Lania: A Multi-chain Aggregated Digital Ecosystem That

Expands the Usability of Crypto Assets

Lania Whitepaper V1.4

Table of Content

1. Statement

The information in this whitepaper may be subject to change or update. The contents in relation to future service availability, use of tokens, or future performance and value should not be construed as a commitment by **Lania** or any other individual or organizations mentioned in the whitepaper.

This document does not constitute an offer or invitation to sell shares or securities. It should not be considered as a part of any offer to sell or subscribe or any invitation to subscribe for any securities. And it should not be considered as the basis of any contract or commitment. **Lania** expressly disclaims all liability for any direct or consequential loss and damage arising directly or indirectly from any information, errors, omissions or inaccuracies in the whitepaper or any actions resulting therefrom.

This is not a buying advice or investment advice. It is for informational purposes only. Please do not trade or invest in any tokens based solely on this information. Any investment involves significant risks, including but not limited to price fluctuations, lack of liquidity or loss of principal. Investors should conduct independent due diligence with the assistance of professional financial, legal and tax experts on the subjects discussed in this article and exercise independent judgment on the relevant markets before making any investment decisions.

We have prepared all information herein from sources which we believe to be accurate and reliable. However, such information is displayed "as is" without warranty of any kind - either expressed or implied. The completeness or accuracy of all market prices, data and other information is not guaranteed, they are based on selected public market data, reflect current conditions, and our views as of this date, all such information is therefore subject to change without notice. Graphs, diagrams and other visual aids are provided for informational purposes only. Neither these charts nor visual aids should be used to make investment decisions. The information is not intended to assist anyone in making an investment decision, or that a chart or other visual aid can capture all of the factors and variables necessary to make such a decision.

Information contained in this document may include or incorporate by reference forward-looking statements, which will include any statements that are not historical facts. No representation or warranty is made as to the accuracy of such forward-looking statements. Any forecasts and estimates contained in this document are speculative and based on certain assumptions. These forward-looking statements may prove to be wrong and may be subject to inaccurate assumptions or known or unknown risks, uncertainties and other factors, most of which are beyond our control. It is possible that some or all of these forward-looking assumptions will not materialize, or actual results will differ materially.

2. Brief

Lania is a multi-chain aggregated digital ecosystem that tends to expand the usability of crypto assets. We aim to build a new digital ecosystem that is simple and friendly, and everyone can participate and get rewarded.

Lania team will work with the community to provide standards, tools, services, virtual scenes and more possibilities for the whole ecosystem . The goal is to bring users, projects, dev teams, IPs, brands, and other participants into Lania and offers a stage where individuals and organizations could connect together beyond boundaries and reality. This further generates new scenes for social interactions, entertainment, work, and business.   Finally, Lania ensures fair value distribution among all participants and contributors based on the proof of their work.

3. What is Lania?

3.1 The Problem Lania Wants to Solve

Satoshi Nakamoto released "Bitcoin: A Peer-to-Peer Electronic Cash System" on 31st October, 2008.   Token, Ethereum, evm, dapp, NFT, and other web3 creations are invented successively. With these creations we began to possess more things, but we are also rapidly losing something...

3.1.1 About Crypto Assets

It has been more than ten years since the crypto comes into reality. The crypto world has experienced unprecedented growth through several bear-bull alternations. The high-level of development has exceeded all expectations.

This poses problems despite rapid development. Cryptocurrency is still used as financial derivatives for speculation. However, we initially defined it as "new currency", "electronic cash" and "value anchoring". The current development has completely deviated from our original intention. Why has it not become a real currency after more than ten years' rapid growth of the market?

Basically, usage scenarios for crypto assets are scarce, especially for NFTs. The vulnerability of NFTs does not come from itself, but a result of the lack of scenarios and usability. To add use value to crypto assets is to help overcome vulnerability.

The range of NFTs' price drop exceeds the prices of native tokens and many Defi projects. The key contributing factor is value concentration on a small number of collectibles, which is exacerbated by the loss of value of the native token (the basis for NFT Valuation).

The transition to new NFT application scenarios will only be earlier, not later. Investors are suffering bigger and more consistent losses on collectibles. Their attention may turn to application scenarios that could benefit from the emerging markets or new functions.

The competition in the market is becoming increasingly intense. X2Y2 on Ethereum and Hadeswap on Solana have taken significant market share away from the industry leaders like OpenSea and Magic Eden respectively. Emerging markets are competing on the basis of new pricing models, optional royalties, and lower fees.

Over the past few months, Ethereum has lost its leading market share. Solana's share has risen to as high as about 43% in September. One of the reasons is scalability and lower fees. Another is that the role of Ethereum in the NFT field may be more inclined to be a store of value.

The value of crypto assets is not limited to speculative financial behaviors. Only when people get together can they interact, entertain, work, etc. These are the basis of transaction, and the ultimate support for NFTs' value should be buying and selling behaviors based on scenarios and needs, rather than hype, speculation and financial behaviors. Speculation will not be the main circulation means of crypto assets.

Providing usage scenarios for NFTs will also contribute to FT(Fungible Token) use and circulation. To put it clearly, whether NFTs have usage scenarios is directly related to the structural stability of the crypto world, the growth speed, and the underlying self-consistency .

The most urgent problem that crypto assets need to solve is to provide scenarios and use values.

3.1.2 The Current Status of Multi-Chain Coexistence

Decentralization is not weak connections between separate islands.

The competition between public blockchains has never ended.   A large amount of layer-1 infrastructures with different visions have emerged one after another and the market share of Ethereum has dropped significantly. Public chain stars like SOL, FTM, and AVAX with faster speed and lower gas have just gained a firm foothold followed by MOVE- base SUI and Aptos chain. Other layer-2 solutions such as Arb, OP, and ZK are also attracting the overflow funds and users from Ethereum. The coexistence of multiple chains is a foregone conclusion.

For users, the coexistence of multiple chains leads to fragmentation of digital assets, high management and collection costs, which results in higher usage thresholds and weaker liquidity. Due attention should be given to improving liquidity. At present, people have only made a little optimization, and the liquidity problem is far from being solved.

Communities and projects are faced with a difficult choice between multi-chain ecosystems. Choosing a public chain means giving up most other chains, or operating a single product at high cost on multiple chains.

Therefore, the coexistence of multiple chains directly results in separation of users and asset liquidity.

According to the status quo and problems, is there a better multi-chain

solution?

It is necessary to find better aggregation solutions under the status of multi-chain coexistence. The former solutions of atomic swap, liquidity replacement, and minting and burning are not the best choices, just transitional solutions.

At present, the impact of unfriendly cross-chain solutions on liquidity is already severe. Liquidity becomes a competitive advantage. Multi-chain markets generally transfer assets through the cross-chain bridge. For example, USDT tokens on chain A are first staked, and then a native aUSDT token will be issued on chain B. This leads to multiple versions of the same token, and it is not only chaotic, but again causes liquidity segmentation.

The existing cross-chain solutions serve as a prelude to an era of multi chains with a stronger narrative. Although we don't find an optimal solution, multi-chain aggregation is a must at present. Users demand solutions that are faster, more secure, connected, capital-efficient, cost-effective, and censorship-resistant. Multi-chain communication and scenarios are more imaginative in the multi-chain era. It will bring more possibilities for multi-chain aggregation composability with any contract on blockchain A be connected to contract on blockchain B.

Aggregating users and crypto assets that coexist in multi-chains through a decentralized application scenario is a better way to solve the problem.

3.1.3 2D & 3D - Upward Development, Downward Compatible

Infrastructures of the crypto world should migrate from 2D to 3D. 2D scenes are not enough to support the development of crypto world, and meet the needs for Dapp developers by users.

User Level. Users look forward to a different life experience. They want to shape their ideal self-image and environment in 3D scenes, and meet their needs that otherwise would not be satisfied except in 3D immersive experiences . Immersive scenes are not just for participation. Higher-dimensional UGC tools that are simple and editable will turn users' imagination and creativity into real works. Users will not refuse such in-depth interaction as multiplayer real-time collaboration, creative play, and immersive social interaction .

Technical Level. Use of 3D technology has reached maturity, and technical capabilities even witnessed a surplus. These technologies need to integrate blockchain to develop a comprehensive product. Use blockchain to protect users' ownership, and use 3D technology to expand the scenes. This is the inevitable trend of technology development.

Capital Level. The Internet industry has already migrated from WEB1.0 to WEB2.0. At present, the way of expression has gone through upgrading from text to audio to video. With the iteration of media, interaction, concept, economy, and society, the ultimate way out is to break through the medium limitations, that is, to develop and grow towards a highly immersive digital space. At the same time, capital

is also seeking new opportunities.

But not all organizations and individuals are able to carry out full-stack development on blockchain and build 3D scenes.

A digital ecosystem requires a large number of different technology stacks to develop. The 3D scene layer needs Unity3D, Unreal 5, or other engines, and the contract layer needs developers to write contracts for different VMs, such as solidity, move, and Motoko. The consensus layer-1 and the scaling layer 2 also need to be written in different programming languages, such as Rust, JAVA, Golang, and C++. The intersection of decentralized and centralized will also require use of web2 technologies.

Even if some technology stacks provide function tools for certain scenarios, they are separate and incompatible with each other. Take DAO management tools as an example. The main types of DAO tools include DAO launchers, rewards & benefits, salary management, governance & voting, information transmission & interaction, content, NFT, fund management, identity authentication, and security. There are currently about 70 known mainstream tools. Do we really want to learn so many tools as part of a project? Not to mention the fact of possible   incompatibility between tools.

What we need is complete, open and ever-evolving toolsets and standards rather than separate tools to respond to the rapid development of the crypto world.

In summary, the crypto world urgently needs to find maturer multi-chain aggregation and application solutions under the current status of limited liquidity and multi-chain coexistence. To create a more diverse usage scenarios of crypto assets with the help of more organizations and individuals realize the true ecological value of the crypto world beyond boundaries and reality.

3.2 Value of Multi-Chain Aggregation

Lania will support the aggregation of all crypto assets at all layers of the product (multi-chain layer/contract layer/service layer/application layer). Once the assets fro m users and assets generated from **Lania** were aggregated into the   digital ecosystem, we will witness a exponential growth in usage time.

Lania brings different blockchain users (web2 users included) connect closely to a virtual
scene in real-time. This gonna generate a new traffic niche/blue ocean. Different bloc kchain users gather to have new forms of interaction,
and new interaction leads to new social activity and asset interaction. In the meanti me, it's user-friendly to traditional web2 users. Even if you don't grasp any basics on blockchain, you are able to join the digital ecosystem to
share the next-generation internet experience powered by blockchain.

Lania aims to solve the problem of insufficient blockchain interoperability from the origin. We are exploring a better solution for multi-chain aggregation and scenario integration by combining assets, users, and communication, forming a new multi-chain value collection.

Assets will no longer be defined as assets exclusive to a single chain. At the beginning, blockchain was born to to allow users to have better asset security, liquidity and choice.

Users will no longer be defined as users exclusive to a single chain. Users are forced to have multiple identities separated by multiple chains or they rely on one certain blockchain.

Now users will gather in the same ecosystem to socialize, create, entertain, and work. Communication efficiency and interoperability between different blockchains will reach a new height through front-end and back-end.

Lania will continue to explore the optimal solution for multi-chain integration until all chains are aggregated.

3.3 Real Crypto Assets Usability

3.3.1 FT's (Fungible Token) Usability

In **Lania**, the blockchain establishes the trust and economic foundation for all participants, and the scene establishes the interaction and demand foundation. When scenes created and users accumulated in the digital ecosystem, this will give rise to new social activities. FT will not just be financial derivatives or a speculative subject matter, but as a payment method and value carrier for real transaction needs.

What is even more worth looking forward to is that, in addition to twinning real-world transaction scenarios, new native transactions exclusive to the digital ecosystem will also be born. Transactions and scenes will interact with each other, evolving into more advanced consumption, work, and business.

3.3.2 NFT's Usability Expand

For brands and IPs, they can bring users into new stories and scenarios. It is no longer just a simple "bedtime story" with pictures, but it allows projects to find its own track and direction in the next-generation Internet. Gamefi can be built here, defi can be built here, and you can also conduct various experiments and explorations of NFTfi and socialfi, with standards based on web3 towards the future.

New projects can do initial launch and add value in **Lania** . In **Lania**, you could achieve what the traditional NFT marketplace cannot do. You will explore a new NFT business model, taking advantage of **Lania**'s tools designed to transcend reality. Perhaps your audience is not just web3 digital nomads. 3D-NFT is just the beginning.

It is just our first "usability" attempt, and NFT is no longer just a small picture. It can be directly three-dimensionalized, and it could also be enabled with more practical functions. Brands/IPs can use NFTs as a means to change relationship with users. 3D is not just a visual enhancement, we believe that 3D will create a new model and structure.

For individuals, you can use your own NFTs in diverse ways. It can be your ID Card, your membership card in a certain brand, an expression of one of your multiple identities, or it can be your stock and bond in the digital ecosystem.

At the same time, your identity, assets, social relations, etc. can all be NFTs in **Lania's** digital ecosystem. In this case, NFT has become the proof to clarify the ownership of all data and protect users' ownership, special rights, privacy, security, etc.

NFT as a warrant, warrant as an NFT, this is an inevitable trend. NFTs can do what traditional warrants can do, but not vice versa.

3.3.3 Beyond Boundaries & Reality

Users in different countries and regions will overcome physical limitations and Internet blocks through the flow of blockchain, toolsets, scenarios and assets. Let your own data and identity transcend time and reality. The integration will inevitably give birth to a new Internet form.

The new Internet form will inevitably leads to a new industrial structure. **Lania** chooses to be a provider of standards, tools, scenarios, and solutions. **Lania** aims to provide organizations and individuals worldwide effective access to the the next generation Internet. Finally, **Lania** hopes to across boundaries and reality together with all her companions.

3.4 Digital Ecosystem

Lania will establish a new digital ecosystem that is collectively built, created, shared and governed through module integration of digital space, Dapp, blockchain, multi-chain assets, and related toolsets. We don't define ourselves as a single Dapp, metaverse, or tool, etc. It's either too narrow or too empty for us.

Lania will bring about the following changes., Achieve better user stickiness and asset liquidity. Enhance interaction between assets, data, identities, and users based on scenarios. Combining all these together will help break through limitations of time and space, achieving a new competitive advantage and experience level.

The existing independent Dapps and tools will be integrated into the digital ecosystem resulting in a strong chemical reaction, and finally forming a sustainable positive circulation of digital ecosystem.

3.5 Value of Lania

3.5.1 An Easy-to-use Next Generation Internet Portal

Lania treats traditional users and blockchain users equally. We hope that user from all over the world can enter **Lania** without barriers. It is not necessary to go through complex recovery phrases and extremely poor interaction experience, and learn large amount of knowledge on blockchain to feel the charm of the next-generation Internet. Traditional users can generate value here, accumulate their own assets, and explore totally new ways of income. Blockchain users can pool their multi-chain assets here for better user experience, and financial behavior will only be a few part of **Lania**.

A variety of scenes and development tools allow all users to enjoy their favorite music festivals, parties, movies, games, shopping, etc. When users have the ambition to *change the world*, they use creator tools and make contributions to the bottom layer, tool layer, contract layer, and scene layer of the world. Engage in new worlds, create new worlds, and unleash creativity and productivity.

With security, autonomy, diversity, and stability, blockchain users will find t*he true charm of blockchain and crypto assets* here.

3.5.2 Multi-chain and Multi-dimension Integration From the Sser Layer and Scene Layer

Lania integrates the scattered blockchain islands into an island group and then forms a closely connected multi-chain and multi-dimension value aggregation. Let assets liquidity not be limited to a single blockchain and solve the liquidity fragmentation caused by cross-chains as completely as possible.

Lania will start with multiple layers such as the tool layer, contract layer, and scene layer. Use tools to facilitate multi-chain access and integration. , Multi-chain communication at the contract layer will solve the problem of communication integration. **Lania** provides various infrastructures and facilities at the scene layer to integrate multi-chain users. The activities of the blockchain will become more efficient and valuable by way of enhancing the usability and liquidity of users' assets.

3.5.3 Usability Expand

The scenarios, demand, and supply-demand relationship derived from **Lania** digital ecosystem will greatly enhance the use value, scope, and dimension of FT and NFT. And it will finally make FT a general equivalent that surpasses traditional currencies. NFT wil grow more scalability and possibilities in new protocols and scenarios.

The aggregation of users, assets, data, identities, usage time and interactions will upgrade the entire scene to a new level. **Lania** can accomplish either what can be done or what cannot be done in reality. It will form a super digital ecosystem that *crosses boundaries and transcends reality*.

3.5.4 Develop With the Community

In **Lania**, users will enter the entire ecosystem in a brand new way. At the same time, multiple identities are allowed to help users explore more experiences. We will also work with developers and contributors in the ecosystem to formulate standards and easy-to-use development tools and help **Lania** and everyone related to it in the ecosystem. **Lania** unites all organizations and individuals to work together, maintain standards, and prosper the ecosystem without interfering with each other's sovereignty.

3.6 Possibilities

3.6.1 User

Users can store and use their digital assets on different blockchains more securely and conveniently based on the new immersive digital ecosystem. The income source has changed during this process. Users earn by investing in the business in the digital ecosystem, and can also choose to work for multiple DAO organizations to earn tokens and NFTs as equity. They can enjoy a livehouse in an immersive 3D concert hall, or invite IRL friends or friends from Lania to use crypto assets to live a second life. Everyday they live in a new world that they've never experienced before.

3.6.2 Project Parties/Brand

Project parties, brands, and IP will gain access to new traffic and quit the exhausting fights among traditional businesses and Internet companies. The change of traffic entrance allows each brand/IP to start capturing new growth. According to the scene and the new underlying logic, new marketing methods are hopefully expected to birth. Relationships with consumers are also changed. Customers are no longer only consumers. Everyone is a part of the brand and grows together with the brand, which will greatly change the business model.

3.6.3 Developer

Lania and its community provide all developers with easy-to-use and dimension-rich standards, tools, APIs, SDKs, and solutions. At the same time, under the premise of ensuring security, we open up the greatest authority to developers as much as possible, so as to unleash the creativity of developers' creation and innovation. We provide all developers with sufficient and necessary conditions to build **Lania** together by way of easy-to-use, inspiring tools, and a friendly community atmosphere.

Developers in **Lania** can not only gain income, achievements, and respect by contributing to development but also realize their own value in this digital ecosystem that is not limited by time and space. It is so cool to participate in the creation of a

new world through coding, modeling, design, and other professional skills.

3.6.4 Investor

The Internet industry has experienced an evolution from web1 to web2. Information carriers, communication methods, terminal equipment, and user habits have undergone several rounds of changes. However, the current Internet development remains stagnant. Everyone is in an competition with each other for what's left and has given up the pursuit for more possibilities.

Lania offers an option, a possibility. Investors can benefit from investing in projects in the digital ecosystem, and can also establish their own investment incubation organizations, recruit investment managers and CFOs, and even raise funds in the digital space.

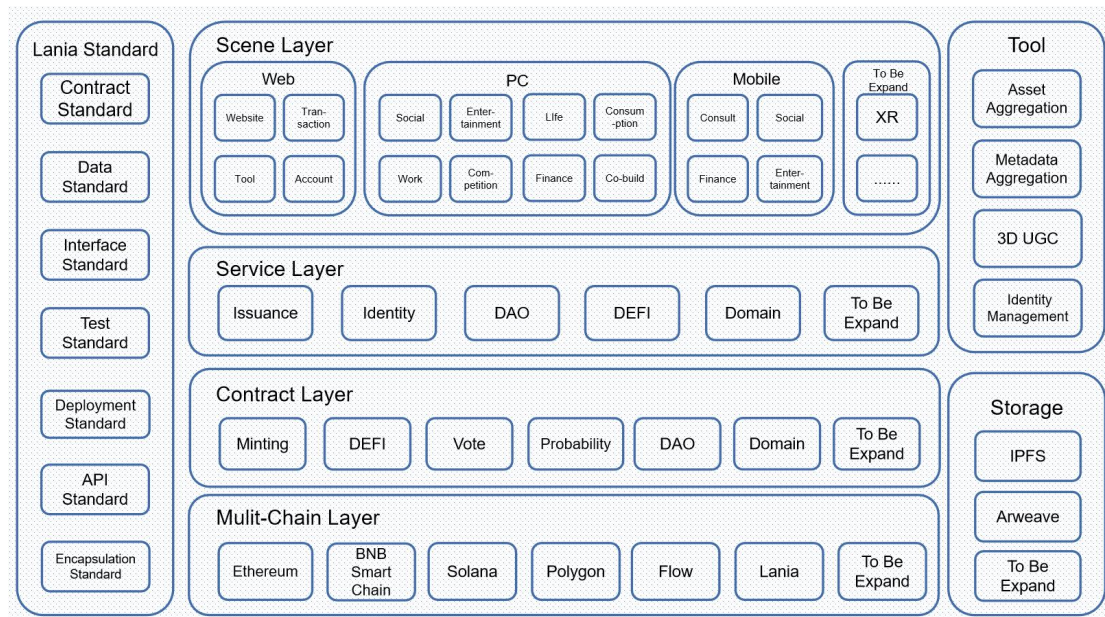### 3.6.5 The Entire Ecosystem

Lania will eventually attract organizations or individuals from different countries, blockchains, industries, and cultures. People socialize, entertain, spend money, work, and trade here without limitations of time and space. Everything in **Lania** is real-time, sustainable, around-the-clock, open, and co-governed. **Lania values contribution rather than power.** Everyone gets income and feedback based on their contributions.

Organizations and individuals will also establish different relationships here. Organizations and individuals will establish a mutually trusted cooperative foundation, equal cooperative relationship, and solid economic foundation through contracts. Organizations can issue their own tokens, and individuals can issue their personal tokens, which represent their own credit and value in the market.

The aggregation of users from multiple chains, countries and cultures,   toolsets, and standards will inevitably lead to a new evolutionary direction of the crypto world and new social activities, taking the Internet to unprecedented heights.

4. Lania's Infrastructure and Roles Within the Ecosystem

4.1 Lania's Infrastructure

Lania Standard
- Contract Standard
- Data Standard
- Interface Standard
- Test Standard
- Deployment Standard
- API Standard
- Encapsulation Standard

Scene Layer

Web: Website, Tran-saction, Tool, Account

PC: Social, Enter-tainment, Life, Consum-ption, Work, Com-petition, Finance, Co-build

Mobile: Consult, Social, Finance, Enter-tainment

To Be Expand: XR, ...

Service Layer: Issuance, Identity, DAO, DEFI, Domain, To Be Expand

Contract Layer: Minting, DEFI, Vote, Probability, DAO, Domain, To Be Expand

Mulit-Chain Layer: Ethereum, BNB Smart Chain, Solana, Polygon, Flow, Lania, To Be Expand

Tool: Asset Aggregation, Metadata Aggregation, 3D UGC, Identity Management

Storage: IPFS, Arweave, To Be Expand

Lania's Digital Ecosystem Infrastructure

Laina's infrastructure consists of multi-chain layer, contract layer, service layer, scene layer, tools, storage, and standards.

4.1.1 Multi-Chain Layer

The multi-chain layer is composed of public chains and a **Lania** chain. All crypto assets and data are aggregated into **Lania** through our multi-chain aggregation tools. **Lania** will support equally each public chain, and its assets and data, as well as users and organizations on the chain. Currently, **Lania** already supports Ethereum and Binance Smart Chain. As the project grows, **Lania** will gradually support more until cover all chains.

Besides, Lania will also develop a **Lania** chain as a test environment for development and deployment to ensure safety, stability and reliability of the project.

4.1.2 Contract Layer

The contract layer is the basis for decentralized interoperability of **Lania**. Besides supporting all public chains, we also support the contract deployment of all public chains. Lania will integrate a mature, safe, and stable collection of open-source contracts to form a smart contract toolbox in a modular manner.

In **Lania**, different developers and projects can carry out contract modular development based on any public chain. The smart contract toolbox powered by **Lania** will upload modular smart contracts to GitHub in an open-source form. It will also be integrated on **Lania**'s official website in a visual way to achieve complete transparency of contract deployment. **Lania** will gradually open up   multi-chain

aggregation of all contracts and make interoperability improvement as a further goal of the contract layer. According to the current development plan, **Lania**'s contracts will integrate asset minting, probability, voting, copyright, DEFI, DAO, and others.

➢ The minting contract is for issuing crypto assets, including FT and NFT;

➢ The probability contract is used to ensure random probability for reward drop scenes;

➢ The voting contract is used for decentralized community voting and management;

➢ The copyright contract is used for decentralized copyright management on chain;

➢ The DEFI contract is used for decentralized asset transactions;

➢ The DAO contract is used for decentralized organization registration, fund and personnel management, collaboration, and distribution.

4.1.3 Service Layer

Lania's service layer is served for decentralized interactive service. It's the basis of connecting assets, data, identity, organization, finance, and other aspects. It presents smart contracts in the form of modules, providing users with a one-stop, composable, convenient, and fast implementation of decentralized interactive functions. According to **Lania**'s current design, it consists of decentralized issuance, identity, DAO, DEFI, domain, and other services.
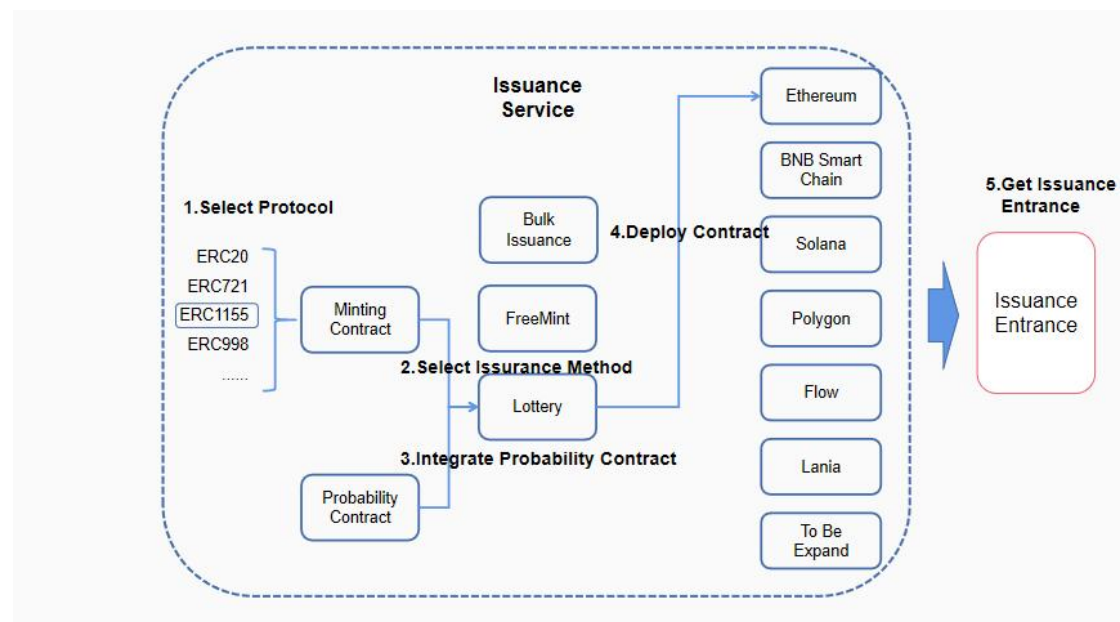
Above is a simple schematic diagram for the issuance service. The issuer choses the ERC1155 asset protocol and integrate the probability contract in the form of lottery. The issuance entrance for the lottery was finally generated after deploying the contract on Ethereum.

At present, the development of the crypto world will still use both technologies from Web2 and Web3, with various blockchain technologies included. Data and interfaces from different technology stacks will be modularized and integrated at this layer, providing necessary conditions of security, stability, and scalability for achieving decentralization at the scene layer.

4.1.4 Scene Layer

The scene layer is a layer directly accessible to ordinary users. All services, technologies, data, and others will be provided to users as immediately usable at this layer. The scene layer is built on the Unity 3D engine. **Lania** is also compatible with the output from other 3D production tools, so that developers at the scene layer can create in the most familiar environment, focusing on creativity rather than tools. **Lania** will gradually support web, PC, mobile phone, and other immersive devices.

Web: Services on the website will mainly focus on official release, account management, and downloading of clients and tools, aiming to help users grasp some bascis on **Lania** and step into the ecosystem.

PC: Lania will provide a complete digital space scene, enabling users to explore a richer and more fulfilling second life and to become an important role in this world. User can bring their life into a new digital space for real-time immersive experience.

Mobile: **Lania** will take advantage of fragmented time, mapping the easy-to-enter scenarios of the digital space to the mobile phone. It will also support data sync between PC and the mobile. By enhancing user experience of social, information, and trading functions and providing light entertainment gameplay related to scenarios, Lania ensures mobile users can also enjoy and have fun.

To be expanded: In the process of evolution, **Lania** will consider embedding scenarios into wearable devices to bring users a more friendly immersive experience.

4.1.5 Tools
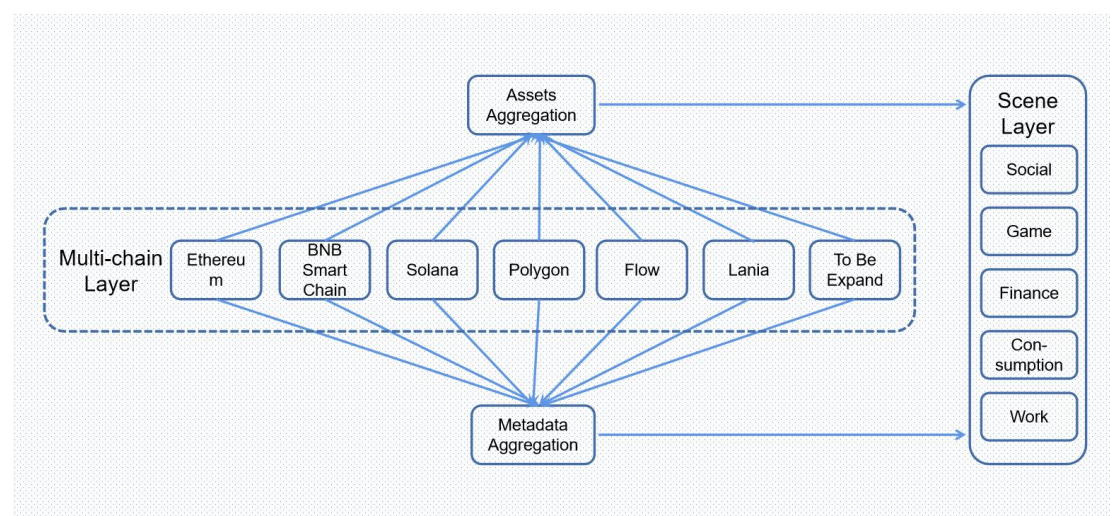
Tools will be an important means for anyone to build in **Lania**. The **Lania** team

will provide asset aggregation tools, metadata aggregation tools, identity management tools, and 3D UGC tools.

Lania offers a solution for asset fragmentation under the status of multi-chain coexistence through asset aggregation and metadata aggregation tools. Asset owners could manage crypto assets in a one-step manner and are accessible to on-chain data. Every project can use **Lania** to unify scenarios and provide users with low-cost but high-scalability services.

The 3D UGC tool is the core tool in **Lania**. It is a downward-compatible and upwardly scalable infrastructure for **Lania** scenes, which can provide **Lania** with a continuous stream of 3D models. Based on the basic principles of openness and diversity, 3D UGC tool is a open modeling tool for everyone. 3D UGC tool consists of three parts: modeling, customization, and asset issuance, which respectively solve the problems of model creation, model customization, and asset circulation. We can not only create our own 3D avatars but also create our own 3D scenes with the help of the 3D UGC tool. Individuals can get personal digital space to live in, organizations can obtain commercial space to provide services, and volunteers can contribute to **Lania**'s public space planning. Ultimately, all scenes of **Lania** will be distributedly storaged in a perpetual and secure manner.

The identity management tool helps each **Lania** own their exclusive and controllable identity through aggregated on-chain assets, metadata, and behavior information. **Lania** could also help obtain everyone's off-chain identity information through trusted data binding with users' authorization. Eventually, the identity management tool will become foundational for anyone to cross beyond boundaries and reality.

4.1.6 Storage

Lania will provide a perpetual, decentralized, and verified storage system which is based on the current mainstream distributed storage systems such as IPFS, Arweave, etc. It is the infrastructure for **Lania** to protect user privacy and data security.

Take IPFS as an example: IPFS is the InterPlanetary File System, a communications protocol designed to create persistent and distributed storage and shared files. It is a content-addressable peer-to-peer hypermedia distribution protocol. The nodes in the IPFS network will form a distributed file system. IPFS is a blockchain-based, permanent, decentralized method of saving and sharing files, and it is a peer-to-peer distributed protocol.

Lania's IPFS node is a public storage service node built in the IPFS network. It provides the infrastructure for exclusive storage services for **Lania** users and scenes through the open source protocol of IPFS. **Lania**'s IPFS node provides perpetual storage services at extremely low cost based on IPFS decentralized protocol and due to reward mechanism improvement.

4.1.7 Lania Standards

Lania standards are the basis for opening up the entire project. It fully covers all participants such as developers, partners, users, IP parties, creators, and validator nodes. Standards are not limited to the base layer, but also appear in the contract layer, service layer, and scene layer from below. The **Lania** team will work with the community to formulate each standard, aiming to accept participants in a friendly and reasonable manner. These standards include contract standards, data standards, interface standards, test standards, deployment standards, encapsulation standards, and so on.

Secondly, the standards are the safeguard of the entire ecosystem. These practical standards build a solid foundation which helps **Lania** to maintain scene openness, asset and data aggregation, interaction decentralization, ecological expansion, and rich content.

4.2 Roles Within the Ecosystem
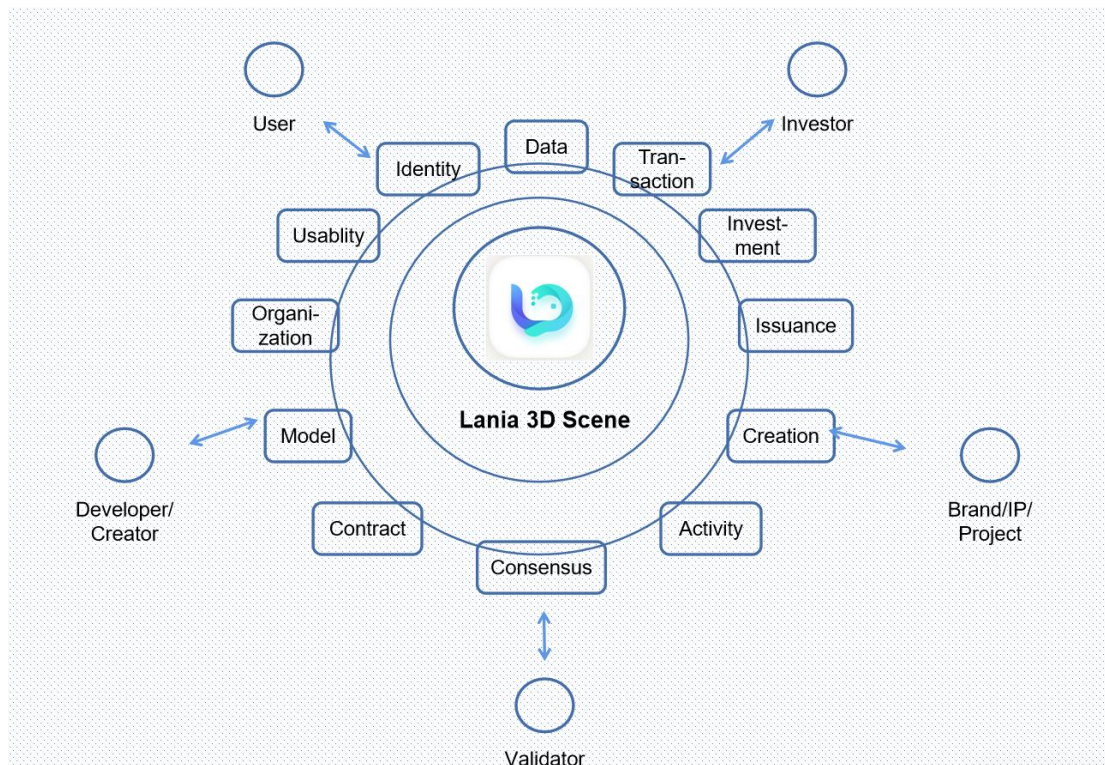
Lania is based on blockchain consensus. **and** it provides developers/creators, brands/IP/project parties, users and investors with services of crypto assets issuance, usage and transaction through multi-chain aggregation and asset usability. Other services which could benefits all participants in **Lania** are available, too. Such as art creation and modeling development, organization creation and online activities, investment channels and data analysis services. All of these help connect various ecosystem roles closely around **Lania**'s 3D scenes, and expand the use of crypto assets.

4.2.1 Validator

The validators here include validators of all public chains. **Lania** enables all verifiers become consensus defenders of the **Lania** 3D scenes through multi-chain aggregation. Whether it is POW, POS or BFT; whether it is L1 or L2; whether it is EVM-based or MOVE-based, they are the guarantee and support of **Lani's decentralized** ecosystem.

4.2.2 Developers/Creators

Developers are important partners of the **Lania** ecosystem. In order to ensure that developers can achieve decentralization under any public chain system, **Lania** will provide multi-chain deployment to support developers of different blockchains. In the meantime, the modular smart contract toolbox powered by **Lania** allows users to modularly assemble decentralized functions, greatly reducing development difficulty and development threshold.

Creators are needed partners of **Lania** which help generate rich model and scene resources. In order to ensure the ecosystem be diversified and enriched and continuously expand, the 3D UGC tools powered by **Lania** will continue to evolve according to the needs of creators.

Whether you are a developer or a creator, you are able to get supports and services at each layer of the whole infrastructure. **Lania** will try best to meet the demand in development and creating.

4.2.3 Brands/IPs/Project Parties

The crypto market needs more brands, IPs, and project parties to join in. They are the characters who enable cryptocurrency's real value, community cohesion, and usage scenarios. **Lania** provides all partners with 3D scenarios that undertake the function of issuing, using and trading assets It forms a closed loop of crypto asset circulation. **Lania** provides DAO tools, online activities, real-life product customization, and other ways to gather around more community users. It also provides scene creation, and will continuously expands the use methods, functions and scenarios of crypto assets.

4.2.4 User

Users generally refer to all users who use **Lania** 3D scenes, they are participants, maintainers and owners of the entire **Lania** ecosystem. The point of multi-chain aggregation is to aggregate fragmented assets and data for users. Assets usability is served to make users' assets backed by a real usage scenario which ensures prices and values continue to increase with the expansion of usage scenarios.

Lania users not only refer to blockchain users, but also anyone who surfs the Internet. In the decentralized network architecture of the next-generation Internet, every user who uses **Lania** services will obtain their own digital autonomy and income rights.

4.2.5 Investor

Lania does not provide a single investing choice of the project itself. It provides every investor with a channel to future income. In addition to **Lania**'s trading market, every project and every asset aggregated in **Lania** is a new target for investors.

5. Lania's Economy Model

Lania will establish and iterate the most appropriate economic model with all partners in the ecosystem based on the development of the entire digital ecosystem. It will not be revealed in the first version of the white paper. What could be informed to public is that **Lania** believes that there is not only one asset or a few assets that can support the development of the crypto world. We treat all crypto assets equally and maintain an open attitude always.

6. Conclusion

Lania is a multi-chain aggregated digital ecosystem that continues to expand the usability of crypto assets. Users can use crypto assets within the ecosystem for more interoperability and scenario interaction. Developers can take advantage of various tools provided by the **Lania** developer community within the ecosystem. Projects , brands, and IPs can upgrade their products and services by referring to creativity and works by the developers, and then make historical changes in their relationship with users based on the characteristics of the blockchain. Eventually, with the aggregation of all parties, **Lania** will grow into a super digital ecosystem and next-generation Internet infrastructure.