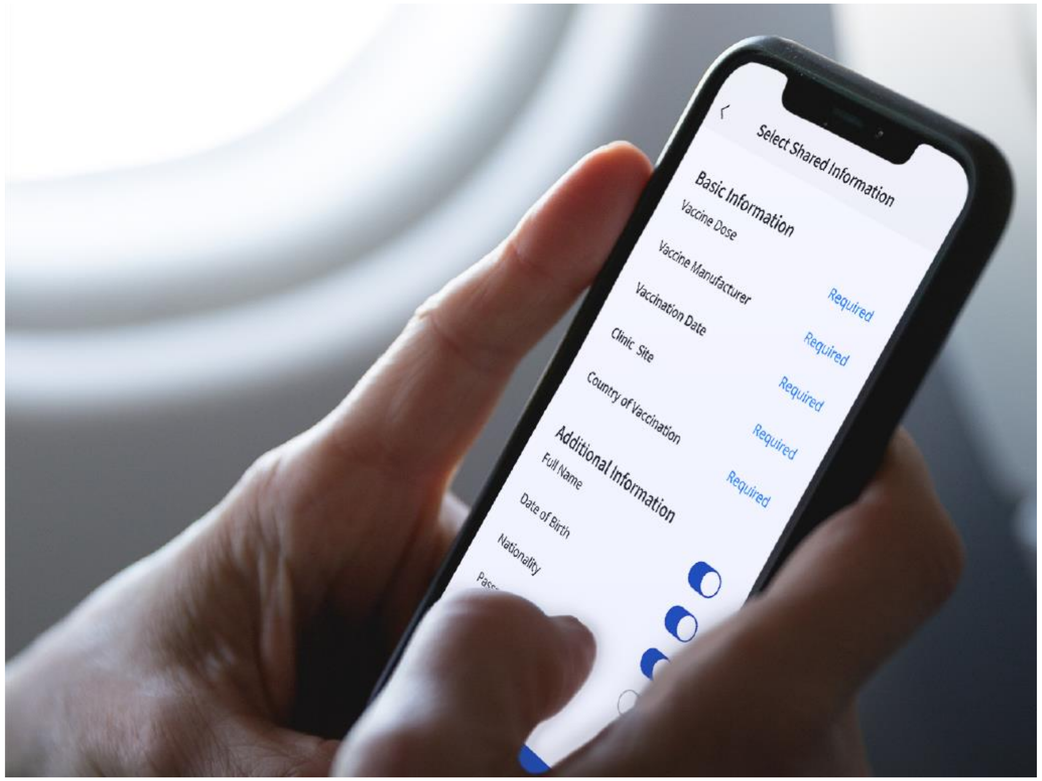
① Verifying the credential issuer's ID prevents anyone from successfully presenting a credential that is not issued by a valid authority

② Verifying the owner's ID recorded in the credential and the presenter's ID prevents anyone from successfully presenting a credential that does not belong to him

③ Verifying with blockchain whether the credential is revoked or not prevents anyone from successfully presenting a revoked credential

1) The IDs applied to COOV stands for Decentralized Identifier (DID), and once issued, it cannot be changed or manipulated

2) If a user reissues a credential on a new mobile device, credential issued by another device is automatically revoked, and information is written in the blockchain, which cannot be falsified

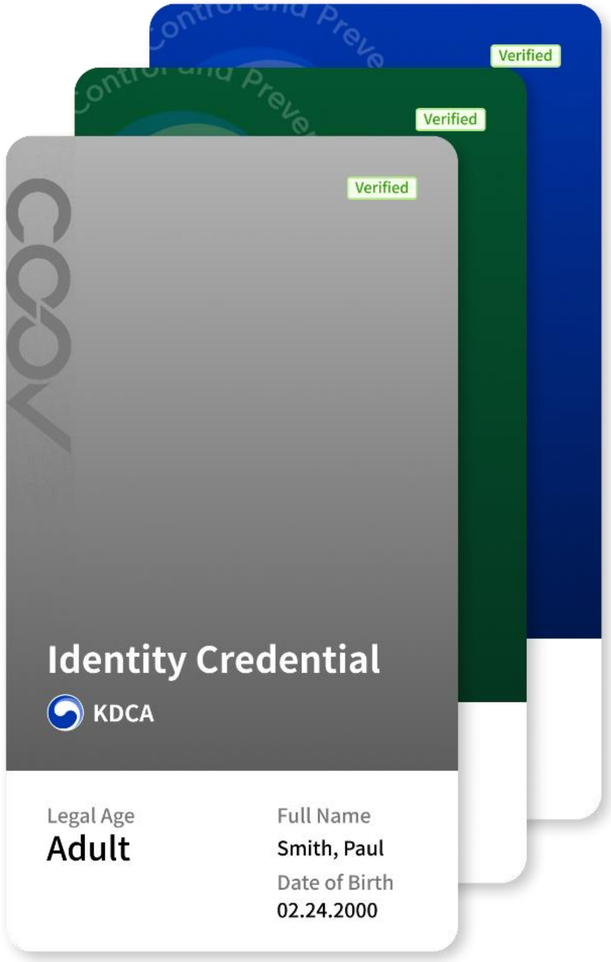


Include Additional Information

Aside from their COVID-19 vaccination credentials, users can also provide additional information (name, date of birth, nationality, passport number, photo, etc.) to interested parties

Multi-purpose Credential Verification

In addition to providing vaccination credentials for COVID-19, COOV can also provide other credentials, including the age classification for verifying whether the user is a minor or an adult



International Compatibility

COOV is available for governments and institutions around the world to use for free. Because of COOV's international compatibility, COOV users' COVID-19 vaccination credentials can be verified in other countries as well.

COOV is powered by Blockchain Labs' unique, patented blockchain consensus algorithm

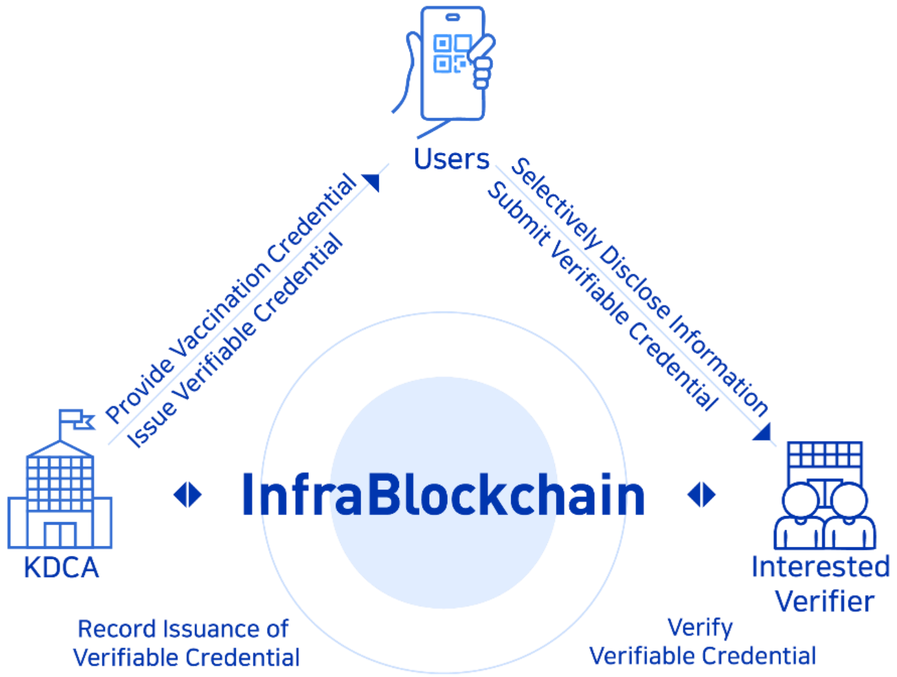
In order for the vaccination verification system to be used globally,
there needs to be a scalable blockchain technology.
However, among the existing blockchain technologies,
Blockchain Labs' Proof-of-Transaction(PoT) is the only consensus algorithm that
does not involve volatile cryptocurrencies such as Bitcoin,
while enabling governments, agencies, and organizations to freely participate in the network.

Blockchain Without a Native Cryptocurrency

Because of its reliance on a cryptocurrency with high price volatility to pay for transaction fees, blockchain was difficult to be used in the real world. InfraBlockchain is the solution to the cryptocurrency-reliance problem, enabling the governments and companies to freely use blockchain without such concerns

A Scalable Public Blockchain

The basic concept of blockchain technology is to increase trust of the network by allowing anyone to freely participate in the network.
If only predetermined members can participate in the network, there is no valid reason to use blockchain technology.
InfraBlockchain invites anyone from anywhere in the world to participate to build a strong trust network.



Setting Global Standards for the DID(Decentralized Identity) Technology

Not only does COOV comply with the global standards of W3C DID, it also utilizes other global standard libraries such as Universal Resolver, to collaborate with DIDs based on more than 40 public and private blockchains, including Ethereum and Hyperledger.
Blockchain Labs is an active member of Decentralized Identity Foundation (DIF), and also working with the Linux Foundation Public Health to collaborate in setting the global standards for many early-stage technologies

KDCA Blockchain Labs

Contact Us

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