STREAM PROTOCOL WHITE PAPER

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1 ABSTRACT

Stream Protocol is a blockchain network-powered content revenue distribution system. When a user requests for settlement after revenue is generated from content, the revenue can be distributed in a fair manner according to clear standards as content-related information and contribution information of content contributors are recorded on the Content Smart Contract (Hereinafter "CSC") of tamper-proof blockchain network.

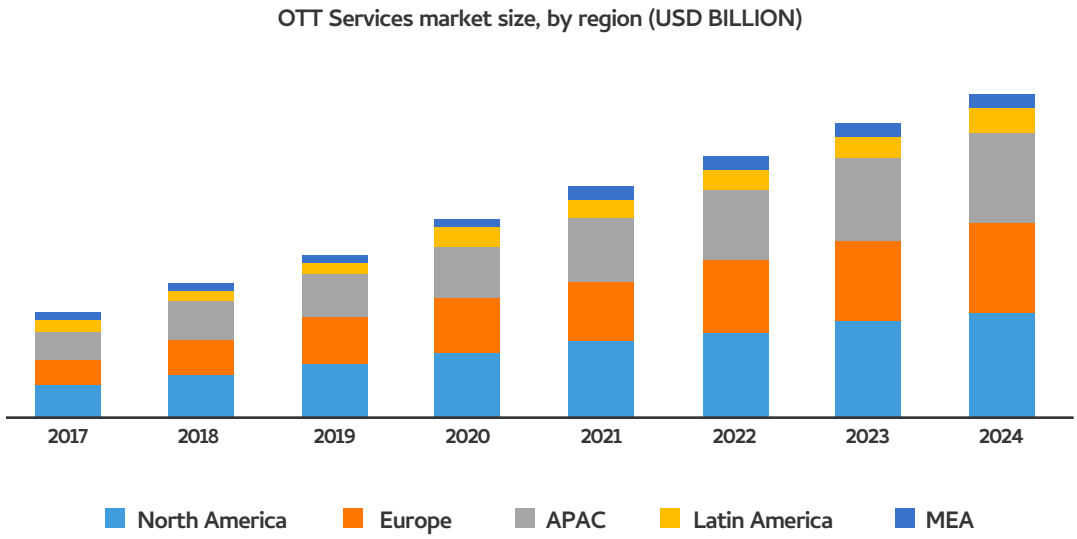
The system can solve the deep-seated problems held by the content market which is enjoying an exponential growth. First problem is the unclearness in revenue distribution standard. Second problem is the inefficiency in the content creation process. Current revenue distribution structure is unreasonable as content creators only receive fixed amounts of earnings regardless of the total revenue generated by content. It is also unreasonable as content creators often receive the same amount of earnings regardless of their level of contribution. Furthermore, re-investment on content and new content creation get delayed as the process from revenue generation to revenue distribution is complicated. Eventually, exponential growth in the number of content cannot be expected.

Stream Protocol builds a foundation for the sound growth of the content market by solving the abovementioned problems. Stream Protocol establishes an ecosystem where quality content can be created continuously by distributing content revenues with fair and clear standards while simplifying content revenue settlement and payment process. Furthermore, Stream Protocol turns content into separate shares by the level of contribution. Eventually, Stream Protocol will improve the content ecosystem in whole so that content contributors can focus on creative works while securing their rights. Also, Stream Protocol will enable the qualitative improvement of content through direct revenue distribution to each content contributor .

2 BACKGROUND

2.1 Exponential Growth of Content Market

Users can easily access and use various content due to the development of the Internet, a limitless virtual space, and infrastructure that fuels the Internet. Increased awareness of Internet users on content leads to the invigoration of the content market as users not only consume content but also generate revenue by uploading self-made content. In case of Over-the-Top (Hereinafter "OTT") market, a market represented by Netflix, the market is expecting an increased global market size of 110 billion USD by 2020 according to a research conducted by the Boston Consulting Group. The number shows that the global OTT market has an infinite possibility as the market has grown 20% from 93 billion USD in 2019.



2.2 Unclear Revenue Distribution Standard

It is clear that the total volume of content revenue is increasing along with the invigoration of the content market. However, most contributors who participated in content creation only receive fixed amounts of fee from the revenue generated from content according to a certain contract or receive the same amount of fee regardless of their level of contribution. Moreover, contributors who participated in creative works get neglected in the revenue distribution process while platforms and a small number of studios and agencies take large share of revenues when certain content gets huge attention in the market for its value. In other words, most contributors who participated in making creative works do not receive the adequate amount of rewards according to their level of contribution.

2.3 Inefficient Content Creation Process

Beside the diversity of content which is sacrificed by the logic of capitalism, it gets difficult to expect qualitative and quantitative growth due to the current content creation process which only aims to maximize profitability. For contributors to receive revenues generated from content, they have to go through a complex process that requires a huge amount of time. Therefore, inefficiency occurs during the process. In most cases, contributors who participate in creative works have a hard time burdening labor costs, technical expenses, and production costs needed in the early stages. However, there is a need to improve the efficiency of the process including investment, creation and revenue distribution as it is impossible to overlook the profitability of content. In short, the need for a platform that distributes revenue accurately and rapidly according to fair standards and enables the reinvestment of the revenue for content creation is increasing as to build a sustainable ecosystem for the content market that expects exponential growth in coming years.

3 VISION

3.1 Fair Distribution of Content Revenue

Stream Protocol suggests clear standards for fair revenue distribution. The standard is open to everyone in a transparent manner as the standard gets recorded on the blockchain network. Therefore, the standard is safe from individuals and entities seeking unfair and unreasonable private interest. Furthermore, the standard can be used to reduce costs that can occur from unnecessary conflicts.

3.2 Sustainable Ecosystem for Content Creation

Content creators can continuously make quality content as the system alleviates the burden of costs by enabling immediate settlement of payment upon content contributor's request. Content creators can focus more on creative works as the system supports them to overcome the limits of the current content market where large-sized studios, distributors and agencies hold initiative.

3.3 Protection of Content Asset Rights

Ultimately, Stream Protocol will develop into a platform that accurately suggests the shares within content and protects the rights of content assets. Revenue generated from content gets paid out to contributors according to individual shares in content as the level of contribution or contracted terms and conditions becomes the share in content. Thus, a virtuous cycle where contributors can focus on making creative works while enjoying the protection of rights can be established.

4 STREAM PROTOCOL

4.1 Innovative Revenue Distribution

STREAM PROTOCOL is the system to distribute revenues from a content based on 'contribution portion' of each contributor in the content. 'Contribution information,' including the contribution portion, is registered on the STREAM PROTOCOL blockchain network and becomes linked with the Content Provider Platform. That serves as the clear standard for the distribution of revenues from the contents to the contributors. Shares in the content, which used to belong only to few producers including the director and script writer, are now also distributed to contributors who have explicitly participated in the production. The contributors can enjoy persistent income through contents to which they have contributed, and that can serve as an incentive to enhance the quality of contents. Furthermore, cost burden to the creators has been reduced by simplifying the complex revenue distribution process. Revenue from the contents can be checked in real-time, and the system distributes the revenue to the contributors as soon as the request for settlement is made. Such an efficient settlement system facilitates the quantitative growth of contents through the circulation of production, revenue distribution, and reinvestment.

4.2 Usage-based Billing System

STREAM PROTOCOL basically adopts the usage-based billing system in which the users are charged in accordance with the time they used the contents, instead of the contemporarily popular subscription system. This strategy is based on the choice for mutually complementary co-existence with the existing OTT platforms rather than the differentiation for competition. In the existing subscription system, the content users experience the inconvenience of purchasing not the content itself but the subscription service of the platform on which the content exists, and OTT platforms are forced to consume resources to keep the users attracted to the subscription service. Usage-based billing system is the efficient payment system that provides the solution to the aforementioned inconvenience and also enhances the revenue of the OTT platform. Resultantly, adoption of STREAM PROTOCOL with the usage-based billing system enables contents providing the services beyond the limit of an OTT platform.

4.3 Cross-Platform Data Usage

Strength of Netflix, a global OTT company, is not just subscription economy. The key point of Netflix is 'personalized OTT.' They collect and analyze watch data of their subscribers to provide personalized curation service and induce long-term subscriptions. Because STREAM PROTOCOL is not limited to a certain platform, it can collect subscribers' watch data across various OTT services to be added. Then, simple but clear big data consisting of contents and users only can be built and personalized service beyond the limit of 'platform' can be provided.

5 EXPECTED SCENARIO

5.1 Content Contributor (Creator)

Content creators should continuously focus on making creative works by earning revenues through guaranteed content rights. In the case of video content, guaranteeing content rights in OTT platforms has become an important issue as revenues generated from online platforms including but not limited to OTTs surpassed the revenues generated from theaters. Stream Protocol can guarantee contributor's individual content rights based on trustworthy information as contribution information is recorded on the blockchain network. As such strength can attract potential and current content creators, content creators will upload and show their creative works by using Stream Protocol. Eventually, Stream Protocol will become the industry standard.

5.2 Content Provider (Platform)

OTT platform companies including but not limited to Netflix, Amazon Prime Video, and Disney Plus are investing on content creation in a continuous manner in order to increase the number of subscribers and to increase retention rate. The purpose of original content and exclusive content is to retain the consumers. However, content channels shall be diversified in order to maximize revenue per content. Pricing system that allows users to pay per content is required in order to generate revenue with individual content as differentiation strategy gets weaker when content is shared among different platforms simultaneously. Stream Protocol can be adopted as a solution that connects such niche markets.

5.3 Content Consumer (User)

As diverse contents platforms appear and subscription system become popular, contents users became able to enjoy wider range of contents with smaller cost. However, the temporal limit in content consumption ironically raised the psychological cost of choosing the platform. As a service focused on individual content consumption not OTT platform, STREAM PROTOCOL can resolve such an inconvenience that the consumers may experience. Also, efficient content curation service can be provided because collection of data on the user's content consumption pattern not limited to a single platform is possible.

6 INNOVATION OF STREAM PROTOCOL

6.1 Blockchain-powered System

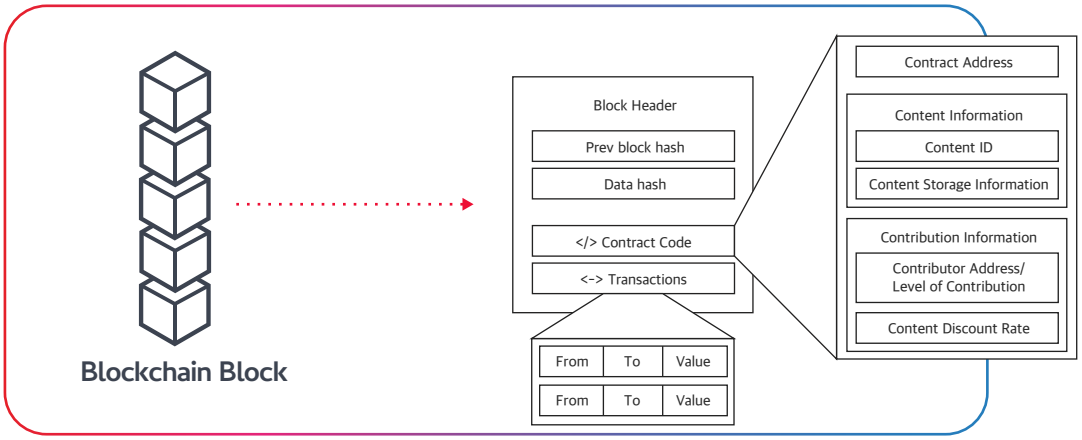
As mentioned above, the key feature of STREAM PROTOCOL is 'distributing the revenue from the content based on the contribution portion of each contributor to the content.' For the sake of innovation of revenue distribution feature, high credibility and security shall be prepared in the contribution portion. STREAM PROTOCOL transparently records the contribution portion on the blockchain to build the system with reduced trust cost that cannot be manipulated.

6.2 Process

Once the content contributors create the contents, the content providers register creation information, contribution information by contributor, and discount rate on the Content Smart Contract (CSC). When the content users pay the tokens to CSC account in proportion to the content using time, STREAM PROTOCOL estimates the total revenue of the registered contents. Then, the revenue is distributed in accordance with the contribution information recorded on the CSC. The distribution is not made at a random timing but at the request by the content contributors.

6.3 Contribution Information

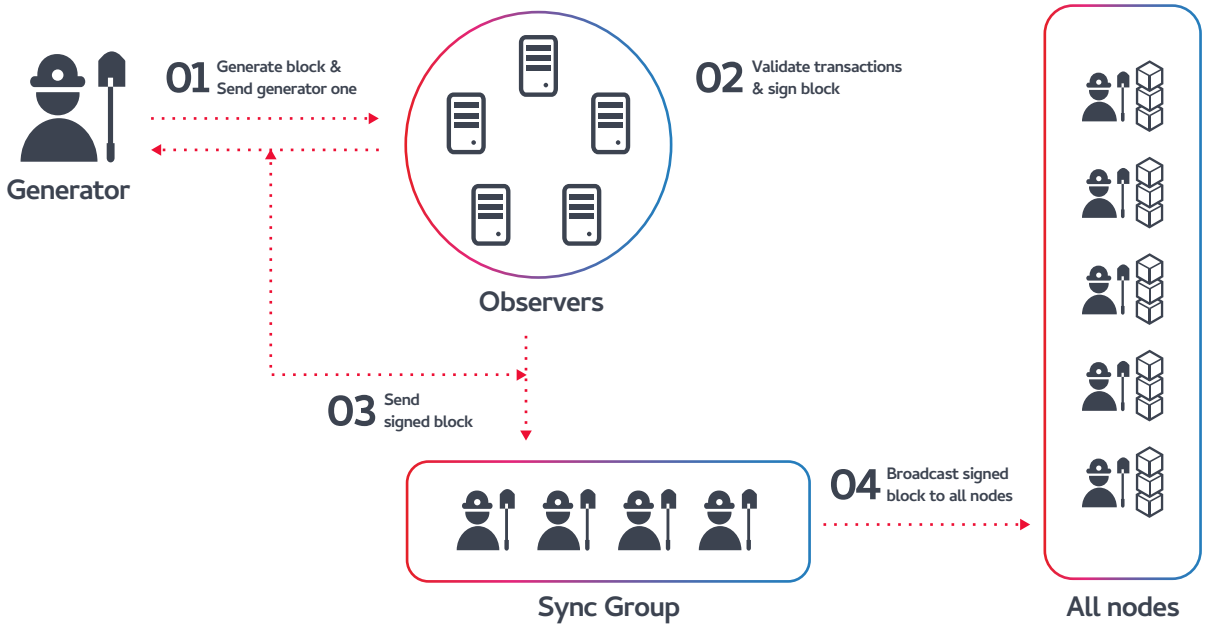
Contribution information is set and entered into the block in accordance with the details of the contract at the time of content creation. Or, contribution portion of each contributor calculated based on relevant parameters, including working time and investment, can be utilized as the contribution information. Whichever way the contribution information is set, reasonable distribution of the content revenue is guaranteed because the content share based on the contribution information is irreversible unless it is modified under the consensus.



Blockchain Network

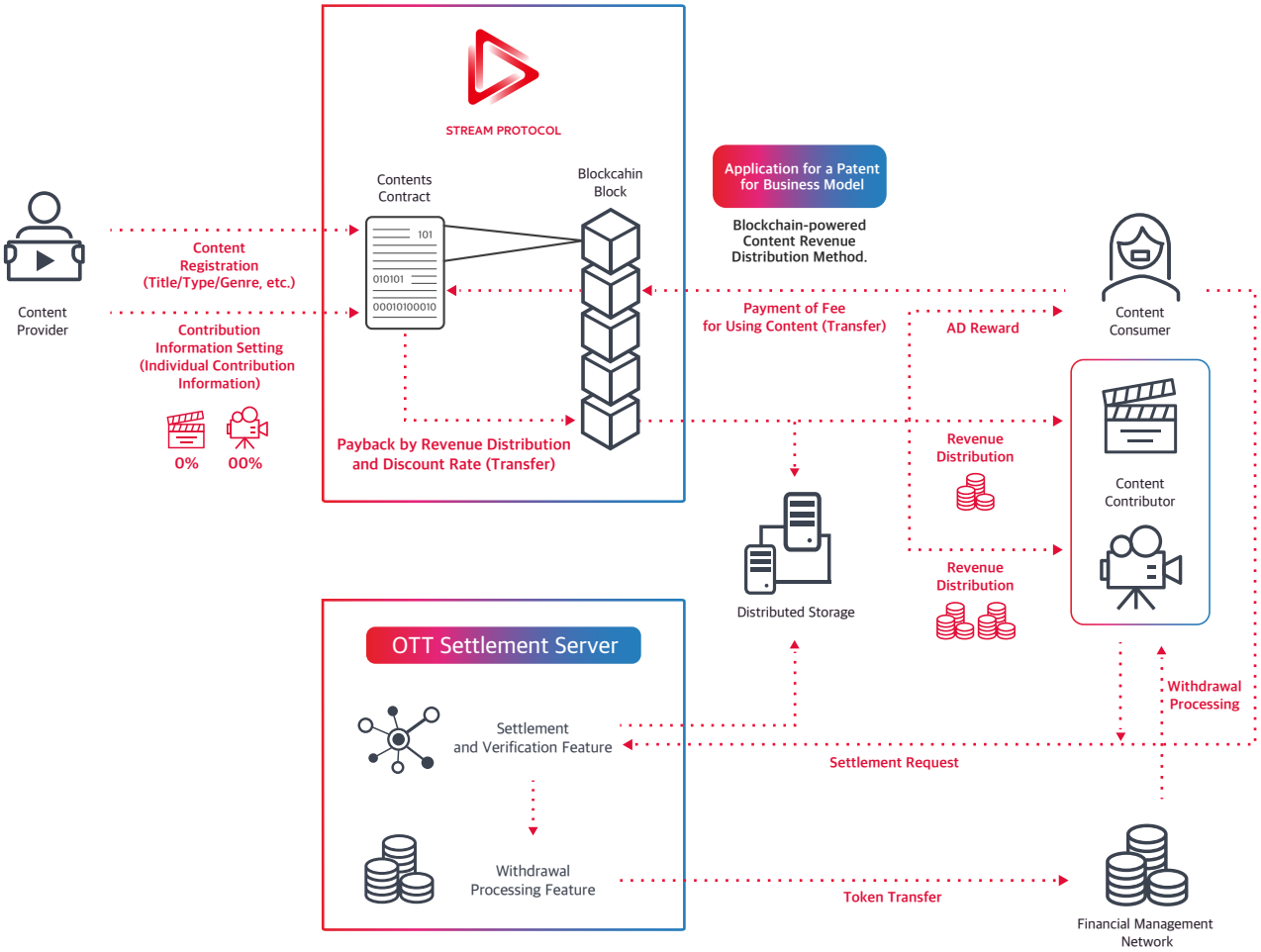
6.4 Proof of Formulation(PoF)

Blockchain network's transaction speed is the most important element to run a blockchain-powered system in reality. If transaction speed cannot support the system in full, it is difficult to build a satisfactory system even when the system is secure. Therefore, Stream Protocol uses FLETA platform's Proof of Formulation (Hereinafter "PoF") algorithm for the purpose of securing a certain level of speed that supports the actual service. As FLETA platform aims to reach 20,000 Transactions Per Second (Hereinafter "TPS"), users can experience linear user experience while not knowing the presence of blockchain network if Stream Protocol uses PoF to process contribution information.



6.5 Token

For content consumption in STREAM PROTOCOL, tokens are used as the means of payment. Content users can acquire the tokens through participations, including token purchase or watching advertisements, and pay for their content consumption with the acquired tokens. Because it uses the usage-based billing system, the users can track their remaining service hours through the amount of tokens in possession. Tokens paid to use a content are accumulated in the CSC account of the content. They are distributed in accordance with the shares of the content contributors if there is a request for the settlement or returned to the users in accordance with the discount rate of the content. Content contributors and users who acquired the tokens can exchange them with the legal tender through the financial management network. Because the flow of the token is verified at the time of settlement and recorded on the blockchain, misuse or abuse by a malicious user is thoroughly prevented.



6.6 Content Curation

Stream Protocol provides the curation feature based on the actual user data connected to individual content as a service that allows the users to use individual content regardless of the platform domain.

As the payment for using content is based on token-powered usage-based billing system, the amount of tokens paid by users can become the standard for content evaluation. This system can be regarded as a rating method evaluating each content by using the metric of 'Immersion'. If a user consumes a huge number of tokens on certain content, it can be seen that the user has immersed in the content by investing a certain amount of time equivalent to the number of tokens. For example, a content can receive a high rating if tokens equivalent to 120 minutes are consumed for using the content that has the duration of 120 minutes. However, if tokens equivalent to 30 minutes are consumed for using a content that has the same duration, the content will receive a rating lower than the previous case.

When the amount of consumed tokens acts as the standard for content rating, token consumption patterns will be used as the standard for the personalized curation feature. When Stream Protocol analyzes information of content that gains tokens from the users, Stream Protocol can recommend attractive content to the users as content-related information is recorded on the blockchain networks' CSC. Like other data-driven services, Stream Protocol will be able to provide a more accurate curation system when more users join and use the content more frequently.

7 ROADMAP

2019 11

Launching of Stream Protocol Project

2020 04

Application of patent for Stream Protocol business model

2020 07

Stream protocol
- sign MOU with OTT platform(Staby)
- form partnerships with companies in the digital content industry

2020 10

Stream protocol
- Mainnet launch
- Development of REST API

2020 11

Stream protocol based OTT media service
- Development of payment and settlement systems
- Integrate with OTT media service

2020 12

Stream protocol based OTT media service
- Beta launch

2021 Q1

Stream protocol based OTT media service
- Official launch

2021 Q2

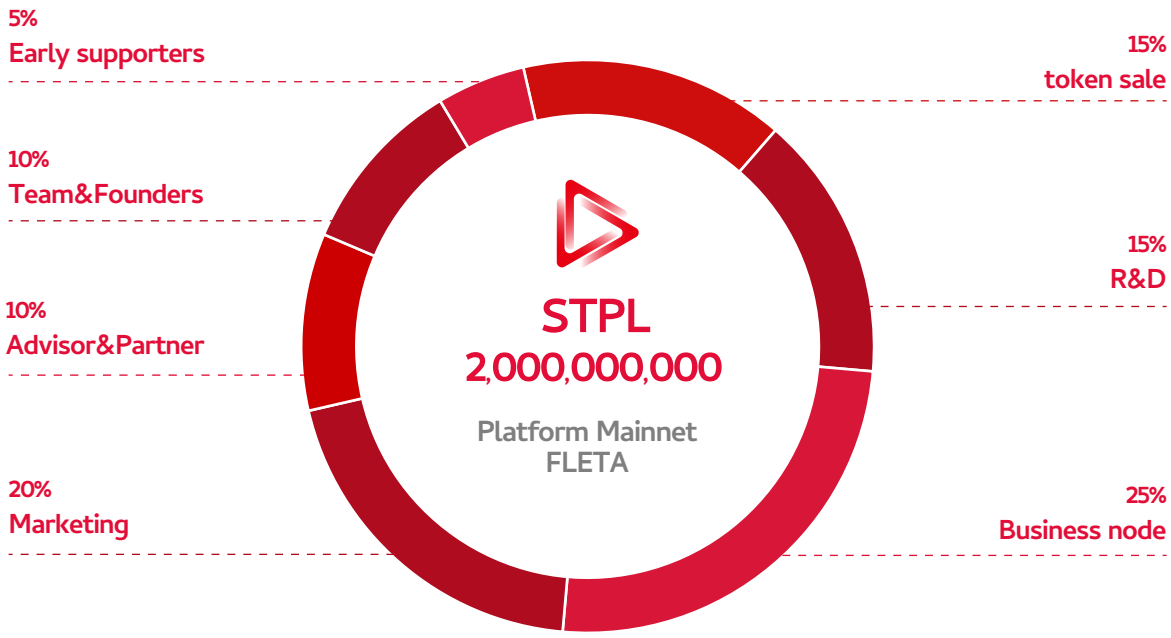
Stream protocol based OTT media service
- Content revenue distribution subscription service launch

2021 Q3

Stream protocol based OTT media service
- Expansion of business partnerships
- Content crowdfunding system launch

8 TOKEN METRICS

8.1 Token distribution



Category	Token Amount	Ratio	Lock-up Period
Token Sale	300,000,000	15%	-
R&D	300,000,000	15%	-
Business node	500,000,000	25%	Not in circulation
Marketing	400,000,000	20%	-
Advisor&Partner	200,000,000	10%	Up to 2 years
Team&Founders	200,000,000	10%	Up to 3 years
Early Supporters	100,000,000	5%	Up to 2 years
Total Amount	2,000,000,000	100%	-

8.2 Use of STPL Token

Payment for Charged Contents

In the streaming service with Stream Protocol applied, STPL is used to make payments for charged contents. STPL Tokens spent for the payment are distributed to the contributors depending on their content shares in the system.

Patronage and Funding for a Content

Users may patronize any content in the streaming service with their STPL Token or acquire investment returns by participating in crowdfunding to produce a content with the Token.

Reward for Advertisement and Participation in Content Survey

As the rewards for watching advertisements or participating in the review and survey on the contents, users can acquire STPL Token.

Node Structure

By holding STPL Token in the amount stated by each node, the user can receive node reward for the system verification.

9 GENERAL INFORMATION

This “Whitepaper” describes the token economy and token features of STPL. This Whitepaper has no relevance with any kind of guide and shall not be interpreted as a suggestion or investment attraction for any securities or other financial instruments under no jurisdiction. This Whitepaper cannot be revealed or distributed to the United States of America or its citizen (as defined under Regulation S under Securities Act of 1933 as amended). Also, this Whitepaper shall not consist any kind of advice (finance, law, tax, etc.) and shall not be relied upon in regard to decisions to purchase the Token. This Whitepaper was written in accordance with the view and plan of the Company as of the date stated on the cover page. The “Company” shall hold full discretion to revise parts of the Whitepaper from time to time depending on its business orientation. Revised version of the Whitepaper shall be in effect as soon as it is revealed.

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Language

If there is any collision between any of the translated versions and the English version of this Whitepaper, the English version always takes precedence.