

# WeKu

# Blockchain-based Creative Content and Social Network Platform with Rewards

Version: 0.73(draft)

WeKu.io

# **Abstract**

Along with the development of communication technology, various emerging technologies such as the Internet, mobile and blockchain have contributed to the rapid development of online social networks. The efficiency of online socialization has greatly increased the coverage and distribution of personal information and original content. More importantly, the internet connects individuals who use multiple technologies together. The transmission of information via the social networks presents a decentralized trend in which media values and rights are constantly being deposited to the individual, and the benefit of capital and technology allows individuals to have increasingly more monetary and social gains.

The goal of WeKu is to create a decentralized, social-centric, intelligent and creative content/social platform based on blockchain and IPFS (InterPlanetary file System). WeKu attempts to address the issue of how content creators and participants get paid for contents. WeKu plan is to achieve this by issuing WeKU tokens to content creators and participants. It will also create a public platform community which is truly owned by content creators and participants.

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# 1. Background

In the Internet 2.0 era, thousands of original writers, bloggers, columnists, and countless socially active users have created billions of dollars in advertising profits for social networking platforms such as Facebook, Twitter, Reddit, YouTube, WeChat and Weibo. However, these original authors did not have complete control over the works they created, nor did they fully share in the profits they generated for the social networking platforms. Most of the advertising and sponsor income generated from these works are owned by the platform, which greatly reduces the enthusiasm and creative quality of original content creators.

Most importantly, credit, fans, circle of friends and social data that the original authors worked hard to create would be blocked if the account was compromised. The vast majority of centralized platforms do not provide a user-friendly export interface for user data, leaving content creators unable to maintain and transport owned content if an account on a established social networks were compromised.

Pioneering attempts have been made to solve these problems by the well-known social media platform STEEMIT in the United States. Based on the blockchain technology, a set of decentralized public ledger transactions have been setup to record all of the produced content and original owners works and user reviews of that content. Additionally STEEMIT used a token to reward originators, content reviewers and witnesses of record transactions(mining). In less than 18 months, STEEMIT global site traffic rankings rose to about 2800, with more than 250,000 registered users and 500,000 articles. Based on digital currency STEEM's market capitalization is more than 350 million U.S. dollars.

STEEM's major users are from the English community and STEEM has no significant impact in multicultural communities. Its predefined reward mechanism cannot be dynamically adjusted to the needs of the community. Different types of creative content communities may require different rewarding mechanisms that are defined by the community themselves. The platform supports only limited user interactions and provides very limited social functions which in turn limits the growth of the community.

# 2. WeKu Design Philosophy

WeKu blockchain is based on STEEMIT framework and Graphene framework which was created by the original Bitcoin team members. In order to create a growing and creative content and social platforms, WeKu will innovate in the following areas:

# Multimedia And Big Data Storage

Use IPFS (InterPlanetary File System) to store multimedia files in order to solve the problem that the blockchain currently cannot store large data.

# Multi-language User Interface Support

The User Interface of WeKu website will be available in English and other localized languages. Additionally the mobile apps will have several native language versions.

## Flexible And Customizable Incentives

For the rapid development of the communities, different communities and scenarios may have different demands and rules on the incentive mechanism. A customizable incentive mechanism for the creators of the communities will be provided to support the variable scenarios and growth stages of the communities.

#### Content Recommendation System Based on Artificial Intelligence

This feature will provide an easy mechanism for community users to identify and access the most relevant and valuable creative content

#### Platform Search Engine

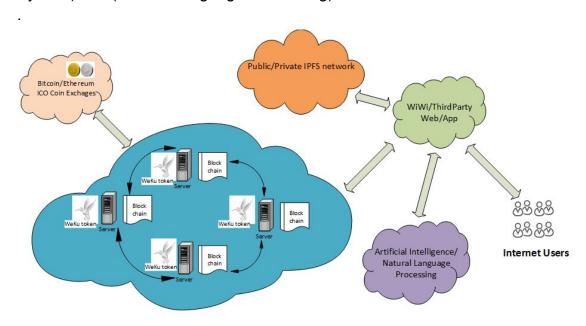
The built-in platform search engine will allow community users to more easily find useful content.

The mission of WeKu is to motivate and provide financial reward to all people who make a valuable contribution to social media and online communities. Through the advertising and sponsors to increase revenue, buyback WeKu

coins and other ways to share revenue with participants, each participant can benefit from the platform. The platform will go through several validation processes to reduce incentive fraud. Eventually everyone can enjoy their own rewards, manage their own content at anytime and anywhere, also can charge content authorization.

# 3. WeKu Platform Technical Architecture

The WeKu platform includes: Client Applications, WeKu Blockchain, IPFS (InterPlanetary File System), and AI (Artificial Intelligence System)/NLP(Natural Language Processing)



WeKu Social Media Network System Overview

#### WeKu Client Applications

WeKu client applications,, which are the portal of WeKu, include desktop application, web application, and multiple mobile application. These applications will allow user to register, login, post, comment, manage wallet and sell/buy tokens.

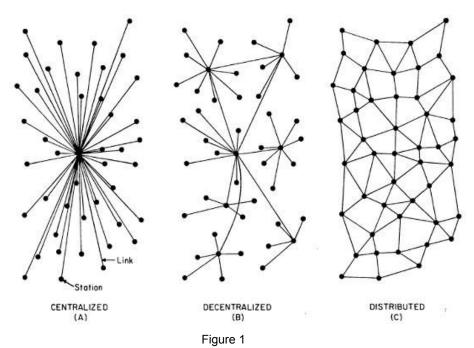
#### 2. WeKu Blockchain

In the world of digital cryptocurrencies, public records that record everything for everyone are often referred to as blockchain. A block is a series of digitally signed and transaction records approved by all blockchain nodes.

The WeKu blockchain, with all user-posted information and content feeds, is a public ledger, which means any third-party service application can access the data directly through WSS or REST APIs. In this age of big data, the user

data is invaluable. Without the useful user data, the machine learning and content value models cannot be established correctly.

# 3. IPFS(InterPlanetary File System)



From the centralized system, to the decentralized system, and to the distributed system

— source

The blockchain storage capacity limitations are not suitable for multimedia and other large files. The WeKu platform adopts IPFS distributed content addressing architecture to store users' large-size text and multimedia files. Unlike traditional address-searching(such as HTTP) architectures, the IPFS peer-to-peer (P2P) communication protocols and Merkle DAG data structures greatly enhance content search and download speeds and naturally counter DDoS attacks at the protocol level. Once the content is uploaded, the traffic will be automatically grained distributed storage to the user geography nearest server. This technology will save Internet bandwidth, reduce duplication of copies, shorten responses times. Importantly it will eliminate the possibility of modification and/or deletion of original content.

## 4. Artificial Intelligence System

Al will be an essential component of WeKu. WeKu will generate tremendous amount of data, such as data regarding users' profile, activities and behaviors, content and operational data etc. Al will provide the tools to get most values out of these data, such as matching advertisements with user behavior, content recommendations, image captioning, content topicalizations.

As an example, topic model is an important tool for text mining. In recent years, it has gained a great deal of attention in both industry and academia. As a critical tool in NLP (Natural Language Processing), it is mainly manifested in document topic inference and semantic match. During the time of system establishment, Latent Dirichlet Allocation (LDA) is used to build the overall content model, and Sentence LDA is used to build the local relevant content model.

After the establishment and training of the topic model, the WeKu platform will take advantage of open source projects for real-time text classification, article rating scoring, personalized recommendation and other scenarios.

There are two main types of topic model applications: semantic extraction and semantic matching.

Semantic extraction is used to categorize articles, some of which are of poor quality, but often use exaggerated titles for fraudulent click through rates. By going through document title and topic dimension reduction, the Weku platform would attempt to fetch the semantics of the document, the establishment of topic classifier, to grade the articles allowing WeKu to filter out junk articles.

Here is an example from the Internet to find a paragraph passage entry procedures:

#### 请输入文档:

设次活动题材比较广,我在这里就和大家分享一下我日常用的卸妆清肤们吧,这些清肤们都是我经过长年累月的考验,放心推荐的。我是混合偏干性皮肤。 清洁,是美容护肤的首要基本功,也应该是劳累了一天后女人宠爱自己的开幕式。 底子好了,各类面霜精华素才能锦上添花。 (1) 卸妆油 用过shu uemura,绿色一大瓶,很久之后才觉悟大概只有演员才有机会能把那一大瓶消灭掉。卸妆力是不错的, 但也有朋友说会致痘—— 清肌晶:我一定会回购的卸妆油。 去黑头能力出众, 不致痘, 乳化好, 卸妆力强!而且性价比高。 注意是直接把油抹在干的脸上,轻轻按摩推开直到化妆品融化,再用温水洗干净。

945:0.416402 276:0.057672 1042:0.032804 790:0.026984 827:0.019577 773:0.019048 7 71:0.019048 1841:0.017460 1097:0.015873 356:0.014286 1056:0.013757 125:0.013228 1151:0.011640 1336:0.011111 753:0.011111 1477:0.011111 1573:0.010053 169:0.00952 4 777:0.009524 1533:0.008466 793:0.008466 1958:0.007407 1832:0.007407 1614:0.006 878 1072:0.006878 703:0.006349 1766:0.006349 1106:0.006349 914:0.005820 1361:0.0 05291 228:0.005291 1153:0.005291 522:0.004762 458:0.004762 1997:0.004762 243:0.0 04762 1527:0.004762 1311:0.004233 683:0.004233 309:0.003704 502:0.003704 983:0.0 03175 1859:0.003175 635:0.003175 1020:0.003175 201:0.003175 1540:0.003175 1694:0 .002646 844:0.002646 0:0.002646 1162:0.002646 1725:0.002646 1847:0.002646 20:0.0 02646 1862:0.002646 597:0.002646 454:0.002646 141:0.002646 1360:0.002646 250:0.0 02646 89:0.002116 685:0.002116 1776:0.002116 286:0.002116 1629:0.001587 1688:0.0 01587 1492:0.001587 1216:0.001587 1203:0.001587 838:0.001587 10:0.001587 27:0.00 1587 670:0.001587 223:0.001587 156:0.001587 105:0.001587 647:0.001587 76:0.00105 8 275:0.001058 1182:0.001058 1195:0.001058 251:0.001058 207:0.001058 133:0.00105 8 1524:0.001058 1341:0.001058 1669:0.001058 65:0.001058 1760:0.001058 54:0.00105 8 1886:0.001058 1903:0.001058 4:0.001058 814:0.001058 678:0.001058 991:0.001058 885:0.001058 801:0.001058 899:0.000529 888:0.000529 78:0.000529 1805:0.000529 16 76:0.000529 74:0.000529 93:0.000529 1715:0.000529 62:0.000529 1564:0.000529 863: 0.000529 651:0.000529 55:0.000529 126:0.000529 51:0.000529 1836:0.000529 35:0.00 0529 691:0.000529 1858:0.000529 13:0.000529 1889:0.000529 725:0.000529 1924:0.00 0529 1942:0.000529 6:0.000529 740:0.000529 1263:0.000529 1098:0.000529 354:0.000 529 1117:0.000529 331:0.000529 285:0.000529 405:0.000529 1169:0.000529 1180:0.00 0529 1069:0.000529 436:0.000529 545:0.000529 1208:0.000529 1032:0.000529 1241:0. 000529 358:0.000529 593:0.000529 162:0.000529 746:0.000529 150:0.000529 1379:0.0 00529 1419:0.000529 1421:0.000529 138:0.000529 1480:0.000529 601:0.000529 1515:0 .000529 975:0.000529 130:0.000529

The program outputs the sparse topic distribution model, where the topic is numbered, which is [945, 276, 1042, ...], which also provides the keyword results for that model.

# 请输入主题编号(0-1999):945

```
0.0676954
肌肤
      0.0529848
面膜
      0.0201813
护肤
      0.0139372
防晒
      0.0138572
美白
       0.0132226
       0.0123783
脸上
       0.0120301
毛孔
       0.0109298
成分
       0.0101567
请输入主题编号(0-1999):276
清洗
      0.0814811
干净
      0.0550195
      0.0447229
清洁
洗澡
      0.0411955
毛巾
      0.028028
热水
      0.0256048
消毒
       0.0234553
冲洗
       0.0186226
浴室
       0.0162395
       0.0159617
请输入主题编号(0-1999):1042
用品
       0.189264
产品
      0.134673
化妆品
      0.129307
消费品 0.0658143
高档
       0.0435354
品牌
      0.0275086
香水
       0.0232864
日用
       0.0148312
```

This shows that this passage is about skin cleansing. On this basis, we can establish a classifier.

Semantic Matching is used to customize the article recommendations. On the WeKU platform multiple elements are used to build a readers profile these include the users recently read articles, tags of interest, likes of articles, articles reprinted, articles replies, article comments, and follow-up Author, circle of friends, length of time reading articles, etc, This information is stored as the user reading features and subsequently used to build a user's reading profile model. By analyzing the articles traversed by users, thematic distributions are generated, semantically measured and assigned the corresponding weights. When there is a new article matching the user's reading interest profile it will be recommended by the WeKu platform to the user according to the similarity to the users reading profile.

# 4. WeKu Platform Ecosystem

WeKu is driven by blockchain technology and is intended to create an attention-focused economy that makes its content profitable and decentralized.

The content evaluation mechanism is the basis of WeKu's economic model. The distribution of rewards is based on the user's effective voting on the content and artificial intelligence scoring. The authors who output high-quality content can obtain huge profits. WeKu will implement a multiple platform mechanisms to promote the growth of the ecosystem allowing WeKu to play an important and critically needed role in content creation and media socialization.

#### Content Incentives

In the WeKu community platform, original authors can get content incentives from the platform by publishing high-quality works. Additionally empowering those who communicate with the platform to also get rewards. At the same time, content producers can also sell their works. Active WeKu platform users can invest in the content creators' works they deem to be of good quality and earn proceeds after obtaining the creators original works. The value of an individual in WeKu is evaluated by the community as a whole. The higher the quality and the more useful the content a creator produces on the WeKu platform the better the prospects of that creator to monetize that content and in turn to gain financial rewards.

#### 1) Content incentive rules

# a) Content publishing rules

Publish high-quality content, access to user approval (vote, like praise, reply) the Weku content developer can get the corresponding WeKu coin reward. Content dissemination participants, who comment on the user and vote to appreciate the production of high quality content, can also get a corresponding cash return.

# b) Voting rules

Rules based on user rating, account holding weight and artificial intelligence evaluation

# 2) Intelligent content filtering

Decentralization does not imply complete and unrestricted freedom of expression. Some of the remarks are very harmful (such as pornography, drugs, racism and violence) and could even need to be removed immediately. The platform AI system uses thematic semantic judgment to filter this content and at the same time the WeKu platform will let readers report questionable content for review and removal if deemed to not meet the WeKu platform terms of service.

# 3) Content cannot be tampered with

The Decentralization is one of the hallmarks of the blockchain. In contrast to current social media a decentralized social media is held by the entire community. Everyone's information is kept in the blockchain, no one can steal your information

On the WeKu platform, the entries into the distribution system (final draft and consensus review) cannot be tampered with. The timestamp of entering the blockchain is one of the key pieces of evidences that confirms the final claim of ownership of content

# ■ Mechanism of Content Social Community

WeKu builds a decentralized media content platform through blockchain technology, where a large amount of high quality content is produced by outstanding content creators, which provides a solid foundation for WeKu to further create a content social platform.

# Convenient Registration Method Weku platform will provide an easy way

WeKu platform will provide an easy way for email and phone registration. In addition to local sign-up, the system will also support third-party sign-in (such as Yahoo Mail, Gmail, etc.).

## 2) Al-based Content Quality Evaluation And Recommendation

Based on natural language processing (NLP) open-source projects, the WeKu system can make real-time text label classification, article rating scoring, personalized recommendations as well as other scenarios allowing users to get personalized content recommendations from WeKu easily.

## 3) Integration of third-party IM(Instant Messenger)

The real-time communication is an essential feature of social network. On the WeKu platform the content communicated by IM will be encrypted from end to end to protect users privacy WeKu platform users can choose to store or not to store the communication information.

# 4) Friends/Groups

Community users can invite their friends to join his/her group, create their own private groups or channels. The Weku platform will provide an easy to use interface to import the data of third-party platforms(WeChat, Weibo, Twitter, etc.), including friends and existing contacts. Inherently as part of the WeKu mission the users actually own their own private data and information.

## 5) Sharing Photos And Media

When users post articles, photos, music or videos, the WeKu platform can be configured to automatically forward these content to third-party platforms.

#### 6) User Group Management

The WeKu platform will support users who want to create their own group to manage their circle of friends, and bulk news. For example, in WeChat, if a user wants to send a message to a specific group of people frequently because people do want replied messages to be seen by others, the messages need to be sent separately in the WeChat, which brings great inconvenience to the sender. The WeKu platform will address this issue by providing the group creation function.

#### 7) Q&A Rewarding

WeKu will have a Q&A reward community. As an example a user can post questions or tasks and sets up a WeKu token as bounty, other WeKu platform users can respond to the author to help this user solve the problem and or complete the requested task. When the answer is accepted by this user, or after the task is completed, the platform will reward the writer and the task completer with WeKu tokens to encourage the community to establish mutual aid behavior. If a large number of members of the public support the quest or task via the thumb up mechanism in WeKu the platform will reward the content creator with a WeKu coin, and then the content can be selected for inclusion in the best content section. f a large number of members of the public support the issue and via the thumb up, the platform will reward the content with a WeKu coin, and then the content will be selected into the best content section. If there is a large number of public votes on the issue and the results of support and praise, the platform will provide token as rewards, at the same time the content will be selected into the best content section.

# 8) Micropayment Service

The WeKu coins can be sent to friends. Additionally the platform provides international small or large money transfer services. Based on this ability a user could us the WeKu coin to make charitable donations. With the WeKu platform a few pennies may be contributed to charitable activities of the users choice.

# Consensus Algorithm of WeKu

The consensus of WeKu blockchain is DPOS (Delegated Proof of Stake), which is also used by STEEM and similar to the consensus algorithm adopted by enterprise companies. People vote to elect representatives who represent their own interests and record the results in public ledger, each of whom has a vested interest in proportion to the weight of the vote he owns.

The core element of the DPOS algorithm is the election, and the token holder can participate in the election. The total amount of WeKu tokens held is the voting weight.

In addition to users voting themselves, shareholders can vote on their behalf by delegating their votes to other accounts they trust.

On the WeKu blockchain, users vote to select a set of witnesses, who play the role of verifying digital signatures and time-stamped transactions. A block is a set of transactions used to update the state of a database (for example, this transaction can be one or more posts, or votes, etc.). Each time a witness produces a block, this witness receives an economic reward for the service. If a witness does not produce a block, then that witness will not be rewarded, and may even be voted out as witness.

At the start of each round, 31 witnesses will be reordered. These witnesses are the top 20 witnesses voted by the users and the 11 randomly-chosen witnesses from the witness pool. Every three seconds, a single block will be generated. If the witness fails to produce a block within its time frame, the next witness will be responsible for producing the next block.

Because the active witness is known ahead of time, WeKu is able to arrange for the witness to produce a block every 3 seconds. Witnesses synchronize their block production through the NTP protocol. This algorithm has been used by BitShares and STEEM networks for more than two years and proved to be reliable and very efficient.

# 5. Main Application Scenarios

WeKu will implement some application scenarios, but also will provide SDK/JS toolkit for third-party developers to build the community in the WeKu platform.

#### Content Reward Community

The community will be encouraged to create and share content, reward authors who create valuable content, motivate users to deliver excellent content, provide customizable incentive rewards system, and help third-party application developers and communities quickly build their own vertical platforms.

#### Photo Reward Community

Photo sharing network: create tags of their own interests and discover people with the same interests

- > Share pictures with friends, tag and categorize pictures
- > Follow on the theme and same hobby people
- Automatically discover interesting pictures, save interesting pictures, create and share your own PINBOARD
- ➤ From traditional search, to social discovery, and then to artificial intelligence analysis
- ➤ The integration of image generation, classification, dissemination and redistribution makes the process smoother
- Reduce information overload by reclassifying

#### Video Reward Platform

- Content authors can upload videos, create channels, build their own brand and become new media stars
- Users can browse, search videos and subscribe the channels
- Aggregate contents with channel as a unit, and recommend content with artificial intelligence algorithm
- Platform can work with traditional media (such as television stations, and production companies) to broadcast content via channels
- Manage agencies, create quality channels, and integrate the best but unknown creators resources
- Diversified profitability models, premium video charge for a fee, popular channel special services, such as live broadcast, games and so on
- Cooperate with advertisers to get accurate positioning of the customers for the brand while taking into account the benefits and user experience

# Open Source Reward Community

➤ It will provide project management and progress tracking. The

features including initial user stories, breakdowns of daily work items, detailed state transitions and time management are provided. It helps customers understand the progress of project.

# Creative Content Translation Reward Community

➤ It empowers producing multi-language versions of high-quality content. It increases the sharing of knowledge with a population not generally reached by the content author thereby improving author's global reputation while the translation of the work can be highly rewarded. The community encourages translations: the author submits a request for translation, and translators provide translations, and then the selected translation will be rewarded.

# 6. WeKu Development Plan

# 2018 Q1-Q2

- □ Publish Content Reward Platform
  - In the first phase of the project, the WeKu platform will focus more on the development of the content community. Compared with some existing content incentive platforms, the WuKu platform will pay more attention to improving the user experience, easy user registration, and powerful content editor, content publishing tool, content management and content tracking. Content in the platform, not only have original content, also has the self media and news media.
- ☐ Add new service nodes and open the test network
- ☐ The content platform running on WeKu Network is open for registration

#### 2018 Q3

- WeKu Video Planform (Integrated IPFS, the user can store massive audio and video content)
- □ Artificial Intelligence Screening and Recommendation Topic Model and Semantic Representative will be used to filter out low quality articles and the AI system recommends the most interesting articles and topics for each user.
- ☐ Honor motivation

In addition to content incentives, the platform places a great deal of emphasis on spiritual rewards, giving more influence and voting power and granting recognition, medal and title based on the contributions of members.

# 2018 Q4

		Publish Powerful Social Network Platform  ☐ Real Time Communication ☐ Moments ☐ Personal Knowledge Management ☐ Community Digital Currency Payment ☐ Private Groups and Management
2019 Q	1	
	0 0 0	<ul> <li>Android mobile application</li> <li>iOS mobile application</li> <li>Publish SDK / API / JS toolkit to build community platform and content social platform</li> <li>SDKs are provided to allow third-party to develop their communities or platforms</li> <li>The platform will provide a customized community incentive rewards system. When the rewards system is being designed and developed, the platform will specifically build a simple and feasible well-thought-out incentive mechanism so that the community can conveniently specify and utilize.</li> </ul>
After 20	019	Q1
	0	<ul> <li>Knowledge Management</li> <li>Collect and organize best articles, best creative contents and High quality content voted by community Professional Content Editors(Sponsored by WeKU Platform)</li> </ul>
		<ul> <li>Development of Diversified Communities</li> <li>□ Professional Community</li> <li>□ Content Intellectual property protection, distribution and trading</li> </ul>

	Notary	
	WeKu sponsored open source software development communities	
	Creative content translation community	
Oth	ner Charity Support, Donation - Low fee for Micro Transactions	
	Online and offline platform interactive activities - Commercial companies utilize WeKU coins to promote their services and products	

# 7. Operating Model

A great social media open platform should have a sustainable operating model. Enthusiasm and imagination are not enough to make a social platform successful. Besides the funds raised by ICO, it is more important to discover a healthy model that will be suitable for WeKu's long-term growth via learning from the successful social platforms.

## Advertisement and Sponsor Revenue

In general, the main income of the media is advertising, 70% of Google and Facebook revenue comes from advertising. Users are annoyed with advertisements, not because of bad ads, but because they do not fit the needs of their users. To understand users' demand pain points, the targeted advertising can effectively improve the conversion rate of advertising. WeKu community content will help advertisers provide better services to assist users save time looking for services.

#### 2. Media Articles Promotion

3. User copyright articles, audio, video, multimedia online service sales service charge

When the creator publishes the content, the author, the publication time and the content of the article will be digitally signed. In the future, if there is a copyright issue, the decentralized blockchain can record the immutable data and can be used to prove the original and solve the copyright problem thus protecting the rights and interests of the original creator. At the same time, creators can use WeKu to set the reference cost of their works. If anyone needs a reference, they can select the reference and then immediately pay for authorization ot use the selected reference. This saves a lot of time that has been historically lost in the communication between both parties.

# 8. TEAM

# **★** Core Team Members

## **Kevin Zou**

Former Xerox senior vice president, head of electronic payment division. Co-founder and CTO of TPS (Transaction Processing Expert System). More than 20 years of Internet and software development and management experience. He is a serial entrepreneur in both Asia and USA. Senior experts in distributed systems and large-scale real-time transaction processing technology, has a number of related patents. In recent years, he has advised a few successful entrepreneurs in the area of blockchain industry.

#### **Eric Chen**

Bachelor of Engineering, Southeast University of China. Master of Computer Engineering, University of Texas at Austin in USA. He founded the Unipeak company. More than 20 years of software development experience, early adopter of emerging technologies, especially interested in Blockchain / Graphene/ EOS, POW / POS / DPOS, DApp, AI / DL, Docker in the cloud computing applications and IPFS distributed network storage applications. A Bitcoin / EOS/ LTC / ETH / ICO Investor.

# Dr. Tom Xu

Bachelor of Engineering from Tsinghua University, Master of Science from Chinese Academy of Sciences, Master of Computer Science and Ph.D. from Clemson University. With working experience in teaching and researching for both Chinese and the U.S. universities; in software development for Fortune 500 company and the U.S. government; in founding and executive management of Chinese private enterprises. Over 20 years of Internet and enterprise software development and management experience. In recent years, co-founded one Shanghai

Vertical Information Technology Co., Ltd. in Shanghai, China and successfully led the company into a public company. Recently, dedicated fully to research blockchain technology.

# **Sunny Sun**

Master of Science in Computer Science of Texas State University in USA. As a .NET software development project leader, he has participated in a number of petroleum services, Texas government project development system software and financial software. His financial software project has been selected into Nanjing 321 final qualification. A BlockChain senior investor.

# **Tony Lin**

Bachelor of Science in Computer Science, Chengdu University of Electronic Science and Technology of China, a Master's degree in Computer Science in USA. Providing leadership in a variety of web system, integration and development of financial and insurance application system.

34 years software development experience, always standing in the forefront of computer technology, focus on result. He is a core member of team. Expert experience in distributed system, Blockchain/Graphene and network encryption technology.

#### **Alex Qian**

Over 15 years of software engineering experiences. Developes BlockChain Framework, Smart Contract(ERC20) and Wallet. Master of C++, NodeJs, Python, WSS/Restful, Javascript platform developing. Expert at system analysis, design and coding.

# Dr. Songshan Li

Dr. Li holds a PhD from University of Texas at Austin with many years of commercial software development experience in USA companies including the largest bank and retailer in the world. His many high impact positions include working as Senior Data Scientist at Walmart. The main research area is on machine deep learning(AI/DL) and its

applications in NLP and human-machine dialogue through natural languages.

#### Xian

IC3 member (http://www.initc3.org/). 5 years experience in Bitcoin/Blockchain Industry. Expert on cryptocurrency trading. PhD in US Computer Science.

# Miya

With a bachelor's degree of Journalism, she began a career as a journalist in China. She had worked for different Internet advertising and public relation companies in Shanghai & Beijing for over 5 years. She also served as COO in a startup company in Internet tourism.

# **★** Advisory Group

# **Dustin Byington**

Graduated from Columbia University. MBA from University of Michigan. Veteran entrepreneur in the blockchain space. Founded Bitcoin College in 2014, Cofounded Tendermint in 2015. Founded Satoshi Talent and Stokens Venture Capital. He is currently president of Wanchain.org - a cross chain interoperability platform with \$35M ICO.

# **Justin Snyder**

Co-Founder of DecentraNet. Customer engagement specialist who develops creative and compelling ways to build Wanchain's Twitter and Facebook communities.

# **Bo Wang**

Mr. Wang obtained his B.S in Information Management in Peking University and his M.S in Information Economics in University of Michigan. He is a serial entrepreneur in both China and USA, and was

recently the former Co-Founder and VP of Engineering of Factom. He is considered an expert of blockchain consensus algorithm and P2P networking. Delphy Founder and CEO. The Delphy project(delphy.org) is a decentralized mobile social platform for prediction markets and raised more than \$20 million in its ICO.

## Jonathan Newell

Jonathan has more than 30 years of information technology experience focused on transaction processing, information security and privacy. Providing expert security and privacy guidance to a widely varied set of companies and industries. Key areas of focus are transaction processing, distributed systems, security architecture, threat detection and guarding PII data as a security concern. Currently Jonathan is a Senior Director of Security and Governance at a Fortune 500 company. Current accountabilities include security and governance leadership over a multi-billion dollar revenue generating infrastructure supporting payment card transactions, for the leading BPO provider in world. Early blockchain adopter/Bitcoin and Litecoin miner.

# Kaiser Wahab (Attorney at Riveles Wahab LLP)

Kaiser represents startup ventures to Fortune 500 companies on the range of corporate, venture capital, contract, and intellectual property issues that confront businesses. He counsels his clients on corporate structuring and securities law, including venture and investor agreements/transactions, formation, and equity incentive plans. Kaiser also negotiates and drafts a variety of agreements, including those related to technology, media, outsourcing, licensing, e-commerce, advertising, user relationships and other scenarios. Finally, he regularly negotiates cloud computing and other technology services arrangements, advises on privacy and data security, and structures venture capital and investor rounds for early stage technology, media, and film/TV ventures.

# 10. Initial Coin Offering

# 1. What is WeKu Token?

WeKu Token (WKC) is a new ERC20 based token going to ICO on Ethereum. The total amount of Weku token is 400 million and will be available to trade after a month of ICO.

# 2. Distribution Method

The WKC crowdfunding will be automatically sold through the Ethereum Smart contract for 30 days while stocks last. The unsold WKCs after 30 days will be reserved.

# 3. ICO Offering Plan

WeKu tokens are received immediately upon purchase. The crowdsale only accepts Ether (ETH), the total raised amount does not exceed 30,000 ETH.

- Base Rate: 1ETH = 7000 WKC.
- The main sale will take place as follows:

i. ICO Day 1-10: 1ETH can purchase 8500 WeKu tokens.

ii. ICO Day 11-25: 1ETH can purchase 8000 WeKu tokens.

iii. ICO Day 26-30: 1ETH can purchase 7000 WeKu tokens.

## Token Distribution Plan:

Percent	Amount	
50%	200m	ICO
20%	80m	Weku Team
10%	40m	WeKu Foundation
10%	40m	Consulting & Marketing
10%	40m	Angel Investment (Pre-Sale)

# 4. Token Unlock Plan of WeKu Team

The tokens hold by the founding team will be locked up for a certain period. The token un-lock plan is as follows

Unlock Plan	Release Percentage
Initial Release	40%
After one year	30%
After two years	30%

Angel Investment and Early Bird Stage Reward Section - Lockout for 3 months beyond the 7000 WKC base conversion rate.

# 5. Use of Proceeds

The proceeds from the token sale will be used for the development, promotion, and growth of the new decentralized ecosystem. The preliminary allocation is set forth below but is subject to change:

Product Research & Development	50%
Marketing	30%
General and Administrative:	15%
Consultants & Partnerships	3.5%
Intellectual property	1.5%

# 11. Disclaimer and Risk Warning

# 11.1 Disclaimer

WeKu does not make, and hereby disclaims, any representation or warranty

with respect to WeKu or WKC (such as merchantability or fitness for particular purposes), except those expressly specified herein. Each purchaser's decision to participate in the WKC crowdsale and purchase any WKC shall be made based on his/her own knowledge of WeKu and WKC and the information disclosed in this Whitepaper. Without prejudice to the generality of the foregoing, each purchaser will, upon the launch of WeKu, accept WKC on an "as is" basis, irrespective of the technical specifications, parameters, performance or function thereof.

WeKu hereby expressly disclaims its liability, and shall in no case be liable to any person, for:

- (1) any person's purchase of WKC in violation of any anti-money laundering, counter-terrorism financing or other regulatory requirements that are imposed in any jurisdiction;
- (2) any person's purchase of WKC in violation of any representation, warranty, obligation, covenant or other provision under this Whitepaper, and the resulting failure or inability to make his/her payment or to claim relevant purchased WKC;
- (3) early termination of the WKC crowdsale for any reason;
- (4) failure or abortion of WeKu development and resulting failure to deliver WKC:
- (5) delay or rescheduling of WeKu development and resulting failure to meet any anticipated milestone;
- (6) any error, bug, flaw, defect or otherwise of the source code of WeKu:
- (7) any malfunction, breakdown, collapse, rollback or hardforking of WeKu:
- (8) failure of WeKu or WKC to meet any specific purpose, or unfitness for any specific use;
- (9) utilization of the proceeds raised through the WKC crowdsale;
- (10) failure to timely and completely disclose any information relating to the development of WeKu;
- (11) any purchaser's divulgence, loss or destruction of the private key of his/her crypto-currency or crypto-token wallet (inter alia, the private key of the WeKu wallet used by that purchaser);
- (12) any default, breach, infringement, breakdown, collapse, service suspension or interruption, fraud, mishandling, misconduct, malpractice, negligence, bankruptcy, insolvency, dissolution or winding-up of any third party crowdfunding portal of WKC;
- (13) any difference, conflict or contradiction between this Whitepaper and an agreement between any purchaser and any third party crowdfunding portal;

- (14) trading or speculation of WKC by any person;
- (15) listing or delisting of WKC on or from any exchange;
- (16) WKC being classified or treated by any government, quasi-government, authority or public body as a kind of currency, securities, commercial paper, negotiable instrument, investment or otherwise that may be banned, regulated or subject to certain legal restrictions;
- (17) any risk factors disclosed in this Whitepaper and any damage, loss, claim, liability, punishment, cost or other adverse impact that is caused by, associated with, in connection with, incidental to or consequential to that risk factor.

# 11.2 Risk Factors

WeKu believes that there are numerous risks involved in the development, maintenance and running of WeKu, many of which are beyond the control of WeKu. Each WKC purchaser should peruse, comprehend and consider carefully the risks described below in addition to the other information stated herein before deciding to participate in the WKC crowdsale campaign.

Each WKC purchaser should pay particular attention to the fact that, while WeKu is established in the USA, WeKu and WKC lie in cyberspace only without physical presence and hence do not fall within or pertain to any specific jurisdiction.

Participating in the WKC crowdsale campaign shall be an action based upon prudent decision and will be deemed as the relevant WKC purchaser having been fully aware of and agreed to take all the risks below.

#### (1) Termination of the Campaign

The WKC crowdsale campaign may be early terminated, in case of which a purchaser may only be refunded with part of his/her payment as a result of the Ether price volatility and/or the expenses incurred by WeKu.

## (2) Insufficient Information Availability

WeKu is at the stage of development as of the date of this Whitepaper and its philosophy, consensus mechanism, algorithm, code and other technical specifications and parameters could be updated and changed frequently and constantly. While this Whitepaper has contained the then up-to-date key information of WeKu, it is not absolutely complete and is subject to adjustments and updates that WeKu might make from time to time for certain purposes. WeKu is not in a position, nor obliged, to keep the purchasers closely posted on every detail of WeKu development (including its progress and expected milestones no matter whether rescheduled or not) and therefore will not necessarily provide the purchasers with timely and full access to all the information relating to WeKu that may emerge from time to time. The insufficiency of information disclosure is inevitable and reasonable.

## (3) Regulatory Measures

Crypto-tokens are being, or may be, overseen by the regulatory authorities of various jurisdictions. WeKu may receive queries, notices, warnings, requests or rulings from one or more regulatory authorities from time to time, or may even be ordered to suspend or discontinue any action in connection with the Campaign, WeKu's development or WKC. The development, marketing, promotion or otherwise of WeKu or the WKC crowdsale campaign may be seriously affected, hindered or terminated as a result. And since regulatory policies could change from time to time, existing regulatory permission or tolerance on WeKu or the WKC crowdsale campaign in any jurisdiction could be just temporary. WKC could be defined from time to time as virtual commodity, digital asset or even securities or currency in various jurisdictions and therefore could be prohibited from being traded or held in certain jurisdictions pursuant to local regulatory requirements.

# (4) Cryptography

Cryptography is evolving and cannot guarantee absolute security at all times. Advances in cryptography, such as code cracking, or technical advances such as the development of quantum computers, could present risks to all cryptography-based systems including WeKu. This could result in the theft, loss, disappearance, destruction or devaluation of the WKC held by any person. To a reasonable extent, WeKu will be prepared to take proactive or remedial steps to update the protocol underlying WeKu in response to any advances in cryptography and to incorporate additional reasonable security measures where appropriate The future of cryptography or security innovations is unpredictable while WeKu will try its best to accommodate the continuing changes in the domains of cryptography and security.

## (5) Theft of Crowdsale Proceeds

There may be attempts to steal the crowdsale proceeds received by WeKu (including the fiat currency amount converted therefrom). Such a theft or attempted theft may affect the ability of WeKu to fund the development of WeKu. While WeKu will adopt cutting-edge technical solutions to keep the crowdsale proceeds safe, certain cyber thefts could be hardly unpreventable.

# (6) Flaws in Source Code

Nobody can guarantee the source code of WeKu to be flaw-free. It may contain certain flaws, errors, defects and bugs, which may disable some functionality for users, expose users' information or otherwise. Such flaws, if any, would compromise the usability, stability, and/or security of WeKu and consequently bring adverse impact on the value of WKC. Open source codes rely on transparency to promote community-sourced identification and solution of problems within the code. WeKu will work closely together with the WeKu community to keep improving, optimizing and perfecting the source code of WeKu onwards.

#### (7) Update of Source Code

The source code of WeKu is open and could be updated, amended, altered or modified from time to time by any member of the community of WeKu. Nobody is able to foresee or guarantee the precise result of an update, amendment, alteration or modification. As a result, any update, amendment, alteration or modification could lead to an unexpected or unintended outcome that adversely affects WeKu's operation or WKC's value.

# (8) Security Weakness

The blockchain of WeKu rests on open-source software and is an unpermissioned distributed ledger. Regardless of WeKu's effort to keep the WeKu system secure, anyone may intentionally or unintentionally introduce weaknesses or bugs into the core infrastructural elements of WeKu which the security measures adopted by WeKu is unable to prevent or remedy. This may consequently result in the loss of WKC or

any other digital tokens held by a purchaser.

# (9) Unauthorized Claim of WKC for Crowdsale

Any person who gains access to the WKC purchaser's registered email or registered account by deciphering or cracking the purchaser's password will be able to claim the purchased WKC for Crowdsale in bad faith. As such, the relevant purchased WKC for Crowdsale may be missent to the person whoever claims that the same through the purchaser's registered email or registered account, which sending is not revocable or reversible. Each WKC purchaser shall take care of the security of his/her registered email and registered account throughout by taking such actions as: (i) using a highly secure password; (ii) refraining from opening or responding to any scam emails; and (iii) keeping strictly confidential all the secret or personal information about himself/herself.

# (10) Private Key of WKC Wallet

The loss or destruction of a private key required to access WKC may be irreversible. WKC are controllable only by possessing both the relevant unique public and private keys through the local or online WKC wallet. Each purchaser is required to safeguard the private keys contained in his/her own WKC wallet(s). Where such private key of a WKC purchaser is lost, missing, divulged, destroyed or otherwise compromised, neither WeKu nor anyone else will be able to help the purchaser access or retrieve the related WKC.

#### (11) Inflation

Subject to the specific underlying protocol at the launch of WeKu, the total quantity of WKC will increase over time, and could further increase because of the adoption of a patch or upgrade of WeKu source code. The resulting inflation of WKC supply could lead to the drop of market price, and consequently WKC holders (including the purchasers) could suffer economic losses. It is not guaranteed that a purchaser or WKC holder would be compensated or made good somehow for the WKC inflation.

#### (12) Popularity

The value of WKC hinges heavily on the popularity of the WeKu

system. WeKu is not expected to be popular, prevalent or widely used soon after the Launch. The worst-case scenario is that WeKu may even remain marginalized in the long run, appealing to only a minimal portion of the users. By contrast, a significant portion of WKC demand could be of speculative nature. The lack of users may result in increasing volatility of WKC market price and consequently compromise WeKu's long-term development. WeKu will not (nor has the responsibility to) stabilize or otherwise affect WKC's market price if there is any such price.

## (13) Liquidity

WKC is not a currency issued by any individual, entity, central bank or national, supra-national or quasi-national organization, nor is it backed by any hard assets or other credit. The circulation and trading of WKC on the market are not what WeKu is responsible for or pursues. Trading of WKC merely depends on the consensus on its value between the relevant market participants. Nobody is obliged to redeem or purchase any WKC from any WKC holder (including the purchasers). Nor does anyone guarantee the liquidity or market price of WKC to any extent at any time. To divest his/her WKC, a WKC holder would have to locate one or more willing buyers to purchase the same at a mutually agreed price, which attempt could be costly and time-consuming and does not necessarily bear fruit. And there could be no crypto-currency exchange or other marketplace having WKC listed thereon for trading.

# (14) Price Volatility

Cryptographic tokens, if traded on public markets, usually have extremely volatile prices. Fluctuations in price over short periods of time frequently occur, which price may be denominated in Bitcoin, Ether, US Dollars or any other fiat currency. Such fluctuations could result from market forces (including speculations), regulatory changes, technical innovations, availability of exchanges and other objective factors and represent changes in the balance of supply and demand. WeKu is not responsible for any secondary market trading of WKC no matter whether or not there would be such markets for WKC. Therefore, WeKu neither is obliged to tame the price volatility of WKC nor cares about that. The risks associated with WKC trading price have to be taken by the WKC traders themselves.

## (15) Competition

WeKu's underlying protocol is based on an open-source computer software such that nobody claims copyright or any other type of intellectual property right of the source code. As a result, anyone can legally copy, replicate, reproduce, engineer, modify, upgrade, improve, recode, reprogram or otherwise utilize the source code and/or underlying protocol of WeKu in an attempt to develop a competing protocol, software, system or virtual platform or virtual machine, which is out of WeKu's control and may consequently compete with or even overshadow or overtake WeKu. Besides, there have been and will be various competing blockchain-based platforms that compete with WeKu. WeKu will in no case be capable of eliminating, preventing, restricting or minimizing such competing efforts that aim to contest with or overtake WeKu.

# 12. References

- 1. Social Media startup Steemit rewarded millions of digital currencies to increase website traffic (http://chainb.com/?P=mpost&id=1373)
- 2. <a href="https://steem.io/#whitepaper">https://steem.io/#whitepaper</a>
- 3. <a href="http://www.infog.com/cn/news/2017/07/Baidu-open-NLP-Toolkit">http://www.infog.com/cn/news/2017/07/Baidu-open-NLP-Toolkit</a>
- 4. LDA Latent Dirichlet Allocation
- 5. Sentence LDA <u>Aspect and Sentiment Unification Model for Online</u>
  <u>Review analysis</u>
- 6. Bhatia, Shraey, Jey Han Lau, and Timothy Baldwin. "Automatic Labelling of Topics with Neural Embeddings." *arXiv preprint arXiv:1612.05340 (2016)*.
- 7. Chaney, Allison June-Barlow, and David M. Blei. "Visualizing Topic Models." *ICWSM*. 2012.
- 8. Chen, Tianqi, et al. "Svdfeature: a toolkit for feature-based collaborative filtering." *Journal of Machine Learning Research* 13.Dec (2012): 3619-3622.

- 9. Fuglede, Bent, and Flemming Topsoe. "Jensen-Shannon divergence and Hilbert space embedding." *Information Theory, 2004. ISIT 2004. Proceedings. International Symposium* on. IEEE, 2004.
- 10. Lau, Jey Han, et al. "Automatic labelling of topic models." *Proceedings* of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies-Volume 1. Association for Computational Linguistics, 2011.
- 11. Mei, Qiaozhu, Xuehua Shen, and ChengXiang Zhai. "Automatic labeling of multinomial topic models." *Proceedings of the 13th ACM SIGKDD international conference on Knowledge discovery and data mining.* ACM, 2007.
- 12. Shen, Yelong, et al. "Learning semantic representations using convolutional neural networks for web search."