



Beauty Contents Social Media

Connect & Share your Billions of Grooming knowledge

White Paper v1.0 Road Map v1.0

Index

1. White paper	4
1) Summary – What is Groo coin?	4
2) Introduction	5
2-1. Changes in the Cosmetics Market	5
2-2. Mobile Platform Orientation	6
2-3. Platform based on EOS Blockchain	6
3) Components of Platform	7
3-1. Groopoint	7
3-2. Groo.io Mobile Application	8
3-3. Groo.io Creative Tool	8
3-4. Groo Private API (Application Programming Interface)	8
3-5. Groo.io Platform Database	8
3-6. Groo Marketing Analysis	8
3-7. Groo Privacy	9
3-8. Groo.io Platform Self-Advertisement	9
4) User Role	10
5) Technical Particulars	10
5-1. Technical Structure of Groo.io Platform	10
5-2. Groo Core Layer	11
5-3. Service Layer	11
5-4. Application Layer	11
5-5. Calculation of Contents Reward	11
5-6. Groo User Level	12

	6) Steps for Prevention of Unauthorized Uses	.13
	7) Groocoin Coin Distribution	.14
	8) Final stage	.14
2.	Road Map	.15
	Groocoin of 2018	.15
	Groocoin of 2019	.15
3.	Legal Considerations	.18

1. White paper

1) Summary - What is Groo coin?

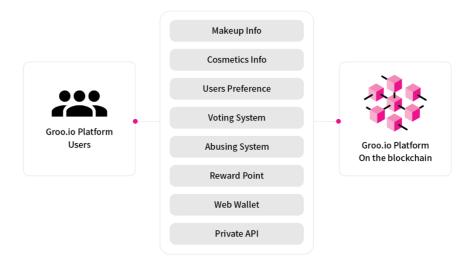
The Project Groocoin is the cryptocurrency based on the Blockchain network which is used in the new social media platform (referred to as the 'Groo.io Platform' hereinafter) which allows the easy and rapid sharing of the makeup cosmetic information retained respectively by the diverse types of people.

The characteristics and intentions of the Groo Platform can be found as follows.

- Pursuit of the general acceptability of cryptocurrency through Groocoin and the Groo.io Platform.
- Mobile ecosystem of the open source platform.
- The platform based on the innovational EOS Blockchain.
- A more rapid execution of transactions but without fees.
- The company utilizing the Big Data reflecting the interest of users and the optimized advertising platform present among the consumers.
- The user-friendly UI and the excellent accessibility.
- Easy sharing with the existing social media applications.

The Groocoin Project aims the creation of the social media platform of beauty contents to consolidate the relevant contents dispersed throughout the whole world by promoting and accumulating the contents of superb quality through the aggressive partnership with the Private Makeup Creators engaged in their activities in different types of social media and blogs.

The companies can plan the Target Marketing to achieve the maximum efficiency yet at the minimal cost based on the extensive Big Data offered at the Groo.io Platform.



2) Introduction

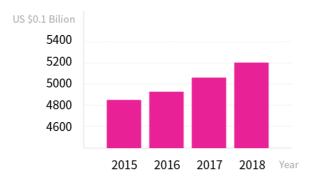
2-1. Changes in the Cosmetics Market

The scale of the global cosmetics market is 1) US\$ 520.3 billion with the stabilized growth recorded at the annual average growth rate of $2 \sim 4\%$. The cosmetics market is in an oversaturated condition and while the companies are investing a great sum of money for marketing, under the current circumstances, they mostly progress the marketing programs by adopting the celebrities as the publicity models rather than highlighting the functional aspects, as the essence of cosmetics, in order to appeal to the consumers in the market where lots of similar products have already been poised with their respective lineup.

Amidst this flux of advertising media, the consumers are striving to find out the cosmetics and makeup suitable for themselves but the contents presented in most of the platforms including the social media exhibit the features of corporate sponsorship and are created with the focus on the excellent properties of their proprietary products only rather than providing the objective data in light of the propensity, preference, age and others of the consumers. The consumers are suffering from difficulties in making the objective decisions based on these types of contents with lots of time spent for search of information through the Internet and this translates into the loss of the opportunity costs by the companies due to the exacerbated competition.

The Project Groocoin is currently developing the Groo.io Platform to allow the consumers to autonomously create and share the contents to have the diversified evaluation fed back from different consumers. The information about the consumers involved in the platform activities is recorded in the Blockchain after being anonymized to enable the transparent reference to the contents and information and this can be utilized as the ancillary indicators as the Big Data for the marketing activities of individuals and companies within the Groo.io Platform.

Cosmetic Market Volume



Euromonitor 2017

2-2. Mobile Platform Orientation

Despite the advances made in the cryptocurrency markets, the cryptocurrency is still an unfamiliar word for most of the general people. In order to purchase the cryptocurrency in general, the local currency possessed by oneself should be transmitted to the exchange but in the case of the cryptocurrencies listed only with the BTC and ETH markets without the local currencies supported, the corresponding cryptocurrencies can be purchased in the applicable BTC or ETH market after purchasing the BTC or ETH first without fail.

To be brief, in order to use the platform based on the Blockchain of a specific cryptocurrency, the above procedures should precede without exception and the exchange has yet to transmit the cryptocurrency purchased to the address of the wallet in the corresponding platform or the individual wallet. This process is often perceived as the barrier to entry by the general people and undermines the widespread acceptability of the cryptocurrency.

The Groocoin Project is a platform focused on the mobile network. The Groo.io Platform is planned to be launched as the mobile application with diversified languages supported and aims the more than about 1 billion female mobile users in Asia as its initial target. The users of the Groo.io Platform will be provided with the individual wallets simply by subscribing to the platform and they don't need to transmit the cryptocurrency to the exchange in order to use the platform contents. After creation of the contents, the users are assigned the Groopoint reward, which is awarded by the company, automatically after completion of the evaluation period of the corresponding contents based on the voting system participated by the individual users.

2-3. Platform based on EOS Blockchain

The Blockchain imposes a fee for each of transactions recorded in the Blockchain for compensation of the creator of the Blockchain. With the services offered to the general public such as the Groo.io Platform, more than tens of thousands of transactions should be processed per second in the Blockchain and the transaction fees and the delay in the processing speed incurred at this time pose a very serious impediment to the expansion of the service. The Groo.io Platform waives the transaction fees charged to the users and utilizes the EOS Blockchain for faster processing of the transactions. As the smart contract platform for rendering the decentralized application (DApp) services, EOS has vowed to resolve the problems related to the transaction fees for improved accessibility to the Blockchain services and the delays in the processing of transactions. The EOS Blockchain does not charge the fees to the users of DApp.

It utilizes the Delegated Proof of Stake (DPoS) introduced in Steemit and Bitshare which are the Consensus of EOS Blockchain. The blocks are created at the interval of 1 ~ 3 seconds and are capable of processing millions of transactions per second.

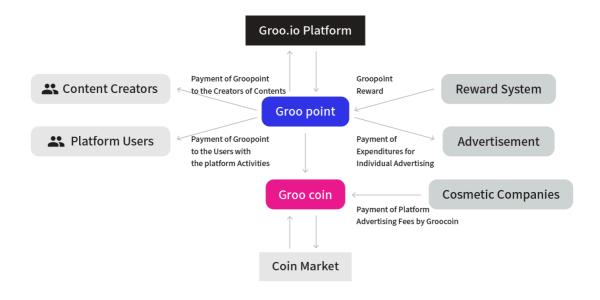
3) Components of Platform



3-1. Groopoint

The Groopoint is the reward point which can be used in the Groo.io Platform. The consumers can be awarded the Groopoint by creating the specific contents or based on the voting for and reply to the corresponding contents. A certain quantity of Groopoint can be converted to the Groocoin which can be purchased / sold at the exchange for each cryptocurrency. The Groo.io Platform is the platform utilizing DApp of EOS.

- 1. The reward point which can be awarded based on the platform activities.
- 2. By proving the stake in a specific quantity of Groopoint retained in the wallet, the service for increase of the exposure of contents can be used.
- 3. A certain quantity of Groopoint can be used for conversion into the Groocoin.



3-2. Groo.io Mobile Application

The Groo.io Platform offers its proprietary mobile applications. As the mobile application based on the Android and iOS platforms, the Groo.io Platform can be downloaded through the Google Playstore and Apple Appstore. By subscribing to the service after installation of the application, the users can be allowed to create the address of the individual wallets, to use the platform contents, to transmit the Groocoin and others.

- Subscription to the Groo.io Platform service (automatic creation of the address to the individual wallets).
- Platform activities.
- · Query of Groopoint or Groocoin.

3-3. Groo.io Creative Tool

This is provided in the form of a web site which enables the creation of contents which can be uploaded to the Groo.io Platform. When the contents are created, the corresponding data is recorded in the Blockchain and after expiry of the evaluation period for 30 days, the Groopoint can be awarded.

3-4. Groo Private API (Application Programming Interface)

The APIs are provided for a diversity of functions including the function for automatic posting to the Groo.io Platform for linkage with third party services, the Blockchain functions to allow the use of Groopoint and others.

3-5. Groo.io Platform Database

Since the Blockchain has not been commercialized to the level to allow the inclusion of all data comprising the platform at present, the Blockchain records the contents except for the large volume data in the first instance. The large volume data is stored in a distributed pattern by utilizing the IPFS (Inter-Planetary File System) and, before the launch of EOS IPFS Library, the large volume data is stored by using the AWS Storage Service (S3) with only the path to the files recorded in the EOS Blockchain.

3-6. Groo Marketing Analysis

The data which can be utilized is planned to be extracted and supplied to the partnership companies in a safe way through the Private API based on the analysis of big data for user preferences. The personal information will be developed within the limit not to be in violation of the fundamental privacy agreement.

3-7. Groo Privacy

The policies related to the disclosure or nondisclosure of profiles, follow and others are planned to be developed to the level not to pose any problems in the use of platform services with reference to the privacy policies and models of Facebook, YouTube and others which are most widely used by the users.

3-8. Groo.io Platform Self-Advertisement

The Groo.io Platform comes with the platform for self-advertisement. The individuals and companies can be allowed to carry the advertisement for specific products if they pay a certain quantity of Groocoin.

The advertisement platform can be utilized after uploading the KYC documents and completion of the examination thereof.

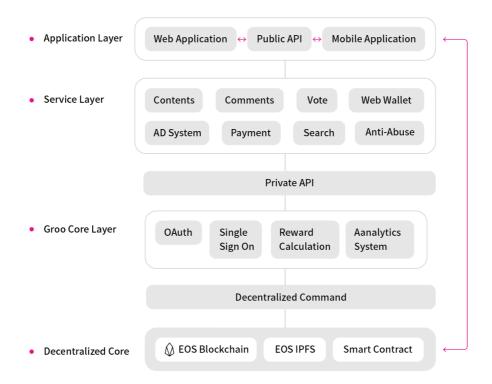
4) User Role

The users are allowed to post the contents, give the vote and express one's opinion in the Groo.io Platform. The users are granted the title at 1-5 Lv in proportion to the platform activities and, apart from this, they are allowed the advantages in creation of the contents by proving a specific quantity of Groopoint retained.

5) Technical Particulars

5-1. Technical Structure of Groo.io Platform

The Groo.io Platform intends to achieve the decentralized architecture. The contents uploaded by the users are recorded only in the Decentralized Core (EOS Blockchain, IPFS) but not stored in the Groo.io server. To this end, the Groocoin Team makes the platform based on the Blockchain network and IPFS (Inter-Planetary File System) and the Smart Contract for implementation of the fair reward system and aims to ensure the transparency of information which can be referred to by everybody. The platform is under development based on DApp (Decentralized App) utilizing the EOS Blockchain as the means to resolve the most serious problems of the Blockchain service such as the slow processing speed of transactions and the excessive consumption of computing power. The Groo.io Platform is composed of 4 layers (Application Layer, Service Layer, Groo Core Layer and Decentralized Core) as in the figure below.



5-2. Groo Core Layer

The Groo Core Layer assumes the role of the back-end component of the system performing the reward calculation, serving as the certification system and providing the Private API. The Groo Core Layer is composed of the Decentralized Core storing the EOS Smart Contract in the form of Web Assembly and the part for connection with Service Layer. The Reward System calculates and assigns the reward to the contents based on the user reward formula in accordance with the rules defined in the smart contract by utilizing the Reward Calculation Module at midnight every day. The reward assigned to the contents is paid to the users involved in the platform activities and the creator of contents in the form of Groopoint after expiry of the evaluation period for 30 days. As the means for distinguishing the users in the Blockchain network, the Authorization Module assigns the unique identification number to each user. In addition, by supporting the SSO and OAuth technology, the Groo.io Platform furnishes the function to allow the easy and convenient linkage with the services offered by the partner companies.

5-3. Service Layer

Within the Service Layer is executed the core logic of the Groo.io Platform. The Service Layer screens the large volume data of the size which cannot be accommodated in the Blockchain at present such as the images, videos and others and stores them in the Decentralized Core through the Private API. Since the present Blockchain technology consumes too much resources to store the large volume data, it is planned to apply the IPFS Library of EOS to the Groo.io Platform to supplement the weakness. Before the time when the EOS IPFS Library is launched, the large volume data will be stored by using the AWS Storage Service (S3) and only the path to the files will be recorded in the EOS Blockchain. The contents are recorded in the EOS Blockchain in the structure defined in the smart contract and the malign users cannot modify the data at discretion.

5-4. Application Layer

The Application Layer includes the mobile applications and web services used by the users. The Groo.io Platform is the starting point where the data begins to be recorded in the Blockchain. The web and mobile application services include the functions for the Groo.io Creative Tool and the Wallet for storage of Groocoin and Groopoint. In order to store or retrieve the data at the Application Layer, the data can be queried from or recorded in the Blockchain network by utilizing the Private API and the Decentralized Command after invoking the Service Layer module. In addition, the partner companies can be allowed to develop the third-party services, carry the advertisement of the customization type for themselves or extract the data on top of the Groo.io Platform when the Public APIs are provided.

5-5. Calculation of Contents Reward

Assuming the number of contents within the Groo.io Platform is n on a day, the reward ratio P

awarded to a specific content x is calculated by the formula comprising the vote score V and the number of comments attached C as follows.

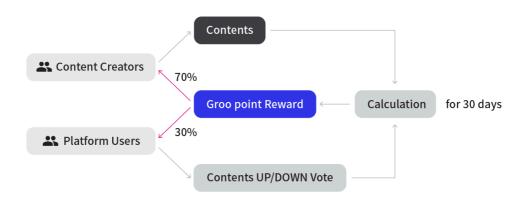
$$p_{x} = \frac{v_{x}^{2}}{\sum_{i=1}^{n} (cv_{i}^{2})}$$

When the total daily reward of Groopoint is assumed to be S, the daily reward R assigned to the content x and the daily reward C awarded to the creator are determined as follows.

$$R_x = S \times p_x$$

 $C_x = R_x \times 0.7$

The daily reward is calculated at midnight every day and accumulated at each of the contents. The settlement of the Groopoint reward and issuance are carried out in 30 days after the contents are uploaded. After this time, the settlement is carried out at midnight every day until the contents are deleted. The time is based on the Universal Time Coordinated (GMT +0).



- 1. Evaluation of the votes and comments attached to the contents uploaded by the creators.
- 2. Allocation of daily issuance volume to each of the contents depending on the vote score and the number of comments attached.
- 3. Compensation of the contents by Groopoint after 30 days.
- 4. 70% of the Groopoint assigned to the contents is awarded to the creators.

5-6. Groo User Level

The Groo User Level is calculated based on the Activity Point for each user at the Groo.io Platform. The level is determined in a relative way and is distinguished into 5 levels depending on the standard normal distribution. The Activity Point is determined on the basis of the activities for posting of the contents, comments, up/down votes, participation in reporting, follow and others in the Groo.io Platform. Since the activities at the platform contribute to the growth of the contents of the high

quality and the stabilization of the platform, the compensation is granted based on the automatic calculation in the Reward System. With the participation in the voting system allowed to the users at Lv.3 or above, the Platform implements the system to award the larger reward to the more active users.

Lv. 1 Lv. 2 Lv. 3 Lv. 4 Lv. 5

6) Steps for Prevention of Unauthorized Uses

It is not possible to completely block the possibility of abuse at the source for the incentives retained at the Groo.io Platform. In addition, there is a possibility that the cases may be discovered among the contents in circulation which require the inspection without exception such as the gambling, porn, fraudulent posting and others. When the unsound contents are uploaded to the platform, the users cause the contents to be inspected automatically by participating in the up/down voting system in person. If any user improperly reports the normal contents with malign intent, the Activity Point of the corresponding user is deducted. Moreover, if the user is degraded to a level lower than Lv.3, the user loses the right to participate in the voting system.

Technical Responses

- The user detected in the inspection of contents receives the penalty to have the AP (Activity Point) deducted.
- The users with a low level of AP are also disadvantaged in the award of reward subsequently.
- The Level System in the Groo.io Platform was designed to grant more of privileges to the active users with the opportunity for a larger amount of profits.

7) Groocoin Coin Distribution

Token Initial: GROO

Total supply: 900,000,000 EA

Circulating supply: 720,000,000 EA

• (ICO Token Sales): 270,000,000 EA

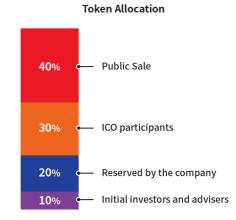


Figure 15. Allocation of Tokens

Out of the total 900 million EA issued, 720 million EA are for supply to the market, of which 30% or 270 million EA are allocated to the participants at ICO. 10% of total issuance quantity is allocated to the initial investors and the advisors and 40% is allocated for public sales. The residual 20% will be reserved for compensation of activities at the Groo.io Platform, research, activation of the community and others and will be disbursed as the expenditures for activation and expansion of the Groo.io Platform in the initial stages.

- ICO participants 30%
- Reserved by the company 20%
- Initial investors and advisers 10%
- Public Sale 40%

8) Final stage

The ultimate objective of the Groo.io Platform is the social media platform fully based on Blockchain to enable the users to search for and refer to the makeup cosmetic contents preferred in each market with ease just as they search through the TV channels by establishing the unified platform to incorporate the makeup cosmetic markets across the whole world and, based on this, to award the reward to the users solely based on the platform activities.

All of the serial processes generated when the users use the platform are recorded in the Blockchain after being anonymized. The anonymized data can be used for creation of new value by converting them into the big data and delivering it to the corporate customers. The companies can analyze the preference of the individual consumers with ease by utilizing the Groo.io Platform and use the result for plan of the effective target marketing. As the number of platform users is increased, this effect will snowball.

^{*} The above allocation ratios can be varied depending on the amount gathered through the event for creation of coins. The accurate information related to sales is planned to be announced through the official channel of Groocoin.

2. Road Map

Groocoin of 2018



Groocoin of 2019

0	2019 Q1	 Groo.io Platform Official Launch
		Groocoin 1:1 swap (Ethereum Token to EOS Token)
		 Exchange Token update support
		 Ongoing Partnership & Sponsorship with Asia Cosmetic companies
0	2019 Q2	Groo.io Platform Mobile Application launchGroo.io Platform Payment Gateway API

2019 Q3
 Groo Analytics CBT (Closed Beta Test)
 Expand partnership & sponsorship
 2019 Q4
 Groo Analytics Launch

The Groocoin Team has the phased plan for development of the coin based on the Blockchain, the Platform, Reward System and API. During 2018, the Groocoin Team will focus their efforts on the development of their first product, EOS DApp (GROO Platform), and the Groo.io Platform is planned to be launched with its official version during the first quarter of 2019 after going through the steps for Close Test, Alpha and CBT. Going forward, the plan for development of Groo Analytics is planned to be added.

1) Issuance of Groocoin

The Groocoin Team plans to issue the precedent coin through the Ethereum Platform (ERC20 Token) and list it with the major exchanges with priority. Moreover, by the continuous attraction of the partner companies for the Groo.io Platform, the publicity effect is aimed to be increased based on the expanded exposure to a larger number of potential users. At the same time, the Reward System to be used in the Groo.io Platform will be developed in parallel with the development of the antiabusing system algorithm to prevent the abuse by the malign users and the improvement efforts will be made for the diverse UIs (user interfaces) for the convenience of users.

2) Development Phase

This is the process for development of the Service Layer which implements the core logic of the Platform. This includes the development of Web Assembly Smart Contract, the connection with the Decentralized Core and the part for connection with the API Layer. In addition, the algorithm for verification of the abusing contents and the reward algorithm will be developed. During the Development Phase, the partnership contracts are planned to be actively executed with the Private Makeup Creators and a certain level of reward is planned to be paid for the initial contents.

3) Launch of Platform and Groocoin 1:1 Swap

The condition whereby 20 or more verified contents exist and 100 or more users are engaged in the activities within the Blockchain is considered the minimum usable condition of the Platform. After launch of the Platform, the 1:1 Swap will be executed with the Groocoin (EOS Token) which can be used in the Groo.oi Platform for the possessors of Groocoin (Ethereum Platform Token) who extended the selective advance investment.

4) Development of Groo Analytics

When the Groo.io Platform is activated, the system (Groo Analytics) is planned to be developed which can be used for analysis of the user preferences recorded in the Blockchain. The cosmetic preferences of the anonymized users are planned to be extracted and converted into the data which can be utilized through the analysis of the big data and provided to the partner companies through the Private API to be developed. The Groo.io Platform will establish the foundation for mutual growth through the sharing and operation of the data which can be utilized in diverse fields including the development of products, advertising and others.

3. Legal Considerations

This White Paper is the document to record the particulars currently planned by the Groocoin Team in relation to the Groocoin and the Groo.io Platform (referred to as "this Project" hereinafter). The Groocoin Team reserves the right to amend, change, add or delete the details related to this Project recorded in this White Paper without the notification to any third parties based on their reasonable management judgment in the course this Project is progressed.

The details recorded in this White Paper do not have any legal binding effect on anybody including the Groocoin Team and are offered for the simple reference purposes and the schedule for roadmap can be moved up or delayed depending on the relevant circumstances at the company.

The details recorded in this White Paper are only intended for communication of information and neither sell, recommend or suggest those recorded below nor recommend or suggest any behaviors related to those recorded below. All decisions and actions made on the basis of the information in the White Paper are the sole responsibility of the party which made the decision or action and the White Paper can be changed without advance notice. The participation in the Groocoin Project and the issuance of coin does not make the guarantee for any future profits or losses.

- 1) The other cryptocurrencies which can be exchanged or traded with Groocoin.
- 2) The investment in the Groo.io Platform, Groocoin Project or any other businesses or assets of the 'Groocoin Team.'
- 3) The shares or securities of the Groocoin Team or the group companies or affiliated companies of the Groocoin Team.