ZPER

Decentralized Ecosystem for P2P Finance

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1.Abstract

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The emergence and development of blockchain technology has been undermining powers of centralized service platforms in a wide range of areas regardless of country and industry. Finance is a sector desperately in need of innovation, as are many existing industries. It has been greatly conservative for a long time, facing limitations in many countries by laws and regulations that continuously hinder the industry's potential for revolutionary development.

ZPER is a decentralized loan and investment platform based on blockchain technology. We aim at creating an innovative P2P finance ecosystem by combining industrial values of P2P finance and asset values of data all over the world. ZPER platform will establish a P2P (Peer-to-Peer) finance ecosystem that transcends country and currency and thereby bring about innovation in the global flow of funds.

In ZPER ecosystem, participants who are necessary to provide a reasonable finance environment for both borrowers and investors, e.g. P2P finance companies recognized by the ZPER Councils of each country, data providers, Robo Advisors, and NPL purchasers, are able to freely meet with each other, share values on the basis of trust, and receive fair compensation. Borrowers can then take out a loan with a lower interest rate than before while investors can enjoy a higher rate of return.

2.Mission

ZPER's goal is to enhance and expand value chains in the P2P finance market and provide all participants with reliable and reasonable trade opportunities.

To this end, ZPER aims at creating a finance ecosystem that meets the following conditions:

- Participation of global P2P finance companies that can be trusted
- Voluntary provision of creative data necessary for borrower evaluation by data providers
- Provision of sufficiently diversified global investment portfolios to investors
- Investment that transcends the borders
- Irreversible management of all bonds and contracts
- Fair distribution of values shared by different participants

Beginning with an alliance of proven P2P finance companies in Korea, ZPER will create an ecosystem on the blockchain network where related financial service companies and data providers can actively participate. Furthermore, it will create an allied ecosystem that consists of around 500 P2P finance companies recognized in more than ten countries, thousands of data providers, and around 30 Robo Advisor companies, etc. by the end of 2019. Such an attempt will make global funds more efficient and innovate the investment industry as a whole, and ZPER will provide a stable environment where more than 300 million individuals, two million independent businesses, and more than 300,000 SMEs to raise funds or make investment.

3. Background

3.1. Problems of Traditional Financial Institutions

The existing financial institutions have utilized economic and political assets and the exclusive nature of the financial industry to monopolize the market for a long time, requesting excessive costs from both those who want to make investment and those who want to raise funds. Besides, under their strict and conservative credit rating policies, loan applications of financially disadvantaged people (e.g. students, immigrants, etc.) with no record of financial transactions have been denied or disadvantageous—excessive interest rates and low credit lines have been applied for them.
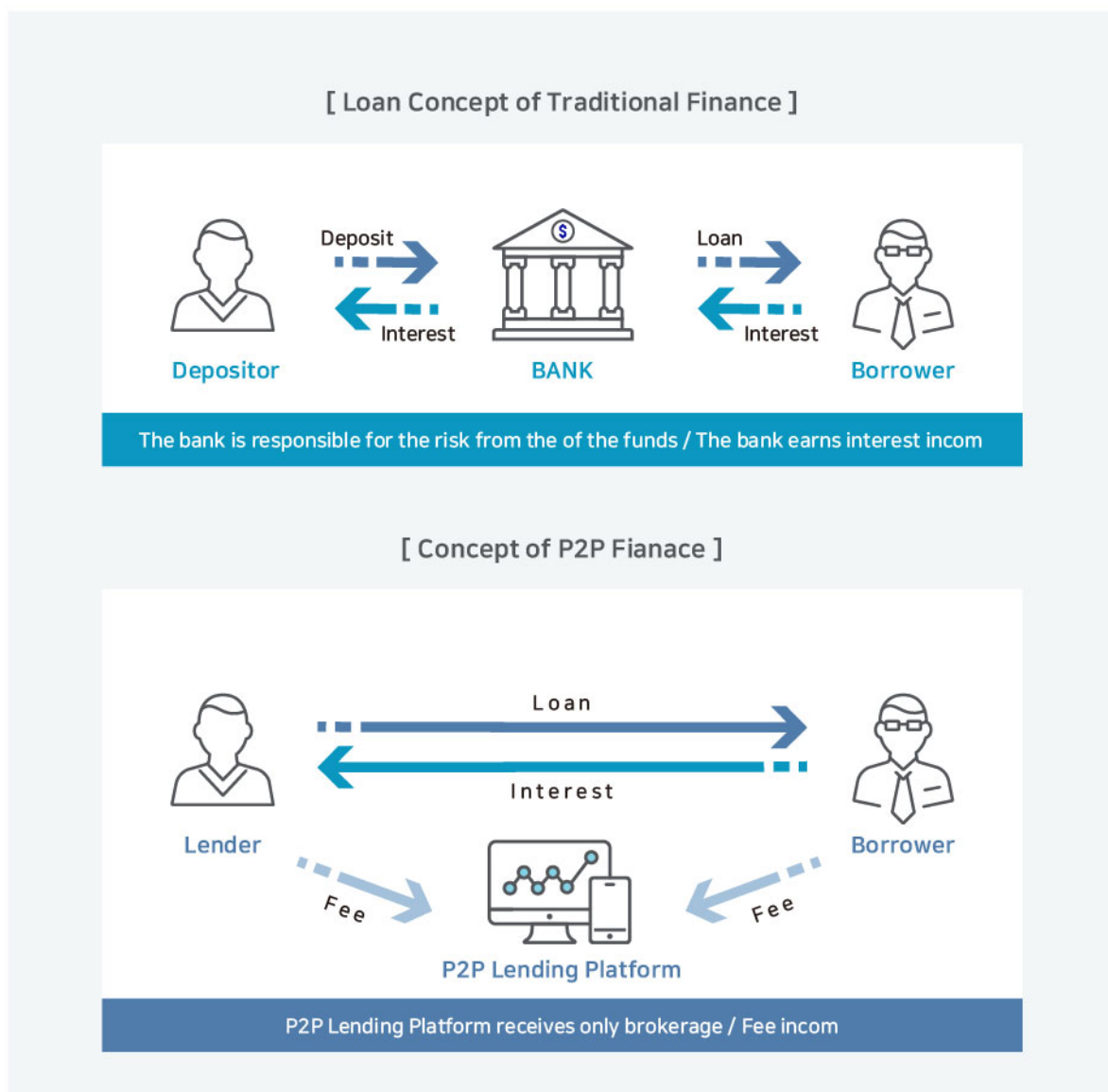
3.2. Emergence of P2P Finance Industry

Against this backdrop, P2P finance companies have emerged and been showing a fast development with the help of the advanced digital technology. Research and Markets, a global market research institution, has predicted that the world's P2P finance market will grow by an average annual rate of 53.06% in five years from 2016 and 2020, and Morgan Stanley's annual report for 2015 forecasts that the size of the P2P finance market will grow to 490 billion dollars all around the world by 2020. Such an upward trend in P2P finance market is expected to continue for a while.
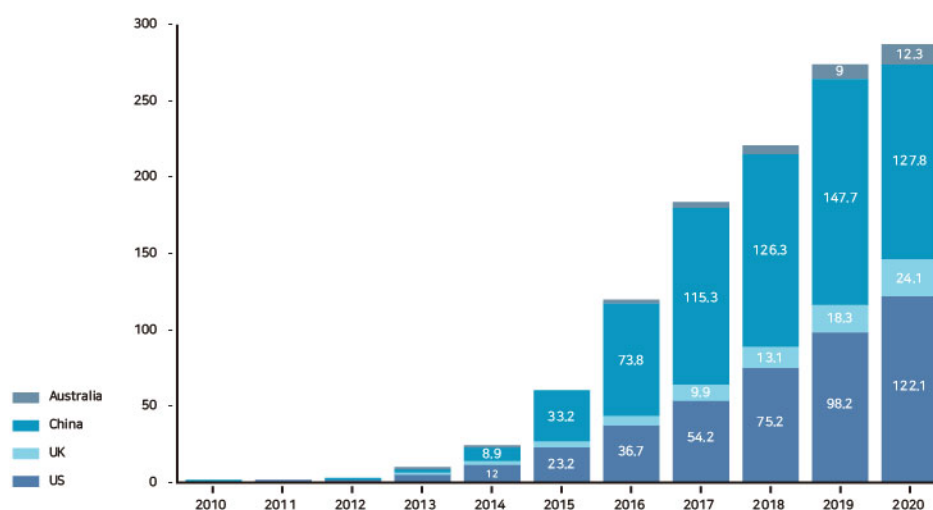
[Figure 1] Growth of P2P Finance Market

Such a rapid growth of P2P lending market is attributable to the fact that borrowers and investors are directly connected to each other on the internet. This has reduced brokerage fee, making it possible to mediate loans at lower costs compared to the existing financial institutions, and investors can now enjoy profit higher than bank rates. P2P lending has opened a new era where underprivileged are also embraced.

[Loan Concept of Traditional Finance]

Deposit

Interest

Depositor

BANK

Loan

Interest

Borrower

The bank is responsible for the risk from the of the funds / The bank earns interest incom

[Concept of P2P Fianace]

Loan

Interest

Lender

Fee

Fee

Borrower

P2P Lending Platform

P2P Lending Platform receives only brokerage / Fee incom

[Figure 2] Differences between the Existing Finance and P2P Finance

4. Problems (Problems of the Current P2P Finance that Attract ZPER's Attention)

The P2P finance environment has generated a lot of positive results through innovative attempts. However, the existing P2P finance is still facing the following limitations.

4.1. Difficulties in Selecting P2P Finance Companies

Compared to the financial institutions under the supervision of the financial authorities, P2P finance is regulated more leniently. This is not surprising given the size and social influence of the current P2P finance industry. In addition, even though the way that P2P finance utilizes digital alternative data to assign credit ratings is revolutionary compared to the way of the existing financial institutions, this method has not been fully proven due to the limited access to data necessary to analyze risks. Therefore, it is all the more important for investors to take into account the risks of P2P finance companies who formulate and manage products.

In 2016, the online financial scam by Ezubao, a Chinese P2P finance company, resulted in a major damage of around 8.6 trillion KRW and reminded people of the importance of selecting reliable P2P finance companies. Nevertheless, it is not easy for investors to analyze risks of P2P finance companies and select reliable companies. Individual investors have to depend solely on P2P finance companies from when they explore investment opportunities to the time when they are paid back. However, most P2P lending is carried out online, and the only source of information about P2P finance companies available to the investors is their websites or news. Therefore, it is difficult for individual investors to get detailed information such as the company's risk management ability, if the company has enough funds, or if the company is currently facing any problems that may affect its business.

4.2. Difficulties in Allocating Safe and Efficient Portfolios

Even when P2P finance companies conduct a high level of risk analyses through different ways, there still exists the possibility of insolvency. This problem is universal in all financial sectors, not just in P2P finance. In particular, because it directly connects investors and borrowers, investors have to bear all the risks caused by insolvent debts. This is why investors' funds should be invested in multiple types and numbers of loans. Lending Club, a representative P2P finance company in the U.S., for example, shows that diversification of investment in approximately more than 146 loans could prevent loss of principal even in the worst case.
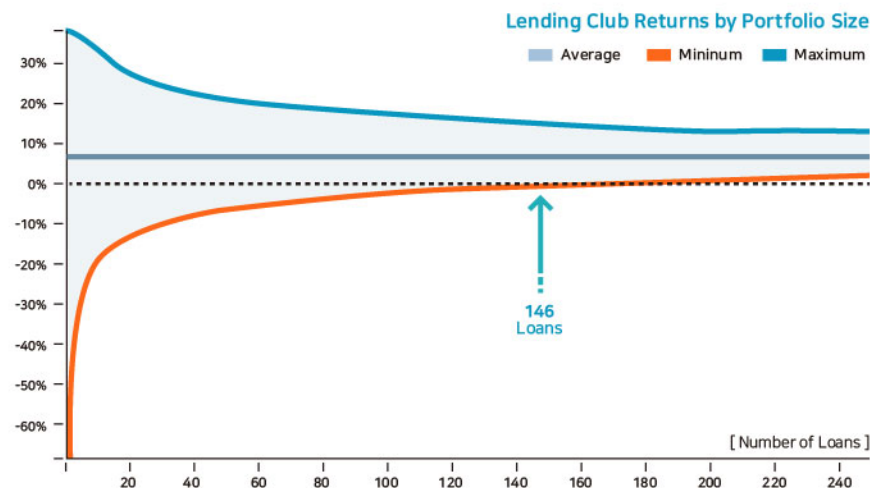
[Figure 3] Correlation between the Number of Loans and the Minimum and Maximum Rates of Returns (Source: Lending Club)

At the same time, while interest rates in some developing countries remain high, real interest rates in developed countries such as Japan have almost reached 0%, hence a discrepancy among countries. Investors in countries with low interest rates do not have enough places to invest to generate capital gains, while borrowers in countries with high interest rates have to pay high interest rates. It takes free movement of investment funds across the borders to resolve this problem, but the hegemony for this is still in the hands of the existing financial institutions.

COUNTRY OR CURRENCY UNION	CENTRAL BANK INTEREST RATE (%)	DATE OF LAST CHANGE	COUNTRY OR CURRENCY UNION	CENTRAL BANK INTEREST RATE (%)	DATE OF LAST CHANGE
Albania	1.25	4 May 2016	Denmark	-0.65	4 May 2016
Angola	16.00	30 June 2016	Dominican Republic	5.25	30 June 2016
Argentina	26.25	11 April 2017	DR Congo	14.00	11 April 2017
Armenia	6.00	14 February 2017	Eastern Caribbean	6.50	14 February 2017
Australia	1.50	2 August 2016	Egypt	18.75	2 August 2016
Azerbaijan	15.00	9 September 2016	Eurozone	0.00	9 September 2016
Bahamas	4.00	22 December 2016	Fiji	0.50	22 December 2016
Bahrain	1.50	14 June 2017	Gambia	20.00	14 June 2017
Bangladesh	6.75	14 January 2016	Georgia	7.00	14 January 2016
Barbados	-		Ghana	21.00	
Belarus	12.00	28 June 2017	Hong Kong	1.50	28 June 2017
Botswana	5.50	12 August 2016	Hungary	0.90	12 August 2016
Brazil	7.25	26 July 2017	Iceland	4.50	26 July 2017
Bulgaria	0.00	29 January 2016	India	6.00	29 January 2016
Canada	1.00	6 September 2017	Indonesia	4.75	6 September 2017
Cape Verde	3.50	16 February 2015	Iran	10.00	16 February 2015
Central African States	2.95	22 March 2017	Israel	0.10	22 March 2017
Chile	2.50	8 May 2017	Jamaica	5.00	8 May 2017
China	1.75	23 October 2015	Japan	-0.10	23 October 2015
Colombia	5.50	27 July 2017	Jordan	3.75	27 July 2017
Croatia	2.50	20 October 2015	Kazakhstan	10.50	20 October 2015
Czech Republic	0.25	3 August 2017	Kenya	10.00	3 August 2017

[Table 1] Base Interest Rates of Countries

Consequently, to design safe portfolios, just considering the number of investment bonds does not suffice. Investment should be made through different P2P finance companies and diversified through a free flow of capital across the borders. However, it is practically impossible for investors themselves to sufficiently diversify their investment within the current P2P finance market structure.

4.3. Difficulties in Liquidating Investment Products

Compared to investment products that the existing financial institutions provide, such as deposit/installment saving, stocks, and funds, it is very difficult to liquidate products that P2P finance companies deal with. This is because the loans, which are the basic assets of investment products, are due to be repaid on a fixed date. Of course, liquidation through injection of funds from new investors is still possible before such a due date. However, it is hard to anticipate such liquidation in the current situations due to the lack of platforms where investment products are standardized for transactions. Consequently, such a problem is preventing investment funds from coming into P2P finance and the market from expanding.

## 4.4 Difficulties in Utilizing Data for Innovative Credit Evaluation

In the course of matching loan applications of borrowers to investors, P2P finance companies are playing the role of reviewers who analyze credit risks of borrowers and collaterals to make safe investment. To thoroughly analyze and measure credit risks, alternative data on varied aspects of borrowers is critical. However, P2P finance companies only have very limited access to such data as it is being collected and managed by centralized service platforms. This is acting as a huge obstacle to the development of the P2P finance industry, which is seeking new values that live up to the rapidly changing modern society through alternative data analysis and is also aiming to replace the existing financial institutions that maintain credit rating policies based on records of financial transactions or values of collaterals.

5. ZPER's Solutions

ZPER will create an environment for stable investment and maximize the effectiveness of global capital distribution by solving problems of the existing P2P finance as follows.

5.1. Designing Various Investment Products through a Global P2P Finance Alliance

ZPER is an open ecosystem where any P2P finance companies and related service companies around the world can participate. Reliable P2P finance companies in the world offer a range of P2P investment products here. Besides, RoboAdvisor companies participating in ZPER ecosystem design and provide secure, global, and diversified investment portfolios to minimize potential investment risks caused by changes in the internal and external financial environment. Financial services related to the ecosystem, such as indemnity against loss of bonds and NPL purchase arrangements also ensure a safer investment.
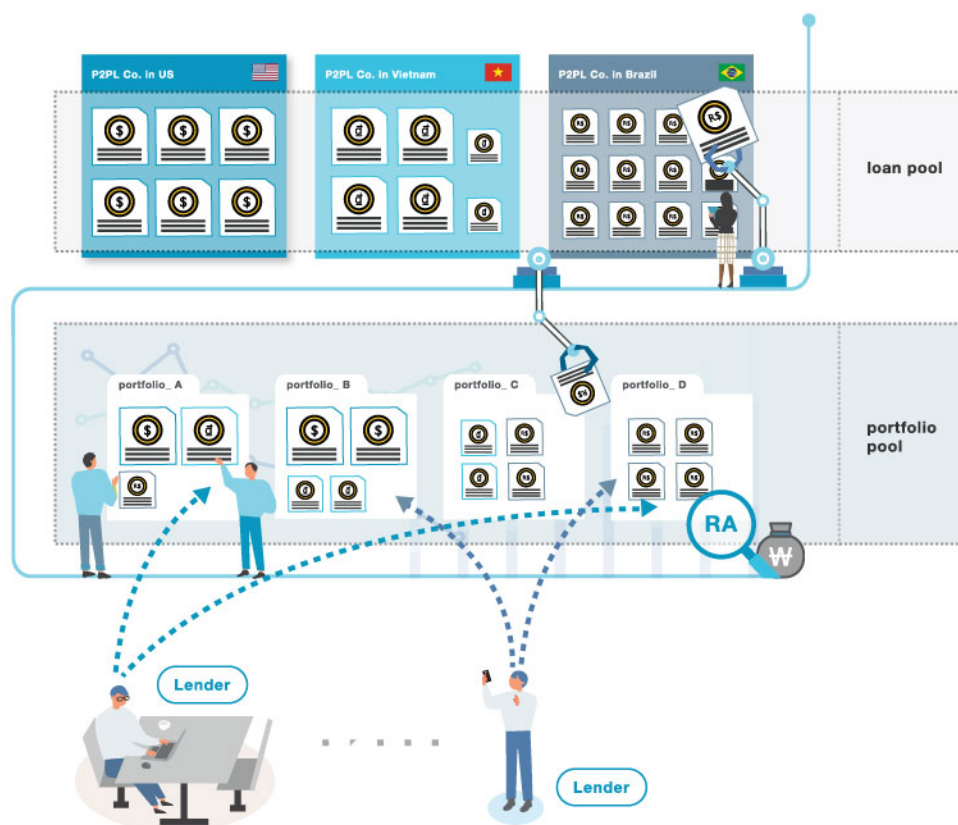
[Figure 4] Global Investment in Loan Portfolios through ZPER

5.2. Creating a Transparent and Sound Investment Environment based on a Smart Contract

ZPER eliminates the likelihood of disputes in advance through the smart contract function, which provides roles, obligations, and rights of each participants and makes an investment contract effective upon its conclusion. Therefore, funds for investment and reimbursement will be made automatically, and obligations and rights of the parties to a contract will also be modified automatically depending on the contract terms. Furthermore, provisions of contracts and any event related thereto will be disclosed to all shareholders in a transparent manner.

In addition, ZPER ecosystem has a ZPER committee that monitors participants. ZPER committee consists of proven companies, monitors qualifications and status of all participants in real time, and can restrict their activities in case of any violation to maintain order of the ecosystem. This minimizes risks caused by P2P finance companies and related service companies.

[Figure 5] ZPER Smart Contract

5.3 Securing Investment Flexibilities by Tokenizing Receivables for P2P Loans

In ZPER ecosystem, all loans will be made transformed into tokens (PLBT, P2P Loan Based Token). Investment products of each P2P finance companies will be delivered to investors in the form of tokens, which will be linked to receivables that are the rights to the future cash flows generated from the loans concerned. Investors can freely dispose of the PLBT at issue, which will be traded at a price both parties have agreed upon. Furthermore, not only the content of the receivables but also all trade information and alteration of rights will be recorded in PLBT.
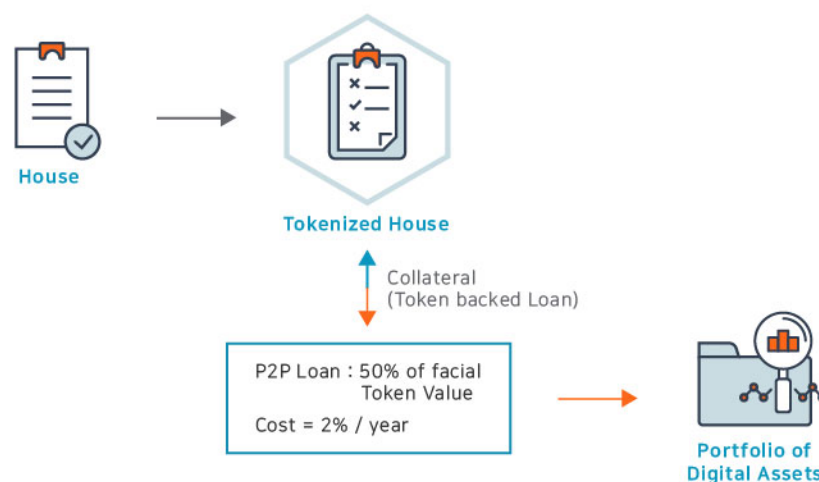
[Figure 6] Tokenized House

5.4 Enhancing Utilization of Data through a Reasonable Compensation System

To enhance the reliability of data, a reasonable compensation system is applied in ZPER. Both data right holders and authenticators will receive reasonable compensation for providing data, in this way, we aim at expanding the scale and scope of data needed for innovative credit evaluation within ZPER ecosystem.

If the data provided are meaningful, even just a little, to innovative credit evaluation, the contributor will receive reasonable compensation (price) based on the level (scope) of consent and values of the data. The compensation can be given by anyone who participates in the ecosystem, e.g. ZPER, P2P finance companies or other data providers, who can also receive such compensation.

6. ZPER Ecosystem

ZPER is a blockchain-based decentralized ecosystem where a wide range of individuals and companies engaged in P2P finance around the world can freely participate beyond borders. Participants of ZPER can make transactions safely according to their needs and roles.
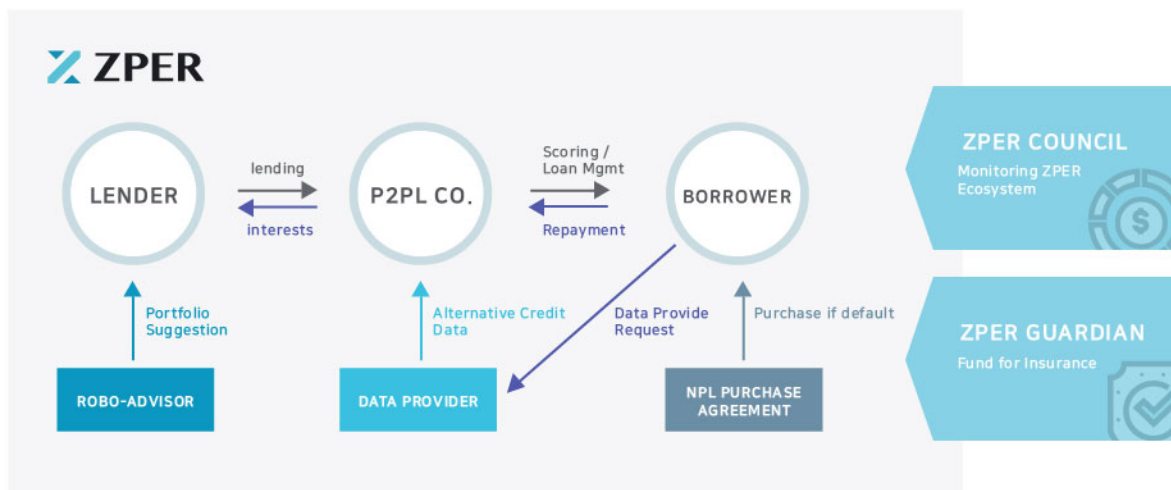
[Figure 7] ZPER Ecosystem Architecture

6.1. Participants

Individuals or institutions currently participating in P2P finance can be a part of ZPER ecosystem easily through webs/applications or SDK or API connection

6.1.1. Investors

Investors are individuals or institutions who want to make profits by investing in the products provided by P2P finance companies within ZPER ecosystem in the following ways:

· investing in individual products of P2P finance companies
· investing in portfolios designed by RoboAdvisors
· investing in receivables for which other investors have requested resale

6.1.2. P2P Finance Companies

They are in charge of the overall control of the processes related to investment, including assessing borrowers, generating loans, and managing reimbursement, and etc. The management of loan agreements and loans is deeply related to the country's geographical and cultural characteristics and should be conducted strictly in accordance with the laws of each country. Therefore, it needs participation of P2P finance companies that have expertise in loan business in each country.

6.1.3. Robo-Advisor Companies

RoboAdvisor companies analyze investment products in ZPER ecosystem with their own algorithms based on the rates of return, investment periods, default rates, and insolvency rates, etc., and build portfolios in a way that allows investors to effectively diversify their investments to gain more profits in a safer manner. Investors can choose products that they want from a range of portfolios designed by multiple RoboAdvisor companies. The following are the examples of portfolios that RoboAdvisor companies provide:

· Safety-oriented investment products that consist of 200 SCM bonds in the world
· Aggressive investment products that invest in 300 mortgage bonds in Southeast Asia
· Secondary products that invest in 500 bonds for which investors have requested resale

6.1.4. NPL Buyer

They are individuals or institutions who pledge to purchase non-performing loans. For investors, they serve as a guarantor for loans that exist in ZPER ecosystem. Pledgers to buy NPLs check information of loans on the blockchain and apply for those loans suggesting certain rates of guaranteeing the purchase. The one that suggests the best conditions through a smart contract will be selected. Pledgers to buy NPLs will pay certain amounts as a deposit to prove the performance of their commitments.

6.1.5. Borrowers

They are individuals, businesses, or companies who apply for loans. Individuals can apply for a loan for educational, marriage, living or housing expenses, while businesses or companies can apply for start-up funds, business management costs, expenses to expand their business, or funds to buy goods. They can directly submit their loan applications to P2P finance companies or use web/application services provided by ZPER platform. In the latter case, they will be connected to appropriate P2P finance companies among those participating in ZPER ecosystem, and the P2P finance company concerned will take care of contracts with borrowers and the management thereof.

6.1.6. Data Providers

All participants who provide alternative data generated from both within and outside of ZPER ecosystem to those who need it are data providers. Alternative data is generally used by P2P finance companies to analyze borrowers. However, with the development of ZPER ecosystem, information will be generated and used in freer forms sharing values. Examples of data used to analyze borrowers and data providers are as follows:

· Credit evaluation companies: records of delinquency, and etc. of individual borrowers and representatives of businesses
· Banks: records of financial transactions
· Credit card companies: daily sales, customer composition, etc. of businesses
· Schools: grades, proof of enrollment, etc. of individuals
· Companies: salary certificate, etc. of individuals
· P2P financers: credit ratings result on each platform
· Individuals: SNS data, reputation among friends, etc.

6.1.7. Further Step – Providers of Expanded Data

In a hyper-connected society, many activities of individuals are recorded in digital data. Data about who bought what, went where, read what article, or liked whose post is being recorded in real time. Data about not just such activities based on individual's will but also surrounding situations, such as what is in the refrigerator or when the lights in the house were turned on, is being recorded and made into big data. The same applies to data related to varied activities of not just individuals but companies as well.

Nevertheless, it is still not easy to utilize a lot of varied data that is generated in real time in P2P finance. Data generated by individuals are being kept by companies who digitalize and manage such data, and most of them are only concerned about negative situations that they may face in case data is leaked without paying much attention to active utilization and provision thereof to the outside. Although companies are making huge profits by using a lot of data they have collected while providing services, individuals, however, who are the owner of such data, are not receiving proper compensation.

ZPER will resolve these problems. In a long-term perspective, we intend to expand the scope of data providers within ZPER platform as defined in this Whitepaper to ultimately include all individuals who have the sovereignty of data. We are planning to create a structure in which more data can be injected into ZPER platform by building a virtuous cycle that enables individuals to check for themselves what values they can create by voluntarily providing their data and to receive reasonable compensation accordingly. This will lead to the development of innovative credit rating models as well as loan products with reasonable interest rates and a wide range of investment products. As a result, an increased number of participants of ZPER ecosystem will maximize the values of ZPER platform.

6.2. ZPER Committee

ZPER Committee is an organization that selects and supervises participants in each sector within ZPER ecosystem that are categorized into P2P finance companies, RoboAdvisor companies, and NPL buyers, and etc. to maintain a sound ecosystem.

As each country has different regulations and characteristics, a ZPER Council consists of more than five companies in each country and is therefore operated separately from other Committees. In a case where ZPER ecosystem has not been fully established in a country, its Committee is formed by ZPER Committees of other countries by vote and managed by ZPER founders during the beginning stage of ZPER.

6.3. ZPER Guardian

ZPER Guardian is a fund run by ZPER ecosystem, which indemnifies investors some of the losses from investments made through ZPER. When investors opt for ZPER Guardian, they are required to pay a certain amount of fees, which will be kept by ZPER Committee and be used to indemnify some of the loss caused by any potential insolvency. ZPER Guardian will be first made with some of the funds raised through sale of tokens, and fees for ZPER Guardian will be automatically adjusted to exceed at all times the anticipated loss amount of the total receivables.

7. ZPER Tokens

ZPER tokens act as a medium to maintain and activate ZPER ecosystem. Ultimately, appreciation of ZPER ecosystem will bring a range of participants and holders of ZPER tokens with compensation accordingly.

7.1. ZPR

ZPR is a method of exchanging values among participants in ZPER ecosystem. ZPR is used in almost all transactions such as investments of P2P loans, trading costs of receivables, compensation for data providers, and NPL buyer commission payments. ZPR enables prompt and transparent funds transfer among participants all around the world with no regard to the actual currency of each country.

7.1.1. ZPR
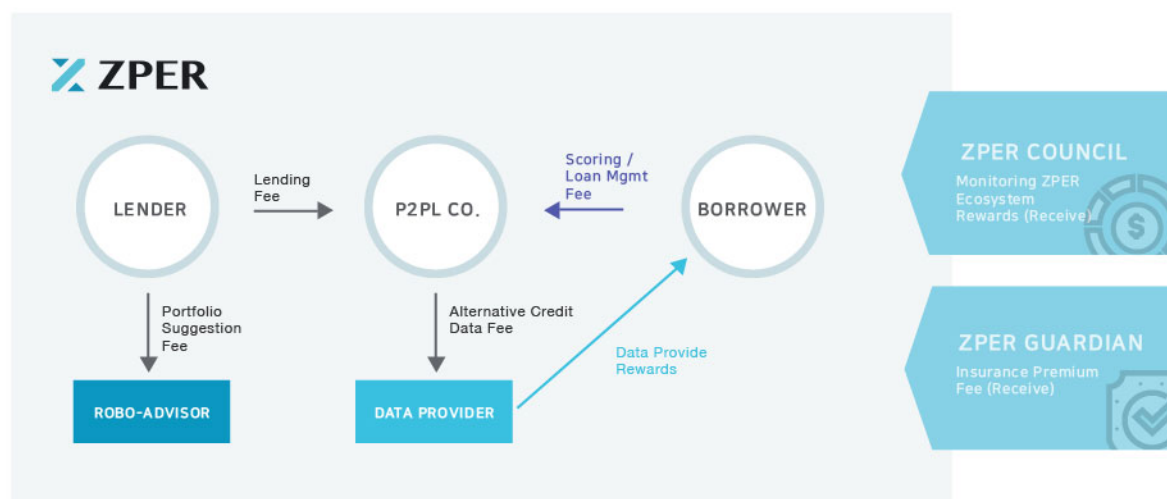
[Figure 8] Use of ZPER Tokens (ZPR)

The total amount of ZPR traded within ZPER ecosystem is linked to the amount of all costs related to the management of companies (e.g. marketing and labor) that have been saved through the participation of P2P finance companies, RoboAdvisor companies, and other service companies in ZPER ecosystem as well as the value of data consumers' willingness to pay. The value of ZPR increases as the number of participants in ZPER ecosystem and interaction between them increases. All of these will be the driving force behind a smooth composition and operation of ZPER ecosystem.

As the main medium for all economic activities that take place on ZPER platform, ZPR is the currency paid in return for values exchanged between participants, or between a participant and the platform. Some participants are required (a requirement for registration) to possess more than a certain amount of ZPR as credentials to guarantee their commitment to the ecosystem.

In this part, examples will be given to show in what form the ZPER ecosystem participants will exchange ZPR. These examples are provided only for a better understanding of this White Paper, and the details may be modified, added, or deleted by ZPER Committee in the future.

7.2.1. Borrowers

· Requirement for Registration: free of charge
· When applying for a loan: ZPRs equivalent to 1%-7% of the amount of money they are applying for is paid, which will be provided as a fee for a P2P finance company who has successfully managed the loans at issue
· When executing loans: receive local currency equivalent to the amount of money applied for through ZPER Wallet
· When repaying the loan: local currency equivalent to the monthly amount of repayment paid through ZPER Wallet

7.2.2. Data Providers

· Requirement for Registration of Data Providers: ZPR equivalent to $1,000 or more
· When providing data: propose appropriate ZPR price for the values of data and receive the amount when participants utilize the data concerned

7.2.3. P2P Finance Companies

· Requirement for Registration of P2P Finance Platforms: ZPR equivalent to $10,000
· When deciding to evaluate loan applications: pay ZPR equivalent to $10
· When evaluating loan applications: pay accordingly in ZPR for each data from various data providers
· When executing loans: pay ZPR equivalent to 0.1% of the amount of the loan to ZPER Guardian (subject to change depending on the grades of insolvency and decisions of the Committee)
· When the repayment is completed: receive ZPR equivalent to 90% of the fees paid by the borrower, and pay 10% to ZPER ecosystem

7.2.4. NPL Buyers

· Requirement for Registration: possess ZPR equivalent to $10,000
· When NPL is contracted for loan products: deposit ZPR equivalent to 10% of the amount of the loan in ZPER ecosystem
· In case of insolvency of the contracted loan: pay the remaining principal to the investor on behalf of the borrower and purchase the loan

7.2.5. ZPER Committee

· Requirement for Registration: possess ZPR equivalent to or more than$100,000

7.2.6. Robo-Advisors (RA)

· Requirement for Registration: possess ZPRs equivalent to $10,000
· Fees to use algorithms: receive ZPRs equivalent to 0.2%-0.5% of the investment from investors who use portfolio investment

7.2.7. Investors

· Requirement for Registration: possess ZPR equivalent to $10
· Investment: pay the local currency equivalent to the investment through ZPR wallet
· Investment Fees: ZPR equivalent to 1% of the investment paid to ZPER ecosystem (subject to change depending on the investment product)
· Fees for ZPER Guardian: when choosing ZPER guardian, ZPR paid accordingly
· Fees for RA: when using portfolio products, ZPR paid per request
· When repaying the loan: receive the local currency equivalent to the repayments (principal + interest) from ZPER wallet
· In case of bankruptcy: in the case of a product that protects against NPLs, the remaining principal received in local currency through ZPER wallet from NPL participants

8. ZPER Services

8.1. ZPER Wallet

This is a basic service used by investors and borrowers on ZPER platform. It manages, exchanges, invests, and repays ZPR and is used for investment and loan application. In the future, a range of participants of ZPER ecosystem, including P2P finance companies, RoboAdvisors, and NPL buyers will use ZPER wallet. Besides, expanded functions such as the services listed below will be available within ZPER wallet.

8.2. ZPERobo

It is possible to invest in products of P2P finance companies that have been transformed into tokens or make diversified investment in portfolios recommended by RoboAdvisors depending on the investors' preference. RoboAdvisor companies design multiple diversified portfolios for a number of loans of P2P finance companies in many countries, and investors can make the best investment based on their investment tendencies.

8.3. ZPER Open Market

It provides services to trade P2P receivables among investors, through which sellers can retrieve their investment before the expiration of loans while buyers can invest in different loans in time on conditions they want. ZPER open market is realized by the technology of tokenizing receivables for P2P loans.

8.4. ZPER Service Use Cases

ZPER will run a range of projects to enhance competitiveness of P2P finance companies and invigorate the ecosystem.

8.4.1. ZPER Zero (For Student)

[Figure 9] ZPER Zero (For Students)

In existing finance, promising students or those hopefuls who have just started out their career but have no collateral or credit histories have been neglected regardless of which country they're from. Situations have been worse for prospective students from developing countries or the third world. ZPER will sort out this problem by making use of meaningful data. The following data can be used to verify prospective students at a preliminary stage:

· Reputation of schools   · Grades of students   · Majors of students
· Evaluation by professors   · Peer evaluation   · SNS activities

These data can be very valuable for companies all around the world that are trying to hire outstanding graduates. Based on these data, companies can pay interest that arises from loans on behalf of the students or become NPL buyers to hedge against default.

Example) Hoi from Viet Nam, a student who goes to the most prestigious university in Viet Nam, has applied for a student loan. Company S in Korea has decided to hire him through Smart Contract in advance for its local corporation in Viet Nam and paid all interest for his student loan.

8.4.2. Loans for Small Businesses

Although small businesses (restaurants, cafes, bakeries, and etc.) generate sales through economic activities, they are still affected by different environmental variables, making it practically impossible to be properly evaluated or given sufficient lending opportunities by banks and other traditional financial institutions. ZPER can solve such problems by engaging a wide range of data providers. The following data can be used first:

· Sales patterns   · Change in commercial areas   · Growth of the business
· trend sensitivity   · Increase of regular customers   · Reputation among customers
· Frequencies on Instagram · Reputation on blogs   · Reputation by TripAdvisor
· Michelin stars

Example) Bintang is a Nasi Goreng restaurant in Indonesia. Bintang has applied for a loan through ZPER, and an Indonesian P2P finance platform has decided to grant a 13 percent loan. A credit card company has provided sales data as a data provider, and, for the investment, Ms. May in Japan has decided to invest at the rate of return of 8% instead of depositing her severance pay at the bank (base rate of Japan: 0%). Ms. May could make higher profits compared to those that could have been made by depositing the money at the bank in Japan, and Bintang could finance money at a relatively lower interest rate in Indonesia. Also, the RoboAdvisor continued to track the credit card sales of Bintang in a timed sequence and adjusted its credit rate.

[Figure 10] ZPR Loans for Small Businesses

8.4.3. SCF (Supply Chain Finance)

Many enterprises are facing reduced availability of capital due to extended supply chains as a result of globaliza-tion and overseas production. Suppliers who produce or import goods are having difficulties in their cash flows due to increased working capital as purchasers (giant buyers, online shopping websites, TV shopping channels) are demanding extended payment terms. Blue-chip suppliers can easily finance money from big banks, but situations are different for most of the suppliers. Some of them opt for financial institutions with high interest rates having to pay a large amount of costs for financing, and what's worse is that some cannot finance money at all. The role of P2P finance has emerged as an alternative for those suppliers, and it is facilitating the cash flows of suppliers contributing to transforming the supply chain that extends from suppliers through to purchasers into virtuous circulation.

Example 1) Super Hat imports hats from China and sells them on shopping mall "A", an online shopping website, on a regular basis. As there is an average delay of one month in sales from the shopping mall "A", it does not have enough money to buy more products. At the time, Andrea in Switzerland, after checking the sales informa-tion data uploaded from the shopping mall "A", lent money to Super Hat at an annual interest rate of 15%. The loan is managed by Smart Contract.

[Figure 11] ZPER SCF

9. Token Sale

9.1. Issuance Terms

Total Issuance : 3,500,000,000 ZPR

ICO Issuance : 2,200,000,000 ZPR

Tokens for Pre-Sale & Crowdsale : 1,100,000,000 ZPR

Hardcap : 48,000 ETH

Softcap : 5,000 ETH

Currency Accepted : ETH

9.2. Token Allocation

Token sale : 50%

Ecosystem : 22.3%

Team & Advisors : 17%

Reserve : 10.7%

[Fig. 13] Token Allocation

9.3. Funds Allocation

R&D : 40%

Operation : 10.7%

Marketing : 13.3%

Biz Developmment : 16%

Strategy Partners : 20%

[Fig. 14] Funds Allocation

10. Roadmap and Goals

Year	
2015	· Established P2P financial platform FUNDA
2016	· Established P2P financial platform MIDRATE · Established P2P financial platform Olley · Established financial product recommendation platform FINDA
2017	· FUNDA achieved cumulative loan of 30M USD · MIDRATE achieved cumulative loan of 10M USD · Olley achieved cumulative loan of 10M USD
Jul. 2017	· Initiate ZPER
1Q 2018	· Published White Paper · corporate partnership signed with leading domestic P2P financial companies and RoboAdvisor · Token Pre Sale
2Q 2018	· Token Crowd Sale · Launched basic ZPER Wallet service
3Q 2018	· First ZPR Exchange Listed · ZPEROBO Service Beta Test (For Some Partners) · Expand Partnerships (3 Participating Countries)
4Q 2018	· Full ZPEROBO Service Launched · Expanded ZPR Exchange Listing · ZPER Open Market Service Beta Test (For Selected Partners)
1Q 2019	· Full ZPER Open Market Service Opened
3Q 2019	· Expanded Partnership (10 Participating Countries)

11. ZPER Team

11.1. History of ZPER

Funda, Midrate, and Olley Funding have run P2P finance business in South Korea since 2015. By the end of 2017, they handled loans of an accumulated amount of 50 billion KRW and connected funds of total of 20,000 users.

In addition, in order to establish a safe P2P financial ecosystem in Korea, ZPER has established the Korea P2P Finance Association (KP2PFA) and has acted as chairman, vice chairman, and director company.

Including the three P2P financial companies above, a number of robust P2P financial companies in Korea has been working on a project to form an "Investment Alliance" to diversify investment in around 200 loans of more than ten companies since the end of 2017. While doing so, their goals have changed to expanding the project in a more flexible manner and in a bigger scale on the blockchain network. With Finda coming on board, which recommends a range of financial products including P2P finance products, the ZPER project has been embarked upon in full swing.

11.2. ZPER Team

Co-founder, CEO
- CEO at Olley Funding
- Dayli Financial Group Strategy Team
- Kiwoom Fund Management Headquaters
- TmaxSoft BI Dep.
- KAIST Applied Mathematics

JB Kim

Co-founder, CSO
- CEO at FUNDA
- Former Vice Chairman at Korea P2P Finance Association(KP2PFA)
- Seoul National Univ. Electrical Engineering

Sean Park

Co-Founder, COO
- UNION VNC, CEO
- Robo-Advisor FABOT, Co-Founder
- Seoul National Univ., Mechanical & Aerospace Eng.

George

CBDO
- BC Card Digital Library
- SBI Savings Bank, Fintech TFT
- Dayli Financial Group, Credit Analysis Team
- Nice Information Service TCB (Tech Credit Bureau)
- Yonsei Univ. Applied Statistics

SJ Min

Senior Software Engineer
- Samsung Electronics Global Technology Center
- TmaxSoft TP Dep.
- Korea Univ. Industrial Engineering

Leo Moon

Full-stack Engineer
- CTO at Midrate
- SK C&C
- Korea Univ. Computer Science

SH Baek

Server Engineer
- Quintet Systems
- KTB Investment Group
- LIG Ensulting
- Daum Communication

SH Lee

Full-stack Engineer
- Funda
- KAIST, Computer Science

SK Lim

Financial Affairs
- SK E&C Overseas Plant Contracts

JY Min

Operation Strategy
- CSO at Midrate
- SK E&C Overseas Plant Contracts
- Kyungpook National Univ. Law

KS Shin

Operation Management
- Operation Manager at Olley Funding
- GE Capital
- Sogang Univ. School of anagement

DY Shin

UI/UX Designer
- Parastar Design
- Babosarang Design
- Crevate

JH Shin

Marketing
- Korea Univ. School of Media & Communication

Dany

Community Manager
- Maeil Broadcasting Network
- Konkuk University Electronic Engineering

Jeff

11.3. Advisors

Sean Shin
· CEO at Dayli Financial Group
· Mirae Asset Securities Research Center Analyst
· Towers Watson Insurance Financial Business
· Samil Accounting Corp. Financial Headquaters
· Syracuse MBA
· Korea Univ. Business Administration

Sudhi Herle
· Sr. Strategy Consultant to the CTO of Samsung Mobile
· Co-founder of Samsung KNOX platform while at Samsung
· Ex-Chief Product Officer at RhythmOne (LON:RHTM)
· Temple University, PA and IIT-Bombay
· More than 30+ technology patents

SuYong Park
· Cognitive Investment Director
· COO of Daylii Financial Group
· Co-representative of Dayli Intelligence
· Seoul Investment Partners
· KAIST Industrial Engineering

Thomas Kang
· Head of Global Outreach for M-DAQ
· Singapore Managing Director,
Asia Pacific Regional Head of RTC & FX Plus at Citi,
Country Head of FX and Managing Director in Seoul
· Agilent Technology,
overall foreign exchange risk management
· US Navy Engineer
· Yale University MBA
· University of California, B.Sc
in Mechanical Engineering

Joe Kim
· Managing Director of XnTree at L39
· Former Director at IBM UK
· Former Managing Director & CTO at Tmaxsoft
· Former CEO at Datawave System
· Imperial College London

James Park
· Director at GoldenTree Asset Management
· Former Director at Citigroup
(London, Madrid, Singapore and Seoul)
· Seoul National University
Electrical Engineering
· University of Chicago Booth School
of Business, MBA

K Wang
· CEO at Coinbin
· CEO at Korbot Company
· Former CIO at Bithumb

Jake Kim
· Director & Investment Manager
at Innobase
· Co-founder of DirectBahn
· Head of Strategy and Planning
at Kolon Life Science
· Sr. Strategy & Business Development
Manager at Mirae Asset
· LG CNS
· IE Business School
· Hanyang Univ.

David Yang
· CEO at Quarterback Group
· CEO at Quarterback Investment
· KTB Asset Management, Fund Manager
· Seoul National Univ, M.A.,
in Business Administration
· Yonsei Univ, B.A., in Business Administration

SH Lee
· Shinseung Accounting Corp. Director
· Samjong KPMG Accounting Corp.
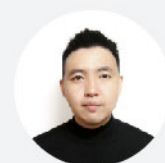
HyunSick Choi
· Doctor of Medicine (MD)
· Block Crafters Capital, Partner
· SOSOLAB, CEO & Founder
· Crypto Influencer
· Inje University, Department of Medicine
· Seoul Science Highschool

12. Others (Legal Issues, etc.)

Any information in this document (henceforth "White Paper") shall be available only for those who have received it for the sole purpose of evaluating ZPER and ZPR tokens.

ZPER (including ZPER Inc., its shareholders, employees, and subsidiaries) has prepared this White Paper to provide detailed information about the team and the platform the ZPER team is planning to create to those who have keen interest in ZPER. Therefore, this White Paper is not intended to solicit investment to ZPER team or platform. As this White Paper is based on information of the time when it was written, there is no guarantee that any information contained herein will be relevant in the future as well.

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12.1 Anti Money Laundering (AML) Act

Buyers must agree to not be engaged in money laundering, illegal currency trade, and any other prohibited activities in any way through ZPR tokens of ZPER or other related derivatives (if any). Each participant should be aware of the fact that they are not allowed to, directly or indirectly, sell, exchange, or dispose of ZPR tokens and other related derivatives for the purpose of money laundering.

12.2 Important Issues

Due to frequent change in related policies, laws, regulations, technology, economy, and other factors, information contained herein may not be accurate, reliable, or final, and may be subject to changes. This White Paper is provided only as a reference.

The ZPER team does not take any responsibility for accuracy and legitimacy of the information provided. If you want to participate in the platform, you should not solely depend on the information in this White Paper. We recommend participants conduct their own research before sponsoring.

In essence, this White Paper is a business proposal or promotional material and is not legally binding in any case. All information set out herein is only for reference, and token buyers should take extra caution for themselves.

12.3. Language

This document supports multiple languages. In case of any dispute, we will settle the problem in accordance with the Korean version. For more accurate interpretation, please refer to the Korean version.