Last updated 2023. 05. 01

1. Background and Goal of PIBBLE 2.0:

As the digital content industry is booming with the rise of artificial intelligence (AI)-generated content, copyright infringement and protection issues are becoming increasingly important. PIBBLE project aims to provide digital content creators with fair and transparent monetization through a new platform centered on AI-based copyright management services.

PIBBLE2.0 will expand from the image-centered service of PIBBLE1.0 to a "copyright-based AI revenue generation platform" that expands the scope of content copyright management, including text, image, video, and sound, and uses AI to create and distribute revenue structures by recording various content types such as novels, webtoons, fanfic, and music, as well as content with secondary copyrights.

With the release of PIBBLE2.0, PIBBLE Team aims to expand its business by establishing collaborations and partnerships with various businesses that require copyright management, such as companies, schools, environmental companies, travel, and education, and to create a future where content creators and copyright holders can work together and receive fair compensation for their work.

The PIBBLE team is committed to building a future where content creators and rights holders can work together and be fairly compensated for their work.

PIBBLE2.0, which will be renewed in 2023, aims to become a hub for Al-based generative content where you can experience all commercially available generative Als, including ChatGPT, which has been gaining attention recently. It is a platform that leads the way in fair and transparent monetization of digital content and becomes a central topic of digital copyright, combining blockchain technology and Al technology to provide new licensing revenue streams for content creators and companies in a transparent and efficient way of ownership, transaction, and record management.

2. PIBBLE 2.0 Target Users:

The target users of PIBBLE 2.0 are as follows.

1) General public including professional content creators: All content creators who want to create and monetize all types of content, including text, images, audio, video, etc.

- 2) Copyright holders: All copyright holders who want to protect and monetize their works.
- 3) Users interested in blockchain technology: Users who are interested in a secure and transparent copyright protection system using blockchain.
- 4) Users interested in AI technology: Users who are interested in the creation and evaluation of creative content using AI technology and the future development and utilization of AI technology. PIBBLE 2.0 is aimed at users who are interested in creating and evaluating creative content using AI technology, and in the future development and utilization of AI technology. You can utilize AI technology to create creative content and predict the value of content evaluated by AI algorithms.
- 5) Users interested in the digital content market: Users who are interested in new trends and innovations in the digital content market.

3. PIBBLE2.0 mid- to long-term roadmap

PIBBLE Project aims to evolve into an "Al-based digital content metaverse platform" that applies blockchain and Al technology.

Season 1: Al-based content ownership record and monetization platform

Season 2: Al-based content marketplace

Season 3: Al-based content creation collaboration platform

Season 4: Building an Al-powered "copyrighted content" ecosystem

Season 1: Al-based content copyright management and monetization platform

Copyright management for Al-generated content refers to tracking and recording the copyright of content created with Al technology. This includes the management of original copyrights that are modified or used to create secondary copyrights. By utilizing NFT (Non-Fungible Token) technology,

ownership verification and transaction tracking of Al-generated content is possible. This protects the rights of copyright holders and records and tracks revenue streams.

- NFT-powered Content Ownership: Implementing NFT technology to verify ownership of Al-generated content and record transactions, and implementing a system to track copyright usage and ensure appropriate fees are paid to copyright holders.
- Content Upload and NFT Conversion: Users upload content and convert it to NFTs with blockchain copyright.
- Copyright record management for human creations and products created by AI
- Copyright record management of secondary works: Management of secondary works that
 use existing works to create new works. Use of secondary copyrights requires permission
 from the copyright owner and payment of a fee.
- Implementing license and royalty management services: Providing a platform to track copyright registrations and royalty payments, and to set and manage usage conditions, so that both copyright owners and users can protect their rights and interests.
- Implement natural language processing and interactive interface with ChatGPT

Season 2: Al-Powered Content Marketplace

An Al-powered content marketplace is a platform that uses blockchain and NFT (Non-Fungible Token) technology to track and manage the ownership and licensing of content, protecting the rights of content creators and allowing them to trade.

- Al-powered Content Marketplace: Allows users to sell and buy content creations such as images, videos, and audio, as well as products generated by Al.
- **Al-powered Content Distribution**: Distributes content creations and Al-generated products to various platforms and channels, and manages content distribution through smart contracts.
- Al-based Content Licensing: Allows users to license Al-generated content for commercial
 use.
- Develop advanced copyright management services such as automatic copyright registration, real-time tracking, and secondary derivative copyright through AI technology.
- Integrating advanced encryption and blockchain technology to enhance the security and protection of copyrights on the platform
- Create educational materials, guides, and community forums for content creators to ask
 questions and share experiences to help them better understand copyright law and the

process of registering and protecting their works through newly created Als, including ChatGPT.

Season 3: Al-based content creation collaboration platform

The PIBBLE 2.0 platform enables the creation of secondary works and collaborative works by utilizing NFTs registered as copyrighted on PIBBLE 2.0, such as novels, images, characters, likenesses, videos, music, and other content reworked or created using artificial intelligence (AI). By providing a comprehensive set of services and tools for copyright protection and management, PIBBLE 2.0 will become a leading platform for the creative community and a catalyst for innovation and growth in the copyright protection market.

- Al-powered content (co)creation tool service: Al-based co-creation service that supports the production of copyrighted Al creations and Al co-creations created by multiple people.
- Al-powered Co-creation Market Platform: Al-powered co-creation market platform ensures
 transparency and fair trade for collective works through co-ownership of copyright and
 co-creation, and security of content ownership and licensing.
- Al-based content financing: Cloud funding and funding system for collaborative projects generated by multiple users and Al.
- Licensing and Royalty Management: Providing licensing and royalty management services
 to enable copyright owners to set terms and conditions for the use of their works and receive
 fair compensation.
- Al-powered Content Discovery: Enables users to discover and explore new Al-generated content through personalized recommendations and search
- Al-powered advanced user experience and analytics: Develop advanced analytics and reporting tools to enhance the user experience by adding features such as user-specific recommendations, social sharing, and community engagement, and to help rights holders better understand the use and performance of their works.

Season 4: Building an Al-powered "copyrighted content" ecosystem

PIBBLE 2.0 expands the reach and impact of the creative and copyright industries. PIBBLE's Al-based content ecosystem will expand from its primary customer base of content creators, copyright holders, companies and organizations, consumers, co-creators, and funders to include travel and

tourism businesses that can use Al-generated content such as travel guides, images, and videos in their products and marketing, and museums and art industries that can create Al content for exhibitions and collections such as virtual tours, Gaming and XR companies that will need to manage the copyright of Al-generated content such as characters and game storylines, and other industries related to the copyright industry, such as education, media and entertainment, government, healthcare, environmental organizations, legal consulting, and advertising and marketing companies. The goal is to lead the advancement of copyright management and the expansion of the copyright industry, strengthening intellectual property protection and facilitating the creation, distribution, and monetization of Al-generated content.

- Updating the platform for copyright protection of Al-generated content: Expanding the
 platform to include Al-based content distribution, licensing, financing, and discovery, and
 enabling users to monetize Al-generated content more broadly within a comprehensive
 ecosystem.
- Expanding the Market for Partnerships and Collaborations: Expanding partnerships and
 collaborations with organizations and institutions in the extended creative and copyright
 industries to increase the market reach of PIBBLE 2.0
- Research and Development on Al Content and Copyright Protection: Research and development to apply new perspectives and interpretations on Al content and copyright protection as it is constantly being created.
- Educational Resources and Community Forum: Providing educational materials, guides, and community forums to help content creators better understand copyright law and the registration and protection process.
- Legal and Regulatory Compliance MonitoringLegal and Regulatory Compliance
 Monitoring: Continuously monitor the legal and regulatory landscape for Al-generated content and copyright protection, and make necessary updates to the platform to ensure compliance

4. 2023 Short Term Roadmap

1) Q1 2023 : 2023-01-01~2023-03-31

Design and development of copyright registration and monetization of contents including Al products

Record content copyrights such as text, image, video, audio, etc. and copyright NFTs for Al products

Application of GPT Chatbot

PIBBLE Wallet upgrade, multi-chain expansion including NFTs

Burning PIB tokens collected through PIBBLE token economics

2) Q2 2023 : 2023-04-01~2023-06-30

PIBBLE Whitepaper 2.0 Upgrade: Development Roadmap for Al Generation Sharing and Monetization

Establishment of PIB Governance DAO: DAO system for PIB holders

Apply AI design for 'Activity Index' in PIBBLE platform: Data of PIBBLE app user activity data accumulated over the years is upgraded into a meaningful 'Activity Index' and AI is applied.

Partnerships to expand the use of PIB tokens

Burning PIB tokens collected through PIBBLE token economics

3) Q3 2023: 2023-07-01~2023-09-30

PIBBLE wallet 2.0 multi-chain expansion

Expanded PIBBLE 2.0 Al design: Designed and phased in Al-based license management, Al-based content distribution, and Al-based content marketplace, including Al copyrighted NFTs.

Burning PIB tokens collected through PIBBLE token economics

4) Q4 2023 : 2023-10-01~2023-12-31

PIBBLE2.0 year-end award ceremony and event held
Established partnerships to expand the use of PIB tokens
Burning PIB tokens collected through PIBBLE token economics

[References] PIBBLE 2.0 development status updated 2023. 04. 26



context enrichment

- Generate sentences with the help of AI in the body text when uploading photos and videos.
- Based on the hashtags you enter, we generate appropriate sentences for social media.
- You can then edit the sentences and use them when uploading.

Story enrichment

- Chat is basic. You can enrich it with your own ideas and imagination.
- When you talk to the AI, you can give it a synopsis and it will create a more specific story.
- You can create and post serialized novels, poems, and even recipes with Al's creative ideas.

Al image fulfillment

- You can express the feeling of the picture you imagine in the text, and AI will draw a picture similar to the content of the text.
- You can post the finished picture immediately, and it can be utilized as an illustration by interweaving it with the story.

Al evaluation

- The Al analyzes the text information entered by the user and makes a sentiment evaluation.
- The company provides certain criteria and quantifies the evaluation results based on the judgment made by the AI.

CARA application development in progress. Scheduled to be applied in 2Q23

CARA, which stands for Creative Al Right Association, is a secure and reliable blockchain-based certificate for the ownership of digital content.

CARA utilizes blockchain technology to provide secure and reliable authentication of the ownership of content. It also provides an opportunity to monetize content if it is valued and licensed. CARA, combined with the AI technology provided by Pibble 2.0, records the ownership and movement of content, enabling CARA holders to securely record and monetize their content.

The Pibble 2.0 service will record the ownership of future AI creations through CARA on the blockchain and issue them as NFTs, leaving a record of future ownership verification. These records can be used as evidence in the event of copyright infringement.

In particular, with the development of AI technology, copyright issues for AI-generated content are becoming more and more important, and CARA certificates are expected to emerge as an important tool for copyright protection and monetization in the digital content market. The CARA certificate provides technical support for copyright protection, but does not assume legal responsibility.