Platform for Goodwill Ecosystem



White Paper

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Thank you for your feedback! Email: feedback@ecoverseglobal.io

EcoVerse Team

Abstract: Currently, the cryptoverse lacks a robust ecosystem that will sustain itself in the long-term. Despite recent technical advancements, PoS and PoW consensus algorithms have proved to only allow those to get richer proportionally to how rich they already were. To tackle these challenges, we propose a platform centered around dApps with a dual coin system using artificial intelligence supported consensus algorithm AI-DPoC (Artificial Intelligence-supported Delegated Proof of Contribution). The EcoVerseTM is the first-ever designed self-sustainable cryptocurrency platform.

I. Introduction

Since Bitcoin's [1] inception by Satoshi Nakamoto, hundreds of thousands cryptocurrencies have been developed with over 1600 traded on exchanges today. The blockchain constructed by Bitcoin has successfully shown how an unspecified number of anonymous people in the cyberspace can do activity for their own interests without central control. There is undoubtedly a noted historical significance of collaboration through cryptographic formation of proofs on trustless cyberspace. Unfortunately, Bitcoin's weaknesses prove to be too numerous to be widely used in everyday life and very few recent crypto projects have been designed to be self-sustaining. Dr. Nicolas Courtois, cryptographer at University College London, reports how many current cryptocurrencies are self-destructive in nature:

"We observe that most cryptocurrencies have mandated abrupt and sudden transitions. [...] Moreover, we show that smaller bitcoin competitors are substantially more vulnerable. [...] We exhibit examples of 'alt-coins' which validate our theory and for which the process of programmed decline and rapid self-destruction has clearly already Started."

The EcoVerseTM team's mission is to build the first ever self-sustaining ecosystem based on a blockchain network developed for daily usability and universal applicability.

This paper introduces the EcoVerseTM platform. First, we identify the main challenges currently facing the crypto universe. Then, we outline our technical solutions to these problems. Then, we

offer our philosophical vision which we hope to achieve with our platform.

II. Challenges/Context

Scalability: Several blockchain platforms such as EOS have recently announced that they can handle 1,000,000 transactions per second (TPS). However, TPS performance factor can no longer be used as a measure of competitiveness—instead, the public blockchain will be measured by a platform's ability to guarantee transaction finalization time (TFT).

Governance: The biggest issue among the weaknesses of PoS and PoW is that only the rich get richer, causing social discontent and inequality. This is because over time, the compensation for block generation becomes more and more concentrated on some nodes. This negative bias is common in existing blockchains and reduces the motivation for other participants. Therefore, it poses as a problem which harms the possibility for sustainability. In blockchains using the PoW consensus algorithm, for example, the node having the most hash-power wins the right of block generation and consequently is compensated the most.

Volatility: Most cryptocurrencies show price fluctuations depending on the market situation or the political situation of each country, which not only makes payment/settlement through cryptocurrency difficult, but also causes psychological anxiety and shrinks investment.

Anonymity/Veronimity: Currently, many platforms such as Bitcoin and Ethereum offer only pseudonymity and not anonymity. According to the General Data Protection Regulation (GDPR) [3], individuals have the right to know how their personal information is processed and used. Also, service providers must

provide people with the details of how personal information was processed and used, if requested. The most difficult challenge at present is to guarantee the right to be forgotten.

Sustainability: Most consensus structures operate in such a way that "the more equipment or stakes one may have, the wealthier the one becomes". This disadvantage is concentrated in the supplementary part, which not only reduces the possibility of ecosystem growth by preventing the voluntary entry of new miners and users but also threatens self-sustainability in the long run.

Another threat to existing crypto projects' sustainability is a lack of ongoing economic incentives to participants. When a mechanism provides incentives to its participants and the interactions are incentive-compatible, the optimal result is achieved when a participant acts according to his/her authentic preference. Most cryptocurrency projects today have been structured in a way that exacerbates the lack of ongoing incentives. One of the fundamental reasons for cryptocurrency hacking is the incompatibility of incentives.

Daily Use/Mass Adoption: The possibility of integrating cryptocurrency into our daily lives appears to be deceptively simple and easy, yet the fact remains that a multitude of impediments must be addressed. Despite the immense improvements, cryptocurrency has yet to achieve mainstream adoption for use in daily life.

Security: Blockchain-based cryptocurrencies are shown to be vulnerable to hackings and attacks-popular cryptos like Bitcoin which are not incentive compatible are vulnerable to selfish mining which poses a threat to the system [4].

Protection from such attacks has been the most significant concern of the crypto community.

III.Objectives

Project Purpose: The EcoVerse team's mission is to build the first ever self-sustaining ecosystem based on a blockchain network developed for daily usability and universal applicability. Our objective is to create a cryptocurrency environment in which individuals are offered: 1) Equitable opportunities, 2) Contributions justly valued, 3) Rewards properly distributed, 4) All decisions made democratically, 5) Accumulation of wealth with integrity.

This set of solutions is to be implemented as a part of EcoVerse.

- 1) An ecosystem that facilitates the use of cryptocurrency on a day-to-day basis.
- 2) An ecosystem optimized by Incentive Compatible Mechanisms that grows continuously, bringing value to the entire system and adapting to ensure self-sustainability in the long run.
- 3) A mechanism that allows people to accumulate wealth as the value of cryptocurrency rises and market capitalization grows.

The main two issues EcoVerse seeks to tackle are daily use and universal application.

The Vision: What we propose to achieve is a true grassroots shared economy based on our basic fundamental freedoms. The so-called 'shared economy' nowadays is disguised: it is centralized, and in reality, nothing is shared--instead the profits earned by all participants are directed to a small number of elites. We seek to change the disguised shared economy to return it to its true

meaning: the door is opened for everyone to participate and a "fair-share contribution" is applied. The values produced from goods and services will flow throughout the ecosystem. Ultimately, building an ecosystem of coexistence and co-prosperity is the pursuit of the grassroots economic revolution.

Principal Features: The principal features of the EcoVerse platform will include:

- Dual coin system
- AI-DPoC
 - (Artificial Intelligence -supported Delegated Proof of Contribution)
- Anonymity and Visibility
- dApp Interactive Development Environment
- CONFIRM™ (COmprehensive 'N Flexible Incentive Reward Model) by adopting Spiral Dynamics [5] and Integral Theory [6]

IV. Technical

Dual Coin System: EcoVerse is designed with a cryptocurrency system consisting of two basic coins, each with different characteristics and functions. EcoVerse-X (**ECX**) tethered to a fiat currency, (i.e. US dollars) is for daily use. According to Thomas Euler's proposal of token classification framework [7], ECX's attributes include:

- Technical Layer- Blockchain Native
- Purpose Network Token
- Underlying Value Asset-backed
- Utility Fiat-tethered Usage Token
- Legal Status Utility

On the other hand, EcoVerse-R (**ECR**) is a cryptocurrency for trading. According to Thomas Euler's proposal of token classification framework, ECR's attributes include:

- Technical Layer Blockchain Native
- Purpose Cryptocurrencies
- Underlying Network Value Token
- Utility Inter-chain Connectivity Token
- Legal Cryptocurrency

ECX is designed for day-to-day economic use, and is operated just like a prepaid card. EcoVerse will issue ECX in exchange of fiat currency from users, who will then use the goods and services within the EcoVerse economic ecosystem.

ECR is a typical cryptocurrency used to store value and is a medium of cryptocurrency exchanges. ECR provides a fee charging function and various authentication functions for dApps that want to provide services to users by using a blockchain. Therefore, dApps will reserve/deposit ECR blockchain as a concept of membership to use ECR, and the processing capacity of the ECR blockchain will be the amount deposited for the membership.

Granting Anonymity and Visibility: ECX and ECR used in EcoVerse require anonymity and visibility depending on their use. ECX should be given anonymity because it is used as a daily payment instrument. To do this, we use a zero-knowledge proof method that can prove facts without showing any information about the proof of facts to the other party. With this method, the payment transaction itself is posted in the public blockchain, but the privacy of the counterparty and the amount of money can be protected by encryption.

In contrast, since ECR is a coin with the characteristics of assets, it should provide visibility under the assumption that it complies with KYC, AML, etc. established by the International Covenant. We collect the necessary personal information and manage it by the Foundation. At the same time, according to GDPR, it is necessary to guarantee the right of individual in handling personal information. For this, implementation of Self-Sovereign Identity is essential.

To implement Self-Sovereign Identity, we use an encrypted off-chain DB to store personal information securely, but we divide the personal information to be disclosed into smaller units and register each of them in the main-net by hashing each. An individual can selectively disclose to another each piece of personal information registered in the main-net. The information to be disclosed is released to the selected person after the password is released. At the same time, the location information of the main-net in which the information is registered is transmitted together; information can be confirmed through the authentication process.

Consensus Algorithm: EcoVerse will use the consensus algorithm AI-DPoC (Artificial Intelligence-supported Delegated Proof of Contribution). Artificial Intelligence techniques will quickly and appropriately respond to problems that arise during operations of each node. This method will automatically analyze, detect, and respond to the result.

AI-DPoC will:

- 1) Evaluate the contributions of all participants.
- 2) Assign a few delegates by node, according to the evaluation result.

3) Delegates will operate a dedicated node.

The criterion for selecting a **delegate** is its contribution, which can be evaluated in multiple ways:

- Operational ability of node
- Participation Quantity/Level of dApp
- Amount/Holdings of ECR and Usage of ECX
- Participation rate of voting conducted for managing ecosystem

The elected **delegates' duties** are to operate and manage one assigned node:

- Monitor the block creation and verify processing to adjust parameters when necessary
- Recovering a node if it is not functioning normally

The nodes constituting the main-net are assigned a block to be newly created in a predetermined order. Each block is thus created by exactly one node at a time. In this case, the order of node selection is determined by uniformly distributed random numbers so that external attackers cannot easily grasp the attack target.

Some nodes will show abnormal patterns when it takes an extended period of time to generate a block or if attacked from outside, error in malfunction. These signs can be detected through log analysis, and it is possible to apply a partial solution. The AI-DPoC (Artificial Intelligence-supported Delegated Proof of Contribution) can be applied to detect, prepare, and respond to malfunctions of the blockchain effectively.

Preventing Negative Bias: In the blockchain using the PoW agreement algorithm, the node having the most hash-power wins the right of

block generation and consequently is compensated the most. In addition, a blockchain using a PoS series agreement algorithm gains the opportunity of block generation with the largest share, and thus compensation. This negative bias is common in existing blockchains and reduces the motivation for other participants. Therefore, it poses as a problem which harms the possibility for self-sustainability.

EcoVerseTM delegates do not directly participate in the block creation process, but rather monitor, coordinate the process, and operate the system. In return, the delegate receives a coin. Therefore, there is no need to compete to create more blocks. The DPoC method evaluates the contribution to all participants who are willing to operate the node at a certain cycle and selects delegates based on this. In this case, not only the one with the highest contribution is selected, but the probability of being chosen is proportional for most delegates that are randomly selected. In other words, when randomly selecting the required manpower at equal probabilities in the area of the lower curve as shown in the figure below, the less contributing person also gets an opportunity in proportion to his contribution. Therefore, there is no unreasonable bias in the conventional blockchains.

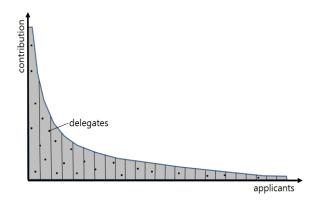


Figure 1

Scalability: One of the most common credit cards in daily use, VISA, has a maximum speed of 60,000 TPS--Bitcoin and Ethereum are quite slow by comparison.

The recently developed EOS [8] blockchain is theoretically capable of up to 3,000 TPS, making it possible for everyday use. More important in analyzing performance measurement for day-to-day use is **TFT** (**Transaction Finalization Time**).

TFT is calculated:

TFT = *Block_Creation_Time*confirm_Number*

EOS's TFT is the fastest TFT at 45 seconds, yet it is still too slow to be used in stores. TFT of each payment is shown in the table below:

Coins	Block Generation Time (sec)	No. Blocks to Confirm	TFT (sec)
Bitcoin	600	6	3600
Ethereum	14	12	168
EOS	3	15	45

Table 1

EcoVerseTM will apply various types of distributed processing techniques, which include the Sharding and the Raiden Network techniques. Our team aims for a two-second TFT using the ECX payment process.

Sharding Technique: The Sharding Technique is one of the on-chain solutions to solve the scalability problem, and it is a method based on the assumption of the PoS series agreement algorithm. This method divides the main chain into k shards and distributes them as shown in the figure below, and each shard processes all the

transactions on the network in parallel structure. This increases the overall throughput of the network in proportion to the number of shares. Recent work [9] has demonstrated the feasibility of sharding the consensus protocol, making important steps towards partitioning the entire blockchain.

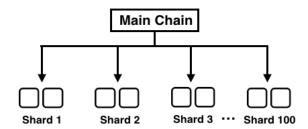


Figure 2

Ethereum [10] has limited processing speeds because all nodes will validate all transactions. You can significantly increase the processing speed if you limit the valid transaction time of the nodes--this is the basic concept of the Raiden Network.

The Raiden Network is an off-chain technique for local agreement between two trading partners that will deposit, exchange, and sign their tokens in real time, according to terms and conditions.

To this end, only the event of opening the payment channel initially and closing the payment channel to terminate the transaction is recorded in the blockchain, and all intermediate transactions between the parties are not recorded in the blockchain. This minimizes the processing burden on the blockchain, and the intermediate transaction can be confirmed immediately. At this time, an off-chain channel is established to deal with interim transactions between the parties, which is called SCN (State Channel Network).

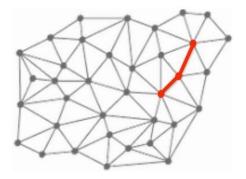


Figure 3

The transaction speed of the user--that is, the factor that directly affects the TFT, is the **finality** of the transaction. After a block containing a transaction record is created in an existing cryptocurrency blockchain, the fork is likely to occur because the transaction is not immediately confirmed. Because a fork occurs, each node compares blocks to generate coins in exchange for block generation. If nodes cannot compete with each other in the block generation process, a fork can be prevented from origin. For this purpose, EcoVerse allows only one node to be created for each block, so that only one node generates a block at a time. Therefore, a fork cannot occur.

However, when an anomaly occurs, it is detected by a node monitoring it using an artificial intelligence technique. Artificial intelligence can quickly respond and be recovered automatically, and a fork can be prevented from occurring. Therefore, in most cases confirmation can be completed in one step.

Adjustment of Price Volatility: Most cryptocurrencies show price fluctuations depending on the market situation or the political situation of each country, which not only makes payment/settlement through cryptocurrency difficult, but also causes psychological anxiety and shrinks investment. However, this price

volatility can be mitigated by temporarily adjusting the new supply of coins.

The existing cryptographic counterparts compensate for the block generation, and the supply rate of coins newly supplied to the market does not change in the short term. Therefore, when the demand curve changes from D1 to D2 in the general demand-supply curve as shown in (a) of the figure below, the price increases from P1 to P2 as the trading volume increases from Q1 to Q2. In this case, if the new supply amount of coin can be increased from S1 to S2 as shown in (b) of the figure below, the price decreases from P2 to P3, and the quantity increases from Q2 to Q3. If the price suddenly drops due to changes in demand, the coin can reverse the price by reducing new supply.

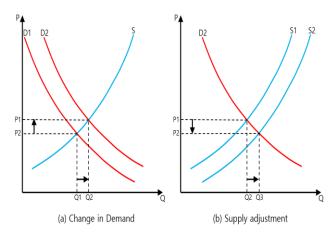


Figure 1

EcoVerse adjusts the new issuance of coins to be paid as compensation for block generation in the manner described above to control the sharp price fluctuations that can occur with ECR. This can mitigate the price fluctuation of ECR in the short term and gradually increase the value of ECR in tandem with the inflation of the real economy in the long run.

V. Decentralized Applications

dApp Development Objectives: The goals of building a dApp World for development and sustainable long-term growth:

- Establishment of an organic network capable of cooperating with dApps based on the necessary environments for the daily use of cryptocurrency.
- 2) Incentive Compatible Mechanisms designed in order to increase longevity, and guarantee the platform's sustainability.

dApp Structure Principles

A. Incentive Compatible Mechanism Design:

A system will remain stable as long as all miners follow their own economic incentives, a property called incentive compatibility. In an effort to design dApp World to be Incentive Compatible, the development team will not develop dApps like other existing blockchains. Instead we will use autonomous guidelines such as Apple and Google's App Market to implement the **EcoVerse** platform's goodwill ecosystem, thereby inducing high conformity. To do this, we provide our own CONFIRM methodology model, consulting and training to enable economical, psychological, social, cultural incentive compatible mechanism design suitable for dApps utilizing various Biz Model characteristics.

B. dApp Ecosystem: By keeping the whole ecosystem efficient and sustainable, dApps constructed in the ecosystem will be designed to share values between each other through organic interconnections, thereby allowing the entire ecosystem to grow.

Building Strategy

A. Implement dApp World to create a goodwill ecosystem: dApp World will not compete for quantity like other blockchain dApps. Instead, CONFIRM is implemented as a model for incentive mechanism design in a goodwill ecosystem. All participants will be able to easily find the right dApps for their needs and get the most fulfillment through their services. The mechanism will be designed so that a good economy can naturally emerge and the ecosystem can organically grow.



Figure 2

B. Increase the Success Ratio Through dApp Consulting: Consulting services will be provided to ensure each dApp provides a reward system with incentive compatibility. dApp designers participating in the ecosystem will be supported and guided in designing an optimal reward system that meets the various needs of users.

An optimal reward system can be designed utilizing the CONFIRM tool to design a model and create a reward system for the satisfaction of all users. Not only will it generate at a level for economic benefits but

also at other levels--for example, cultural and psychological rewards. dApp designers participating in dApp World will be able to take advantage of these services through consulting from our development team. The development team will closely analyze the requirements of the services and develop the optimal Business Model and the reward system for each and every dApp to be successful.

dApp World Development Plan

CONFIRM Business Implementation Model

CONFIRM™ Framework : dApp World Design & Implementation

Data Personalized Incentives

EcoVerse™ dApp World

Incentive Tool

KSF Matrix Biz Model Incentive Systems

Al based data analyze

SDVM AQAL

dApp World Biz Model

Figure 3

Template-based dApp development environment: Ethereum's smart contracts have opened up many possibilities for dApp developers by providing Turing completeness. However, this possibility also means the potential of abuse. It also means that it takes a lot of effort and time to implement your business idea into dApps because it requires high professionalism. EcoVerse introduces the concept of a buildable template to solve the problems of these existing dApp development environments and to accomplish the following two purposes.

- All actions that cause dApps to disturb the ecosystem either by mistake or intention, will be blocked.
- Providing an environment where dApps can be developed easily and effectively.

The template provided by EcoVerse is a preliminary implementation of dApps using a smart contract. It minimizes developer effort and time for dApp implementation. It also uses parameters to customize each dApp's business characteristics. It is a flexible form of a smart contract that can select and coordinate design elements. Of course, the templates provided here preclude errors and side effects through a thorough testing process in advance.

Integrated Development Environment (IDE).

Developers can use this tool to create a dApp that meets their needs through the following steps: 1) Select the type to suit your business needs. 2) Use the parameters to select design elements and fine tune. 3) Check if dApp works properly in the

simulation environment. In particular, we provide a separate test net for the simulation environment and use pre-implemented smart contracts to see how dApps react to various usage patterns of end users. Considering this development environment, the overall structure of the system is shown in the following figure.

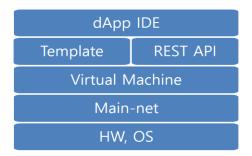


Figure 4

The REST API supports the common functions provided by main-net in web format.

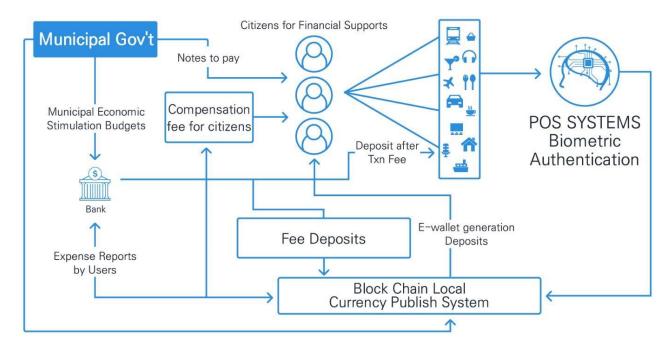


Figure 5 Ecosystem Service Architecture

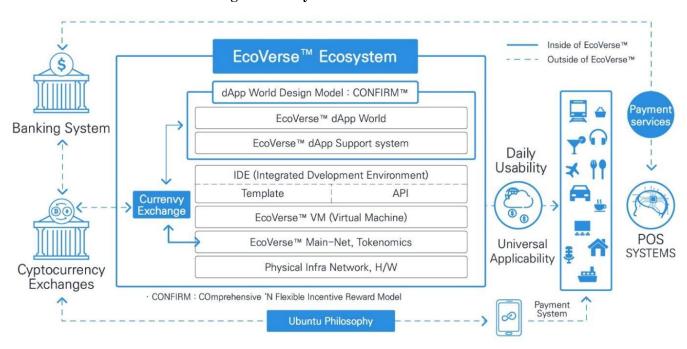


Figure 6 Blockchain Based Local Currency Issue Service Use Case

Philosophy Mentor Psychological counseling	Persona level up	Personal documentary production		Diagnostic Health Care	Exercise Prescription	Healthy Food		intellectual property	Recruiting Compensation	Gifts Bonus Merit pay
Enrichment PG	Honor/Growt h in Consciou -sness	Authorizing Copyright		Medical Tourism	Physical Compensatio n	Customized medical information		Service fee	Economic Compensation	User Allowance
Trust level up	Relationship Insights PG	Qualification system		Meditel Membership	Self-healing Program	Beauty Plastic Surgery		Community Support Allowance	Cooperation Allowance	development patent royalty
Philosophical Psychological Healing	Travel	Purchasing agent Procurement		Honor/Growt h in Consciou -sness	Physical Compensatio n	Economic Compensatio n		Customized Knowledge	Media Environment	Market information
Q&A Dialogue Methods	Concierge Service	Errand Solver	4	Concierge Service	Incentive Compatibility	Data Information	•	Provide dApp service	Data information	Private Information Network
Meeting party convention	Performance Event	Functional Secretary		Cultural Influence	Educational Opportunities	Business Infrastructure		Cultural information	Data mining	Gartner Report
					1					
Speaking & Voting Rights	Interview Advertising	Personal Branding		Humanities Training	Media Training	Marketing Training		Strategic thinking Method	Media Production Agency	Provide Marketing Tools
Membership Operator	Cultural Influence	Interest Grouping		Service Training	Educational opportunities	Data Science		Service Affiliation Network	Business Infrastructure	Management consulting
Community Leadership	Gift coin	personal coin		Community Party	dApp Technical Education	SI training		Communicati on Ability Level Up	Offer SDK	IDE Infrastructure

Figure 7

CONFIRMTM KPI Matrix¹. The eight incentive types will make the incentive compatibility and show the matrix in the center, and each example specifically provided by the type.

¹ Our model shows the components of the business in four areas and eight fields in the middle matrix and shows the KPIs of the eight fields in detail. This model was developed based on the AQAL Matrix of the Ken Wilber Integral theory.

Using CONFIRM™ KPI Matrix to Find dApp

Period											
Philosophy Vision Equity Art Media Artistic Moste Centure Health Health Health Artistic Moste Centural Health Health Artistic Health Health Artistic Concierge Physical Artistic Concierge Convention Contents	Good Will Desire	Freedom	Share		Unconscious			nt		Restaurant	
All Record eBook Personal Health Record Personal Health Record Service	Harmony	Philosophy Vision	Equity							Trading Physical	Information Purchasing
Al Meditation eBook Personal P	Consideration	Credit	Fairness			Passage	Ecology Environment		Products	agriculturál	Proof of Origin Trade Logistics
Al Meditation eBook Personal P			,	K				A			
Exhibition Service a film Service World Information Context Analysis Information Algorithm Club Party Game Animation Sharing Concierge Community System Economic ecosystem Al/IoT Historical and Cultural Records Processing System Emotion Calture Community Experts Forum Section Poundation Activities Processing System Emotion Ration Language Habit Life Style Habit Life Style Governance Multi Channel Community Information Culture Gommunity Information Community Governance Multi Channel Economical Ecosystem System System System Community Information Network System System System Al/IoT Development Development Al/IoT Development Development Al/IoT Development Development Development Development Al/IoT Development De			Personal Health				y trading Physical				
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Ration Language Habit Life Style Behavior Habit Definition Value Setting Forum Specification Activities Clobal Interest Group Interest Group Interest Community Interest Group Interest Community Interest Community Interest Group Interest Competition Culture Community Interest Competition Culture Community Interest Competition Culture Competition Culture Compatition Culture Competition Culture Com				A				1			
Communication Culture Community Interest Group Information Culture Community Information Culture Community Information Culture Coperation Culture Coulture Culture Compaign Countermeas Training Network Concerned System Concerned Countermeas Information Network Service Network Network Concerned System Concerned System Concerned Concerned System Concerned	Emotion Ration Sympathy Intelect	Habit			Definition		Specification Foundation		Tool	Response	
Cooperation Policy Value Trade Holacracy Organizationa I Culture System Organizationa I Culture Model Infrastructure Pagulatory System Organizationa I Culture Model Infrastructure Pagulatory Organization I Culture Model Infrastructure Pagulatory Organization I Culture Infrastructure Pagulatory Organization I Culture Infrastructure Policy Value Trade Holacracy Organization I Culture Infrastructure Policy Value Trade System Organization I Culture Infrastructure Policy Organization I Culture Infrastructure I Culture II	conversation facilitation	Culture	Group			Economical	Information		Service		Qualitative Data Mining
Preeting Training Network ure	Friendship				Culture	Regulatory Countermeas			Organizationa	Cooperation	IDE Infrastructure
	Greeting Attitude	Training				ure					

Figure 8

Multi-worlds and Multiverses: In order to implement universal applicability or versatility in a blockchain-based platform, it must accommodate a large number of dApp types. Participants will be able to realize many businesses in the form of dApps by classifying diverse human needs and various business models.

Attracting a large number of dApps from other platforms, such as Ethereum, will enrich the ecosystem with little effort. To achieve this, we use Interchain technology to establish a connection point with dApps on different platforms.

As part of its differentiating strategy from other platforms, our platform seeks to build value

chains by connecting dApps. To this end, we will develop a socket for easy connection of smart contracts, providing seamless extendibility for users, and allowing developers to easily mesh-up dApps. This will enable dApps for a complex business model and drive the formation of diverse value chains to attract as many people as possible to participants.

System Design Model Reference 1: Spiral Dynamics Value-Meme

 Spiral Dynamics Value-Meme is one of the many human development theories and widely accepted as a tool to integrate and explain many existing theories. This theory explains why in an organization or social system the value structure of an individual becomes the key, and how desire and value work.

 Spiral Dynamics Value-Meme is the ecological design model for the selfsustainability and long-term growth of dApp World. That are the core functions of CONFIRM, the desire (Behavioral Factors) and motivation to design the Biz Model and Incentive system.

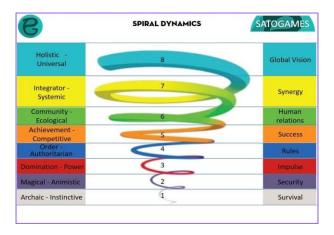


Figure 9

System Design Reference Model 2: AQAL [6].

AQAL's AQ (All Quadrants) is a topographic map, that is showing all Holon belonging to individuals and groups interrelationships of internal (subjective) and external (objective) objects. It is a framework that explains the validity criteria of the value of 4 domains and the values differentiated by domains and explains the four subfields. AL (All Level) shows MEME's development levels--it is a structural pattern showing distinctive characteristics at each level, showing healthy values corresponding to MEME level in each area. AQAL will utilize CONFIRM as a frame to optimize the interaction mechanism that will present the components and maximize the synergy between the dApp World Biz Models

by differentiating the inherent values of each component.

We will select the dApp World Biz Model, MECE, which can realize differentiated value by 4 areas of AQAL. The selected Biz Model is placed in the matrix by dividing the profitability center and the public interest center Biz Model according to the characteristics of the Meme². We design DB mining and sharing method so that interworking and interaction between each Biz Model smoothly. For example, Green Meme's Biz Model is linked to healthcare and integrated marketing Biz Model of Orange Meme, which is not profitable due to goodwill and concierge service to realize shared economy, but it increases participation rate and increases total profit to share.

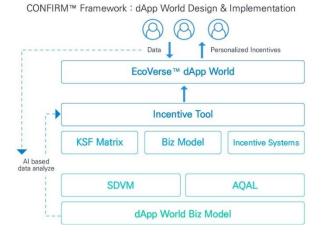


Figure 10 CONFIRM Business Implementation Framework

Policy and Operation Plan for dApp World

1) Consulting for Development and Implementation

The EcoVerse platform will provide the necessary technical support and training to

² Red and Orange present Profitable Biz Model, Blue and Green presenting sourcing for Public Interest

facilitate easy development for all dApp developers/development companies who participate in dApp World by offering a plethora of tools such as IDE, templates, and APIs.

2) Consulting for Feasibility Studies of dApp Business Models

Consultants and educators will be provided to those who want to participate in dApp World to design their own business models, service mechanisms, and reward systems based on SDICMD (Spiral Dynamics Incentive Compatible Mechanism Design) development methodology.

3) Match-Making for Cooperation Among dApps

The Foundation will establish and operate Business Cooperation Center (B.C.C) to promote the growth through solidarity and cooperation by having inter-dApp World services. B.C.C. will provide services to facilitate economic growth of dApps by applying interconnectivity through Match-Making Services among similar dApps, based on AQAL Matrix, which could share incentive compatible Mechanisms.

4) dApp Incubation Service

Various startup events will be provided to discover services that can support the growth of the ecosystem. New ideas/products will be supported until they are successfully established in the ecosystem.

5) Funding for the Initial Development of dApp

The Foundation will operate an incubation fund for business partners and dApp developers. It will also do various funding activities to support dApps including air drops, which are necessary to increase the users of dApp services. For example, the Foundation could purchase tokens generated by a selected dApp, and airdrop them to all of the EcoVerse users for free. This will dramatically increase the users of the dApp. The cost of such airdrops will be recovered over a period of time with the dApp's operation fees.

VI.Philosophy

An Ubuntu Economy: Ubuntu [11] comes from the Nguni proverb

"Umuntu ngumuntu ngabantu," which in its literal translation means, "I am because we are." Ubuntu stresses the importance of community, solidarity, caring, and sharing. This worldview [ubuntu] advocates a profound sense of interdependence and emphasizes that our true human potential can only be realized in partnership with others (Ngcoya 2009).

At the heart of Ubuntu remains interconnectedness between people, and the idea of community. The EcoVerse founds itself on the Ubuntu concept of humanity towards others and our neurobiological need for connection. An Ubuntu economy is our vision of a community for participants of all cultural and social trajectories where each individual can act on the sense of being connected to others by our common humanity, and where all relationships and levels of behavior or action are elevated to a higher plane. Fundamental to the EcoVerse philosophy are concepts of empathy and of building the community for the greater good of society--beyond the economic and financial freedoms or gains which our platform offers.

Adaption of Spiral Dynamics & Integral Theory for dApp World

Spiral Dynamics is a developmental psychologybased theory which postulates that thinking and societies exist at different levels of complexity, with new forms of psycho-social complexity emerging as lower levels become oppressive. The initial theorems were conceptualized by Clare Graves, who wanted to explore 'the engine that drives human emergence – why we are and what leads us to change to be something different'. According to Graves, "Every person, every individual has the right to be who he really is." Spiral Dynamics introduces a dynamic world full of possibilities--in this landscape, the possibilities are vast and endless. EcoVerse utilizes this concept of allowing the individual to be authentically themselves-- it acknowledges the dynamism between people and culture by recognizing the differences between each individual in how he/she thinks, within a certain context, and at a particular level.

Integral Theory aims to piece together a framework for better understanding the issues of the world through a lens that takes into account at least four different dimensions including the interior-individual (intentional), the exterior-individual (behavioral), the interior-collective (social), and the exterior-collective (social). It is not only a theory but a practice and an actual series of practices of inclusion. It involves the meta-paradigm of correlating humanity's most fundamental methodologies of knowledge. [6]

Both theories provide analytical and design methods for analyzing human desire. When considering the key elements and mechanisms that build dApp World, a theoretical framework is needed to interpret qualitative data in order to optimize behavioral motivation, and appropriate incentive conformity design. In order to construct and expand the ecosystem, MECE should be designed to ensure that the synergy effect by the interaction between dApp works. Spiral Dynamics and Integral Theory provides an effective and practical tool for attempting to dataries the topics and problems mentioned above.

VII. Conclusion

The proposed EcoVerseTM is the first ever self-sustainable platform using AI-DPOC (artificial intelligence supported delegated proof of contribution). EcoVerseTM solves daily usability and universal adoption by improving transaction times, security, and interconnectivity. The platform aims to achieve the goal of hundreds of thousands TPS in real world application with TFT at less than 2 seconds, which we consider the highest limit for a cryptocurrency adoption in daily activities.

EcoverseTM supports a two-coin system that answers both the need for privacy and KYC/AML regulation and allows for a stable currency, optimal for the needs of e-commerce, and a utility coin for interchain connectivity and growing in value.

EcoVerseTM is simply better than many platforms in the following areas

- ✓ **Technology**: it provides an array of solutions, including patent-pending AI-DPoC for consensus and the most fast TFT.
- ✓ **Economy**: it is designed to be selfsustainable unlike almost all the cryptocurrency mechanisms are not.
- ✓ **Philosophy**: Based on the totally different perspectives on humans from all other

- platforms, it is designed to build an ecosystem based on Ubuntu economy.
- ✓ **Socio-Psychology**: To increase longevity, and guarantee the platform's sustainability, Incentive Compatible Mechanisms is designed by adopting Spiral Dynamics Value Meme and Integral Theory.

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Appendix

ICO Schedule and Plan



Figure 11

Total ECR	2,500,000,000	Percent
EcoVerse ™ Pool	250,000,000	10%
Business & Partners	250,000,000	10%
Team & Advisors	500,000,000	20%
Total ECR by ICO time	750,000,000	30%
Maximum possible numbers for 20 years	750,000,000	30%

Table 2

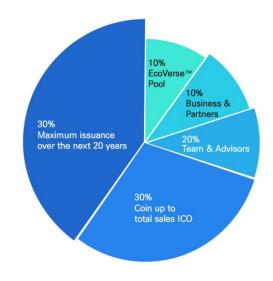


Figure 12