

SDChain Whitepaper

1. Background

SDChain International Ecosystem Alliance is composed of the SDChain international management team, SDChain application partners, SDChain technology community, and SDChain Community Representatives.

Six Domain Chain was officially launched on July 18, 2018. As a leader in the integrated development of the global Internet of Things and blockchain ecosystems, Six Domain Chain took the lead in launching the Co-Chain plan in the world based on the ecological characteristics of Internet of Things applications, industry blockchain application needs, and current public chain development trends, allowing the entire industry to Applications can be easily uploaded to the chain, establishing an autonomous, collaborative and symbiotic IoT blockchain ecosystem, allowing the entire community to achieve win-win cooperation, jointly promote the transition from the era of "everyone is connected" to a new era of "internet of everything", and create a digital economy Cambrian period.

2. Introduce to SDChain

Six -Domain Chain (SDChain) is a public -blockchain platform for the wide application of Internet of Things in many industries. The key points have two advantages. First, combined with the “six -domain model”, the international leading methodology, and a large number of practical operations in the top-level design, standard formulation and application realization of the Internet of Things industry can help the SDChain ecosystem from the top, to let partners in The Internet of Things quickly and efficiently realize projects. Second, by addressing the complex application ecosystem needs of the Internet of Things, and the enhanced optimization of the blockchain bottom layer design — including SDFT consensus algorithm, Co-Chain and Token issuance mechanism, P2P

communication optimization, and smart contracts, etc., — it can better support the operation of different IoT applications in the six domain chain ecosystem, and thus create the world's best IoT blockchain.

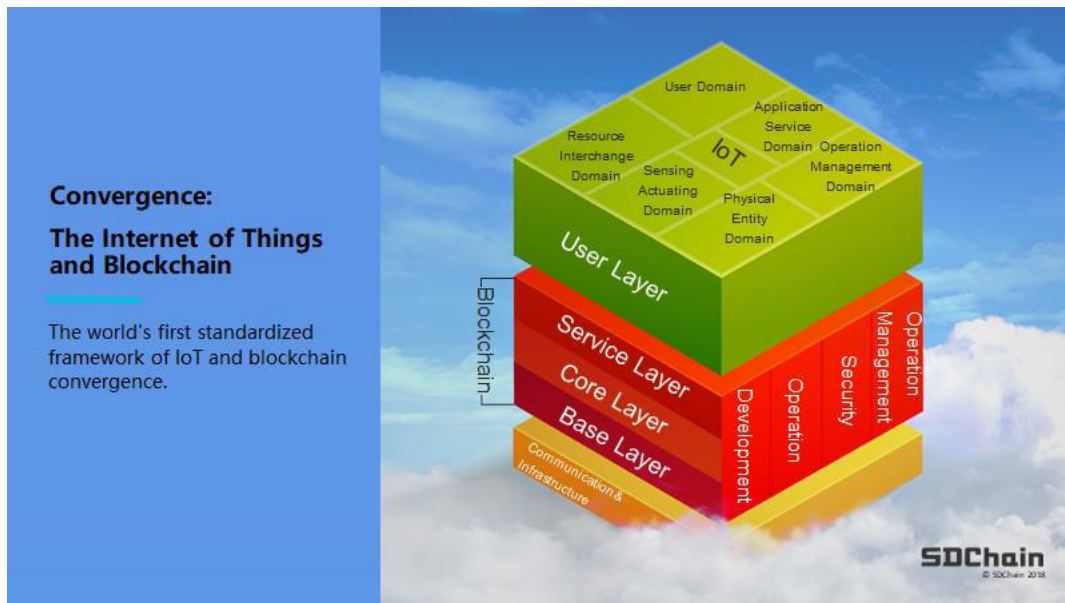


Figure : IoT and blockchain convergence architecture.

The six domain model itself focuses on solving the ecosystem construction of the Internet of Things application, which is not the level of the underlying data interaction. However, the part of the Internet of Things most lacking in development is the design of the top layer, while the data interaction between network devices is relatively mature. After more than ten years of development, the solution of the single technology level of the Internet of Things cannot quickly drive the development of the industry. What is more important is to integrate with various industries and establish an ecosystem operation service structure. Therefore, the SDChain has the advantage of a strong IoT ecosystem top-level design guidance ability. Regarding other topics and details, please refer to SDChain whitepaper.

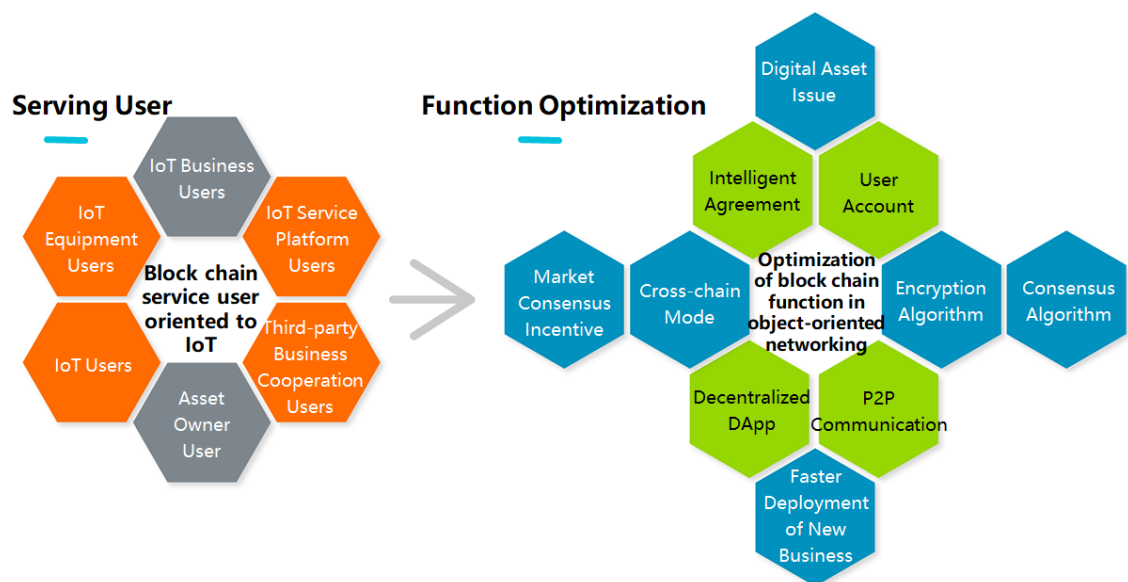
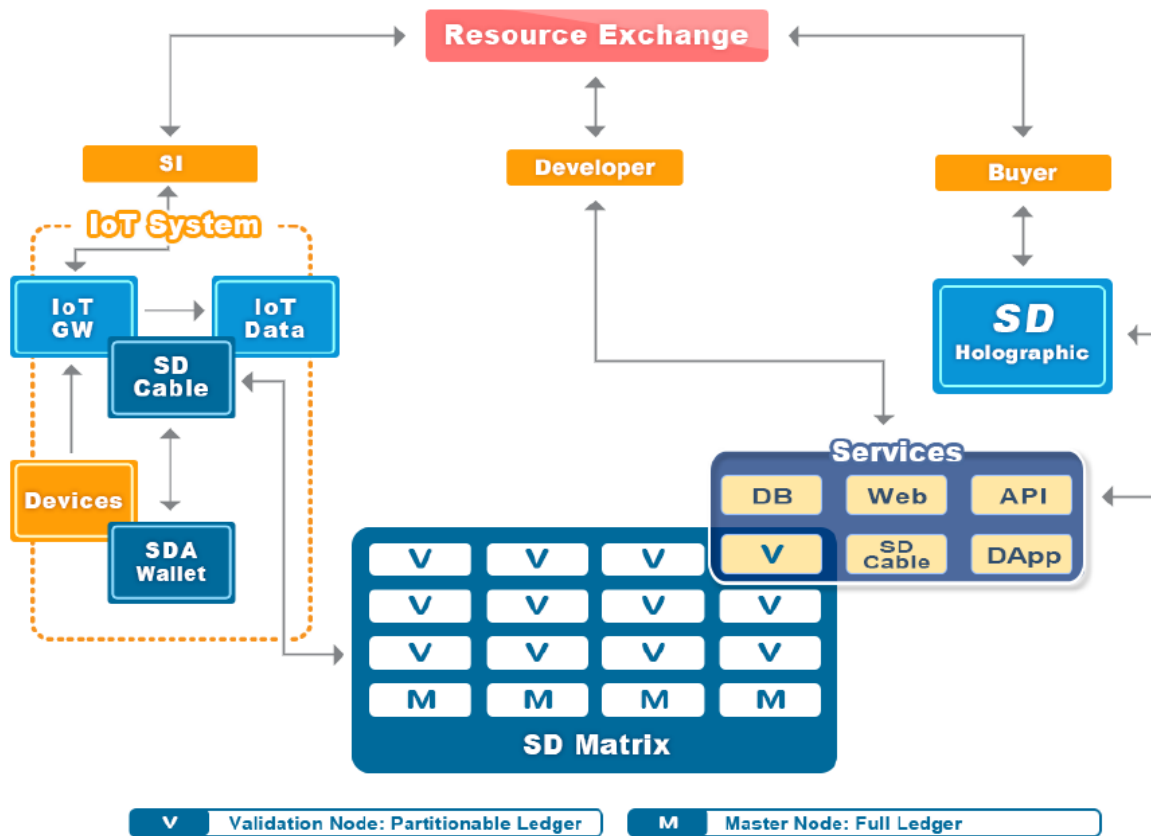


Figure: SDChain -optimized IoT service architecture.

The Internet of Things system based on the “six domain model” has effectively classified the Internet of Things users for the six domain chain, mainly including Internet of Things business users (individuals, enterprises, governments, etc.), entity asset owners, and objects. In addition, there are networked device users, IoT service platform users, IoT operation and

maintenance users, and third-party business cooperation users. According to the characteristics of the above-mentioned users and the characteristics of the blockchain business, the bottom layer of the six domain chain is modularized to meet the multi-dimensional and multi-role security protection, data privacy, distributed data storage, and trusted data asset access. And there is a strong underlying guarantee for trading, etc.



SDChain © SDChain 2018

Figure : SDChain are perfectly integrated into the IoT application architecture.

The optimization design of the SDChain in the consensus algorithm is determined by the high distribution and differentiated business attributes of the IoT. It is not possible to simply copy the other consensus algorithms from public blockchains that are mainly issued with digital tokens but lack application support. The IoT is an integrated and complex heterogeneous system. The IoT devices involve a wide range of industries, business secrets, and large differences. Communication protocols are also varied. Therefore, the security and performance of the underlying blockchain are high. The SDChain proposes a SDFT algorithm based on these characteristics. It uses the high-conformance RAFT and high-concurrency PBFT for reference, and solves the problems of security, high performance, and trust.

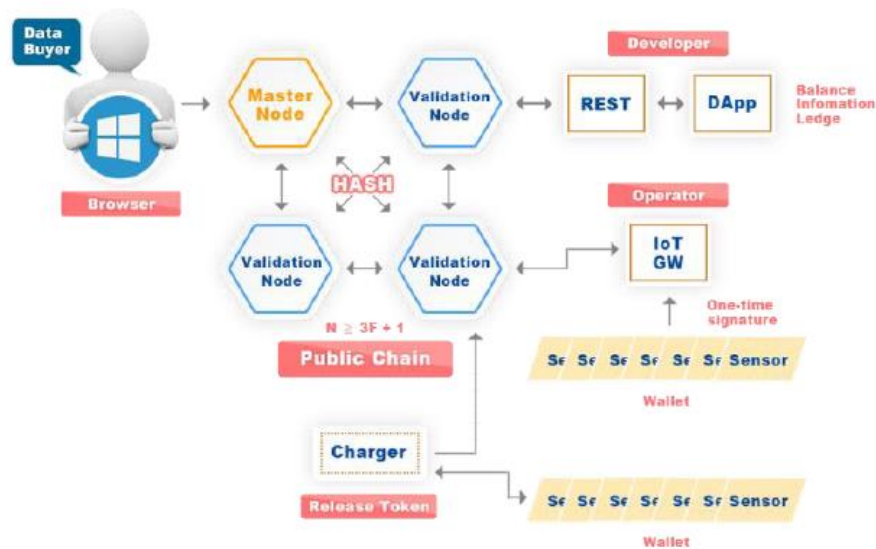


Figure : SDChain consensus algorithm SDFT adopts a layered architecture.

3.Co-Chain Technology

Co-Chain is an innovative blockchain collaborative symbiosis technology proposed by the core development team of Six Domain Chain. Based on the underlying blockchain of Six Domain Chain, it can quickly establish a new blockchain underlying platform with equivalent functions. The newly established Co-Chain is not a general concept of "sub-chain" and "side-chain", but an independent, symbiotic blockchain with autonomy and a chain-type super consensus node in the entire network. Co-Chain internally implements independent ledger verification and consensus through the SDFT consensus algorithm, and has a network-wide ledger synchronization mechanism that uniformly consumes SDA as the basic accounting fuel. Currently, the throughput of a single Co-Chain supported system has exceeded 10,000 TPS (Transaction Per Second). Co-Chain has independent Token issuance rights, including the type and quantity of Tokens in the Co-Chain community. Co-Chain can realize interconnection and interoperability, coordinate the resources of the entire network, and can also realize cross-chain interaction with various other mainstream consensus algorithm blockchains through the smart contract model, truly realizing the Chain-to-Chain collaborative ecosystem.

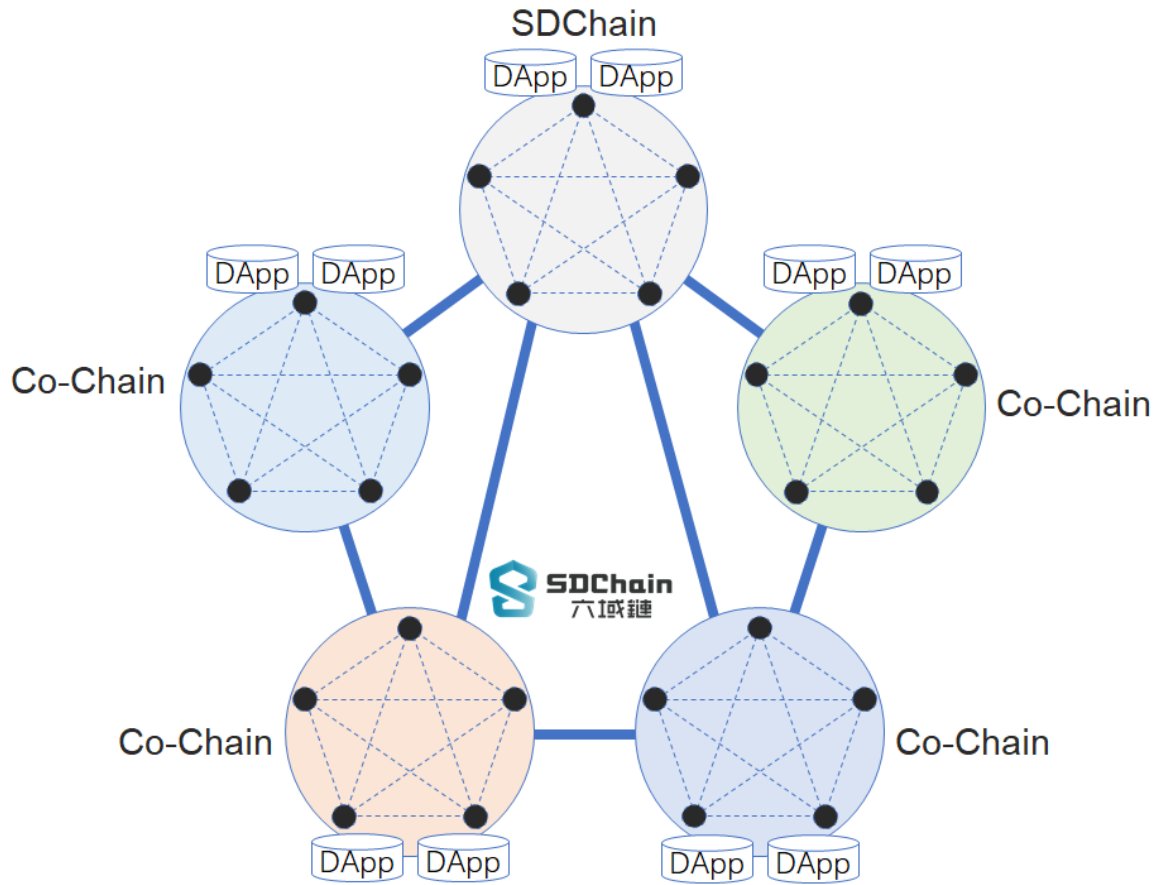
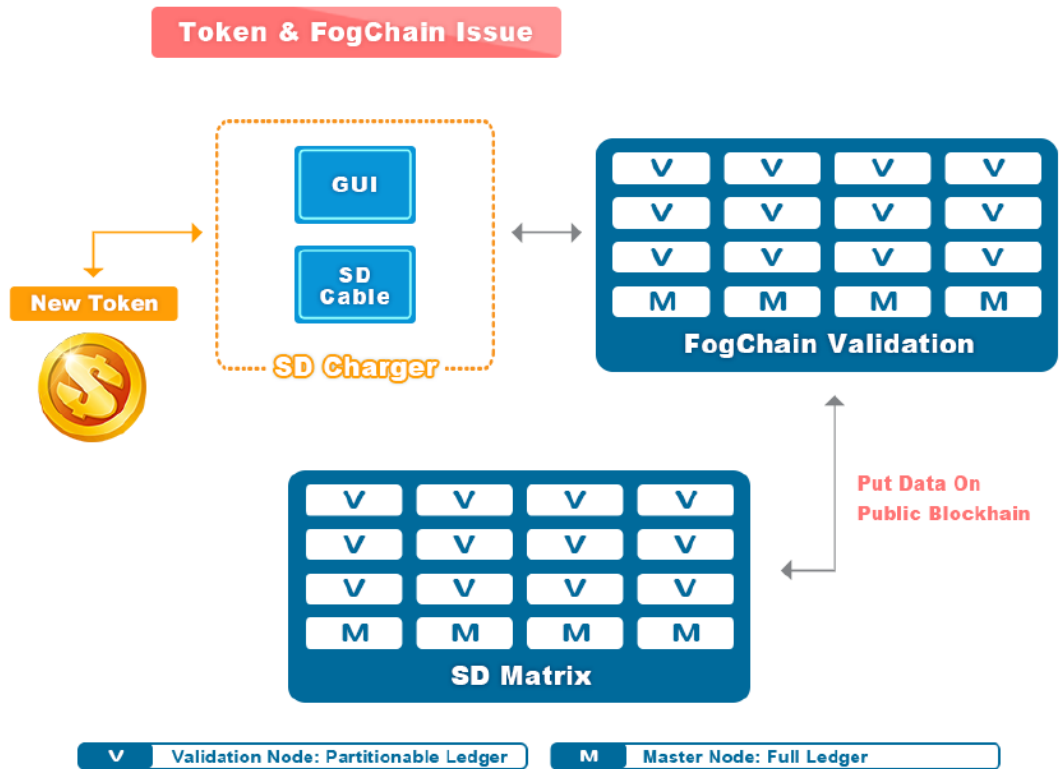


Figure : Co-Chain is an independent, autonomy symbiotic blockchain.



SDChain © SDChain 2018

Figure : Co-Chain has the power to issue independent Token.

Co-Chain has independent Token distribution rights, including the type and number of Tokens in the Co-Chain community. Co-Chain can realize interconnection and interoperability, cooperate with the whole network resources, and realize cross-chain interaction with other mainstream consensus algorithm blockchains through the smart contract mode, realizing the Chain-to-Chain collaborative ecosystem.

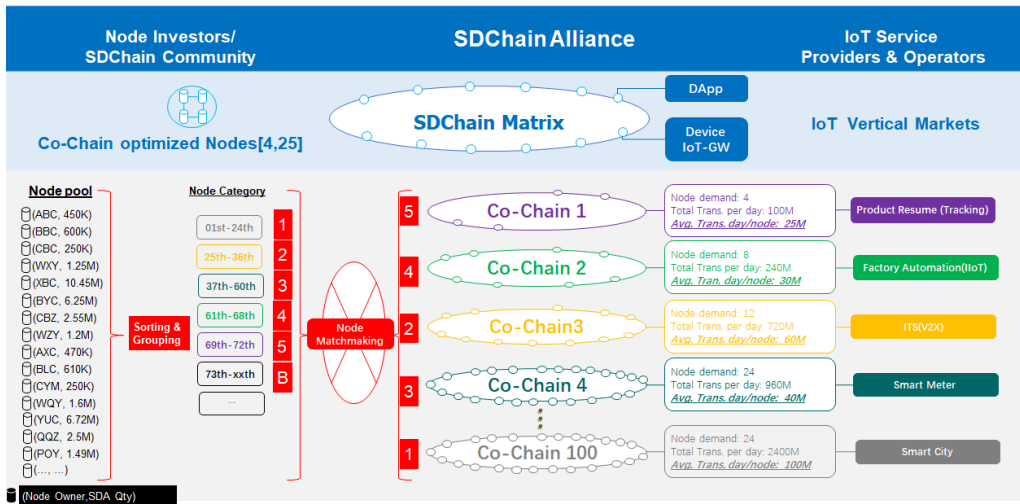


Figure : Co-Chain program includes both SDA Node and Co-Chain Operator

4. Application Value

As the basic tradable equity certificate in the Six Domain Chain community ecology, SDA main application scenarios and value logic include but are not limited to the following:

1. SDA serves as the underlying accounting Gas of the Six Domain Chain community ecology, including the underlying accounting Gas of Co-Chain. Six Domain Chain is equipped with SDA Feepool, which serves as the unified gas settlement basis for the entire network.
2. SDA serves as the equity certificate for accounting nodes and valid wallet account activation in the Six Domain Chain ecosystem to ensure system security.
3. SDA participates in community governance as a general equity certificate for business pledge, guarantee, voting, etc. in the Six Domain Chain community. SDA holders can vote on governance proposals based on the weight held by SDA. When there are serious differences of opinion in the community or major project events Voting on governance proposals can be initiated at any time (such as protocol modification and consensus upgrade, network maintenance, project token distribution, major community emergencies, community promotion incentives).
4. A universal equity certificate for the use of various DApps, resources and services in the Six Domain Chain community; as a general equivalent for the issuance, confirmation and transaction of digital assets in the SDChain application ecosystem: SDChain not only supports the issuance and confirmation of various digital assets And transactions, etc., it is also possible to establish a data asset system closely related to physical world

assets through the Internet of Things, and promote mutual transactions between data assets.

5. SDA serves as the basic settlement voucher for data asset transactions in the Six Domain Chain community and between Co-Chains, as the cornerstone asset reserve for the construction of Co-Chain sub-chains. SDChain supports the issuance of various sub-chains on the basis of the parent chain, that is, Co-Chain technology. The issuer of any sub-chain can easily obtain sub-chains with independent management rights through SDA locking or cornerstone asset reserves, thus reflecting To improve the ecosystem of SDChain. Ecological projects on the Six Domains chain that need to issue digital assets must lock SDA or cornerstone asset reserves. Application ecosystems that do not issue digital assets can use the Six Domains open-source public chain technology to varying degrees through authorization.

6. Co-Chain secondary Token is mainly used as a tradable equity certificate for the value of data assets and services in Co-Chain's independent ecosystem. Especially on the Internet of Things application ecosystem, a certain proportion of secondary tokens are generally reserved to stimulate data production, processing and services in the ecosystem, and the rest are used for Co-Chain community development.

7. As an incentive token for the development of SDChain technology and community, it will continue to promote the development of technology and community ecology through incentives for the above contributors.

5. Ecosystem development

At present, the SDChain ecological project covers IoT applications, NFT digital collections, Arduoduo International Data Exchange, Taiwan IoT information security services and other applications. In the future, Six Domain Chain will aim at the integrated development of public chains and alliance chains. The public chain mainly targets community and decentralized network applications; the alliance chain mainly focuses on enterprise-level applications, and Co-chain technology protects enterprise-level application data security. Enterprise-level services continue to apply the IoT blockchain, including IoT information security services and IoT device on-chain certificate storage services; explore new business formats and models such as IoT big data trading and carbon rights trading; mine and artificial intelligence computing Cooperation with new technologies and new models such as force.

Public chain services are aimed at cooperation with some community application models of current mainstream public chains, focusing on typical application cooperation with Solana. Currently, SDChain develops and deploys SDChain Bridge technology products. In order to better realize transactions with Web3.0 assets, cross-chain exchange transactions with all assets on BNB Chain have been implemented. The next step will be to achieve cross-chain integration with other mainstream public chains. This makes SDA more widely used in the Web3.0 world.

6. Organizational chart of the SDChain Alliance

Organizational chart is as follows:

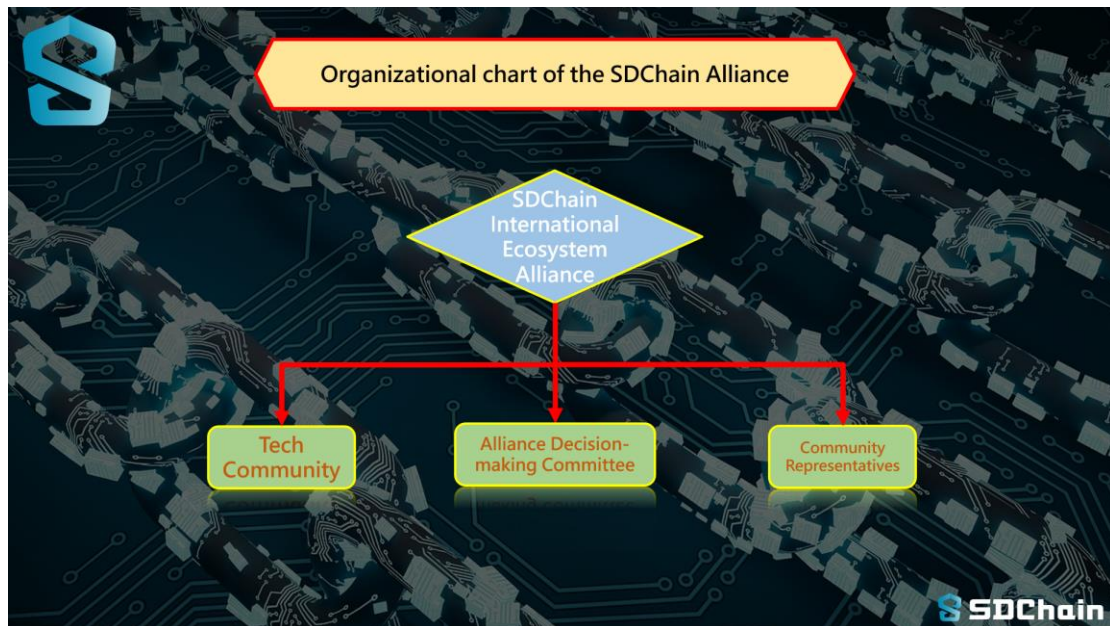


Figure : SDChain International Ecosystem Alliance