Company White Paper

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1. INTRODUCTION

1.1. Disclaimer

This White Paper is provided and developed by the ALCHEMY COMPANY, LIMITED. (AFI) team and describes a decentralized peer-to-peer (P2P) lending and financing marketplace where international borrowers and lenders can participate in transactions through an easy-to-use and trusted P2P platform.

This White Paper describes the current version of AFI's P2P Lending Platform. We provide the description of the technology, based on our level of knowledge and development. We hope you will find it valuable. However, there are certain commitments we are unable to make in regard to the technology of the protocol. Neither AFI, nor its suppliers and distributors provide any guarantees regarding products described herein. We take no responsibility in regard to the contents of the protocol software, its special functional capabilities, availability and compliance with your requirements. All services are provided "as is".

Local law of certain countries and jurisdictions ensures and/or guarantees certain rights, such as vendibility, serviceability in certain fields, investor protection and intellectual property rights protection. Aside from situations outlined in the legal system, we exclude any and all implied warranties.

After reading this White Paper you may decide to take part in the development of new decentralized technologies, using your knowledge, time and financial resources. Therefore by reading this text, you assume the unconditional obligation that, in the event of being a citizen of USA, China, Singapore, Russia or any other country, any lawsuit with any claimant, in which your name is featured as an involved party, we receive a guaranteed right to charge you as a private party for the full amount of losses, including any fines or legal costs, including situations in which you use software and/or remedies (VPN, Class Action, etc.) to conceal your true identity and/or country of residence.

This White Paper does not constitute a recommendation by AFI or any of its affiliates, or advice to any recipient of this White Paper, on the merits of participation in the contemplated Security token offering (STO). This White Paper does not necessarily identify, or purport to identify, all the risk factors associated with the STO. Prospective participants must make their own independent assessment, after making such investigations as they consider necessary, of the merits of participating in the STO. Prospective participants should consult and rely upon their own counsel including investment, accounting, legal and tax representatives and advisers, as to such matters concerning the STO. Further, it is onus on participants and their counsel to evaluate independently the financial risks, consequences and suitability of an investment in the STO, or if in any doubt about the contents of this White Paper.

Investment in the STO carries substantial risk and may involve special risks that could lead to a loss of all or a substantial portion of such investment. Unless prospective participants fully understand and accept the nature of the STO and the potential risks inherent in the STO they should not invest in it. Each prospective participant is wholly responsible for ensuring that all aspects of the STO are acceptable to them.

There can be no assurance that AFI's investment objective will be achieved, and investment results may vary substantially over time. Investment in the STO is not intended to be a complete investment program for any investor. Prospective participants should carefully consider whether an investment is suitable for them in light of their circumstances and financial resources. Interested parties acknowledge the AFI's Lending Platform, as

described herein, may never in fact operate as intended.

1.2. Specification of Examples in White Paper

All examples and demonstrations in this White Paper are used only as demonstrative examples. The business of AFI involves manufacturing fintech products and tokenizing primarily financial assets, although we do not think it impossible to apply our proprietary protocols in other fields, with approval. In our case, first and foremost we create tailor-made P2P solutions democratizing the relationship between borrowers and lenders.

1.3. Forward Looking Statements

Certain information contained in this Information Memorandum constitutes “forward looking statements”, which can be identified by the use of forward-looking terminology such as “may”, “will”, “should”, “expect”, “anticipate”, “project”, “estimate”, “intend”, or “believe” or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, including those described under the sections headed “Risk Factors” and “Potential Conflicts of Interests”, actual events or results or the actual performance of AFI may differ materially from those reflected or contemplated in such forward-looking statements.

2. COMPANY

2.1. Abstract

Alchemy is a blockchain-based peer-to-peer (P2P) lending marketplace. The platform allows for instant and direct lending between supply-side lenders and demand-side borrowers from all over the world in a trusted manner using the advantages of smart contracts and blockchain technology. We offer a unique architecture to analyze and structure a credit risk-adjusted rate with the utilization of Artificial Intelligence (AI) and Machine Learning (ML) technologies. We aim to revolutionize the peer-to-peer lending market, and serve as the leading infrastructure for credit providers and credit seekers.

Alchemy will be the first peer-to-peer (P2P) lending platform that utilizes blockchain technology to reduce high credit risk and high default rate, while at the same time offering a risk-adjusted downside protection for capital commitment lenders. As Alchemy P2P credit products grow and the network expands, we aim to become to leading source of personal loan providers for individuals around the world.

2.2. Background

Following the 2008 economic crisis, credit availability and liquidity and lending practices have tightened drastically relative to pre-crisis, in both developed and developing countries around the world. The original aim of this trend was to curtail and pull back investments in risky assets and instruments; however, one unintended consequence of this strategy is it has caused many hard-working individuals to be unable to access much-needed credit and loans. As a result, many potential high- and low-credit score borrowers were being turned away from the traditional banking sector. This challenge has been exacerbated by the consolidation of the banking vertical into a smaller and smaller number of big players, a phenomenon which occurs during every economic slowdown, and which accelerated greatly starting in the 1990’s

The market’s reaction to this phenomenon, given the relatively low availability of credit in the system, has created the emergence of a new peer-to-peer (P2P) financing interaction, in which an online platform acts as the intermediary to match credit borrowers to credit providers or capital lenders. This has and will continue to allow for a more decentralized distribution of credit and debt

to individual interested borrowers, which have historically been serviced by traditional banks and banking institutions in a centralized manner, which is not only time consuming, but also labor and paperwork intensive.

Peer-to-peer (P2P) lending has experienced tremendous growth over the past decade as borrowers seek better and more efficient alternatives to banks. The P2P lending marketplace is estimated to grow at 53%+ in compounded annualized growth rate (CAGR) in the next few years. Morgan Stanley predicted such P2P marketplace lending will be an industry valued north of $490B globally by 2020. Per Morgan Stanley Research, "P2P lenders have leveraged low operating costs, minimal regulations, big data and technology streamlined for a mobile generation to mediate terms between everyday borrowers who want quick access to cash and the lender next-door starved for yield."

As of today, the majority of peer-to-peer (P2P) financing platforms only service the residents of the country where it is headquartered and/or country where the company is domiciled or registered in. This limitation of opportunities for potential lenders to provide capital to leverage on existing risk-adjusted interest rate return for potential borrowers all across the world must be enabled. Alchemy aims to not only democratize capital access for the global population, but also ensure it is done in a safe and trusted manner by utilizing smart contracts, blockchain technology and a proprietary architecture that integrates artificial intelligence (AI) and Machine Learning (ML) capabilities.

2.3. Company Vision

Trust has historically played a crucial role in how the banking sector has operated, in both the credit and cash verticals. Many scholars believe the birthplace of credit and interest transactions dates back to Babylonian times, circa 1800 BC. The Code of Hammurabi is one of the first known laws to explicitly mention credit, and mandates maximum legal interest rates and how loans needed to be witnessed by a public official and recorded as a contract to be valid. In essence, it established a system of mutual trust between the public, borrowers, and lenders. Fast forward to the 21th century, in which trust between the public and financial institutions has weakened dramatically in the aftermath of the 2008 economic crisis; there is a critical need to restore the general population's trust in financial transactions, which play a central role in our lives. None other than the Nobel laureate in economics, Kenneth Arrow, noted the importance of trust in the financial system:

"Virtually every commercial transaction has within itself an element of trust. When we deposit money in a bank, we trust that it's safe. When a company orders goods, it trusts its counterpart to deliver them in good faith. Trust facilitates transactions because it saves the costs of monitoring and screening; it is an essential lubricant that greases the wheels of the economic system.

Alchemy aims to become to leading source of credit providers for individuals around the world, built on top of a trusted transaction manner between all relevant parties. We aim to be the first peer-to-peer (P2P) lending platform that utilizes blockchain technology to reduce high credit risk and high default rate, at the same time offering a risk-adjusted downside protection for capital commitment lenders.

2.4. Market Opportunity

The economy is changing rapidly and with it, so is technology. Financial services which have historically been provided by banks in a centralized way, are now also being provided in a decentralized manner by the "crowd". The roots of peer-to-peer lending can be traced back to about

ten years ago, when companies like Prosper (prosper.com) and Lending Club (lendingclub.com) kickstarted one of the first waves of P2P lending in the 21st century. The problem is, these financial solutions are currently only available in very select markets.

AFI's P2P platform allows people around the world to borrow and lend on the same footing at the same time; so customers living in countries with high inflation and interest rates are also able to benefit from more affordable rates through the AFI platform. AFI is in the process completing development on the beta version, and we aim to be a pioneer in giving market participants around the world a more balanced lending and financing market.

Trust is an essential factor in all relationships with lenders and financial institutions, because of the intensely personal nature of the business. Since the 2008 financial crisis, the public's trust in traditional banking institutions has waned; and with recent major fines on several well-known European banks, and the multiple missteps of Wells Fargo over the past few years, there is an opportunity to strike now and claim market share.

2.5. Tokenization of "Real World" Assets

Tokenization is the process of converting legal rights to an asset into a digital token on a blockchain. There has been great interest by major banks, financial intermediaries and technologists around the world in figuring out how to move real-world assets onto blockchains to gain the advantages of Bitcoin and other cryptocurrencies outlined below, while keeping the characteristics of the asset.

The goal of taking these real-world assets and putting them on the blockchain is to achieve advantages associated with cryptocurrency, including security, speed and ease of transfer, combined with the undisputed value of real-world assets. This is a new form of an old concept: "securitization" is simply turning a set of assets into a security. Of note, tokenization can also be applied to *securitized* real world assets.

Assets that are not fungible require an abstraction layer in order to be tokenized. For example, when a company group assets together and offers them as a package. This is the method used for securitizing mortgages and other debt obligations, whereby a set of mortgages with unique characteristics are bundled together into a group of mortgages with approximately similar characteristics. Fungible assets are typically easier to tokenize because the general set of tokens are linked to a general set of interchangeable asset components.

In a digital system like Bitcoin or Ethereum there is always consistency. Transactions obey the rules of the software no matter what, and there are no exceptions. In the real world, there are often exceptions. Gold bars are stolen, houses burn down, music samples turn out not to be properly licensed, diamonds fail to be delivered—humans sometimes don't obey the rules. Therefore, the key challenge for any system that involves tokenizing real-world assets is to ensure that the digital token stays linked to the real-world asset. Using ERC20 Smart Contracts ensures that the token and the asset stay linked (see more on "ERC20 Contracts" below).

2.6. Securitization on Blockchain

Securitization is the issuance of debt securities backed by a pool of standardized assets of a single type. Thanks to securitization, low-liquidity assets (for example, bank mortgages which generate cash flows over decades) were typically converted into higher liquidity security instruments, to be traded on markets and over-the-counter.

To simplify, the securitization process consists of four consecutive steps. The originator, who owns assets, collects them in a pool, standardizes them

and transfers the pool to a legal entity (normally a special purpose vehicle, "SPV") established specifically to issue bonds. Because of this, the assets are not exposed to the risk of bankruptcy of the originator's bank nor to counterparty risk. Then, the SPV structures the assets within the pool into several tranches (usually according to the level of risk) and issues securities — bonds — which are backed by the cash flows generated by the underlying assets. As a rule, rating agencies like Standard & Poor's assign a rating to every tranche, where the rating of each tranche may be higher or lower than the rating of others, depending on the quality of the asset pool. Thereafter the SPV sells securities, usually to institutional investors; in certain cases, the originator itself may also become an investor in a tranche. Finally, the SPV transfers the proceeds to the originator.

The classic securitization process described above has serious flaws, the first of which include the large amount time required and high-cost of the process itself. The preparation for such a transaction often takes at least six months to a year, while the cost of services to carry it out ranges from $500,000 to millions of dollars, making it unattractive to many originators. This happens because the securitization process requires 1) a detailed audit of the asset pool, 2) agreements with various parties operating under conditions of information asymmetry, 3) the heterogenous structuring of asset-related data.

In addition, the lack of full transparency in the various stages of securitization hinders accurate risk assessment and enables fraud (for example, issuing concurrent mortgages on the same asset, or the inclusion of non-existent assets). Also, inadequate control of the credit pool may provoke a default on the bonds issued. On top of that, tightening regulations draws parties towards more transparency and the rigid structuring of information, which further complicates the process of securitization.

Blockchain provides a powerful solution to all of these challenges:

(a) Creating a single and standardized source of information instead of multiple data silos across different entities. This makes information sharing easier and streamlines the process at different stages, reducing costs and time consumption.
(b) It improves price discovery and liquidity by making security prices more accurately reflect true value.
(c) The immutable trail of changes enables an instant audit during all stages of the process: starting from loan origination, to changes of ownership in the secondary market for securities. Immutability significantly cuts due diligence costs.
(d) Disintermediation and simultaneous recording of data into blockchain boosts the speed and reduces costs as well.

We believe that implemented properly, blockchain will enable the smooth alignment and integration of all parties involved in securitization, including securely collecting and maintaining their data and cash flows. The advantages of blockchain will contribute to a faster, cheaper and more transparent securitization.

3. PRODUCT

3.1. How the Product Works

AFI's P2P interface will allow borrowers to request a loan and for lenders on the system to directly fund it. AFI's AI system will run the credit underwriting process including credit check, home ownership and other relevant details. If the borrower makes it through the underwriting process, AFI will fund the loan request with money from the pooled investment account. As part of the closing process, AFI will set up a monthly withdrawal of the payment for the note from one of the borrower's accounts.

AFI will then roll borrower's debt into one of its debt pools. The debt pools will be assembled in tranches and sold to investors. Investors can purchase AFI tokens to buy into these tranches of and thereby have an ownership stake in these debt pools.

Using blockchain technology in the pooling and tranching of this debt has the following advantages:

(a) First, and most importantly, all parties involved must be part of this ledger (lenders, capital providers, the AFI management team, borrowers, etc.);
(b) Blockchain will allow verification on data integrity in the different stages of the process with ease;
(c) Allow verification in the mortgage area and mortgage pool;
(d) Allow verification in the other collateralized portfolios so investors can easily track back to the source and therefore better evaluate the risk associated with their investments in tranches; and
(e) AI will be used to appropriately evaluate the risk of each tranche and price accordingly.

3.2. Alchemy Ecosystem

Borrower can apply for a variety of different credit and debt financing options that fits their need, whether it be debt consolidation, paying off student debt, or financing a big purchase, etc.
Capital Lender provides the capital, which is then being facilitated through Alchemy P2P platform to the borrower.
Alchemy P2P Platform facilitates transactions between borrower, capital lender and the pooling of all types of debt obligations into Tokenized Debt Obligations (TDO) debt pool. Alchemy will take 4% origination fee and 2% transaction fee (1% from each side, borrower and lender) per monthly transaction.
Tokenized Debt Obligations (TDO) securitize all the debt obligations outstanding, whether it be credit and debt financing through Alchemy P2P Platform and/or through third-party capital providers. Tranches will be positioned and sliced in the pool of credit and interested parties can participate in the acquisition of these tranches.

3.3. Credit Risk Analysis

Alchemy will utilize proprietary credit risk analysis tools to evaluate credit riskiness of the debt, and provide a sound Alchemy credit riskiness rating. The variables will encompass a variety of different factors, including but not limited to, income, current debt to asset ratio, geographical risk factors, and default probability risks.

3.4. Risk Management

The utilization of blockchain technology in serving the tranches of TDOs has many benefits. We aim to capitalize on a broad base of opportunities, and offer substantial savings to the consumers. Blockchain technology allows all parties involved to be interactive on the ledger. Relevant parties include: lenders, capital providers, Alchemy P2P platform, Alchemy risk management team, and more. The utilization of blockchain technology will

allow transparency in the verification of data integrity, and authenticity in the different stages of the credit flow process, including: credit and background checks, credit risk profile construction, and TDO debt ownership verification. It will also allow investors interested in investing in tranches of Alchemy TDO product the ability to experience higher transparency than traditional Collateralized Debt Obligation (CDO) tranches.

3.5. Collateralized Debt Obligations

Financial asset securitization investment trust, also known as CDO, allows the securitization of debts of all types, including, but limited to: credit card, housing mortgage, personal loan, auto and business loan. TDO offers the benefits of flexibility over other securitization instruments, as it can contain of a wide range of financial products. One popular form of securitization instruments is the mortgage-backed security (MBS), which is often pinpointed as the reason for the 2008 global financial crisis. The market has attributed the opaqueness of the risk profile in these tranches as one of the major risk variables of these investments.

Alchemy seeks to collaborate with 3rd-party capital providers to securitize the credit facilitated on our platform and through the utilization of our proprietary balanced riskiness profile analysis, splits these TDOs into tranches based on balanced levels of risk and interest rate. Blockchain technology, machine learning and artificial intelligence will not only enhance transparency and data integrity between all parties involved, but it will also build trust in the product. We aim to rebuild the trust in the banking system that was challenged in the wake of the 2008 economic crisis. Please refer to Schedule B for more comparison and contrast between blockchain-based TDOs and traditional CDOs.

3.6. Product Interactions

Please see Schedule A attached.

3.7. Product Interactions

Please see Schedule B attached.

Alchemy aims to be the leading player in the P2P lending industry while ensuring relatively risk-adjusted rate for both the lenders and borrowers. Lenders and Alchemy can divest balance sheet credit risk via the buying and selling of TDO-based tranches with interested parties, while offering borrowers the ability to possibly borrow at an interest rate lower than the current traditional credit market. Alchemy will ensure the delivery of such services with the help of high-quality blockchain engineers, financiers, operationalists, and marketers.

3.8. Token Custody

Alchemy as an entity strives for top-level security for our investors, capital contributor and debt seekers. Alchemy seek for solutions that will allow an investor “person” to recover their token in the case of security challenges through the the following strategies:

- *Mobile Security Enhancement and Secure Cloud Storage:* through storing private and public keys in the cloud, we can avert situations in which investors without direct access to their phone whether will continue to have access to sensitive critical information.
- *Finger-Printed USB Technology* Alchemy is collaborating with an Asian-based technology company that specializes in highly-secured finger-printed USB technology in which the information, including private and public keys, can only be accessed with the fingerprint of the original user. This is a highly secure way of storing sensitive information.

- *Know Your Customer (KYC) and Anti Money Laundering (AML) Protection through Ocular* Alchemy is in constructive collaborative talks with Ocular, which leverages cryptographic security mechanisms employed in distributed ledger technologies to ensure that data cannot be tampered with, while allowing users full control over how their data is stored and shared. Ocular is an AML compliance platform that provides instant verification of a customer's background (i.e., 'KYC').

3.9. Transfer Agent

Alchemy will work either and/or work develop tools internally and/or work with solid third-party to ensure transfer of 'assets' in and between Alchemy ecosystem is valid and secure.

3.10. Wallet Conversion

Alchemy aims to provide ample liquidity for Alchemy investors by developing collaboration with third-party trading solutions, and not exclusive and inclusive to the following potential partners, tZERO. tZERO aims to provide market based trading to emerging asset classes that will ultimately transfer how capital markets function by making them more transparent, liquid, and accessible. Alchemy seeks to develop collaboration with tZERO in order to allow ample liquidity of Alchemy investors.

3.11. Business Solutions Using the AFI Product

As described in this White Paper, the first industry that we will launch will be our P2P lending and debt financing platform.

3.12. P2P Lending and Debt Financing

P2P lending is one of the fastest growing segments within the financial technology (Fintech) industry. The U.S. is projected to take approximately 45% of the global P2P market share by 2020, while China currently has the most diversified number of players (4000+) in the market. Despite growth in the industry many challenges still exist, and we believe AFI is positioned to alleviate the burden that the current system puts on market participants.

Traditional P2P lending requires a third-party intermediary to manage the risks and service these loans accordingly, which is very financially technical and human capital intensive. Many of the challenges to the loan financing process come with the interaction with third-party intermediaries. They inherently slow the process down. Verification and credit scoring evaluation, which is currently done manually and is process intensive, will be performed by AI on our platform. This removes the human error risk, and cuts down processing time to minutes, maybe even seconds, depending on how intelligent the AI has grown.

According to Eric Piscini, Principal in Banking and Technology at Deloitte Consulting, "Blockchain is a way to go back in history, because when you think about the way we were lending, the way we were paying, the way we were trusting each other, it was peer-to-peer. Over time we added intermediaries and third parties because we stopped trusting each other [American Banker]."

The revenue model on the P2P Lending platform will be a 4% Origination Fee and a 2% Transaction Fee (1% from each side) on every transaction.

3.13. Investment Restrictions

There are no upper or lower limits on the number of investments in the portfolio.

AFI's investment program is speculative and entails substantial risks. Market risks are inherent in all investments to varying degrees. No assurance can be given that AFI,s investment objective will be realized. An investor may lose some or all of their

investment (see further under the section headed "Risk Factors" below).

3.14.Utilizing the Proof of Stake Protocol

AFI's system will run Proof of Stake ("PoS") to verify the blockchain transactions after the upcoming ETH update. To understand PoS, it is important to fist have a basic understanding of Proof of Work which will be the first protocol used("PoW").

3.15. Proof of Work Protocol

PoW is the mining process that most people have heard about, whereby a user installs a powerful computer or mining rig to solve complex mathematical puzzles (known as proof of work problems). Once several calculations are successfully performed for various transactions, the verified transactions are bundled together and stored on a new 'block' on a distributed ledger or public blockchain. This mining process verifies the legitimacy of a transaction and creates new currency units.

The work must be moderately difficult for the miner to perform, but easy for the network to check. Multiple miners on the network attempt to be the first to find a solution for the mathematical problem concerning the candidate block. The first miner to solve the problem announces their solution simultaneously to the entire network, in turn receiving the newly created cryptocurrency unit provided by the protocol as a reward.

As more computing power is added to the network and more coins are mined, the average number of calculations required to create a new block increases, thereby increasing the difficulty level for the miner to win a reward. In proof of work currencies, miners need to recover hardware and electricity costs. This creates downward pressure on the price of the cryptocurrency from newly generated coins, thus encouraging miners to keep improving the efficiency of their mining rigs and find cheaper sources of electricity.

3.16. Proof of Stake Protocol

Unlike the PoW system, in which the user validates transactions and creates new blocks by performing a certain amount of computational work, a PoS system requires the user to show ownership of a certain number of cryptocurrency units.

The creator of a new block is chosen in a pseudo-random way, depending on the user's wealth, also defined as 'stake'. In the proof of stake system, blocks are said to be 'forged' or 'minted', not mined. Users who validate transactions and create new blocks in this system are referred to as foragers.

In order to validate transactions and create blocks, a forger must first put their own coins at 'stake'. Think of this as their holdings being held in an escrow account: if they validate a fraudulent transaction, they lose their holdings, as well as their rights to participate as a forger in the future. Once the forger puts their stake up, they can partake in the forging process, and because they have staked their own money, they are in theory now incentivized to validate the right transactions.

This system does not provide a way to handle the initial distribution of coins at the founding phase of the cryptocurrency, so cryptocurrencies which use this system either begin with an ICO and sell their pre-mined coins

In a PoS model, the influence of each node participating in the network is dynamic and constantly adjusted based on its economic stake in the network. There are different methods and mathematical models used to determine the specific methodology used to determine this weighting, but the idea is to allocate it generally based on the relative loss each node would suffer as a result of a network failure or breach.

Economically, this model makes sense from an incentives standpoint—at least on its surface. This assumes, however, that a malicious actor could not easily "short" his position on another exchange in order to profit from a decline in the price of that network's assets. To address this, some models require nodes to post a certain amount of cryptocurrency, in the nature of a bond, in order to ensure their trustworthiness as a validator node on the network

3.17. Game Theory Behind the Proof of Stake Protocol

Game Theory is a branch of mathematical economics focusing on the outcomes of conflicts between players, and the optimality of their strategies.

Game theory is one of the prime fundamental directions in economics. 11 scientists specializing in game theory have received the Nobel Memorial Prize in Economic Sciences, including John Nash, responsible for introducing one of the key concepts in game theory, known as the Nash equilibrium. It is a state in which a single player cannot benefit by changing strategy while the other players keep their set of chosen strategies unchanged.

Analysis carried out according to game theory indicates that the global financial market is currently trapped in the suboptimal equilibrium of the prisoner's dilemma.

This inefficiency leads to high costs and often losses, which in turn raises the cost of capital and leads to a lack of access to capital for decentralized small businesses or borrowers. Another issue derived from this dilemma is the barrier to entry into the public market arising from the high cost of deployment. Removing this barrier allows the market itself to effectively evaluate every asset by leveraging the collective wisdom of all the trading participants. Further, this is a virtuous cycle: the resultant increase in the volume of transparent and authentic trade operations provides more data, which can then be utilized by the market--and technologies that can assist the market--to verify the assets.

Alchemy is looking to apply this theory to our system, by integrating a Proof of Stake (PoS) protocol for verification of transactions into AFI products. In a PoS model, the influence of each node participating in the network is dynamic and constantly adjusted based on its economic stake in the network. There are different metrics and mathematical models used to determine the specific methodology used to determine this weighting, but the idea is to allocate it generally based on the relative loss each node would suffer as a result of a network failure or breach. Economically, this model makes sense from an incentives standpoint—at least on its surface. This assumes, however, that a malicious actor could not easily "short" his position on another exchange in order to profit from a decline in the price of that network's assets. To address this, some models require nodes to post a certain amount of cryptocurrency, in the nature of a bond, in order to ensure their trustworthiness as a validator node on the network.

All transactions will also be done on Ethereum's system using ERC20 Smart Contracts. By using Smart Contracts, the assets can constantly be monitored by AI in order to apply the logic that is built into the contracts. In turn, the increased amount of information on economical operations and their authenticity grant new opportunities for the development of an even more economical AI, building sufficiently precise artificial intelligence systems for risk evaluation, making the cost of such calculations almost disappear.

4. MANAGEMENT TEAM

4.1. Justin Jung – Founder & CEO

Justin was a successful salesperson selling skin products to men and books to kids when he was in high school. Later, he started his first business at the age of 18 by establishing a social media marketing agency called JCKR Marketing based in Brooklyn, New York. The business went from 0 to having 6 figures in revenue per month within a year and a half before a family office acquired his agency. Justin works hard to, and excels at, bringing people together and maximizing their potential, because he believes people are the foundation of every business.

Justin is currently building his second company at the age of 21, Alchemy, to solve average Americans' financial inflexibility issues, by building and structuring the Alchemy Tokens. He believes cryptocurrencies, blockchain technology, and artificial AI (artificial intelligence) will form the next internet for human society that will significantly boost the civilization.

Justin is an active advisor for multiple startups and also a speaker who has been invited to give public speeches multiple times about entrepreneurship.

4.2. James Fan – Co-Founder & COO

James graduated from the best university in Taiwan, National Taiwan University, which only admits the top 1% of all applicants.

James had been handling operations for more than 5 years for his family's real estate business, strengthening his time and people management skills. He also believes in having a backup plans for every decision or action that will be taken.

James past experiences include working for NuSkin as a senior representative. He is also a public speaker on financial freedom and entrepreneurship.

4.3. JT Bell– Co-Founder & Head of Business Development

Jahril harbors a meticulous attention to detail by enhancing intelligence through information by means of transforming complex data into actionable strategies. He is eager to demonstrate to all that in every transaction they will be taking on a valuable asset. Jahril garnered skills while providing equity research and commercial funding to businesses across the U.S at an innovative investment bank on Wall Street. Similarly, his experience working at an innovative PR firm managing a spectacular client, The National Association of Corporate Directors, furnished him with the opportunity to develop the best solutions using computational, managerial and strategic techniques to ensure that the greatest utility was brought out of every presentation.

Jahril's past experience also includes working at two DoD contracted software development firms. Jahril specializes in strategy consultation and commercial real estate acquisition and financing, and has garnered over $50M in transactions in two-years.

4.4. Chris Lowe – Director of Risk Management

Chris is a versatile finance professional with a special focus on credit risk and new product initiatives. Educated at Regis High School, then at Connecticut College studied in the Government Department specializing in emerging country politics and economics. School was followed by time in the New York creative world and as a fine arts painter.

Later he transitioned to Wall Street joining Swiss Bank Corporation's Emerging Markets Trading and Finance (EMTAF) group for 3 years working in various developmental roles. This led to 13 years at JPMorgan working in New York, London, Sao Paulo, and Mexico City on derivatives risks, credit risk, country risk, new product development, and credit risk pricing leaving as an Executive Director.

Since then Chris has worked in FinTech on SME credit and underwriting exploring the unbanked business finance sector. This gives Chris a unique perspective on finance and risk from Wall Street to Main Street.

4.5. Riley Cagle – Director of Government Relations

Riley's experience is in the government sector both state and federal. Riley has written legislation for the Pennsylvania Senate before, and currently, hold a position as the Director of Government Relations for Alchemy Coin. Riley was also a former Coordination Manager for the Julie Wheeler State Senate campaign in York, Pennsylvania. Riley has excellent communication and negotiation skills, as well as a deep understanding of government processes and an intermediate level of understanding of Wall Street.

4.6. Benjamin Chen –Director of Product Development

Benjamin has been a developer for more than 8 years. During his career, he has been involved with developing for multiple industries, including gaming, gambling, and hardware that wide breadth of experience programming and developing. Cash Flow and Security are what he specializes in. Benjamin also has substantial experience managing large teams through multiple projects when he spent four years of his career working at BBIN, one of the largest gambling software supplier in Asia. He tries find creative, “outside of the box” solutions that other people will not consider. His ability to think creatively and come up with solutions to most complex issues makes him the right candidate to help the Board navigate through any unforeseen technical issues that it comes across.

4.7. Nick Chen – Director of Assets Acquisitions

After graduating from MIT Sloan School of Management with Master’s in Finance. Nick worked at Bank of Canada for a year to do research and execution support for the Bank's open market operations desk. Later on, he worked at Macquaire Group for 2 years as an investment banker mainly focusing on North American infrastructure deals. After that he left for JPMorgan Chase & Co, where he works till present, to provides infrastructure advisory in the M&A section.

Nick excels at analyzing financial reports and building investor relationships. Nick recognizes the potential of the impact that blockchain technology is going to bring to Wall Street. And he believes that Blockchain technology will make Wall Street more efficient than ever before.

4.8. John Tse – China & Southeast Asia Sector B&D

John is a strategic planner that always thinks one step ahead of everyone. This habit led him to become multiple executives and chairmans at numerous companies in Mainland China and HongKong Area.

John has been involving in Real Estate and Gambling industry for more than 10 years. Therefore, John is very well connected in China and Southeast Asian countries.

He believes that Blockchain technology combining real estate will bring a huge revolution in the Asian Market.

5. TOKEN

5.1. Security Token

A recent surge in litigations to blockchain related startups has sprung out of a general lack of credence, due diligence, and necessary investment into abiding by modern, healthy, and necessary securities law. Regularly, ICOs are cutting corners, attempting to represent the functional utility of their token and in most cases using this as a means

to evade regulations... effectively, conducting unlicensed security offerings instead. We believe in the disruptive, beneficial, and long term viabidistlity of both our technology and token economy. As such, Alchemy is seeking to be a leader in operating compliantly and inline with SEC and securities regulation.

Alchemy is classifying our token sale as a security. By making this necessary investment now, we can confidently and safely invest in our infrastructure for the long term. We will have the ability to introduce our project to a wider scope of institutional and ultra high net worth investors that can prove beneficial to the community at large.

As a fully registered security token, we will also become one of the few tokens eligible to be exchanged on secondary security token trading platforms, improving liquidity for token investors. The added benefits of being one of only a few tokens to be eligible for more mainstream exchanges includes added liquidity, margin, and volume by being a legitimate financial product.

While adhering to federal securities laws, Alchemy also believes fully in the utility of our token. This means that the token provides real use-value by means of powering the platform's transactional economy, while at the same time, token holders can also participate in the company's profit making by holding the token in a classic security-like fashion.

The Alchemy token is built on the Ethereum blockchain using the ERC20 standard. ERC20 based tokens allow companies to quickly move to market, transfer tokens, contractually engage investors and drive business transactions with smart contract functionality.

5.2. Smart Contracts and Technology Overview

General components overview:

P2P platform

- Marketplace for borrowers and lenders to meet by criterias
- Integration with 3rd party bank accounts (to send and receive payments)
- Money pool management (based on 3rd party integration with bank)
- Debt management tool (to track each debt payout process)
- Lending / borrowing management and history

Documents management tool

- Custodian account space with ability to upload docs and info about collateral
- AI based system for underwriting process
    - Account management
    - Access to online wallet
    - Reports and audit tools

Oracles and smart contract management layer – is responsible to call SC at specific time and specific conditions. It also provides a way to get off-chain data on blockchain

Smart contracts (SC)

- ERC-20 Smart Contract for AF tokens operations - responsible for ETH to AF token conversion and other operations regarding AF
- Smart Contract for tranche buckets management - holds different tokenized TDO's and Smart Assets in different tranches
- Smart Contract for TDO tokenization - stores all information about TDO on blockchain and creates special token which represent this TDO and creates set of tokens where 1 token is equal to 1$ of debt
- Smart Contract for asset tokenization (Proof of Asset) - stores all information about SmartAsset on blockchain and creates special token which represents this SmartAsset and creates set of tokens where 1 token is equal to $1 of asset value.
- Smart Contract for transactions record and dividends payout – stores all transactions that happens between lender and borrower. Using the oracle service it

calculates dividends payout, exchanges money to crypto and uploads to SC. Automatically pays to all investors based on their investment.
Online wallet for investors – part of Investor's personal account page on platform. ERC-20 wallet, used to aggregate multiple tranches of investments, also contains Ethereum wallet for investors to transfer money, and subsequently start investing in different tranDhes Structure of Online wallet:

ERC-20 ETH wallet – used to deposit money to invest

- tranche 1 wallet - wallet with risk level 1
- tranche 2 wallet - wallet with risk level 2
- tranche N wallet - wallet with risk level N. Risk levels configured on p2p platform
All tranche wallets represent AF tokens, we use different wallets to calculate dividends differently.

Lender's money pool

- Bank account integration for automatic money transfer to borrower if both parties agree
- Proof of Stake(POS) like model used to prioritize different lenders

User roles:

- Borrower
- Capital lender
- Obligor
- Investor
- Custodian

Use cases:

A. As a borrower I want to take a loan to payout to obligor (e.g. payout student loan)

In this case borrower goes to P2P platform market and creates request for loan, there will be multiple matches based on criterias set by him and determined during underwriting using AI. After he selects the best option for him, he sends contract(not clear legal process) and money automatically transfers from Money pool to Obligor. Transaction record creates on SC for borrower-lender transactions records management
TDO tokenization starts by SC for TDO tokenization. TDO now represents a set of tokens specific for this particular TDO Risk is calculated and stored on platform

B. As a borrower I want to get a loan by providing collateral (e.g. car)

Borrower follows all the same steps to select lender with best conditions but he also uses custodian services to evaluate value of collateral and sign contract of transferring ownership. After he uploads all documents, money will be sent to him from Money pool.
Transaction record creates on SC for borrower-lender transactions records management.
Asset tokenization process starts by calling SC for asset tokenization (Proof of Asset). All records about asset are stored on blockchain. Tokens for this specific asset generated.
New tokens on tranche management SC will be generated based on risk and in proportion to total value.

C. As an custodian I want to upload all information and documents about collateral

Custodian will have his personal account on platform which will give him all necessary tools to upload and fill forms regarding collateral.
After all necessary documents are uploaded Smart Contract for asset tokenization is triggered
It creates special (inside system) token, records asset on blockchain.
From this point asset is called "Smart Asset" which is a record and set of tokens associated with it.
Sends all tokens to Smart Contract for tranche buckets management.
Tranche management SC set's it to corresponding tranche based on provided risk factor.

D. As an investor I want to invest into specific tranche

Investor creates an account and online wallet (creates automatically). He deposits ETH to his ERC-20 online wallet.

SC for tranche management already have Smart Assets packed into tranches so it just converts ETH to AF tokens and assign them to address which corresponds to specifical tranche for investor.

Asset Risk Oracle represents connection between blockchain and off chain by publishing on blockchain updated risk profiles per asset.

E. As an investor I want to get dividends from my investment

All transactions are stored on blockchain, including financial transactions. They all are stored in "Smart Contract for transactions record and dividends payout". This gives transparency for investors and for auditors.

After each predefined period of time Oracle calls "Smart Contract for transactions record and dividends" payout and this SM automatically calculates and publishes amount of dividends needed to pay to each investor.

When data regarding payout is available, Oracle will get it and call service (part of platform) to automatically convert USD to ETH (using services like lykke or cex.io) and convert them to AF tokens.

Tokens will be deposited to "Smart Contract for transactions record and dividends payout" and will be send to all investors automatically.

This will ensure liquidity of the token since company buys their own tokens from the market and pays out the dividends.

F. When debt is fully covered, automatically remove TDO or Smart Asset from tranche

As part of Smart Contract for transactions record and dividends payout

There is a built in mechanism that burns TDO/SmartAsset tokens after each transaction. All information about TDO and Smart Asset is stored on blockchain as part of corresponding SC.

Tranche structure:

Tranche is a logical entity which represents a set of TDO's and Smart Assets. Each TDO and Smart Asset has its own internal token which is used to track debt and value correspondingly. Each TDO/Asset token =$1

Amount of tokens reducing everyday (with debt payout). So after all tokens got burned collateral returns to owner or TDO removed.

tranche with risk level 1

TDO 1

Token A	Token A	Token A	Token A	
Token A	Token A	Token A	Token A	Token A

Asset 1

Token B	
Token B	Token B

5.3 Total Number of Tokens to be Created and Sold

AFI will create up to 50,000,000 Tokens ("Alchemy Tokens") through the Ethereum Smart Contract System. Before the Sale Period Begins, the Smart Contract System will create and directly release a pool of $5,000,000 million pre-allocated Alchemy Tokens to the AFI ("AFI Allocated Tokens") for certain uses as described in 5.5.

5.3. Commencement and Duration of Token Sale

AFI's sale of Alchemy Tokens is anticipated to begin on or around April 15, 2018 and continue for 30 days or until the time that 50,000,000 Alchemy Tokens are issued, whichever is earlier (the "Sale Period").

If less than 5,000,000 Alchemy Tokens have been sold during the Sale Period (the "Activation Threshold"), each purchaser will have the possibility to initiate the transfer of the respective amount of Ether submitted to the Smart Contract System from the Smart Contract System's address back to the address used by that purchaser to transfer Ether to the Smart Contract System.

5.5. AFI Token Price

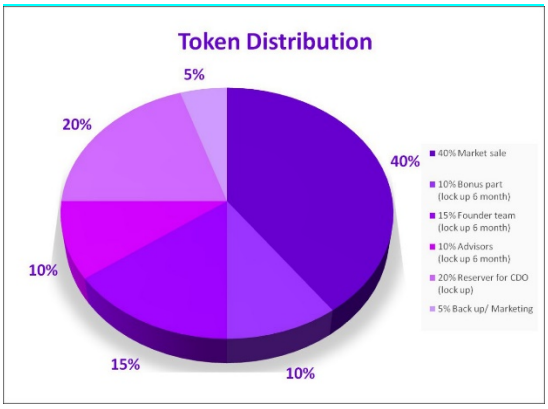
1 Ether will purchase 1,000 Alchemy Tokens. There is no sale price for AFI Allocated Tokens, which is created by the Smart Contract System and pre-allocated to the Company before the Sale Period.

5.6. Procedures for Buying and Receiving Alchemy Tokens

In order to purchase Alchemy Tokens during the Sale Period, and to receive the Alchemy Tokens you purchase, you must have an Ethereum wallet that supports the ERC20 token standard. AFI reserves the right to prescribe additional wallet requirements.

Approximately forty-eight (48) hours prior to the commencement of the Sale Period, AFI will publish an address for the Alchemy Tokens Sale via its website. To initiate a purchase of Alchemy Tokens during the Sale Period, you must send the specified amount of Ether to an Ethereum address (the "STO Address") that will be provided only after agreeing to the terms of the STO. Sending Ether to the STO Address during the Sale Period triggers a smart contract operation, pursuant to which the Smart Contract System will automatically create and promptly deliver the corresponding Alchemy Tokens to the ERC20 wallet address from which the Ether were sent. Ether must be sent to the STO Address during the Sale Period in order to purchase and receive Alchemy Tokens. Sending Ether to any other address may result in loss of Ether. Attempted transactions to purchase Alchemy Tokens will be rejected if Ether is sent to the STO Address at any time before or after the Sale Period. The Smart Contract System is deployed by Company from the Cayman Islands, and is programmed so that all transactions it executes will be executed in the Cayman Islands. As such, title to, and risk of loss of, Alchemy Tokens created and delivered by the Smart Contract System passes from Company to purchasers in the Cayman Islands.

5.7. Token Distribution



40% of available tokens will be reserved for public sales. 10% reserved for bonus with a 6-month lock-up period (referred below), 15% reserved for founders' team also with a 6-month lock-up period, 10% reserved for advisors with a 6-month lock-up period, 20% reserved for TDO and 5% for back-up and/or marketing. Lock-up period is installed to ensure security and limits volatility in the case of a massive release of tokens to the public market.

An example of how lock-up period with for public investor (non-Alchemy internal team) works is if you have 100 token of Alchemy coins with a 15% (meaning you will get 15 more tokens, which is 15% of the base 100 tokens), the investor will get 100 tokens upfront at the pre-determined distribution time frame and then will get their 15% discount or whatever the number of equivalent token is post the 6-month lock-up period. This is to ensure the company is in full compliant with the exchange and/or other partnership collaborative agreement. Those investors and/or internal Alchemy Coin and / or relevant internal team members will be placed on whitelist, which indicates the ability to have liquidity and/or tradability on exchanges.

In continuation of the example above, 100 of your vested tokens will be tradable and/or experience liquidity post the per-determined time frame which will be publicly announced by the company, and the other 15% discount or the equivalent of the number of tokens, will be authorized to you post 6-month of the first 100 number of token distributions, in which this portion of your full ownership will be placed in the whitelist. As an investor who invested under the 15% discount time frame, you will have full ownership of your shares 115 tokens (100 base token + 15% or 15 # of tokens = 115 tokens in total), but only the first 100 base token will have the ability to have liquidity on exchange platforms with the 15% discount portion and/or 15 tokens in this specific case will experience same level priority as of the first 100 token after 6 months.

Disclaimer: any remaining amount from the bonus categorization post-investor distribution will automatically be re-allocated under reserve for TDO, to further fuel the growth of the product. This will be incremental of the 20% pre-allocated reserved amount for TDO (noted in the chart). We will use this specific pool of capital to acquire and/or invest in, but not limiting to, our collateralized debt obligation (TDO) itself and/or to further enhance the strengths and opportunities observed in the products.

5.8. Dividend Distribution

Dividend distribution will precede the profit generated from the Collateralized Debt Obligation (TDO). For example, if there are 125M token supply and you own 1.25M Alchemy Finance token or 1.00% of total supply, and there was a $1.00M USD in profit, then you will get distributed $0.10M USD worth of capital distribution. Distribution will occur in equally-valued conversion via USDT and/or other preannounced conversion currencies to your Ether address. The sample numbers and relationships above shall only be utilized as a sample.

5.9. AFI Allocated Tokens

AFI Allocated Tokens will be used by AFI for legal costs, marketing and compensating employees and contractors, and for other internal purposes in connection with the operation of AFI. AFI Allocated Tokens that are sold before the Sales Period are non-refundable, even in the event that the STO does not raise the minimum amount.

5.10. AFI Token Usage Rights

Alchemy Tokens carry no ownership, revenue or governance rights. In particular, Alchemy Tokens do not represent or constitute any ownership right or stake, share or security or equivalent rights nor any right to receive future revenues, shares or any other form of participation or governance right in or relating to AFI.

6. RISK FACTORS

6.1. Certain Risks Relating to Purchase, Sale and Use of Alchemy Tokens

Important Note: As noted elsewhere in this White Paper, the Alchemy Tokens are not being structured or sold as securities or any other form of investment product. Accordingly, none of the information presented is intended to form the basis for any investment decision, and no specific recommendations are intended. AFI expressly disclaims any and all responsibility for any direct or consequential loss or damage of any kind whatsoever arising directly or indirectly from: (i) reliance on any information contained herein, (ii) any error, omission or inaccuracy in any such information or (iii) any action resulting from such information.

6.2. Risk of Losing Access to Alchemy Tokens Due to Loss Of Private Key(S), Custodial Error Or Purchaser Error

A private key, or a combination of private keys, is necessary to control and dispose of Alchemy Tokens stored in your digital wallet or vault. Accordingly, loss of requisite private key(s) associated with your digital wallet or vault storing Alchemy Tokens will result in loss of such Alchemy

Tokens. Moreover, any third party that gains access to such private key(s), including by gaining access to login credentials of a digital wallet or vault service you use, may be able to misappropriate your Alchemy Tokens. Any errors or malfunctions caused by or otherwise related to the digital wallet or vault you choose to receive and store Alchemy Tokens, including your own failure to properly maintain or use such digital wallet or vault, may also result in the loss of your Alchemy Tokens.

6.3. Risks Associated with The Ethereum Protocol

As with other decentralized cryptographic tokens based on the Ethereum protocol, Alchemy Tokens are susceptible to attacks by miners in the course of validating Alchemy Tokens transactions on the Ethereum blockchain, including, but not limited, to double-spend attacks, majority mining power attacks, and selfish-mining attacks. Any successful attacks present a risk to the Platform and Alchemy Tokens, including, but not limited to, accurate execution and recording of transactions involving Alchemy Tokens.

6.4. Risks Associated with Markets for Alchemy

Alchemy Tokens are intended to be used solely on the Platform, and Company will not support or otherwise facilitate any secondary trading or external valuation of Alchemy Tokens. This restricts the contemplated avenues for using Alchemy Tokens to obtain Services or access the Platform and could therefore create illiquidity risk with respect to Alchemy Tokens you hold. Even if secondary trading of Alchemy Tokens is facilitated by third party exchanges, such exchanges may be relatively new and subject to little or no regulatory oversight, making them more susceptible to market-related risks. Furthermore, to the extent that third-parties do ascribe an external exchange value to Alchemy Tokens (e.g., as denominated in a digital or fiat currency), such value may be extremely volatile and diminish to zero.

6.5. Risks Associated with Uncertain Regulations and Enforcement Actions

The regulatory status of Alchemy Tokens and distributed ledger technology is unclear or unsettled in many jurisdictions. It is difficult to predict how or whether regulatory agencies may apply existing regulation with respect to such technology and its applications. It is likewise difficult to predict how or whether legislatures or regulatory agencies may implement changes to law and regulation affecting distributed ledger technology and its applications, including the Platform and Alchemy Tokens. Regulatory actions could negatively impact the Platform and Alchemy Tokens in various ways, including, for purposes of illustration only, through a determination that Alchemy Tokens are a regulated financial instrument that requires registration or licensing. Company may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction.

6.6. Unanticipated Risks

Cryptographic tokens such as Alchemy Tokens are a new and untested technology. In addition to the risks included in this White Paper there are other risks associated with any purchase, holding and use of Alchemy Tokens, including those that the AFI cannot anticipate. Such risks may further materialize as unanticipated variations or combinations of the risks discussed in this White Paper.

7. Budget

7.1 Budget Allocation

Alchemy will utilize the capital raise to further build, grow and market the market, therefore creating value add to the Alchemy ecosystem. Sales and Business Development will market and secure partnerships and grow brand value for consumers and businesses alike. Technical and

Product team are responsible for the building, maintaining and ensuring the stability of the Alchemy P2P platform. Internal team members are early contributors of this projects and will continue to promote value add in the Alchemy ecosystem. The Operations team will handle all accounting, HR, and operational initiatives of the organization. The Legal team will be responsible for handling all the legal aspect of the organization, including establishing entities in other countries and manage legality risks. A small pool of capital reserve is allocated for unforeseen costs.

7.2 Usage of Fund - Expansion

Given the strategic partnerships Alchemy has and will continue to develop, the company aims to utilize the following % of raised capital to build and grow the the following market. The allocated capital will be used to establish further partnerships, build and market the product, and solidify sales and marketing team all of which will further enhance the value of the Alchemy ecosystem. The following breakdown will be coming from the sales and business development line item of the budget allocation section.

Country of Expansion	**% of Capital Allocated**
USA	60%
Cambodia	10%
The Philippines	10%
SE Asia, Other	5%
East Asia	7.5%
Europe	7.5%

Business Vertical	**% of Capital Allocated**
Technical & Product	35%
Sales & Biz Dev	30%
Internal Team	15%
Marketing & Advertising	10%
Legal	8%
Reserve	2%

8. Tax

Taxation implications of investing in ICOs (Realizing Gains)

According to IRS Notice 2014-21, cryptocurrencies are taxed as “property.” Therefore, there are tax consequences when an investor invests in an ICO using cryptocurrencies because the transaction will be treated as one property exchanged for another.

If an investor purchases an ICO token with Ethereum, the difference in the cost basis of the Ethereum and the fair market value of Ethereum when they invest in the ICO token will trigger a taxable event. Please see th

e example below.

• Investor purchases Ethereum on 1/1/2017 for $1,000.
• On 2/1/2017, the value of the Ethereum appreciates $2,000.
• The investor decides to purchase $2,000 worth of an ICO token with the Ethereum.
o This is treated as an exchange of property between Ethereum and the ICO token and triggers a taxable event:
• The investor’s will realize a gain of $1,000.
Fair Market Value of ICO Token Received: $2,000
Cost Basis of Ethereum: ($1,000)
Realized Gain: $1,000

The holding period of the Ethereum invested

should be considered. If the Ethereum invested was held for more than a year before investing, the realized gain would be long term, and if the Ethereum invested was less than a year, the realized gain would be short term.

•Long term tax treatment is taxed at 15%, and short-term rates are taxed at ordinary rates at about 25%.
Long Term Tax Treatment Short Term Tax Treatment
Realized Gain: $1,000
Maximum Long Term Tax Rate: 20%
Maximum Short Term Tax Rate: 37%
Tax Liability: $200
Tax Liability: $370

At this point, the investor has a holding position in an ICO token whether or not they are able to liquidate the token on an exchange. The cost basis of the ICO token carries forward from the purchase price, and their holding period resets. If the investor just holds the ICO, there is no taxable event until they trade the position. When they trade the ICO tokens back to Ethereum, there is a similar taxable event as above. Please see the following example:

• The investor's cost basis in the ICO token is $2,000, their purchase price.
• The value of the ICO token appreciates to $4,000.
• The investor decides to sell his position in the ICO token by trading it for Ethereum.
• The investor will realize a gain of $2,000.
Fair Market Value of Ethereum Received : $4,000
Cost basis of ICO token: ($2,000)
Realized Gain: $2,000

Similar to the holding period of Ethereum, the holding period of the ICO token should be considered. If the ICO token purchased was held for more than a year before trading, the realized gain would be long term, and if the ICO token invested was less than a year, the realized gain would be short term.

Taxation implications of investing in ICOs (Realizing Losses)

According to IRS Notice 2014-21, cryptocurrencies are taxed as "property." Therefore, there are tax consequences when an investor invests in an ICO using cryptocurrencies because the transaction will be treated as one property exchanged for another.

If an investor purchases an ICO token with Ethereum. The difference in the cost basis of the Ethereum and the fair market value of Ethereum when they invest in the ICO token will trigger a taxable event. Please see the example below.

• Investor purchases Ethereum on 1/1/2017 for $2,000.
• On 2/1/2017, the value of the Ethereum is worth $1,000.
• The investor decides to purchase $1,000 worth of an ICO token with the Ethereum.
o This is treated as an exchange of property between Ethereum and the ICO token and triggers a taxable event:
• The investor will realize a loss of $1,000. Value of ICO Token Received: $1,000
Cost Basis of Ethereum: ($2,000)
Realized Loss: $1,000
The holding period of the Ethereum invested should be considered. If the Ethereum invested was held for more than a year before investing, the realized loss would be long term, and if the Ethereum invested was less than a year, the realized loss would be short term.

• Long term tax treatment is taxed at 15%, and the maximum short term rates are taxed at ordinary rates at about 37%

Long Term Tax Treatment VS. Short Term Tax Treatment
Realized Loss: $1,000 Realized Loss: $1,000
Maximum Long Term Tax Rate: 20%
Maximum Short Term Tax Rate: 37%
Tax Savings: $200
Tax Savings :$370

At this point, the investor has a holding position in an ICO token whether or not they are able to liquidate the token on an exchange. The cost basis of the ICO token carries forward from the purchase price, and their holding period resets. If the investor just holds the ICO, there is no taxable event until they trade the position. When they trade the ICO tokens back to Ethereum, there is a similar taxable event as above. Please see the following example:

• The investor's cost basis in the ICO token is $1,000, their purchase price.
• The value of the ICO token depreciates to $500.
• The investor decides to sell his position in the ICO token by trading it for Ethereum.
• The investor will realize a loss of $500.
Fair Market Value of Ethereum Received : $500
Cost basis of ICO token: ($1,000)
Realized Loss: $500

Similar to the holding period of Ethereum, the holding period of the ICO token should be considered. If the ICO token purchased was held for more than a year before trading, the realized gain would be long term, and if the ICO token invested was less than a year, the realized gain would be short term.

9. Mobile Security

Two modes of protection will exist for the AF Platform.
(i) zIPS -The only app that protects mobile devices with proven, real-time, on-device protection against zero-day DNA threats (ii) A lightweight SDK that embeds z9 inside iOS and Android apps to protect the app and its sessions against known and zero-day DNA attacks.

Using the patented, machine learning-based z9 detection engine, the MTD solution protects against the broadest array of mobile threats –and it will do so even in disconnected or "in a bubble" use cases.

These available AF solutions protect against:

• OS / Kernel exploitation
• Profile / Configuration modification
• System tampering
• Device vulnerability
• Physical USB exploitation
• Device /Network
• Man-in-the-Middle
• SSL stripping techniques
• Attempts to intercept SSL traffic
• Rogue access points Application
• Malicious apps
• Known and unknown malware
• Dynamic threats abusing download and execute

z9 Threat Detection Engine

Used in the most security-conscious organizations our multifaceted approach to detection through Zimperium offers a solution and an approach that has detected 100% of zero-day exploits without requiring an update. AF will be adopting and deploying this technology which uses the patented machine learning detection engine, z9, which monitors the entire device for malicious behavior (not just scanning apps) to prevent a compromised device from gaining access to the secured networked platforms. Our MTD solution will provide real-time, on-device DNA threat detection even when the device is not connected to the network. The z9 detection engine is embedded within the zIPS app to defend devices, and in the zIAP software development kit to generate self-protecting apps. This delivers behavioral real-time threat detection to both devices and applications.

Unparalleled Mobile Security

Comprehensive threat protection against both known and unknown mobile cyber-attacks, AF users, brokers and agents will be able to leverage this protection, securing their wallets, tokens and applications. Secure and Scalable Enterprise Architecture Our MTD will be seamlessly integrated with our mobility and security infrastructures, providing the broadest set of options, with unparalleled privacy, group, policy and forensics capabilities.

10. FAQ

Where can I view Alchemy roadmap?

You can view the roadmap in the Appendix section below of this whitepaper.

What is Alchemy?

Alchemy is a blockchain-based peer-to-peer (P2P) lending marketplace. The platform allows for instant and direct lending between supply-side lender and the demand-side borrower from all over the world in a trusted manner using the advantages of smart contracts and blockchain technology.

What kind of currency can buyers buy into Alchemy?

Those interested in Alchemy product can contribute via fiat currencies and/or depositing cryptocurrencies in our designated account(s).

How much money does Alchemy expect from its sale?

PRODUCT INTERACTION

Alchemy has a soft cap of $3M USD and a hard cap of $60M USD.

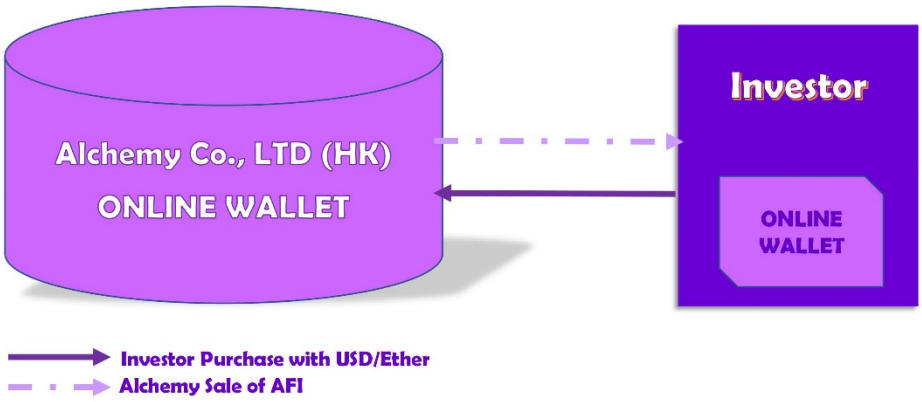
Is Alchemy hiring?

Yes, we are always seeking highly qualified individuals to create value for the Alchemy ecosystem. Please email us at careers@alchemycoin.io

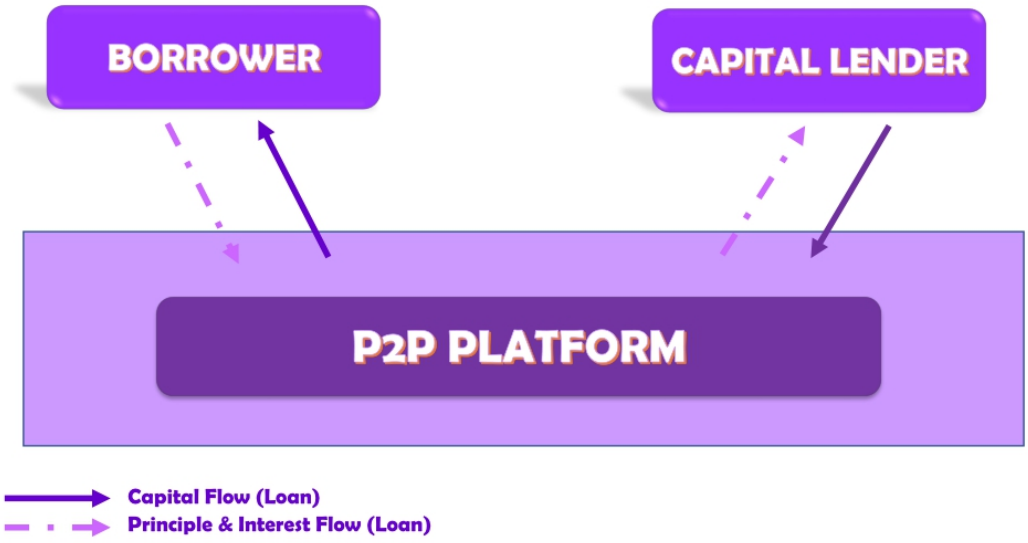
How does Alchemy use my data?

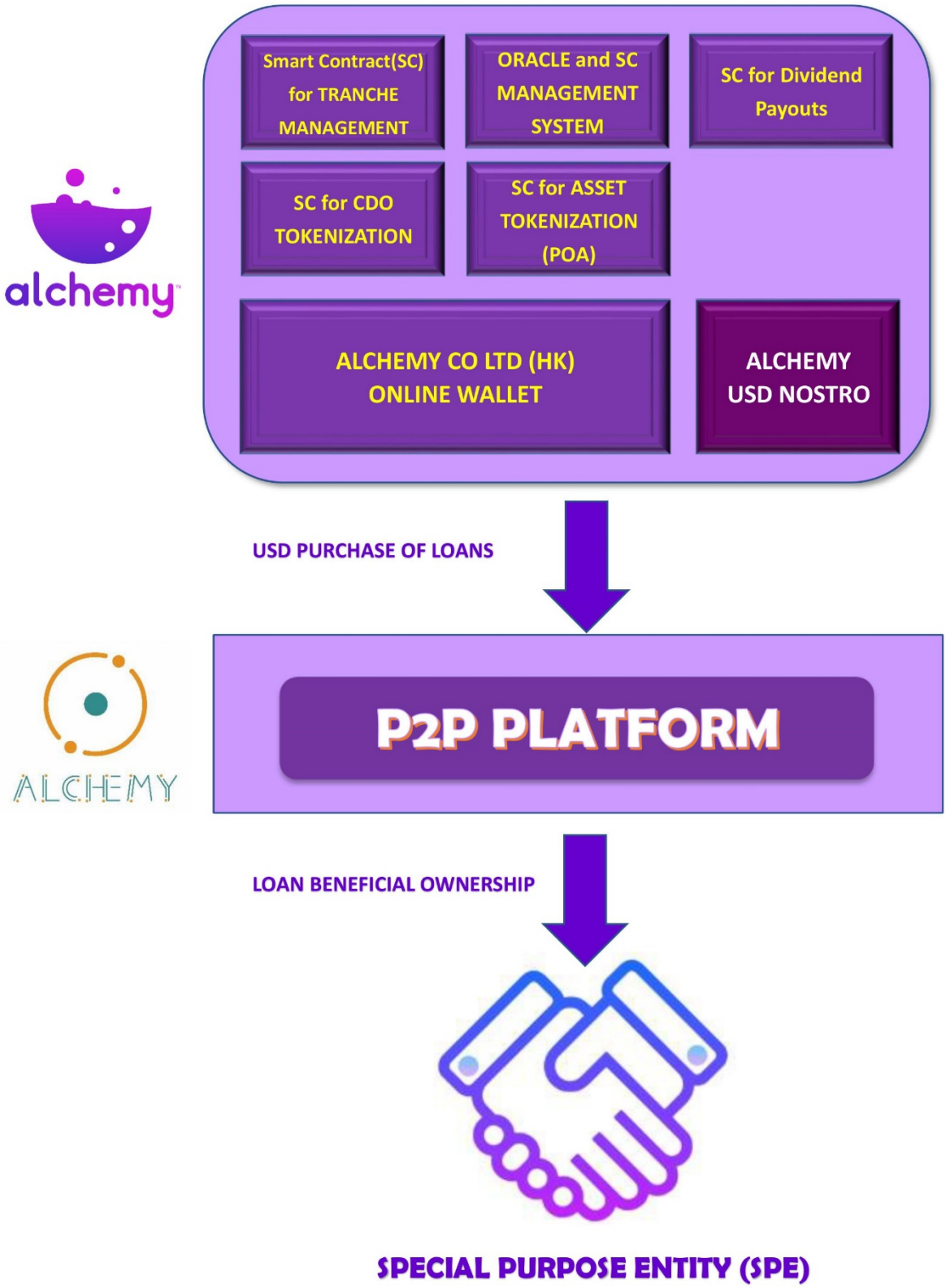
Alchemy is committed to keeping any and all personal information collected of those individuals that visit our website and make use of our Platform accurate, confidential, secure and private. As part of our business, we are required to verify the identity of members who apply for a financial product through our platform. For more FAQ, please refer the FAQ section on our website.

Alchemy CO., LTD (HK)



Alchemy Finance Corp (US)




Smart Contract(SC) for TRANCHE MANAGEMENT
ORACLE and SC MANAGEMENT SYSTEM
SC for Dividend Payouts
SC for CDO TOKENIZATION
SC for ASSET TOKENIZATION (POA)
ALCHEMY CO LTD (HK) ONLINE WALLET
ALCHEMY USD NOSTRO
alchemy
USD PURCHASE OF LOANS
ALCHEMY
P2P PLATFORM
LOAN BENEFICIAL OWNERSHIP
SPECIAL PURPOSE ENTITY (SPE)

Product Roadmap

Q2 2017	Launched Alchemy
Q2 2017	Formulated engineering and finance team
Q3 2017	Secured financial institutions and retirement fund management interests; NDIRA and in discussion with several more
Q4 2017	Blockchain smart contracts design and acquired strong interest from students and individuals about Alchemy product
Q1 2018	Blockchain smart contract creation and integration
Q2 2018	Alpha version of Alchemy P2P lending network
Q3 2018	Beta version of Alchemy P2P lending network
Q4 2018	Expand Alchemy P2P Lending Network and Integration score and credit riskiness valuation for potential borrowers
Q1 2019	Partnerships and beta testing with relevant business, financial and legal partners
Q2 2019	Release product for interested market participants (consumers can start request debt financing through AF platform). Start with debt purchase
Q3 2019	Product test run for new market verticals (real estate in Cambodia and The Philippines and casino markets in SE Asia)
Q4 2019	First batch of securitization and tranching Alchemy Tokens

Product Strategy

A) Platform Development Headcount

2 backend developers
1 Machine Learning engineer (for AI based system for underwriting process)
1 frontend developer
1 UI/UX designer
1 QA engineer
1 DevOps engineer (to deploy application in AWS/Google cloud and setup all security settings)

B) Mobile app development

1 iOS developer
1 Android developer
1 Mobile UI/UX designer
1 QA engineer

C) Blockchain team

2 Solidity developers
1 backend developer (oracles and blockchain integration)
1 QA engineer (with blockchain knowledge)

Time Estimates:
6 - 9 month with a Platform development team working full-time

P2P Platform development:
* Marketplace for borrowers and lenders
* Integrations with major banks (via API for money transfers)
* AI based system for underwriting process
* Account management for lenders and borrowers
* Documents management for custodians
* Monthly payments scheduling and monitoring
* Reports generation and tools for auditors
* Integration with blockchain (with the help of blockchain team)

Mobile app:
4 - 6 months with a Mobile app development team working full time

* Marketplace for borrowers and lenders
* Account management for lenders and borrowers
* Integration with backend

Smart Contracts and blockchain related development:
6-9 months with a Blockchain team working full time

* Writing smart contracts for TDO tokenization, Proof Of Asset protocol (Asset tokenization mechanism)
* Writing smart contracts for investors and dividends payment
* Integration between blockchain and off-chain by writing Oraclize services
* Creating smart contracts for dividends calculation
* Storing transaction records that are happening off-chain(bank)
* Creating smart contracts for investors and trunch investment mechanism

All work can be done in parallel but there are integration points to keep in mind.
Integrations:
* P2P platform with Bank API's
* P2P platform with Oracle services and blockchain Smart Contracts calls
* Mobile platforms with P2P platform
* Smart Contracts with Oracle services

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