ContractLand White Paper

Version 1.0

March 30th, 2018

1. Introduction

Many people think that the blockchain is only a bottom-level technological innovation as a distributed ledger for recording value. However, what blockchain disrupts is the foundational form of human trust and interactions through of immutable and autonomies smart contracts. This will not only have huge impact on the entire human social infrastructure, but also brings a lot of changes to traditional business models.

More than 95% of global economic activities are completed by small-to-medium sized enterprises (SMEs). 60%-70% of total employee population is contributed by SMEs. SMEs, an important part of the global economy, most SMEs have yet to benefit from blockchain's nature of low-cost market penetration and high liquidity due to high technical barriers.

ContractLand is a smart contract model creation, sharing, and trading platform built on a scalable decentralized exchange. It allows programmers to freely create and share templates for business based on the needs of companies and industries in the form of smart contracts. Enterprises can simply use these templates to take advantage of blockchain technology to optimize their business processes. This combined with ContracLland's decentralized exchange will bring liquidity and market exposure to enterprises, and bring out the true value of blockchain technology.

2. Solution

2.1 Template Creation

ContractLand is targeting to help SMEs with shortage of blockchain programmers, and build up a template sharing platform provided by community developers. Community incentives are used to attract a large number of developers to participate in the creation of industry standard templates, to make business smart contracts simpler and easier to use, making the blockchain technology seamlessly branch to the real economy.

2.2 Contract Exchange

A decentralized exchange will be built by ContractLand to make connections between enterprises and enterprises, enterprises and users. It will allow companies to quickly deploy and distribute smart business contracts directly through standard templates. The characteristics of blockchains such as are traceable transactions, irrevocable ledger, and elimination of third-party risk, will allow quick and safe transfer of contracts between companies.
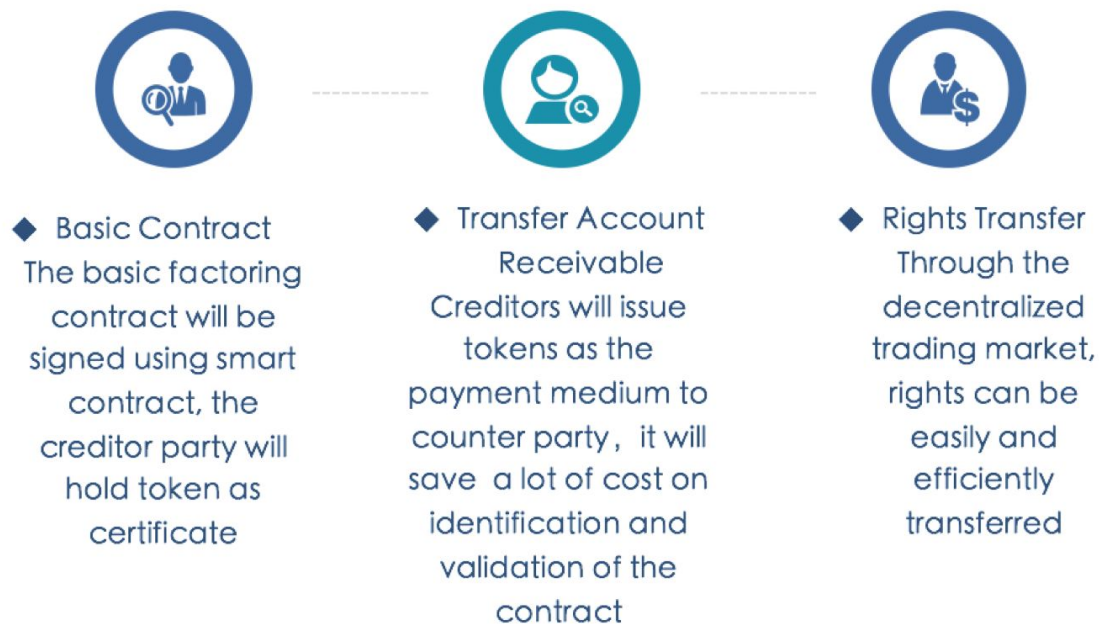
2.3 User Experience

ContractLand provides user-friendly and safe wallets for every user, allowing ordinary users to enjoy one-stop shopping service.

3. Application Scenario

3.1 Factoring Market

By the end of 2016, the size of the global factoring market had reached US$ 2.6 trillion, and most of the factoring business was based on various traditional paper contracts. It required a lot of manpower to verify the authenticity of the contract, which has low efficiency and poor liquidity. ContractLand will utilize blockchain technology not only to make this process easier to customize operating environment for factoring using blockchain.

◆ **Basic Contract**
The basic factoring contract will be signed using smart contract, the creditor party will hold token as certificate

◆ **Transfer Account Receivable**
Creditors will issue tokens as the payment medium to counter party, it will save a lot of cost on identification and validation of the contract

◆ **Rights Transfer**
Through the decentralized trading market, rights can be easily and efficiently transferred

3.2 Token Sale

As one of the important basic services of blockchain applications, token sale has a scale of more than US$4 billion in 2017. However, it is often organized in a centralized manner. Under the current conditions, only Token-made links operate with smart contract technology. ContractLand will leave entire pre-sale process to r the smart contract management system, which can eliminate the risk in the pre-sale process.

3.3 Prepay Services

Prepaid services are widely used in various fields of consumer life, such as prepaid card in the retail industry, pre-paid value in the Internet industries and etc. The application of smart contracts can help eliminate unreasonable charges in prepaid services, central billing system failures or artificial manipulation of ledger. However, most prepaid merchants are lack of sufficient technical capabilities and business experience to deploy smart contracts. ContractLand will make the deployment of pre-paid smart business contracts completely barrier-free, and makes the prepaid services more transferable through the wallets.

4.   Technical Summary

4.1 Contract Creation

Contract templates contains rules that defines the contract's business logics and exchange behavior which is shared between all instances of the generated contracts. Each individual contract instance will have their own unique set of parameters defined at the time of creation. For the most straight forward class of contracts where the underlying units are fungible (such as Tokens), the contract template will follow the ERC20 standard. For non-fungible contract types, the template will follow the ERC721 standard.

We will also implement an open SDK for developers to create more complex and custom contract templates, of which they can then submit to the platform for other businesses to use to create contracts. The contract standards for these will be determined on a case by case basis.

4.2 Oracle Service

For contract with dependency on public information, a centralized oracle service can be used (such as RealityKey or Oraclized). Disputes can be settled through token shareholder voting. Incentive mechanisms will be put in place for both the oracles and dispute arbitrators.

4.3 ETH Gas Station

We use the Gas Station concept from SwarmCity to remove dependency on ETH for transactions / function calls. This allows users to interact with the application using just our native token through automated conversion between ETH and CTL behind the scene.

4.4 Decentralized Contract Exchange

We will be implementing an exchange protocol similar to EthereDelta for an OTC exchange with on-chain settlement and an off-chain order book to save on gas with on-chain backup mechanism. This will evolve into a complete decentralized exchange with high throughput order matching capabilities upon the adaptation of more scalable lower level blockchain technology.

4.5 Blockchain Technology

Our platform will pilot on the Ethereum blockchain due to its:
- Existing ecosystem, tools, and developer community
- The underlying blockchain has solid decentralization (compared to platforms like NEO, QTUM)
- The Ethereum Enterprise Alliance (EEA) is a strong support for business development

While Ethereum currently provides the best and most robust platform for developing impactful and secure smart contracts, and can sufficiently support our needs for contract creation, contract template creation, and OTC exchange, it's current scalability does not support the hosting of a complete decentralized exchange with order matching. We will be developing our own flavour of EOS blockchain in order to support our fully fleshed out decentralized exchange, the resulting EOS chain will be able to handle transactions at a rate of 10,000tx/s.

We recognize that smart contract technology is a young and agile ecosystem, liable to rapid change both in future iterations of existing platforms, and in the emergence of future blockchain systems, and thus remain open to exploring other platforms.

4.6 User Interface and Wallets

The user needs to enter the public key and private key into mobile devices to use our App and Wallet functions. The user's private key will not be uploaded to our server. Instead, it will be stored locally in the user's local device's cache for users own convenience and safety. Users will be take responsibilities for keeping their own private keys.

We will support the user side of the internet and mobile mobile platforms. Client-side development will initially use traditional centralized servers to ensure stability and renewability. Then we have plans to transfer the front-end HTML and Javscript to IPFS, at the same time transfer the underlying data storage to the SIA to complete the transition to realize the full decentralization.
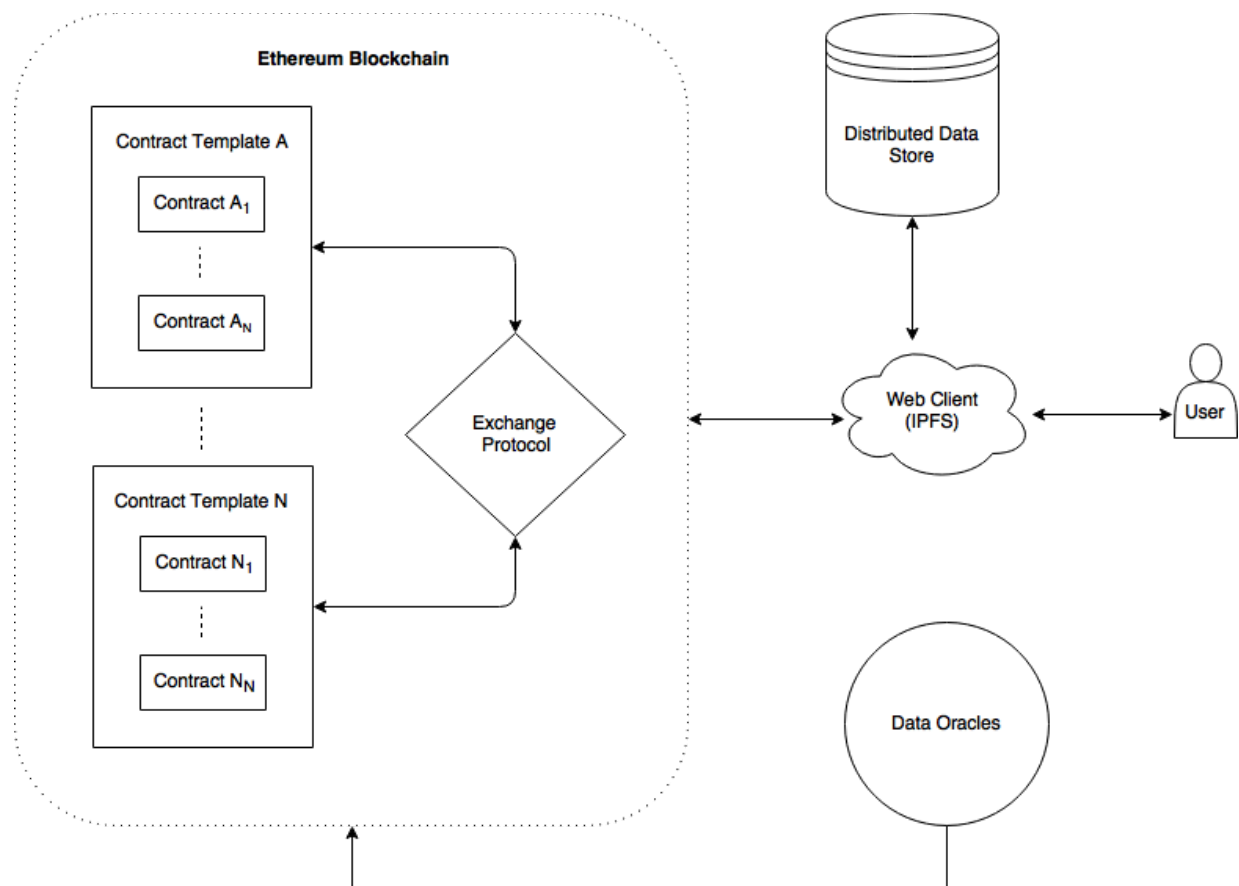

Figure 1. Users access ContractLand through the web client on their web or mobile devices. The dapp does not store user's private key, rather is it stored on the user's local cache memory for purpose of interacting with the dapp. Contracts created on ContractLand lives on the Ethereum blockchain, along with the exchange protocol. Data Oracles are managed by individual data providers who supplies data to contracts on-chain.

5. Timeline

Q1 2018 - Publish ContractLand Platform
- Team Establishment
- Publish Whitepaper
- Design Platform Architecture

Q2 2018 – Deploy ContractLand platform Alpha version to Ethereum main chain
- CLC token development and deployment
- Open ERC20 token and develop smart contract for ICO
- Publish OTC contract transactions

Q3 2018 – Deploy ContractLand platform Beta version to Ethereum main chain
- Sale CLC publicly
- Open high-frequency matching transactions

Q4 2018 - Enhance platform functions
- Create additional contract templates (eg factoring, futures, prepaid cards)

Q1 2019 – Creation of decentralized contract templates
- Finalized templates details and creation mechanism
- Publish templates creation SDK version for developer
- Post mediation server and create client interface

6. Token Utilities

The CLC is not only the currency of settlement in the ContractLand community, more importantly, it is motivation tool in ContractLand ecosystem. Enterprises and individual users can pay CLC to each other or platform to use the services.

6.1 Templates Creation

Developers produce a graphical contractual smart contract model through an open development environment. The contract templates will be uploaded to the community mall after review and test by professionals.

6.2 Templates Usage

Enterprises or individual users can use standard smart contract templates, and customize smart contract quickly and easily based on their needs.

6.3 Deployment of Smart Contract

After the enterprise or individual users complete the smart contract configuration, the deployment application may be filed. When decentralized audit mechanism is applied to review, a certain amount of CLC tokens will be consumed to complete the deployment according to the total amount of the contract.

6.4 Smart Contract Execution

Smart contracts will be automatically executed according to preset logic conditions such as Token sale. Smart contracts that require the user to initiate the execution request from Dapp, then a workflow will be initiated and completed by the contract. (such as prepaid product/service consumption)

6.5 Smart Contract Trading

If the negotiable smart contract that satisfies the rights and obligations under the standard, it can be freely circulated and traded in the market, and a certain amount of CLC tokens will be consumed for each transaction.

6.6 Oracle Service Incentive Mechanism

Information agencies and dispute arbitrators will receive rewards in the form of CLC tokens.

6.7 Token Distribution Plan

The total amount of CLC tokens will be 1 billion, and the minimum unit of division is 18 digits after the decimal point.

Token Distribution

Legend: ■ Team ■ Advisor ■ Business Development ■ Footstone ■ ICO
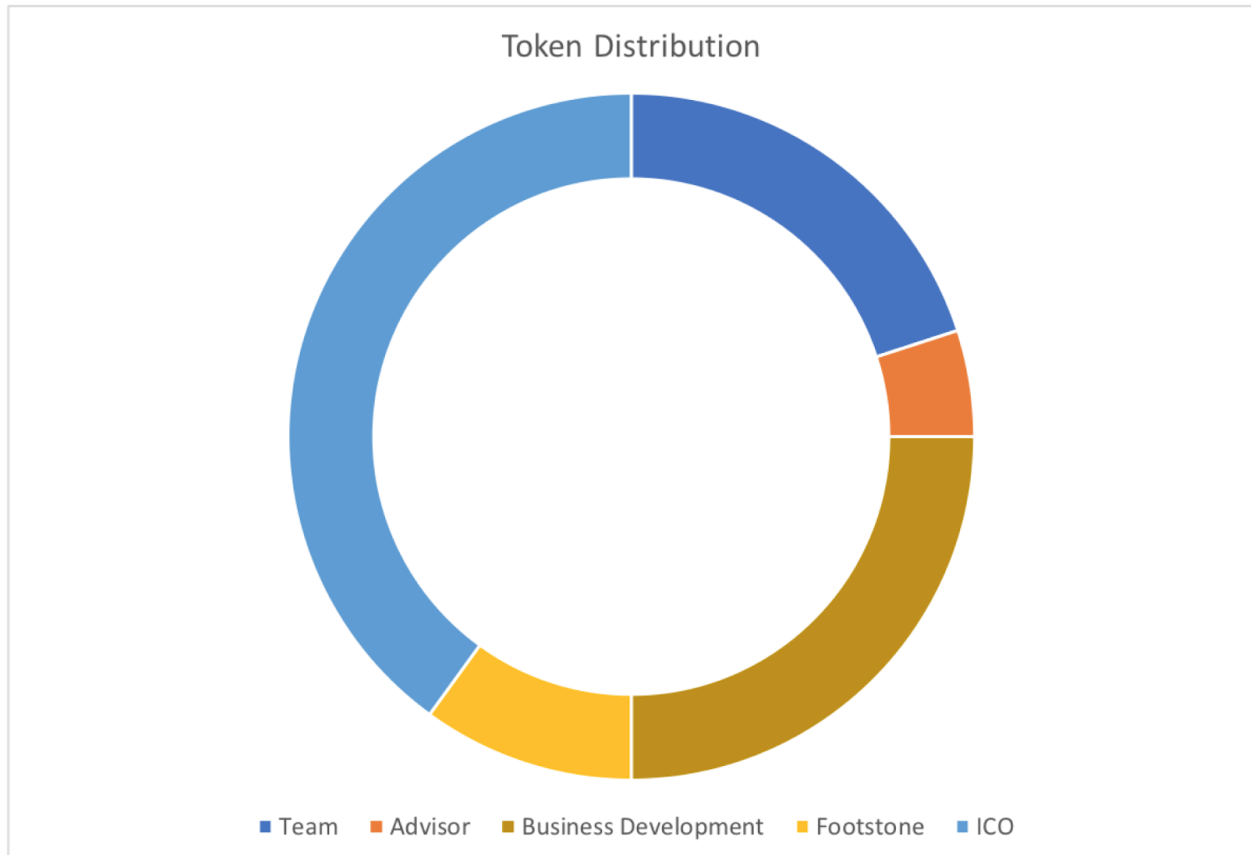
7. Team

CEO : Peter He
Entrepreneur, developer, and blockchain investor. Founder of Nimbusfly Technologies Inc. A graduate of Computer Engineering from University of Toronto. Led the effort in creating the first blockchain project and community at Bloomberg NYC.

CTO : Han Ke
A former trading and applications engineer at FinTech firm Betterment, led their first blockchain product in the space. Long-time dabbler of cryptocurrencies. Experienced in blockchain, algorithmic and high-frequency trading, data processing and predictive forecasting, as well as web and mobile frameworks.

CMO : Forrest Li
Blockchain Entrepreneur and crypto investor. Graduated from Master of Financial Engineering from University of Toronto. Forrest has worked at Cinda securities. Forrest specialized in risk management.

Advisor: Bingyang Li

Independent VC blockchain investor. Used to provide data analysis consulting services to many top scientific research institutes and financial institutions around the world such as Harvard, MIT and Stanford, and has rich entrepreneurial experience.

Early Investor: Jiahua Xu

Co-founders of Newpay of Hainan New Generation Technology Co., the first batch of third-party payment practitioners in China, the COO of Shanghai Culture Assets and Equity Exchange, expert of internet banking and exchange

Early Investor: Chang Liu

The early investor of cultural property rights and postage card electronic discs have been devoting themselves to promoting the value of cultural products for many years. They are the brokering members of many exchanges such as the Nanjing Stock Exchange and the Beijing Fulit Textile Exchange. They have a large number of members and have five years of experience. Above exchange actual combat experience. Participate in the community management of a number of well-known blockchain projects, has extensive experience in community operation and maintenance, and is closely related to the major self-media within the circle.

Early Investor: Zeyang Xu

Decades of investment and Internet finance entrepreneurship experience, in-depth participation in product design of the Shanghai Stock Exchange, co-founder of sports quiz platform FirstMatrix

8. Foundation

Ø ContractLand Foundation

The ContractLand Foundation (hereinafter referred to as the "Foundation") is a non-profit entity registered in Singapore. The Foundation will serve as an advocacy entity for the ContractLand project and will focus on the development of ContractLand. Furthermore, the Foundation will dedicate to keep high transparency of governance. It will promote its safe and rapid development. After the Foundation is established, it selects the appropriate community members to join the foundation's functional committees to participate in the actual management and decision-making.

Ø Financial Planning and Execution Report

At the end of every quarter, CFO and Personnel Management Committee will summarize previous quarter's financial performance and make financial planning based on last season performance. Then they will form a official financial report submitted to the strategic decision-making committee for review.

Ø Digital Asset Management

The strategic decision committee will authorize professional financial personnel to manager the digital assets that belong to the foundation. Both digital assets transactions and fiat currency transactions will be managed independent and timely by accountant, which follows the financial internal control regulations. The foundation requires multiple signatures to make transactions to ensure the safety and accuracy of the assets. All collected legal currencies are converted into digital assets in time and deposited in digital wallets. Foundation assets cannot be kept in personal accounts.

Digital wallet will be managed based on the principle of independence. The Foundation's wallet takes 4 out of 7 multiple signatures. If the signature is added, it must be authorized by the strategic decision committee. Large amounts of tokens are stored in cold wallet; small amount of tokens require multiple signatures.

Ø Disclosures
The Foundation will disclose to the community the development, operation, commercial promotion and operation of the ContractLand each year.

Regarding of the financial status of the foundation, financial reports will be conducted on a quarterly basis. The comments of the audit of annual report will also be disclosed. The Foundation established the Public Relations Committee as an external window, to regularly convene conferences to announce to the public the important news of the Foundation.

9. Risk Warning and Disclaimer

Ø Regulation Risk
Governments are still designing public policies on the use of cryptocurrencies as a form of trade settlement. Governments that use cryptocurrency for local businesses may publish laws and regulations that use cryptocurrencies as a regulated activity. In recent days, countries such as China and South Korea have issued regulations or statements prohibiting the sale of tokens, while other countries have tried to use token sales as securities issuance regulation. This may result in holders of ContractLand tokens unable to use their ContractLand tokens in the future without the ContractLand token further promoting compliance.

Ø Tax Risk
The use of a ContractLand token as a settlement currency may be subject to local income tax, capital gains tax, value-added tax or other forms of taxation. This uncertainty in tax legislation may be the unforeseeable future tax issue for merchants and users regarding the use of ContractLand tokens as settlement currency, token transaction and Contract Land token capital gains.

Ø Anti Money Laundering Risk

The United States has introduced a series of regulations to combat terrorist financing and money laundering activities. Many other countries have enacted similar laws to control the flow of capital in these illegal activities. Some criminals use cryptocurrencies to violate these rules. The illegal use of any Contract Land token may seriously affect the international reputation of the Contract Land network. In this case, it can be imagined that this may lead to CTF and anti-money laundering regulatory review, and may cause significant damage to the allocation and circulation of tokens in the ContractLand ecosystem.

Ø Business Risk
We cannot guarantee that ContractLand can succeed in selecting, developing and promoting new products and services.We also cannot guarantee succeed in enhancing existing products or services. If we failed to do so, it may adversely affect ContractLand's business, financial condition and operating performance.

The industries which ContractLand operates in are emerging industries and may be subject to supervision by the relevant government. Such government activities may or may not be specifically directed towards the results of ContractLand. All of this may make ContractLand stop providing certain products or services locally in line with the laws and policies of the place where the business is located, all of which may damage ContractLand's reputation or lead to higher operating costs, and may turn over to ContractLand tokens and/or Or the development of the project has a major adverse effect.