

ABLE TO THE WORLD

ABLE:
APPLYING BLOCKCHAIN TO EXTEND FINANCE





This White Paper states the current views of ABLE token issuer and service provider, Chain Holdings OÜ (registration code 14406869) and its Korean agency, K-Blockchain (registration code 462-86-00783) concerning the ABLE Platform and related matters. Chain Holdings OÜ or K-Blockchain may from time to time revise this White Paper in any respect without notice. The information presented in this White Paper is indicative only and is not legally binding on Chain Holdings OÜ or K-Blockchain or any other party. This document is for informational purposes only and does not constitute and is not intended to be an offer to sell, a solicitation of an offer to buy, or a recommendation of; (1) ABLE Tokens, (2) an investment in the ABLE Platform or any project or property of Chain Holdings OÜ or K-Blockchain, or (3) shares or other securities in Chain Holdings OÜ or K-Blockchain or any affiliated or associated company in any jurisdiction. Please read the important legal disclaimers at the end of this White Paper.

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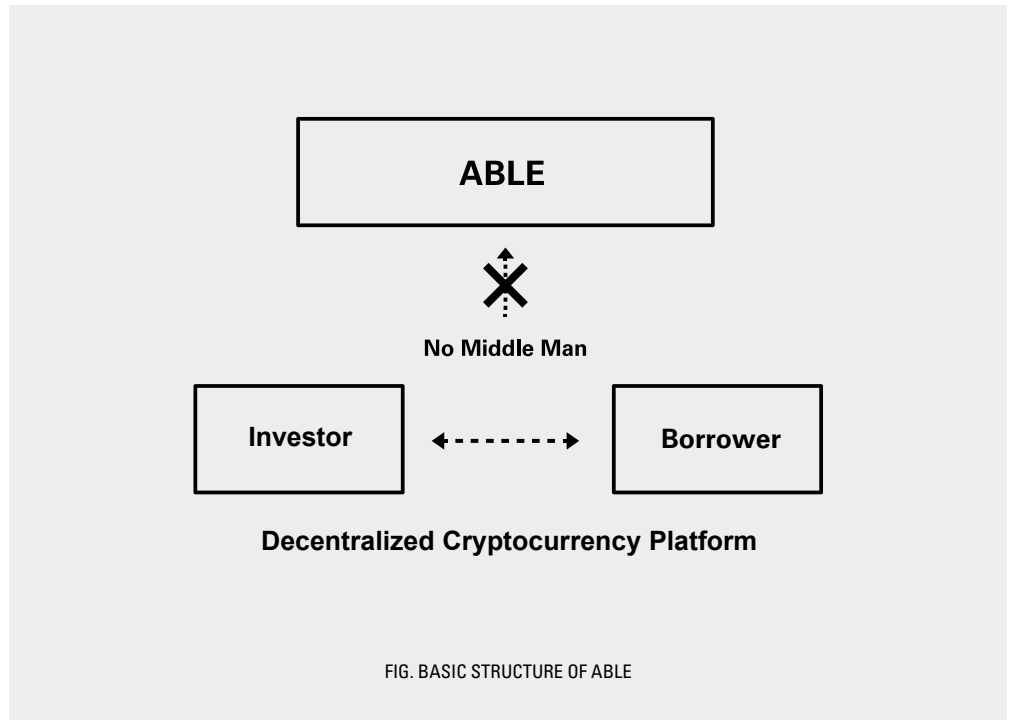
00 VISION

The ABLE project will create a solution to problems with traditional bank lending-deposit spreads, and nontransparent and centralized cryptocurrency financial services, basing the solution on the transparency and reliability of a blockchain system. The ABLE project is the cryptocurrency-specific financial solution that provides cryptocurrency financial products through person-to-person loan-matching systems and decentralized exchanges.

The ABLE project will create a platform that enables cryptocurrency-based financial activities to center around the ABLE account, emanating from the fact that banking activities are carried out primarily through bank accounts. Users propose loan interest rates through a matching system, eliminating the lending-deposit spread by directly connecting users on a peer-to-peer basis. The ABLE project supports decentralized exchanges and provides decentralized cryptocurrency wealth management services through smart contracts. Ultimately the project aims to evolve into the ABLE Ecosystem through its integration with external systems, including simple payments.

01 INTRODUCTION

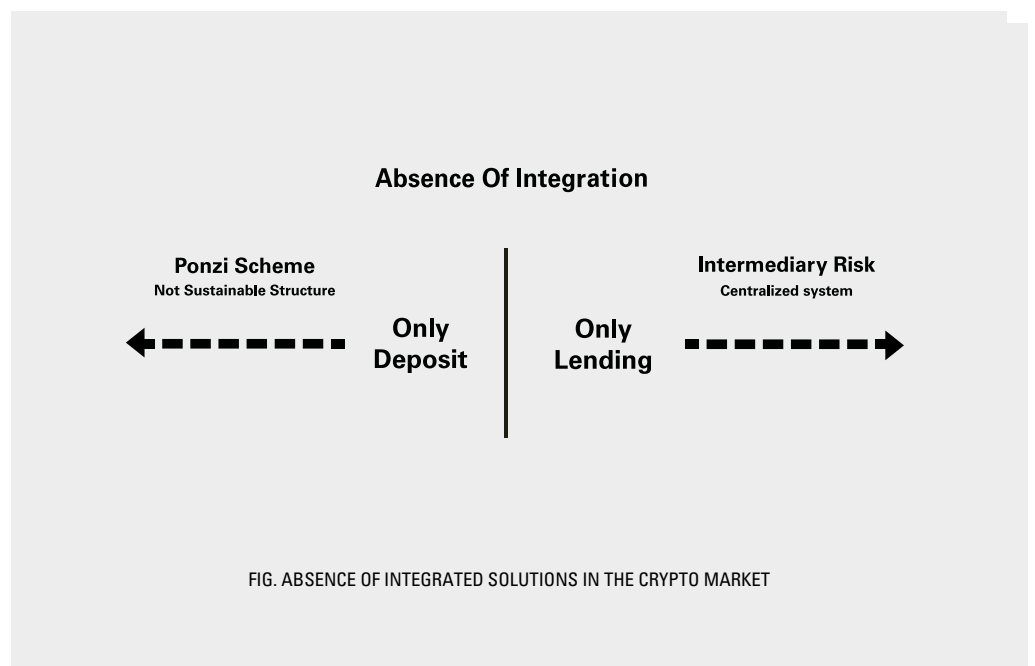
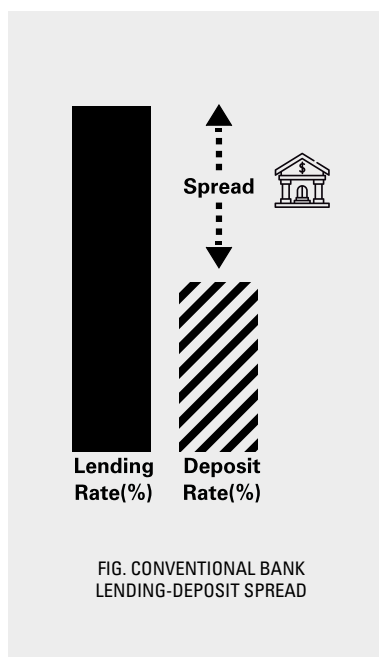
01 INTRODUCTION



ABLE PROJECT: DECENTRALIZED CRYPTOCURRENCY PLATFORM

The ABL project has been proposed to provide an alternative to banks' conventional lending-deposit spread structure, and to solve problems with initial cryptocurrency banking services.

- 1) Banks have a business model based on a lending-deposit spread (i.e., the difference between lending and deposit interest rates), in which the bank acts as an intermediary between depositors and borrowers. This structure allows banks to receive deposits at low interest rates and lend money at high rates, profiting from the difference.
- 2) Existing cryptocurrency-based banking services are provided through a centralized structure. The combination of unsustainably high interest rates and centralized services renders banks directly vulnerable to managers' moral hazard and the hacking of central servers. The lack of integrated solutions in the crypto market withholds users from experiencing diverse banking services.



The ABLE project aims to solve these problems by applying decentralized blockchain technology.

By developing a matching engine that connects investors and borrowers on a peer-to-peer basis, the project directly connects investors and borrowers without any intermediaries. With intermediaries and lending spreads eliminated, cryptocurrency interest rates will be determined by mutual agreement between users in a free market, and said rates will serve as market interest rates. Investors can receive higher interests than they would in a centralized market, while borrowers can lend money at lower rates, creating a win-win scenario. Since investing and lending occur governed by smart contracts, the project will eliminate exposure to managers' moral hazard and the risk of central-server hacking.

Current cryptocurrency banking services provide deposits and loans separately rather than linking depositors and borrowers. The services have shortcomings such as inability to provide high deposit interest rates in a sustainable way. Such services cannot mitigate or eliminate intermediary risks because their structure is based on a centralized model. On the other hand, the ABLE project directly links users, primarily through an account, and enables a variety of financial activities such as payroll and investment, based on smart contracts.

The ABLE project primarily aims to apply decentralized blockchain technology to financial and wealth management features; to directly link demand and supply through an account on a peer-to-peer basis; and to establish a reliable system. It aims subsequently to build an in-house decentralized exchange, and then to evolve into a platform on which to develop and use smart contracts for finance and wealth management services.

02 BACKGROUNDS

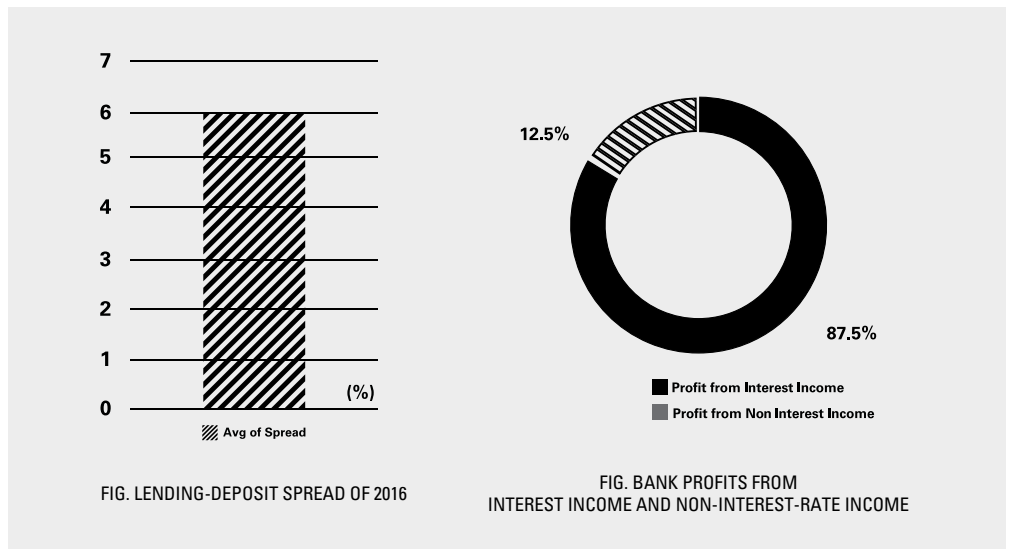
- 2.1 MARKET SIZES OF BANK LENDING-DEPOSIT SPREADS
- 2.2 CASE STUDIES OF CRYPTOCURRENCY BANKING SERVICES

02 BACK- GROUNDS

TRADITIONAL BANK LENDING-DEPOSIT SPREAD AND CRYPTOCURRENCY BANKING BUSINESS MODEL

2.1 MARKET SIZE OF BANK LENDING-DEPOSIT SPREADS

Traditional banks serve as intermediaries and profit from differences between deposit and loan markets (lending-deposit spreads). The ABLE project will create a system that enables investors and borrowers to share the value generated by eliminating such intermediaries. Currently, cryptocurrency banking businesses provide piecemeal services such as high-yield deposits and loans involving intermediary risks. The ABLE project creates a sustainable business model that enables direct account-based linking of users through smart contracts, and through decentralization solves the problems of managers' moral hazard and the hacking of central servers.

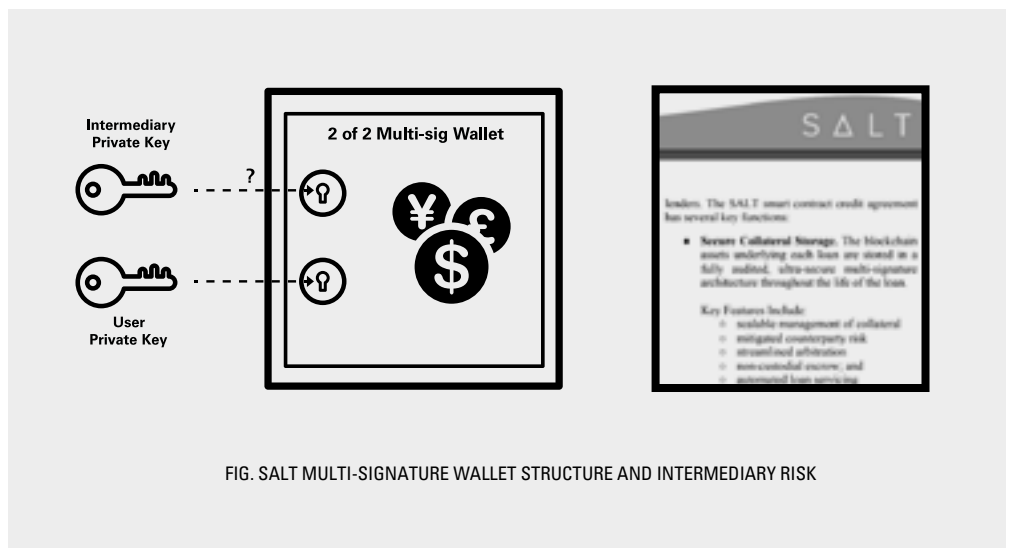


As of 2017, the average deposit-lending spread of banks was recorded at about 6%, thus explaining the 80% of their gross income. The non-interest income (e.g., service charges, trusts, securities, foreign-exchange income), on the other hand held a small proportion of 20%.

The decentralization of financial businesses eliminates operational risks that occur during bank operations. Since investors are directly linked to borrowers without banks as their intermediaries, they can use services without being burdened by banks' operational risks.

2.2 CASE STUDIES OF CRYPTOCURRENCY BANKING SERVICES

2.2.1 CASE STUDY OF LOAN BROKER RISK: SALT



SALT is a banking service cryptocurrency solution that lends money in fiat currency backed by cryptocurrency as collateral. Using the multi-signature technology that only allows a withdrawal with the signatures of both intermediaries and borrowers, this solution alleviates intermediary risk and thus distinguishes itself from existing solutions. However, the SALT structure stipulates that without signatures, users cannot receive ownership of cryptocurrencies in return. While the platform uses smart contracts, until it becomes decentralized it cannot be an ideal solution to intermediary problems. Most lending platforms are also vulnerable to managers' moral hazard because intermediaries retain customers' cryptocurrency assets.

2.2.2 PONZI-SCHEME TYPE CRYPTOCURRENCY DEPOSITS

There are cryptocurrency deposit services in the form of Ponzi schemes that pay unsustainably high deposit interest rates. These services attracted customers by providing interest rates as high as 10% per month in the six months following launch. The Government of the United Kingdom has imposed sanctions on Ponzi-type fraudulent cryptocurrency financial services. Ponzi-scheme type cryptocurrency services that collect money on an arbitrage profit-sharing model also have emerged.

2.2.3 CONCLUSION FROM ANALYSIS OF CASE STUDIES OF CRYPTOCURRENCY BANKING SERVICES

Cryptocurrency banking services are still in their infancy and do not have established business models. Most attempts to solve their problems have separated deposits from loans. This mechanism was not sustainable under the weight of high deposit rates and failed to solve the intermediary-risk problem caused by centralization.

The ABLE project aims to create a solution to existing problems and a better system through the investing-lending matching engine and various financial services that provide account-based links between investors and borrowers.

03 ABLE PROJECT : FINANCIAL SERVICES

3.1 ABLE INVESTING-LENDING MATCHING ENGINE

3.2 CRYPTOCURRENCY PAYROLL SERVICE AND CREDIT SCORE/ LOAN

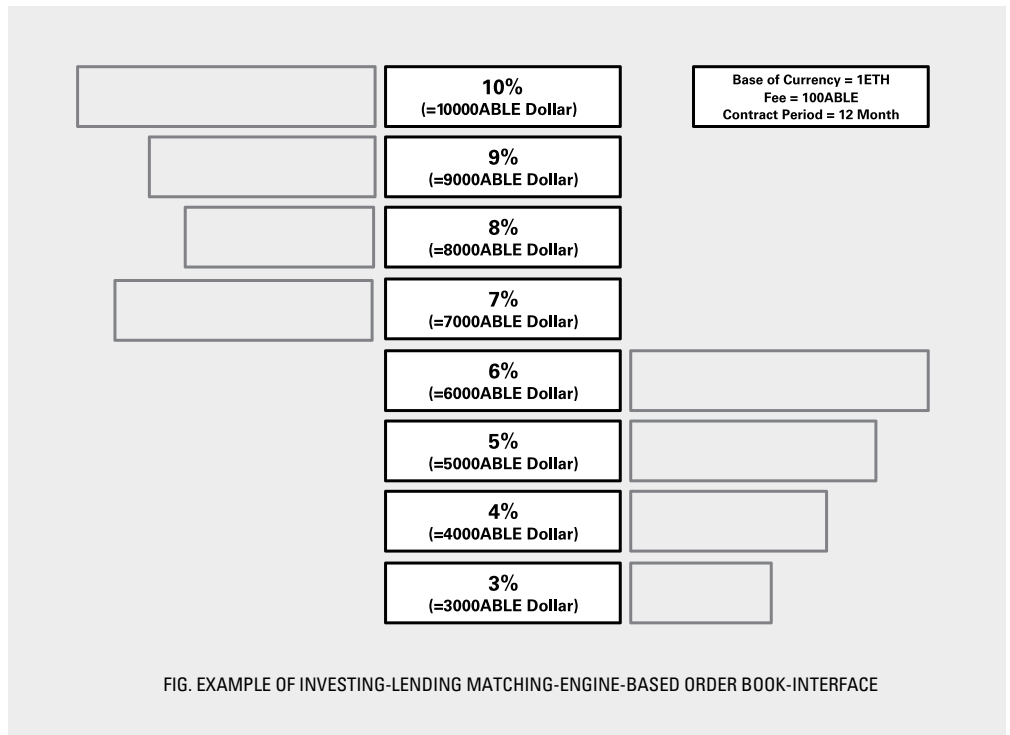
3.3 CONVENIENT CRYPTOCURRENCY ADDRESS AND SCHEDULED REMITTANCE SERVICE

3.4 ACCOUNT-BASED ICO SMART CONTRACT

03 ABLE PROJECT: FINANCIAL SERVICES

The ABLE project, in its initial stages, provides: 1) investing/lending – investing-lending matching engine; 2) payroll and credit score/ loan – cryptocurrency salary- payment service and credit scores to support loans; 3) simplified payment and remittance service – simplified account address service and reserve remittance; and 4) investment – account-based Initial Coin Offering (ICO) investment governed by a smart contract. The project offers an account-based finance experience that encompasses, loans, remittance, payroll, and investment.

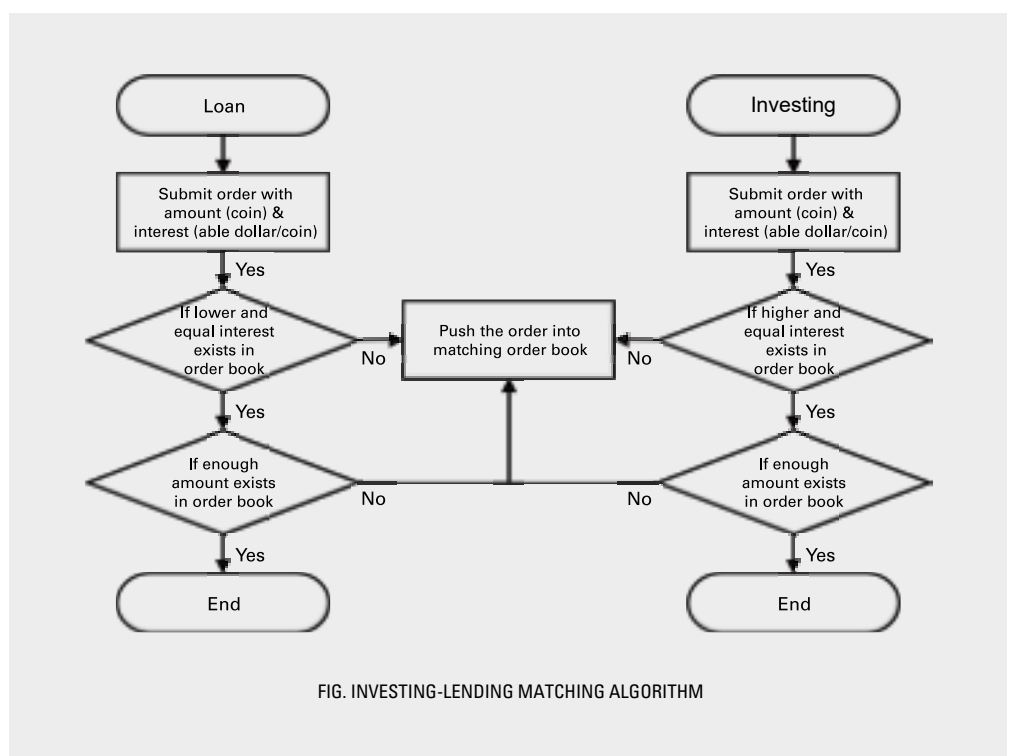
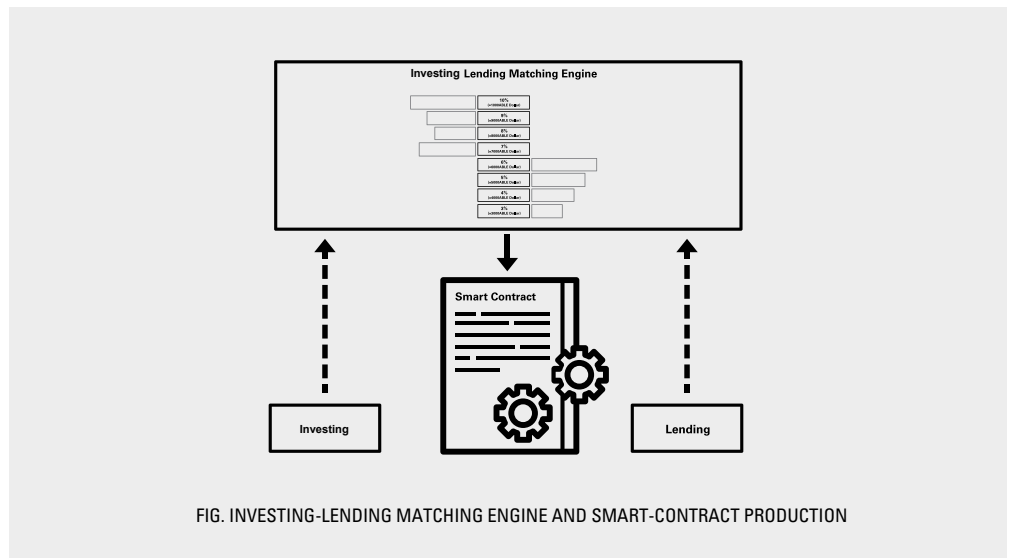
3.1 ABLE INVESTING/ LENDING MATCHING ENGINE



The fundamental principle of decentralization is to share value among actual participants while eliminating unnecessary intermediaries in a given business model. The matching engine that directly links investors and borrowers on a peer-to-peer basis allows investors and borrowers to share actual value. Whereas in the traditional banking system, banks determine deposit and lending rates as intermediaries, the ABLE investing-lending matching engine allows a variety of investors and borrowers to participate in the process of determining appropriate rates.

Since the existing cryptocurrency banking market tended to focus on either deposits or loans, it was difficult to secure sufficient liquidity and trading volume. However, the market that enables direct linking on a peer-to-peer basis can increase liquidity and trading volume. Generating great amounts of various currency data made available to users, such as cryptocurrency short-term rates, long-term rates, and trading volume, reduces volatility and helps create a stable cryptocurrency market environment.

3.1.1 INVESTING-LENDING MATCHING ENGINE AND SMART CONTRACT



An order book for investing and lending is created based on investing and lending demand from users. Once an invest or lending transaction is carried out based on the order book, a smart contract is created to execute the investment or the loan. The borrower’s cryptocurrency will be set up as collateral and the contracted loan will be given. Then the investor will receive corresponding interests.

3.1.2 INVESTING-LENDING MATCHING-ENGINE PRODUCTS

Investing-lending matching-engine products are created to increase liquidity and trading volume. Offering too many products prevents banks from securing sufficient liquidity and trading volume, and offering too few prevents them from meeting various demands. Considering that the cryptocurrency market cycle is shorter than the cycles of traditional financial markets, the solution will include products with relatively shorter cycles in its initial stages.

We plan to increase the number of cryptocurrencies supported (e.g., Bitcoin, Litecoin) just as the Atomic Swap feature is introduced.

3.1.3 INVESTING-LENDING MATCHING-ENGINE BUSINESS MODEL

The entire investment process—investment money transfer, interest payment, and investment return at maturity—is carried out through smart contracts.

Collateralization of cryptocurrency, loan payment, and interest payment are also carried out through smart contracts. Users can invest any cryptocurrency set up as collateral in mutual funds listed on the ABL network and various investment products, but cannot make withdrawals. Any investments made by cryptocurrency collateral can be automatically liquidated through smart contracts to preserve the value of collateral, in case value of the investments declines.

If the asset set up as collateral is PoS(Proof of Stake), users can use external master node services based on a smart contract.

3.2 CRYPTOCURRENCY PAYROLL AND CREDIT SCORE/LOAN

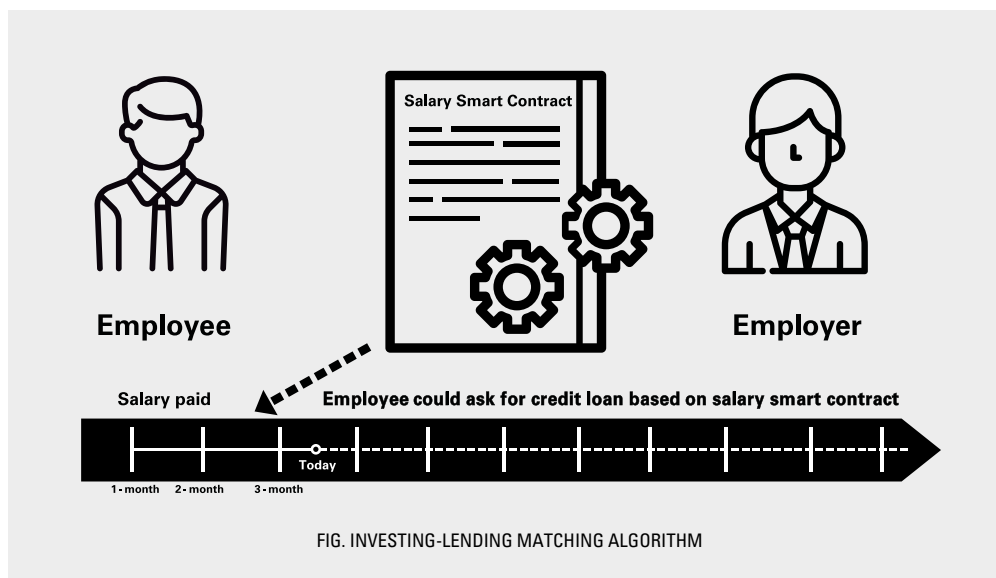


FIG. INVESTING-LENDING MATCHING ALGORITHM

GMO, a Japanese Internet-based conglomerate, has paid some of its employee salaries in cryptocurrency. Growing interest in the cryptocurrency industry is expected to result in an increase in payments in cryptocurrency for some salaries or project costs.

Typically, loans are divided into secured loans backed by assets, and credit loans based on income. Currently, there are only few credit-loan services in the cryptocurrency space, because salary payment in cryptocurrency has received little consideration. However, as more salary payments are made in cryptocurrency, credit lending based on cryptocurrency also becomes possible. Salaries can be paid based on project progress or hours of work done, and credit assessment and credit lending can be serviced based on cumulative salary-payment data.

3.2.1 SALARY PAYMENT SMART CONTRACT

Personal labor can be assessed largely based on hours of work and performance. Initially, the salary payment system will focus on assessing hours of work. Then salaries can be paid on a yearly, monthly, or weekly basis.

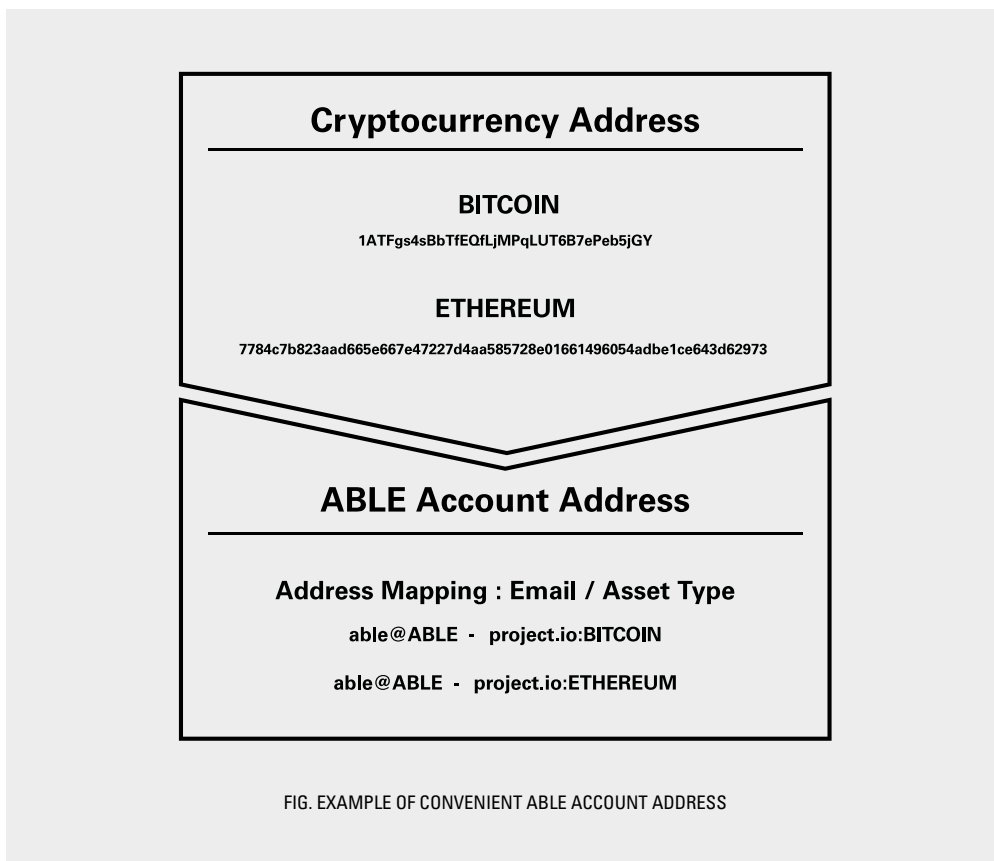
3.2.2 CREDIT ASSESSMENT

Credit assessment can rest on the fact that blockchain data cannot be manipulated. In initial stages, credit scores are generated based on the history of completion of salary-payment smart contracts and consistency of cryptocurrency income. Then, based on the credit scores, the option to allow salary advance payments will be added. Credit scores will be refined by credit-assessment technology based on big data and external credit-score data.

3.2.3 CREDIT LOAN BASED ON SMART CONTRACT FOR SALARY PAYMENT

Adding the option of making a credit loan to the cryptocurrency salary payment system allows users to take out a credit loan based on existing smart contracts for salary payment, using the credit-score data within the account.

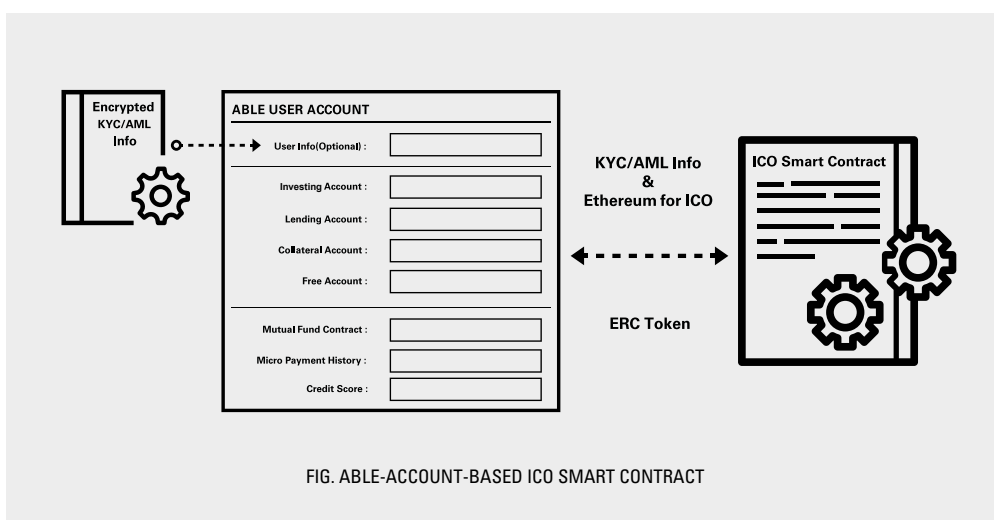
3.3 CONVENIENT CRYPTOCURRENCY ADDRESS AND SCHEDULED REMITTANCE SERVICE



The address lengths of cryptocurrencies are typically 34 characters for Bitcoin and 65 characters for Ethereum, to prevent hash collisions and hacking. However, a remittance service that requires long addresses is a hassle for users. Making cryptocurrency remittance more accessible means making cryptocurrency addresses convenient, a principle similar to that by which web-based applications use easily remembered domain URLs instead of IP addresses.

We provide convenient addresses within the ABLE account to boost remittance activities, including small-amount payments. Additionally, we provide the option that allows users to cancel remittance at any time before the reserved time through the scheduled remittance service.

3.4 ACCOUNT-BASED ICO SMART CONTRACT



Currently, solutions must provide a variety of data for KYC/AML(Know-Your-Customer/Anti Money Laundering) to be effective in ICO. Files and personal data can be stored in the ABLE account through encryption so that users can invest in ICO on the ABLE account using personal data and an ICO smart contract.

04 ABLE ECOSYSTEM DEVELOPMENT PLAN

4.1 ABLE DEX

4.2 ABLE FINANCIAL PRODUCTS

4.3 MICROPAYMENT / THIRD PARTY

04 ABLE ECOSYSTEM DEVELOP- MENT PLAN

The ABLE Ecosystem largely comprises the ABLE account and support for third parties providing finance, wealth management, and micropayment services. We will add the decentralized exchange (DEX) feature to store smart contracts based on various cryptocurrencies. Operating on DEX, we will distribute the framework to allow production of wealth management and finance smart contracts, creating an environment where a wide array of product developers can develop financial products. Thus, users can access a variety of financial products, and through API development the ABLE project can evolve into a cryptocurrency finance platform and an ecosystem enabling communication, including micropayment, with outside parties.

4.1 ABLE DEX

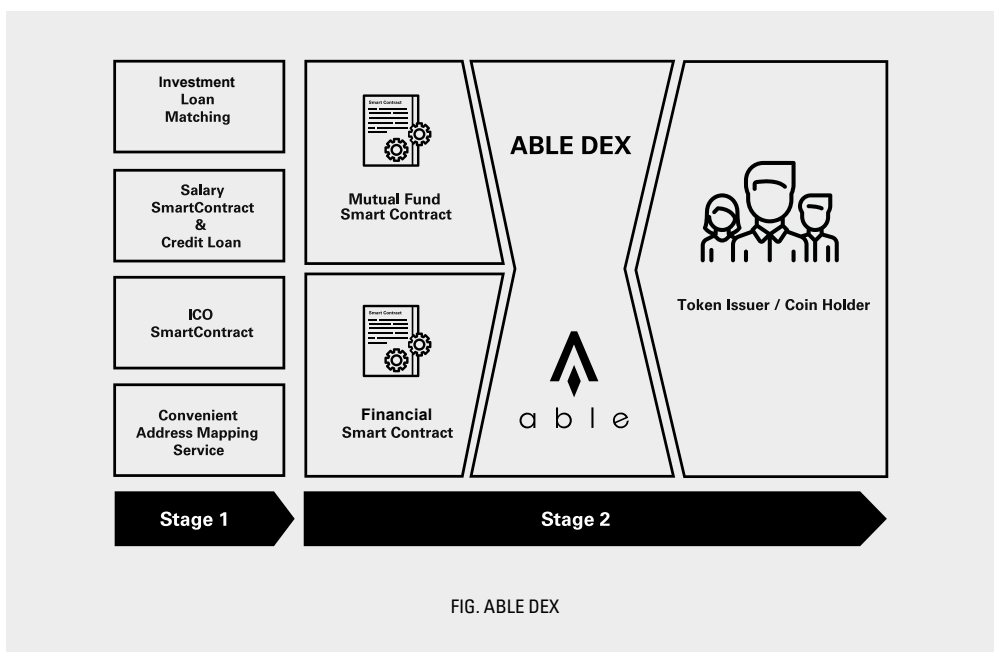


FIG. ABLE DEX

We need a decentralized exchange through which cryptocurrency assets can be traded in order to develop wealth management and finance smart contracts. Currently, most cryptocurrency investments are made through arbitrage trading at centralized exchanges or ICO participation with personal wallets. However, through ABLE DEX, we can eliminate the risks of centralized exchanges and allow for wealth management.

Through the ABLE account, we can create a platform that makes a variety of investment products accessible. On the ABLE network, we will create an environment where various smart contracts and Decentralized Applications (DApps) can enable the development of the ABLE Ecosystem.

4.2 ABLE FINANCIAL PRODUCTS

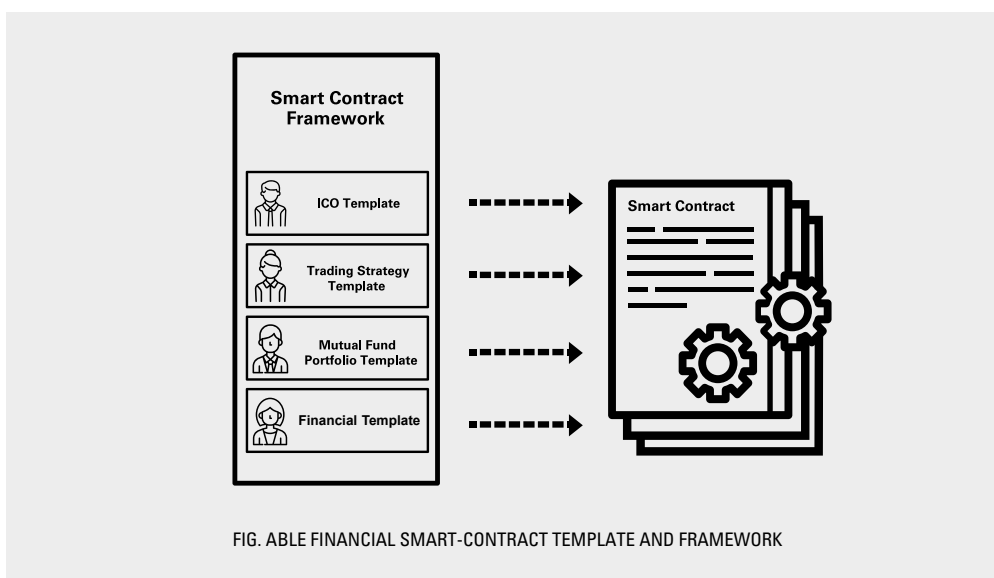


FIG. ABLE FINANCIAL SMART-CONTRACT TEMPLATE AND FRAMEWORK

Utilizing various smart-contract frameworks and templates, users can develop cryptocurrency investment products. Using these templates, financial-product developers can create a variety of wealth management and finance smart contracts without having to learn difficult programming languages. Users can access various investment products through the ABLE account.

4.2.1 SMART CONTRACT FOR WEALTH MANAGEMENT

We develop the smart contract frameworks necessary to manage funds, such as trading strategy generators, and portfolio analysis tools. Fund-management service fees will attract investment-product developers and create an ecosystem that will:

- 1) Allow creation of a variety of technical indicator-based trading strategies.
- 2) Create a systematic wealth management environment by providing smart contracts that enable portfolio construction and performance analysis tools.

4.2.2 FINANCE SMART CONTRACT

While the investing-lending matching engine carries out most loans, demand for various financial services will be met through finance smart contracts that include long-term loans, large-amount loans, P2P loans, secured loans, and credit loans.

Secured loans, and credit loans based on external ABLE data will be carried out through various integration mechanisms, following the development of the ABLE main network.

Initially, ABLE will produce finance smart contracts; then ABLE will gradually provide an environment in which various financial-product developers can produce finance smart contracts based on the finance smart contract framework.

4.3 MICROPAYMENT/ THIRD PARTY

A big portion of financial activities such as credit-card payments, automatic transfers of utility and service charges, and mileage programs will be integrated into the cryptocurrency space.

Extending the scope of practical application based on a variety of partnerships with third-party services, including micropayment, will strengthen the ABLE ecosystem. In the future, a majority of economic activities will be integrated into the cryptocurrency space by cryptocurrency finance.

05 ABLE SYSTEM ARCHITECTURE

5.1 ABLE SYSTEM

5.2 ABLE ACCOUNT

5.3 ABLE CRYPTOCURRENCY ECONOMIC SYSTEM

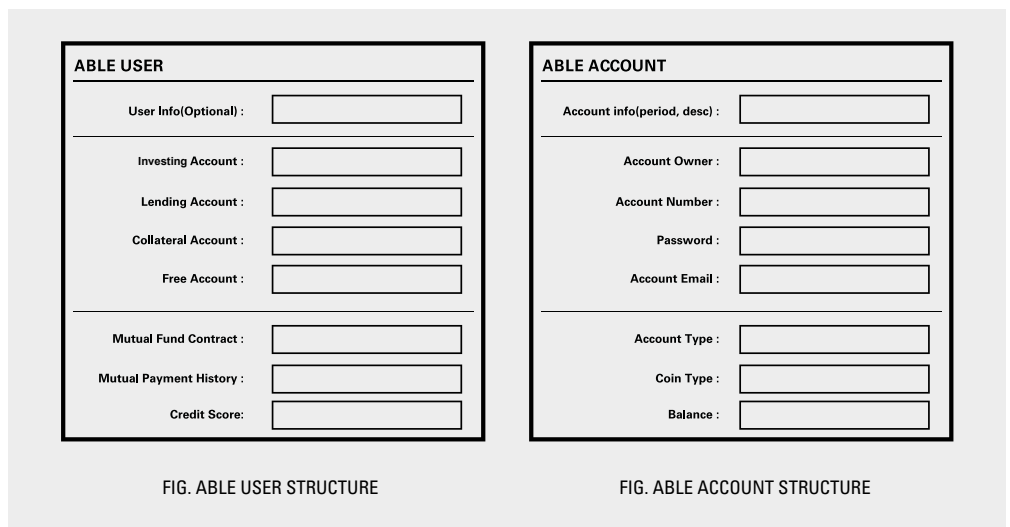
5.4 ABLE CONSENSUS PROTOCOL

05 ABLE SYSTEM ARCHITECTURE

5.1 ABLE System

Users can use the ABLE account to access third-party services including micropayment, investments, loans, and wealth management. This strategy allows existing bank-account users engaged in financial activities to expand their services in more accessible ways. We aim to provide users with financial services integrated around accounts.

5.2 ABLE Account



All the services of the ABLE system will operate on smart contracts based ABLE User and ABLE Account. The ABLE User can have one or more ABLE accounts, depending on the purpose. The ABLE User data includes user information, a list of accounts held, fund/loan subscription details, payment history, and creditworthiness. The ABLE Account encompasses deposit account, loan account, collateral account, free account, fund/finance account, and credit score. Each ABLE Account includes account information, account holder, account number, password, e-mail address linked to the account, account type, deposit coin, and balance. Upon creation of the ABLE account, the user can transfer and withdraw money through the ABLE free account, and utilize various products based on smart contracts.

5.3 ABLE CRYPTOCURRENCY ECONOMIC SYSTEM

5.3.1 ABLE COIN/ABLE DOLLAR

ABLE currency consists of ABLE Coin and ABLE Dollar. ABLE Coin is used as a service charge for using the ABLE system, and ABLE Dollar is used for interest payment. ABLE Coin and ABLE Dollar can be exchanged.

5.3.2 ISSUING ABLE COIN/ABLE DOLLAR

The amount of ABLE coins initially issued is 25 billion, and the token decimal unit is 18. Validation nodes will be operated on a PoS basis. The additional inflation rate through initial PoS-based operation is 15%, which will converge into 5% in the long run. Of the outstanding tokens, 15 billion will be distributed to the general public and 10 billion will be assigned to related parties. The initial amount of ABLE Dollar issued is 1 billion. To ensure minimum volatility, no additional ABLE Dollar will be issued.

5.4 ABLE CONSENSUS PROTOCOL

ABLE adopts the PoS consensus protocol. The minimum number of ABLE coins preserved to operate validation nodes will be 20 million.

06 TECHNICAL STRUCTURE OF ABLE SYSTEM

6.1. ARCHITECTURE OF ABLE SYSTEM

6.2. APIS OF ABLE SYSTEM

6.3. ABLE COIN ON ABLE SYSTEM

06

TECHNICAL STRUCTURE OF ABLE SYSTEM

The development of ABLE system goes through three stages. At the first stage, we first develop ABLE account, investing-lending matching, and convenient cryptocurrency address services through solidity-based ABLE smart contract technology on the Ethereum blockchain and then provide ABLE service through the ABLE web page. At the second stage, we develop ABLE DEX and design various ABLE financial products that interact with ABLE smart contracts and provide them to users through the web page. At the final stage, we create a dedicated blockchain main network for ABLE that allows us to provide credit services and personalized financial products by gathering and analyzing user patterns of using financial products.

6.1. ARCHITECTURE OF ABLE SYSTEM

The ABLE system has the following architecture: it is made up of infrastructure layers, ABLE framework layers, and application layers, and members have limited access to the respective layers depending on their access level.

INFRASTRUCTURE

The layer consists of blockchain systems for managing shared log and executing smart contracts. In the initial stages of the ABLE project, Ethereum blockchain will be used and then replaced by dedicated ABLE blockchain. In the infrastructure layer, ABLE accounts, investing-lending matching engines, the DEX, and cryptocurrency gateways are designed, forming the foundation of the ABLE system. Access to the infrastructure layer is limited to the ABLE system, but the layer is maintained and repaired at the request of users.

ABLE FRAMEWORK

The framework provides cryptocurrency gateways and the DEX to allow for exchange of cryptocurrencies between different blockchain systems and offers finance solutions for investing-lending matching engines and ABLE products. Smart contracts of ABLE financial products are designed based on their characteristics. Access to the framework layer is limited to the ABLE system which validates and distributes such financial products.

ABLE APPLICATION

The application introduces how to transfer money, create an account and use products designed based on smart contracts and delivers user requests to the framework. Using account smart contracts, users can create their own ABLE account, transfer money, and use financial products through distributed product smart contracts. The application layer provides web sites and smartphone apps for users to easily use the ABLE system. Access to the application layer is also given to users, and they can access the ABLE finance and financial products through the web and applications.

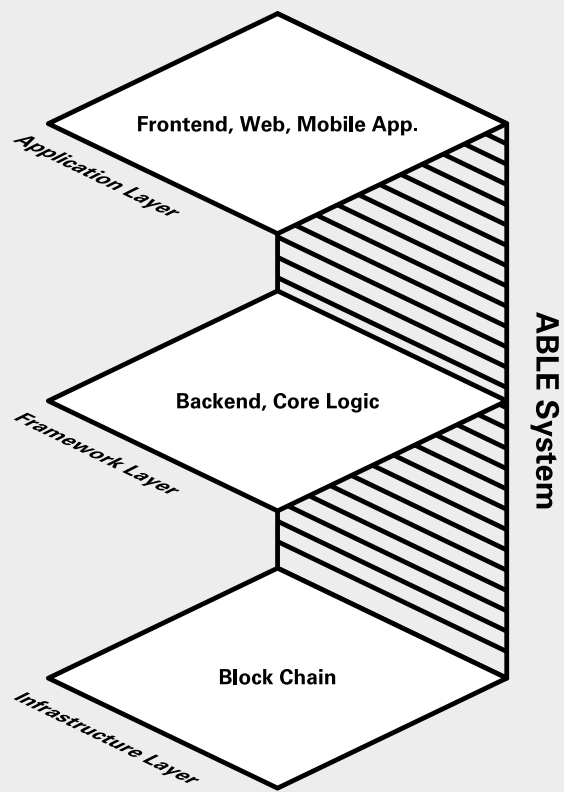


FIG. ABLE SYSTEM LAYER

The figure below represents the structure of the ABLE system, which will be realized on ABLE blockchain, and the API relationships among the layers. Users can use the ABLE system through the website and mobile applications in the ABLE application layer. All the actions requested by users are delivered to the ABLE Framework through public APIs, and smart contracts are called at such requests. All requests among smart contracts within the ABLE framework layer are carried out through protected API. The ABLE system builds finance and account smart contracts which are responsible for ABLE account-related processing, transfer, and remittance transactions. Then smart contracts are designed to provide services for investments, loans, and financial product transactions. The ABLE infrastructure layer manages all smart contract codes working on the ABLE framework and users' account transaction details, remittance details, and financial product details in blockchain. The ABLE blockchain learns users' service details through big data analysis and recommends financial products tailored to users' patterns.

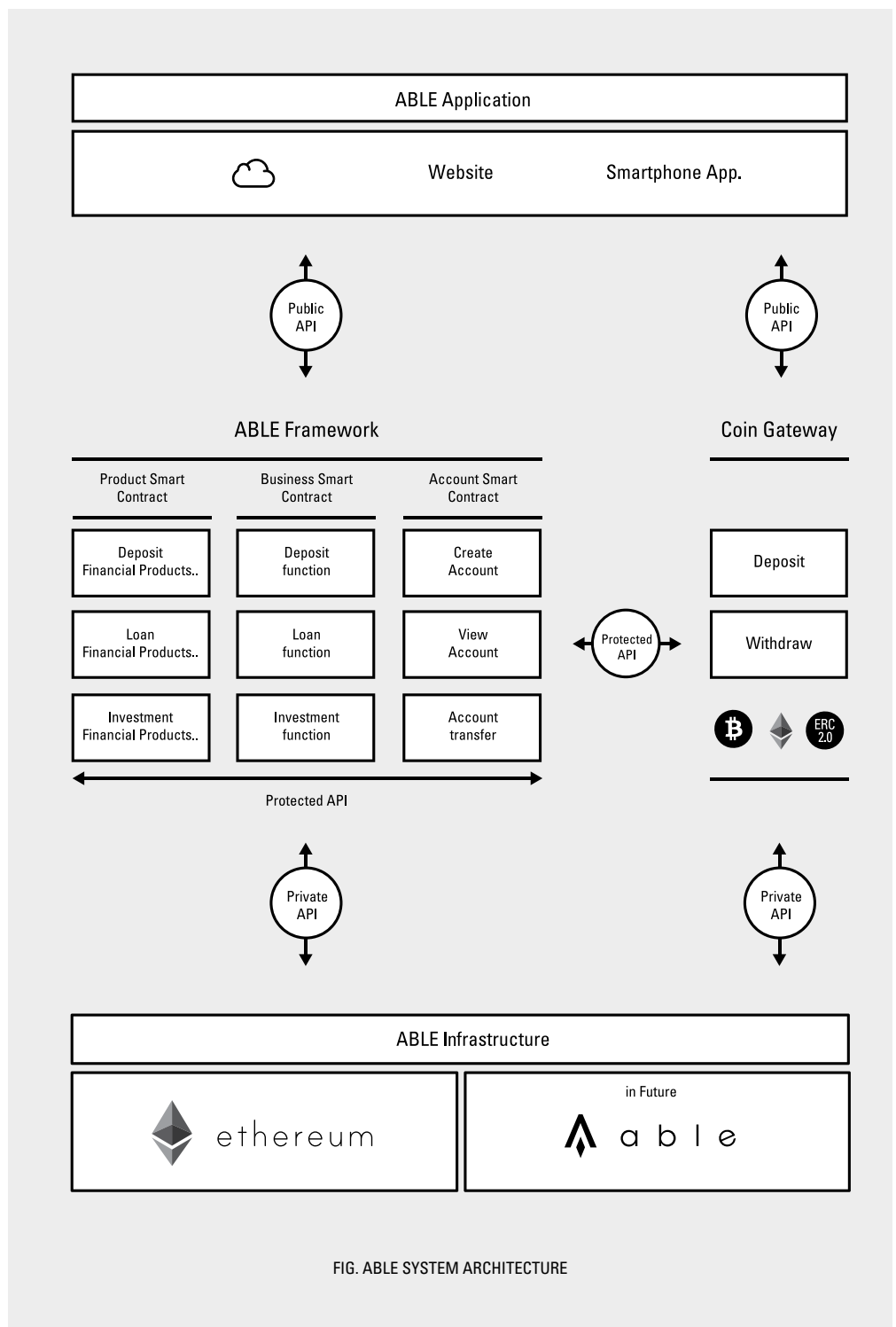


FIG. ABLE SYSTEM ARCHITECTURE

6.2. APIs OF ABLE SYSTEM

Since the ABLE system architecture is layered, and levels of access vary depending on the layer, all respective layers and components communicate through standard-based ABLE APIs. The respective APIs are divided into public API, protected API, and private API, and levels of access to respective APIs are divided into users and the ABLE system.

PUBLIC API

REQUEST_DEPOSIT(COIN TYPE, AMOUNT)

Used when users deposit cryptocurrency money. Deposits are made based on the type and the amount of coins deposited.

REQUEST_WITHDRAW(COIN TYPE, DESTINATION ADDRESS, AMOUNT)

Used when users withdraw cryptocurrency money. Withdrawals are made based on the type of cryptocurrency withdrawn, the address of cryptocurrency to receive, and the amount of coins.

REQUEST_TRANSFER(SOURCE COIN TYPE, DESTINATION COIN TYPE, DESTINATION ADDRESS, AMOUNT)

Used when users transfer cryptocurrency money between accounts. Transfers are made based on the type of cryptocurrency transferred, the address to transfer cryptocurrency to, and the amount of coins. Exchange between different cryptocurrencies will be made at the exchange rates and service charges set by the ABLE system.

REQUEST_SMARTCONTRACT(COIN TYPE, PRODUCT ADDRESS, AMOUNT, PARAMETERS)

Used when users apply for financial products. Request for financial products is made based on the type of cryptocurrency sent, the address of the smart contract for chosen products, and quantities.

PROTECTED API

START_SMARTCONTRACT (COIN TYPE, SOURCE ADDRESS, SMARTCONTRACT ADDRESS, AMOUNT, PARAMETERS)

When users request financial products, it sends the type and the amount of coins requested for the smart contract in question. When the smart contract expires or Stop_Fund occurs, End_Fund will be executed.

STOP_SMARTCONTRACT (COIN TYPE, SOURCE ADDRESS, SMARTCONTRACT ADDRESS)

When users cancel financial products, the coins put into the product will be returned through smart contracts. Interim payments will be made under the agreement for the product.

END_SMARTCONTRACT (COIN TYPE, DESTINATION ADDRESS, AMOUNT)

When smart contracts expire or are terminated, the result will be sent based on the type of products to the account of users who requested the products.

EXCHANGE_COIN(SOURCE COIN TYPE, DESTINATION COIN TYPE, AMOUNT, SOURCE ADDRESS, DESTINATION ADDRESS)

Used for transfer of cryptocurrency between accounts or used to exchange cryptocurrency when smart contracts expire.

SET_SMARTCONTRACT(SMARTCONTRACT NAME, SMARTCONTRACT DESCRIPTION, SMARTCONTRACT ADDRESS)

Used when registering financial product smart contracts designed with the ABLE system. The product thus registered is made accessible to users through the application layer.

DELETE_SMARTCONTRACT(SMARTCONTRACT NAME)

Used to delete any expired financial product smart contracts.

PRIVATE API

ETHEREUM APIs

These APIs are fundamental to the Ethereum blockchain, and the ABLE Framework is created using Ethereum APIs. Ethereum APIs are called by requests.

ABLE APIs

These APIs are dedicated ABLE blockchain APIs and basically include the same functions as Ethereum APIs. They include additional APIs that can process personal data and details of customers that are difficult to register with the public Ethereum blockchain.

6.3. ABLE COIN ON ABLE SYSTEM

ABLE coins are designed to maintain the ABLE system and used by vendors. When a new financial product smart contract is registered with the ABLE framework, ABLE coins are used as a Gas fee, which is a registration fee. Thus to release new financial products, ABLE coins should be continuously purchased from users and vendors, and the continuous purchase of ABLE coins to maintain the system prevents dumping of ABLE coins. Next, when users exchange cryptocurrencies through the ABLE DEX, ABLE coins are used as service charges. Lastly, users can use ABLE coins to pay for products or services offered by ABLE vendors.

07 BUSINESS MODEL

07 BUSINESS MODEL

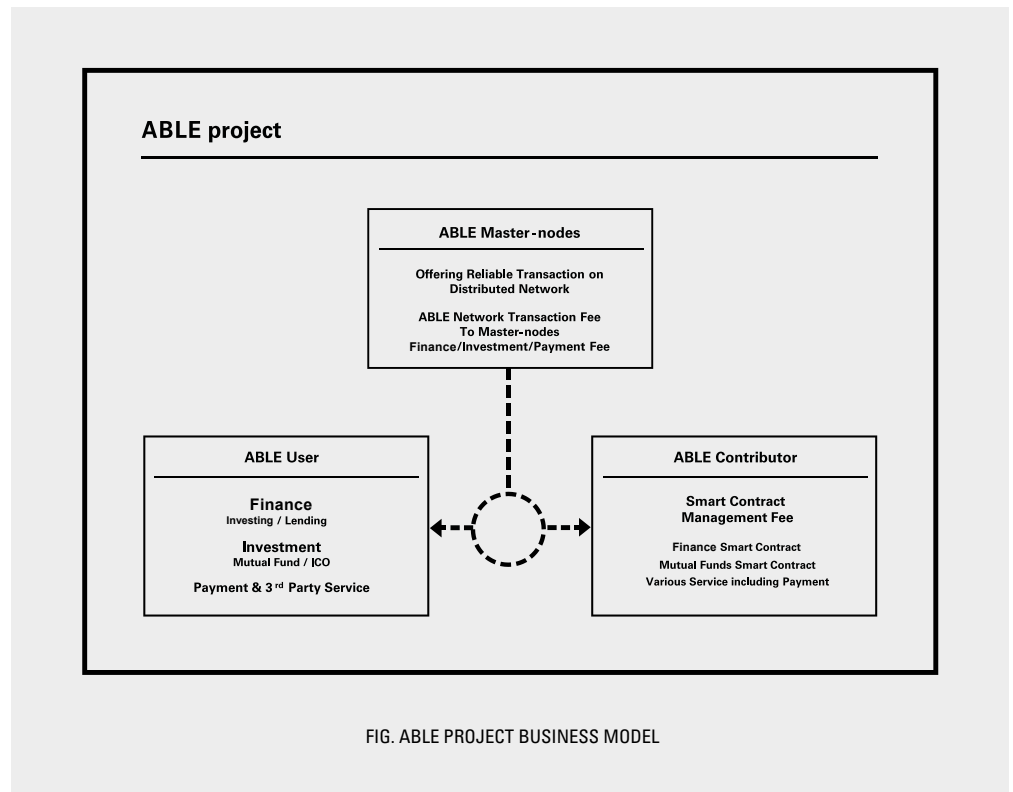


FIG. ABLE PROJECT BUSINESS MODEL

The ABL project is largely composed of ABL User, Contributor, and Master-nodes. The user can use financial services, investment products, payments, and a variety of services. The contributor produces a wide array of services including finance, investment products, and payment that the user can utilize, and receives service charges. The master-nodes ensure stability in operating a decentralized ABL network based on PoS consensus algorithms, and receive network-transaction service charges.

08 CONCLUSION

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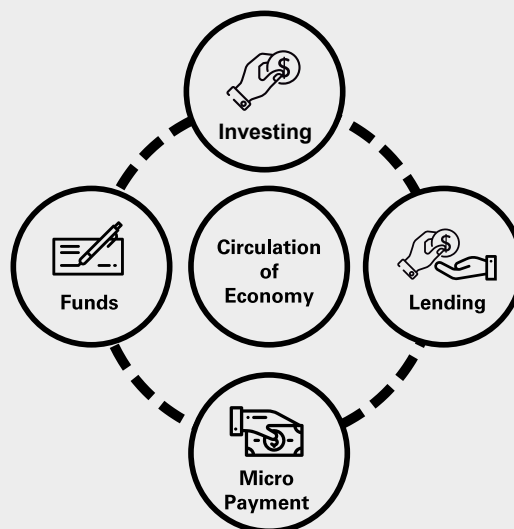


FIG. ABLE ECOSYSTEM SCHEME

The ultimate goal of ABLE is to provide users with a great user experience, while simultaneously allocating value to ABLE through all the benefits described above. In finance, the project aims to create a systematic ecosystem and develop a better user-accessible system by applying blockchain technology to any area deemed necessary. ABLE intends to integrate into one system all the financial solutions currently dispersed across the blockchain market, by offering a solution to existing banks' problems, and an alternative to centralized deposit-lending systems.

The P2P investing-lending system, which is the core of the ABLE project, is particularly significant because it creates personalized accounts for cryptocurrency assets. Existing micropayment and fund solutions suffer from numerous shortcomings due to the lack of an integrated account, and users have substantial trouble using those solutions. Additional solutions will be created in the integrated system to provide various services to users through their account designed for them.

The ABLE project aims to improve accessibility for the general public to easily use institutional-grade products with low service charges and high returns on investments, as well as low lending rates, by utilizing the benefits of blockchain technology. Personal accounts will enable users to receive transparent services difficult to earn through personal wallets. Through the account and micropayment system, cryptocurrencies can be used to make actual payments, and users can participate in smart contract-based financial products. Financial products provided by ABLE offer increased access to products in which individuals have difficulty making investments. ABLE plans to allow users to use products to which access is typically limited, such as the presale of unlisted coins with relatively high minimum-investment amounts; and intends to provide users with the opportunity to actually utilize cryptocurrencies.

By applying blockchain technology to various financial services, such as depositing cryptocurrency, using cryptocurrency coins in real life, and making investments with cryptocurrency, we will create a system that meets the expectations of those anticipating the fourth industrial revolution in this age of blockchain.

NOTICE & CAUTION

The ABLE project Whitepaper has been prepared to outline the project and provide a specific description of the roadmap. This Whitepaper has not been prepared to encourage or attract investment, and all readers of this Whitepaper should be advised that ABLE token issuer and service provider, Chain Holdings OÜ (registration code 14406869) and its Korean agency, K-Blockchain (registration code 462-86-00783) are not responsible for any loss, damage, or obligation, financial or otherwise, arising from the reader consulting with this Whitepaper. Please be advised once again that Chain Holdings OÜ and K-Blockchain accept no responsibility or liability for any financial damage, loss, or obligation arising from the reader's use of this Whitepaper in any decision-making process, including, without limitation, consulting with this Whitepaper and basing decisions on this Whitepaper. Values or stabilities of any ABLE tokens including ABLE Coin and ABLE Dollar are not guaranteed.

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REFERENCES

Lending-deposit spread business at world banks,
<https://fred.stlouisfed.org/series/DDEI021WA156NWDB>

SALT Whitepaper,
<https://membership.saltlending.com/files/abstract.pdf>

British Government Ponzi Fraud Cryptocurrency Service Sanctions,
<https://beta.companieshouse.gov.uk/company/10278342/filing-history>

Atomic Swap,
https://en.bitcoin.it/wiki/Atomic_cross-chain_trading

Japan's GMO Internet Group Will Pay Thousands of Workers in Bitcoin,
<https://bitcoinmagazine.com/articles/japans-gmo-internet-group-will-pay-thousands-workers-bitcoin/>

Bitcoin 34-character address length,
<https://blockexplorer.com/>

Ethereum 65-character address length,
<https://etherscan.io/>

IPv6,
https://en.wikipedia.org/wiki/IPv6_address

KYC (Know Your Customer),
https://en.wikipedia.org/wiki/Know_your_customer,
Money Laundering,
https://en.wikipedia.org/wiki/Money_laundering



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