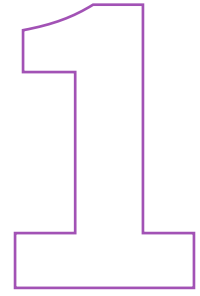# KWAVE

whitepaper

Overview

1

In the last half-century, the entertainment industry has grown exponentially.

The entertainment industry encompassing various genres such as broadcastings, music, arts, dramas, and movies has become vital to human life. With the support of IT, manufacturing, and related industries, the entertainment industry and its market share have proliferated compared to other sectors.

For the first time since 2009, the global economy shrunk from the impacts of COVID-19 and the 2.1 trillion-dollar entertainment industry shrunk by 5.6% in 2020. The shock of COVID-19 tumbled old business models while reinforcing new trends; thus changing the industry status quo.

The K-WAVE project aims to shake up the entertainment ecosystem by providing a transparent and fair star-fan relationship model, allowing fans to exercise their influence within the platform and by supporting a bidirectional, rather than a one-way communication system between artists and fans.

The K-WAVE platform discovers and nurtures new artists and supports the growth of the artists' respective fan network. Similarly, fans have an opportunity to develop their favorite artists into global stars. K-WAVE token economy will allow us to provide global services free from national politics and diplomacy. K-WAVE's blockchain technology is no longer an imagination but a reality that is already seeping into our everyday life.

Blockchain technology creates decentralized, transparent and efficient digital assets which are increasingly being considered as alternative profit generators. The digitization of assets and new distribution methods are leaping beyond the 3rd industrial revolution era, and paving the path toward the 4th industrial revolution. In particular, the entertainment industry is paying close attention to this technology as the industry is undoubtedly one of the best places to apply the advantages of blockchain. The industry is bracing for a radical shift in the post-COVID era.

K-WAVE is focused on the many changes and benefits new technology, namely blockchain and VR/AR technology can provide in developing a comprehensive entertainment platform for the future. By applying new technologies to the Korean wave, K-WAVE will change the structure of the global entertainment industry and usher in a new and mature entertainment paradigm.
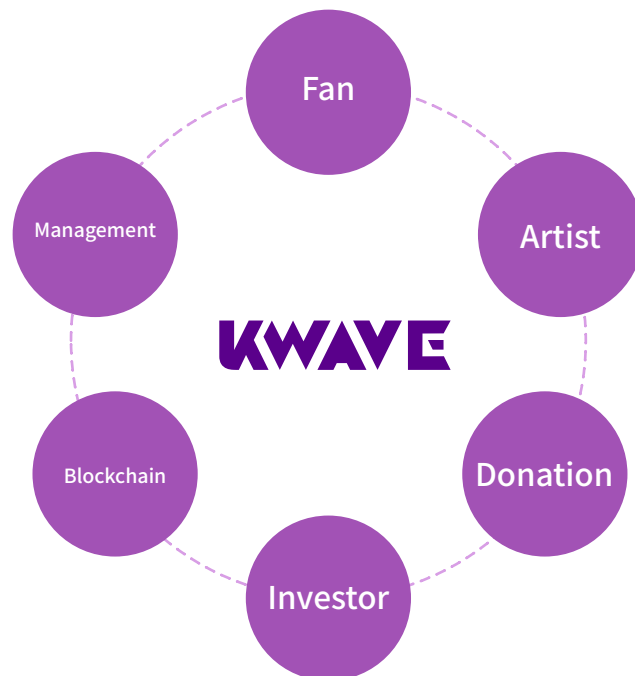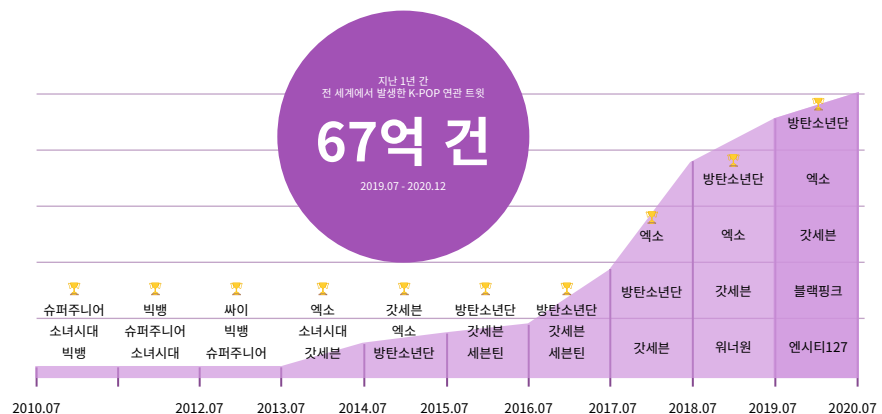
K-POP Entertainment Environment

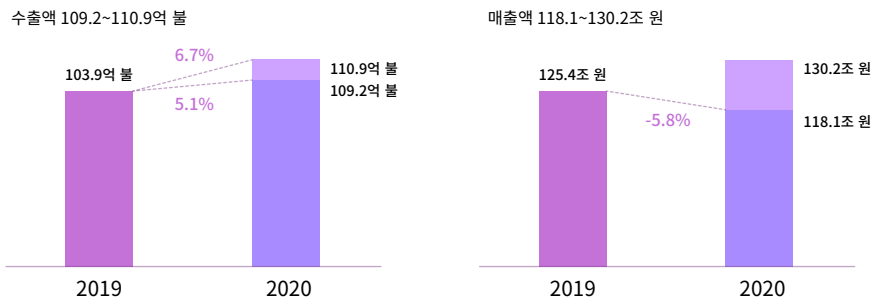## 2-1. Growth of the K-POP market

Undeniable Popularity of K-POP

Considering the constant rumors of a "K-POP crisis" even until a few years ago, K-POP has come a long way. Critics claimed the popularity of immature singers dancing robotically to soul-less music would be fleeting. Despite such criticism, fan influence prevailed and the longevity of K-POP artists exceeded even the wildest of expectations. Now, K-POP competes for a larger portion of the music industry on a global level.

While the global digital content market is rapidly growing rapidly, Korea's digital content market maintains a prestigious ranking of fifth place. In addition to K-POP music, Korean culture in the medium of film, broadcast and game, is gaining momentum toward the next 3.0 stage of 'New Hallyu (i.e. Korean Wave)'.

지난 1년 간
전 세계에서 발생한 K-POP 연관 트윗

67억 건

2019.07 - 2020.12

2010.07		2012.07	2013.07	2014.07	2015.07	2016.07	2017.07	2018.07	2019.07	2020.07
슈퍼주니어	빅뱅	싸이	엑소	갓세븐	방탄소년단	방탄소년단		엑소	방탄소년단	방탄소년단
소녀시대	슈퍼주니어	빅뱅	소녀시대	엑소	갓세븐	갓세븐	엑소	방탄소년단	엑소	엑소
빅뱅	소녀시대	슈퍼주니어	갓세븐	방탄소년단	세븐틴	세븐틴	방탄소년단	엑소	갓세븐	갓세븐
							갓세븐	갓세븐	블랙핑크	블랙핑크
								워너원	엔시티127	엔시티127

K-POP 대화량 성장 곡선 (2010-2020)

The Korean cultural content industry – the seventh largest industry worldwide – already possesses global competitiveness. In 2019, the Korean Wave content market was worth KRW 125.4 trillion. In 2020, due to the impacts of COVID-19, it was worth KRW 118.1 billion, after taking a hit of 5.8%. In 2021, however, steady increase in overseas exports is expected to ensure Korean Wave content's market value to reach over KRW 130 trillion.

수출액 109.2~110.9억 불

6.7%
103.9억 불
5.1%
110.9억 불
109.2억 불

2019   2020

매출액 118.1~130.2조 원

125.4조 원
-5.8%
130.2조 원
118.1조 원

2019   2020

2020 국내 콘텐츠산업 주요 통계

In addition to K-POP, there has been a steady increase in demand for the export of Korean TV series, films and other audio-visual content. Such expansion in the reach of Korean cultural content through the development of digital platforms has generated new fandoms all around the world.
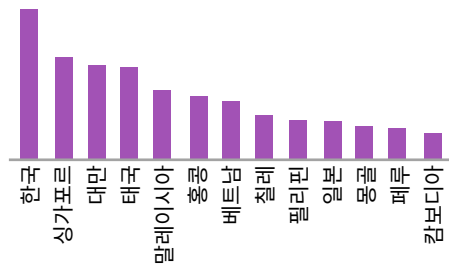
There has been an overall rise in the number of Hallyu communities (fan clubs). Recently, in addition to Asia (average annual growth rate of 32.3%), America (35%) and Europe (60.7%) have also shown significant increases.

Even despite the global downsizing of record sales, K-POP record sales increased significantly; thus proving its global fan power. While the global record market recorded a -5.7% growth rate from 2013 to 2019, K-POP record sales recorded an annual growth rate of 27.7%. In the first half of 2021, K-POP record sales rate increased by 41.9%, regardless of COVID-19 prohibiting offline concerts.
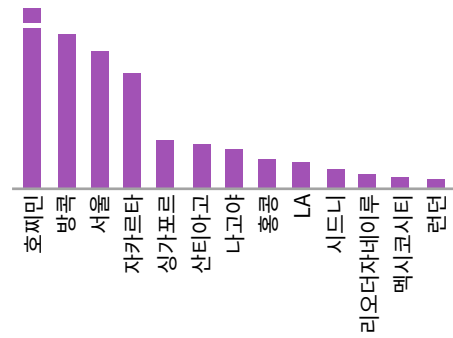

한국 10.1%
인도네시아 9.9%
태국 8.1%
베트남 7.4%
미국 7.4%
일본 6.8%
필리핀 6.8%
브라질 4.4%
멕시코 4.3%
말레이시아 3.1%
기타국가 31.9%
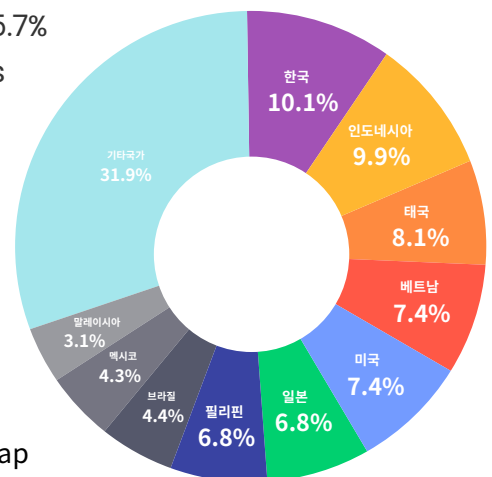
2020 Global K-POP Map

국가별 K-POP 체감 지수

도시별 K-POP 체감 지수

2-2. New Trends post COVID-19

New Normal in Consumer Pattern

COVID-19 brought about new consumption trends: (1) "untact" (online purchases), (2) "home-conomy" (home + economy), (3) self-present purchases. These trends are expected to become the 'New Normal' post COVID-19.

1) Online (contact-less) Consumption

The spread of COVID-19 has made many people fearful of face-to-face interaction. "Untact" purchases, whereby the customer purchases without interacting with other people, has become the preferred method by consumers. Many industries have observed preparing strategies to respond to contact-less consumption.

2) Home-Conomy (Home + Economy)

The almost house-arrest environment that was brought on by COVID-19 has expanded the types of leisure and activities people enjoy at home; thus creating a booming market for the supply of such goods and services.
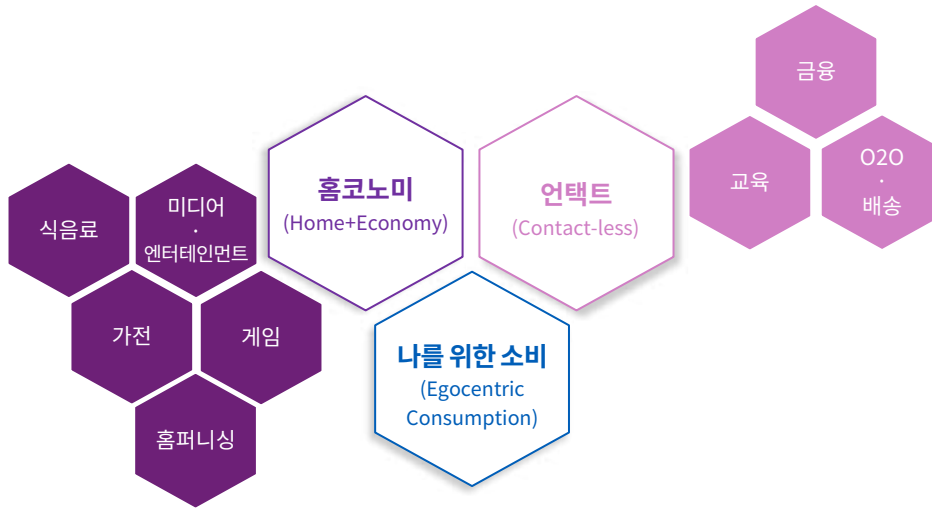
3) Egocentric Consumption

Increase in time spent at home has shifted consumer patterns. Consumers are showing trends of purchasing more for themselves than to showcase to others.
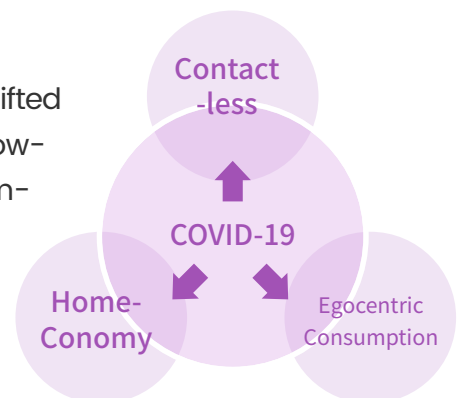
COVID-19 Changes in Consumption Patterns by Industry

COVID-19 is affecting and changing all areas of consumer life. There has been a paradigm shift across all industries.

Finance
Increase in offline kiosk and other contact-free purchase methods. Health care related financial plans launched to meet demand of health-conscious customers.

O2O & Shipping
Increase in demand for faster (30mins to 1hr) daily necessities and small-batch groceries delivery services.

Education
Increase in demand for e-learning and edu-tech due to prolonged online education environment.

GAME
Increase in consumers using the gaming platform as a means to socialize.
Casual mobile games with low-entry barrier and fun fitness games are popular.

Media & Entertainment
Continued aversion to multi-use facilities due to COVID-19 has expanded the streaming platform content market and accelerated the growth of the OTT market.
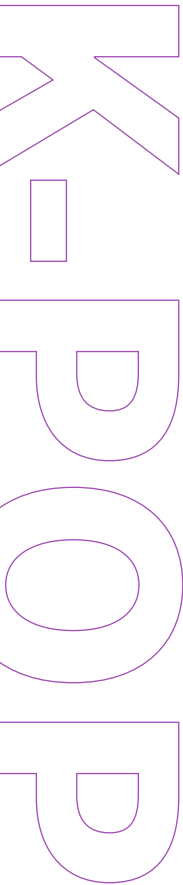
Home Appliances

Increase in need for more comfortable and cleaning home appliances such as massage chairs, coffee machines, monitor screens and clothing care appliances

Food and Beverage

Increase in at-home meals led to HMR product consumption, as people started exploring While staying at home, people recreate processed foods with their own recipes, which boosts HMR products' consumption.

Home Furnishing

Increased spending on home furnishing, indoor hygiene, as well as at-home health and beauty care products.

Automobile

Avoidance of face-to-face contact has led to increase in online sales for a typically offline-driven automobile industry. Travel and vacation restrictions have led to spending on cars.

Luxury Goods

While the overall spending on clothing, shoes and bags have decreased, consumers have spent their surplus funds on luxury goods as "revenge spending" and "self-appreciation spending" during COVID-19.

2-4. VR/AR Market Growth

The global VR/AR market is growing explosively. Major international and domestic gaming, entertainment, communication, and IT companies are actively investing in this market; with a focus on core technologies, games, solutions and services, and photo/video areas.

글로벌 VR 시장 매출액 추이

글로벌 AR 시장 매출액 추이
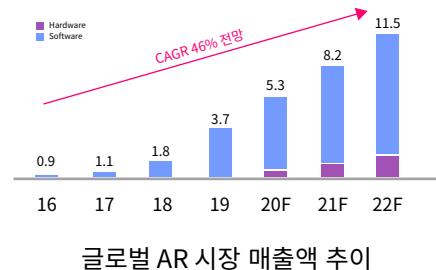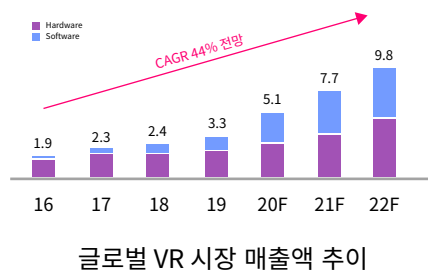
Creation of a VR ecosystem is boosting the growth potential of the VR software market.

VR hardware performance improvement
+
Network environment improvement

Expansion of VR software applicable industries, increasing demand for premium content

Device

. 2nd and 3rd generation VR devices are scheduled for release, in synch with the commercialization of 5G.
. For the next three years (from 2019), shipment of VR/AR headset is forecast to grow by more than 60% per annum.
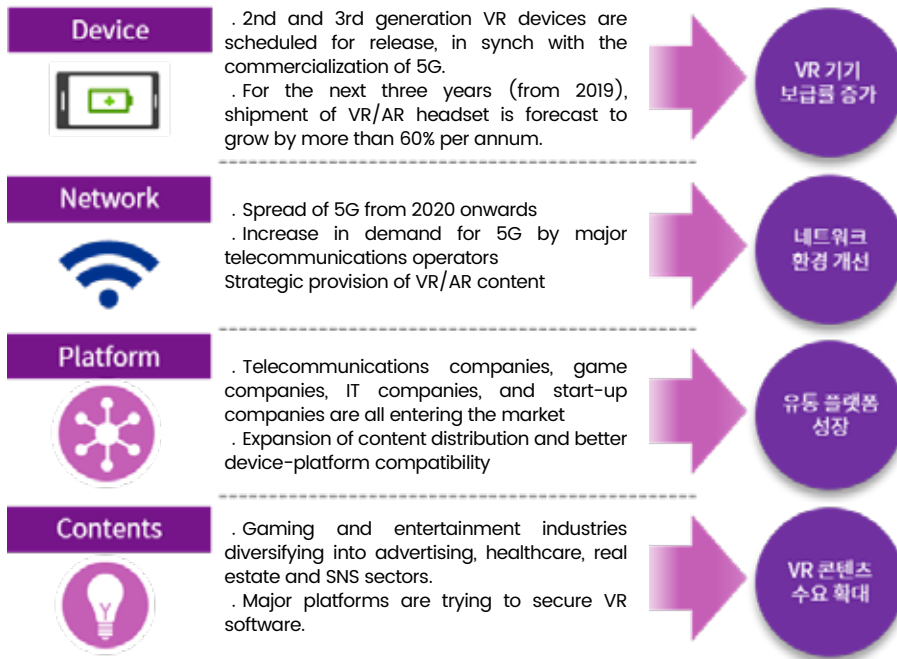
VR 기기 보급률 증가

Network

. Spread of 5G from 2020 onwards
. Increase in demand for 5G by major telecommunications operators
Strategic provision of VR/AR content

네트워크 환경 개선

Platform

. Telecommunications companies, game companies, IT companies, and start-up companies are all entering the market
. Expansion of content distribution and better device-platform compatibility

유동 플랫폼 성장

Contents

. Gaming and entertainment industries diversifying into advertising, healthcare, real estate and SNS sectors.
. Major platforms are trying to secure VR software.

VR 콘텐츠 수요 확대

2-5. Game Companies & Conglomerates Entering The Entertainment Industry

Game companies and conglomerates are trying to diversify their business portfolio by using the operational know-how and technologies they have developed through their existing businesses. In addition, they are trying to create additional commercial opportunities by acquiring content intellectual property and/or collaborating with entertainment companies.

BTS "Bang Bang Con: The Live" Case Study

- Content distribution alliance between Naver's global services including V Live and Line and CJ's platforms such as TVing were reinforced through the exchange of KRW 600 billion worth of shares between the companies.

- Riot Games Inc.'s Virtual Girl Group K/DA: Four characters from the "League of Legends" game formed a virtual girl group and released their first official album. TWICE participated in the recording, and the debut single album received more than 360 million views on YouTube.

- American rapper Travis Scott held a virtual concert in Fortnite, a free-to-play Battle Royale game developed by Epic Games. Travis Scott's movements were replicated by his avatar and the audience also participated as their in-game avatars to create a new type of concert experience, never before possible in the offline world.

Case Studies of Game Companies & Conglomerates Entering the Entertainment Industry

NCSoft Corporation	· "Universe", a global all-in-one K-POP entertainment platform that can be enjoyed online and offline. · More than 10,000 pre-reservations · Users can connect with famous K-POP stars such as Daniel Kang / MONSTA X / jihoon Park / Iz*One / Cosmic Girls (WJSN). Universe provides users with AI voice functions, motion capture, character scanning and other entertainment content that is infused with IT technology.
Netmarble Corp	· BTS World: Players take the role of BTS' manager, going through various journeys with each of the seven members in this live action-based casual mobile game · BTS Universe Story: Users create and share their original stories based on the official BTS Universe
KaKao & Naver	· Kakao M: Celebrity-owned media management (CMM) is a "celebrity commerce" business whereby the celebrity directly participates in planning and producing their own content based on their unique brand image and story. · Naver: Reinforced their concert, music, video and digital content development and production competitiveness by investing KRW 100 billion in SM and YG each.

2-6. Industry Benchmark

Universe
A global all-in-one K-POP entertainment content platform that is infused with IT technologies such as AI voice functions and motion capture abilities.

Whosfan
A K-POP idol fandom app developed by Hanteo Global. It provides K-POP chart ranking, voting, various events, and Hanteo News.

Amino
A community network platform dedicated to specific topics and interests. Users can create voting polls, upload general posts, create wiki-pages related to their interests, and quizzes.

Zepeto
Korea's renown metaverse platform which provides augmented reality (AR) avatar services.

K-WAVE

About The K-WAVE Platform

3-1. Background and Goals

A. FanTok Platform Development Background

Recently, major Korean entertainment agencies have simultaneously launched K-POP idol groups that are primarily based overseas, thus accelerating the "K-POP Hallyu 3.0" trend. A typical K-POP overseas expansion strategy is as follows. The first stage usually refers to the Korean singers' introduction overseas. The second stage refers to targeting foreign countries by including foreign members in the group. The third stage has evolved into the nurture and debut of the K-POP group directly from abroad by applying the K-POP system. This "K-POP Hallyu 3.0" strategy has been fueled by the rise in the global brand value of K-POP, which accelerated the globalization of the K-Star brand and the scope of the K-POP genre.

유럽 1,879만명
아시아-대양주 6,899만명
아메리카 1,580만 명
아프리카·중동 1,188만명

104.77 million global fans worldwide

Globalization of K-POP

Hallyu fans are continually growing, mirrored by increase in demand for album sales and performances. Hallyu continues to spread worldwide, including Japan, Southeast Asia, China, Europe, and North America. The officially estimated number of Hallyu fans are 100 million globally. In addition, BTS has established itself as a group which ranks atop Billboard charts, and various other K-POP artists such as EXO, TWICE, and Blackpink are also ranked in multiple music charts abroad.

As of 2021, Hallyu has become a powerful cultural product that encompasses all genres and cultures of the world.

BTS
· Won four awards from the People's Choice Awards in the United States in 2020
· As of 2021, won the Billboard Music Award for Top Social Artist for the fifth consecutive year
· Nominated for the Grammy Awards in 2020
· "Dynamite" topped the Billboard Singles Chart Hot 100 in 2021
· Music video for "DNA" recorded over 1.2 billion YouTube views

EXO
· Recorded the shortest time from debut to performed at Tokyo Dome as international male artists
· 5th official album ranked No. 1 in Billboard's World Albums Chart for two consecutive weeks
· Burj Khalifa hosted an EXO-themed LED show
· Ranked No. 1 at Asia Artist Awards for two consecutive years
· Ranked No.1 on Forbes' Korean Power Celebrity list in 2015

TWICE
· Japan's debut album in 2017 sold over 200,000 copies
· First K-POP girl group to complete a dome tour of Japan
· TWICE themed game launch, which ranked as the No. 1 game download on the Japanese App Store
· Received five consecutive platinum certifications for Japanese album from the Recording Industry Association of Japan

BLACK PINK
· YouTube music video reached 100 million views in the shortest time
· Ranked No.2 on Spotify Global Top 50 Chart in 2019
· Ranked No.33 on the Billboard Hot 100 Chart in 2019
· Ranked No.20 on the Billboard Official UK Singles Chart.
· Released collaborations with famous pop stars such as Dua Lipa, Lady Gaga
· The number of official YouTube subscribers exceeds 60.5 million

K-Content Globalization

With the popularity of K-POP, Korean broadcasts, and movies, the export of related services has increased. The global access and demand for K-Content are rising due to the development of the digital platform.

As various fans immerse themselves in Hallyu, diverse and broad demands follow along with the growth. In the beginning, the fans discover Hallyu through songs and K-drama, leading them to seek more K-content and interaction with K-stars. Especially for fans from geographically distant areas like Europe, North and South America, demands are even more robust. The limited opportunities for activities such as fan meetings, birthday parties, autographs, and broadcasting viewing make them eager for more.

The demand for direct and intimate communication and interaction with global fans has been boosted. International fans are waiting for more variety and in-depth exchanges with their Hallyu stars.

K-Drama
- global OTT original content

· The golden age of Netflix K-drama.
· Half of the Southeast Asia Netflix Top 10 consists of K-drama
· Due to the popularity of "Kingdom", 'Gat' from the Joseon Dynasty became popular on Amazon
· "Sweet Home", "Space Sweepers" ranked No.1 on Netflix

Parasite
- winner of the Academy Award for Best Picture, 2020

· Winner of the Palme d'Or at the 72nd Cannes Film Festival
· Exceeded 1 million viewers in France
· Advanced to North American Telluride Film Festival
· Awarded Best Foreign Language Film at the 77th Golden Globe Awards
· Nominated in four categories at the 92nd Academy Awards

**Minari**
- Academy Award for Best Supporting Actress

· Topped the Box Office on its release day in Italy
· Yuh-jung Youn became the first Korean actor to win an Oscar
· Won Best Supporting Female Award at the Independent Spirit Awards
· Ranked No.1 in cable TV VOD sales in April 2021

B. History Before K-WAVE

FanTok history begins from K WAVE, which has been working hard to globalize Hallyu for a long time. K WAVE is a global Hallyu magazine co-founded with KBS in 2012.
Later, K WAVE stopped co-publishing with KBS and started to publish magazines independently. Since then, the group has contributed to the globalization of Hallyu by launching brands such as K WAVE U, K WAVE H, and K WAVE X based on the global Hallyu fan community.

K-WAVE is a fresh start that benefits from the experience of all the methods and tactics of K WAVE over the past ten years, promoting Hallyu globalization, and a library of data such as photos, interviews, and videos.
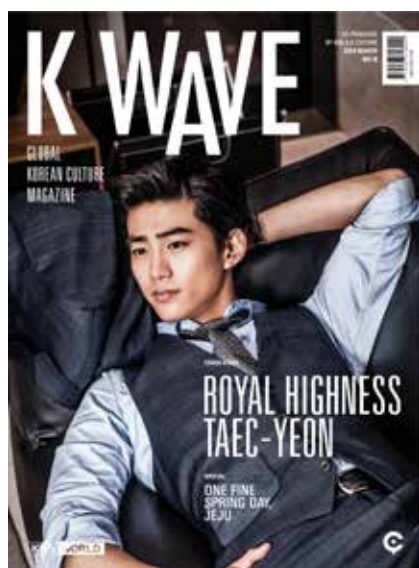
a. K WAVE
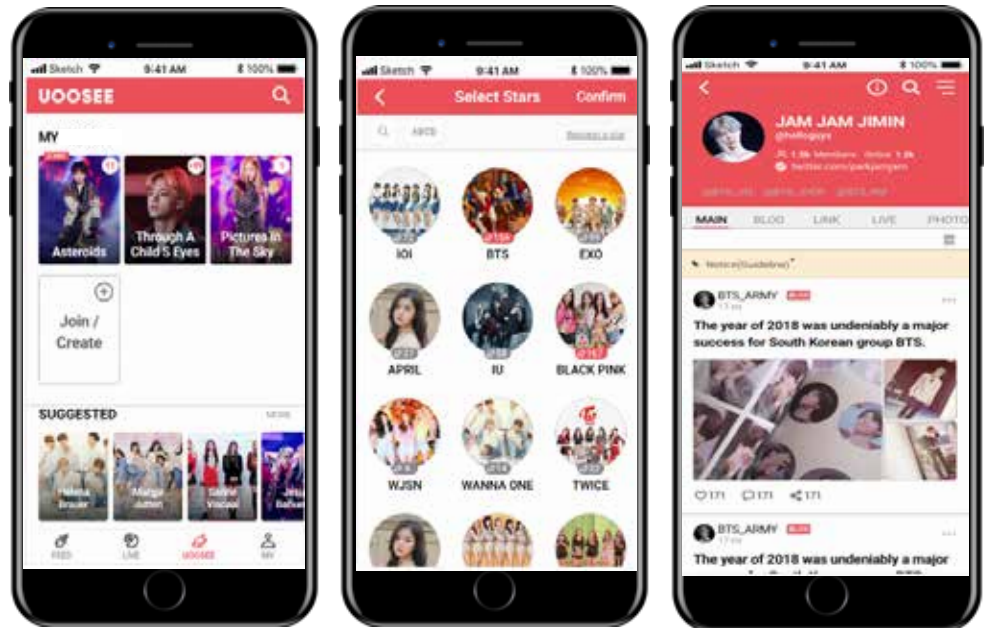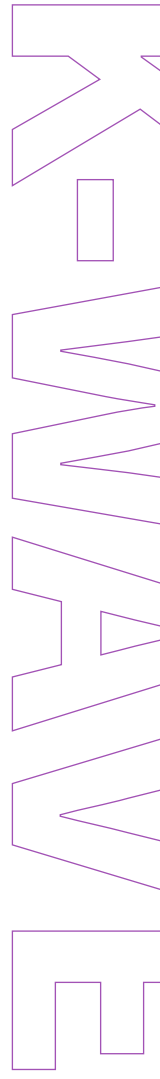

b. K WAVE M, K WAVE H, K WAVE X

C. K WAVE App

Since the release of K WAVE in August 2016, the team has been creating content for fans with involvement from a total of 300 K-stars and K-groups, including Joon-gi Lee, Chang-wook Ji, Hyoyeon of Girls' Generation, Apink, Chi-yeul Hwang, Infinite, Ji Eun Song, Young-kwang Kim, So-ra Kang, Haha, Momoland, and more.

D. K-WAVE Goals

K-WAVE aims to satisfy the needs of global Hallyu fans. In particular, the team aims to bring closer together fans from areas such as Latin America, North America, and Europe who have typically lacked frequent interaction with K-stars. Global fans crave more than just news, music, information, and images. They want a more personal experience and deeper real-time interactions. For example, they want a "platform that can provide deeply personal and private exchanges" whereby the app can directly deliver birthday presents on their behalf to their favorite K-stars.

Fans want a "magic lamp" from Aladdin to have their special wishes granted by their Hallyu star. FanTok strives to be that "magic lamp" for K-POP fans.

MISSION (WHY)	VISION (WHAT)	CORE VALUE (HOW)
"FanTok creates a new profit-generating model based on Hallyu interests."	"FanTok provides a metaverse platform for the global Hallyu fan community."	"Global network, blockchain-based convergence solution, and artists."

KWAVE

3-2. K-WAVE Features & Services

A. Make A Wish

"Make A Wish" is the core service provided by FanTok. The user (fan) selects his or her favorite K-stars and submits their wish to them. Fans apply, vote and collect wishes in advance and the selected wishes are granted through a designated live broadcast program. FanTok will partner with live broadcasting services from reputable media channels such as "Naver Now" and other famous radio talk shows, in order to overcome logistical and implementation restrictions to granting wishes.

Business Overview	· Ahead of a live-stream broadcast, fans submit their wishes of what they want the K-star to do for them during the broadcast. · Wishes are selected from a pool of "popular wishes" by the K-star's team or the K-star him/herself. · "Coins" are used to upload and vote on wishes. · Direct wish granting process between the K-stars and fans may also be available in the near future.
Main Content	· For example, before a particular broadcast (e.g. Naver Now), fans can select a category of wishes pre-confirmed by either the broadcaster and/or the K-star and upload their specific wishes. · Fans can also participate by voting on other fans' wishes so that that particular wish can go up the live ranking scale. · Wishes are selected from the top-ranking wish list. The author of the granted wish and the users who voted for that wish to be granted are rewarded with coins.
How-To	· By providing fan-communication content to a platform that already has the celebrities involved, there is no need for talent recruit. · By pre-determining the range of wishes, celebrities feel less pressured and this results in higher execution rates.
Expected Outcome	· Naver Now currently receives stories, content and wishes via text messages. A more engaged and trendy communication method seems much more suited to Naver Now than the old radio method. · Public trust in FanTok will increase through consistent wish fulfilments, amounting to more users of the app. · FanTok's direct communication platform has the added advantage of servicing not only the fans, but also the artist's agencies and producers.

Make a heartfelt wish to your favorite star!

Your dreams may come true.
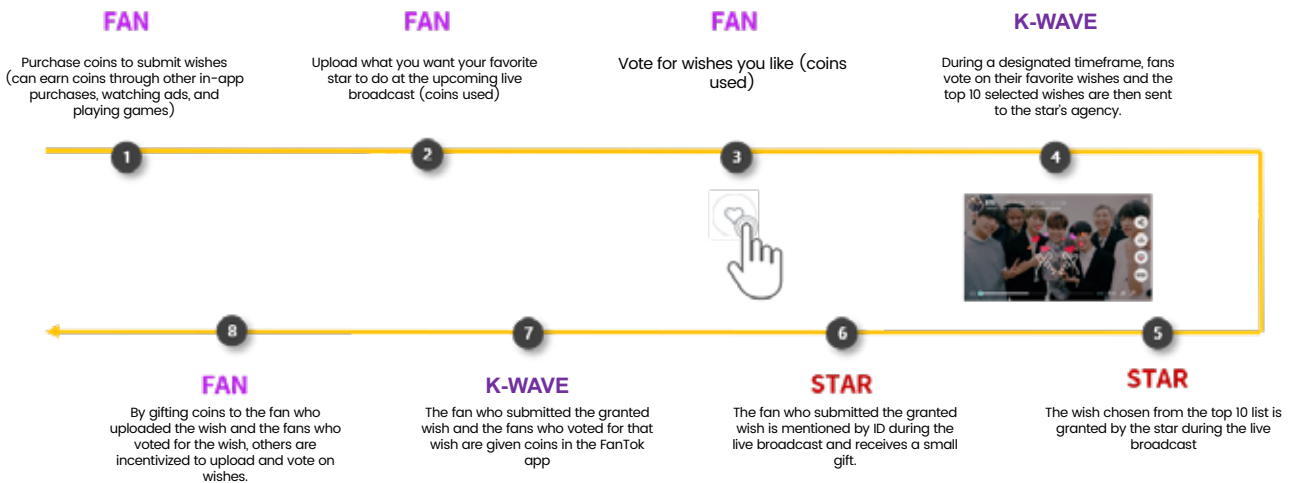The votes you get from other fans increases your chances!

- Automatic translation system may be considered

**Leave comments & hearts
on your favorite wishes!**

Fans can leave comments and hearts on wishes that
they would like to see granted.

Higher number of hearts increases the chances of the
wish being chosen.

FAN

1. Purchase coins to submit wishes (can earn coins through other in-app purchases, watching ads, and playing games)

FAN

2. Upload what you want your favorite star to do at the upcoming live broadcast (coins used)

FAN

3. Vote for wishes you like (coins used)

K-WAVE

4. During a designated timeframe, fans vote on their favorite wishes and the top 10 selected wishes are then sent to the star's agency.

FAN

8. By gifting coins to the fan who uploaded the wish and the fans who voted for the wish, others are incentivized to upload and vote on wishes.

K-WAVE

7. The fan who submitted the granted wish and the fans who voted for that wish are given coins in the FanTok app

STAR

6. The fan who submitted the granted wish is mentioned by ID during the live broadcast and receives a small gift.

STAR

5. The wish chosen from the top 10 list is granted by the star during the live broadcast

B. Custom Entertainment Station

K-WAVE provides the chance for fans to express their fan love by creating mini games and sharing them with other fans.
Fans can earn in-app coins by creating and playing games. Ad profit sharing is also available for popular game creators, thus providing a monetary incentive.

Business Overview	· Way for fans to create simple mini in-app games to share with other fans · Coins and other benefits are given to fans completing the challenge and/or quiz · Creators of the game earn coins by managing their own games
Main Content	· Quiz · MBTI type test (E.g.: Which BTS member is your type of boyfriend?) · Lyrics guessing "tray karaoke" game · Guess the next dance sequence. · Recreate retro entertainment games · Create your own wallpaper and decorate characters · Once a user reaches 'manager' level, they can create new format
How-To	· The existing formats are available to users in a vending machine type format. Users can create content by selecting the type of format, then fill in the content. · Users receive coins by creating games. · Coins are also gifted to the creator once a game reaches over a particular number of use and to the game's users who complete the game and/or reach a certain score.
Expected Outcome	· Fans will find enjoyment in making their own content and connecting with other fans. · Increase in in-app time will lead to better and more advertisement and investment opportunities. · FanTok will have created a K-POP re-interpretation of popular formats such as MBC's 'My Little Television', weekend TV entertainment programs and in-app games. · Through advertisement profit-sharing with creators of popular in-app games, fans can become "seong-deok" (meaning successful fan) and earn additional income.

Sample Image

C. Merchandise

K-WAVE made exclusive good kits are specifically tailored to varying degrees of fan love (see below). The goods are released as a limited time offer and are linked to specific live broadcast concepts.

1) Random box kits are prepared for different fan levels : entry, light, and core fan.
2) Limited edition Playmobil figure goods production and sale
3) K-WAVE analogue coin gifts and sale

A. K-WAVE Coin VIP
For users who have a significant amount of K-WAVE coin through diverse in-app activities and purchases, K-WAVE will provide them with an analogue K-WAVE coin, similar to a YouTube silver play button. (In due course, they will be granted offline VIP status as well)

B. Goods Kit
Artist-made and official merchandise grouped in random box kits are tailored to different fan levels. This reflects the different needs and wants of entry or lights fans compared to core fans. K-WAVE increases its goods sale competitiveness by mixing K-WAVE made goods with official merchandise.

C. Collecting Playmobil Sets
Playmobils are designed with the specific themes of the live broadcast where K-WAVE wishes are granted. The full set will be divided into different sale dates before the live broadcast to make the collecting process more fun. Once the full set is revealed, fans will

ame of the upcoming broadcast

K-WAVE-made goods and kit

Example of Playmobil

D. KWAVE Gallery

The many photo shoot images from KWAVE come to life again through a virtual exhibition.
Fans can choose how the images are curated either by artist or by theme.
The 360-degree viewing angle of the virtual exhibition makes the user feel like they are at an actual offline museum.
This museum is a virtual space dedicated to the Hallyu theme and offers a variety of viewing selection by date, artist and genre.
Interview recordings and behind the scene photo shoot recordings are also intermittently included in the exhibition.
Behind the scenes stories, never before seen video footage, B cut images and interviews are available. FanTok is also looking into potential meet and greet sessions with A-listers so that fans can "keep" in-app signed images.

By using the KWAVE data base, KWAVE Gallery provides a new experience to fans and this innovation can further elevate Hallyu as part of mainstream culture.
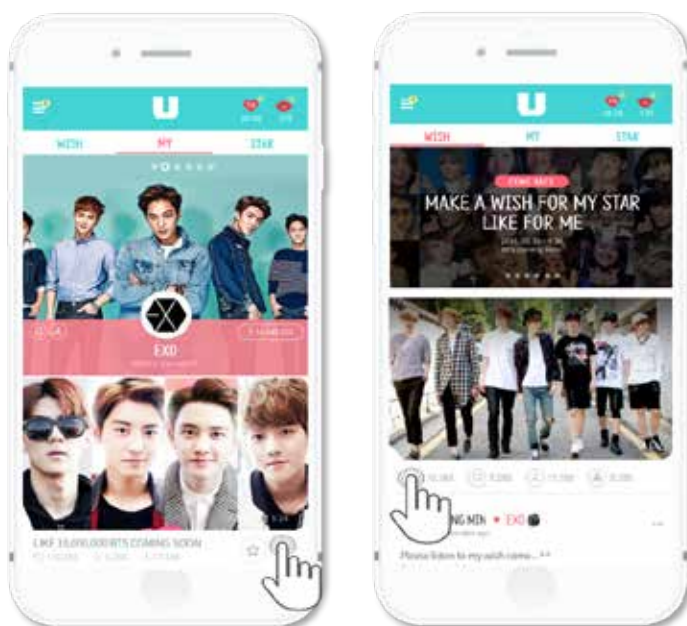

Video Display Format

Gallery Display Format

E. Coin System

Securing a profit structure that encourages the use of KWAVE U virtual money

The app system naturally encourages in-app purchases by designing fun participation elements requiring partial payment. This ensures the app's profit model as well as the use of virtual currency.

Once all the free hearts are used, there are three ways to earn coins.

1. coin purchase, 2. watching advertisements, 3. attendance check, and various in-app activities (e.g. creating games, voting on wishes, etc.)

Once all the coins have been used   Purchasing coins from the store   Earning coins by watching ads   Gaining coins by attendance check and other in-app activities

F. Crowd Funding

Culture expansion through crowd funding and artist rewards that meet fan demands

Fans can directly influence their favorite artist's activities through crowd funding and receive unique and special benefits through ViFROST.
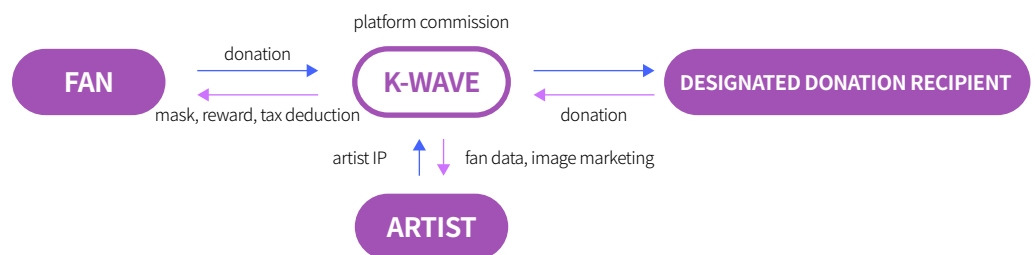
Target fan base is comprised of fans who want to exercise goodwill through their favorite artist and also be rewarded for such activities and target organizations that have low participation rates.
Through this, FanTok receives platform commission, fans receive charity rewards (personalized messages, hand-written letters etc.), and artists gain media attention and a charitable image.
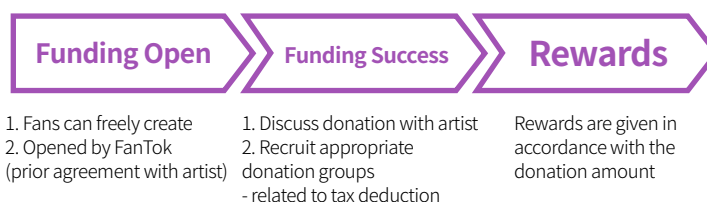
Fans can open a crowd funding page or make one on K-WAVE for their favorite artist. It is operated as an "all or nothing" type so if the target amount is reached, the donation and special benefits are provided and if the amount falls short, there is no reward.

Reward Example – minimum donation amount KRW 20,000.
1) Mask (artist name & donation organization name engraving)
2) 1-month subscription for artist's personalized message in FanTok
3) Additional KRW 4,500 per month for extension of personalized message service

Example of simultaneous connection between FanTok funding and global commerce

Funding Open
1. Fans can freely create
2. Opened by FanTok (prior agreement with artist)

Funding Success
1. Discuss donation with artist
2. Recruit appropriate donation groups
- related to tax deduction

Rewards
Rewards are given in accordance with the donation amount

* Funding operates as an "all or nothing" format. A set donation amount is determined and if the final amount does not meet the set amount, the entire donation is cancelled as well as the applicable reward system.

Blockchain

1. Blockchain Technology Concept & Advantages

1) Blockchain technology concept & advantages
In order to analyze tokenizing of assets using blockchain technology, an understanding of blockchain technology is required.
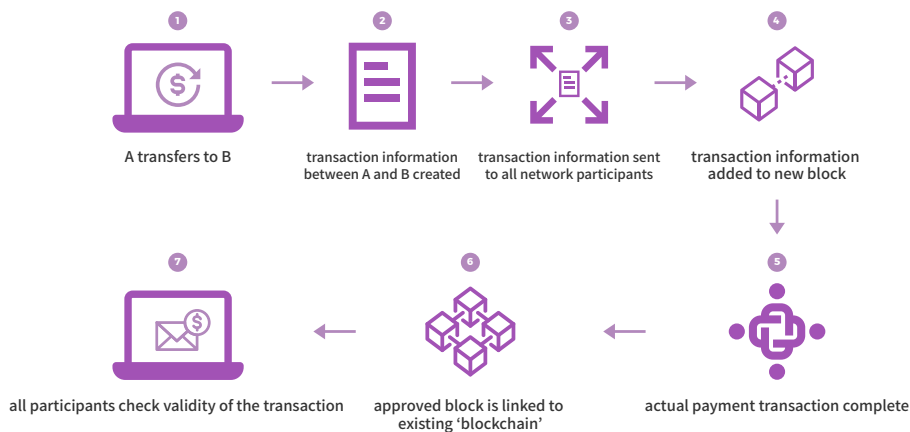
a. Blockchain is the endless linking of blocks that record specific transaction information in a time chronological order

· block : creation of a block that records all transaction information per time units
· hash : code that connects the front and back blocks
· Block Chain : chain of blocks linked in time chronological order through hash
   - Specific deal times can be determined since blocks are connected in time chronological order.
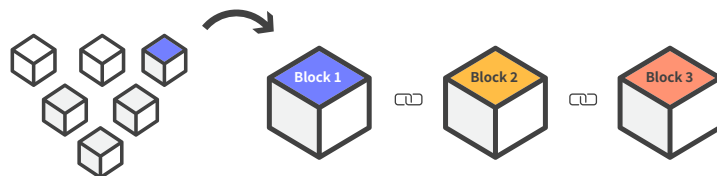
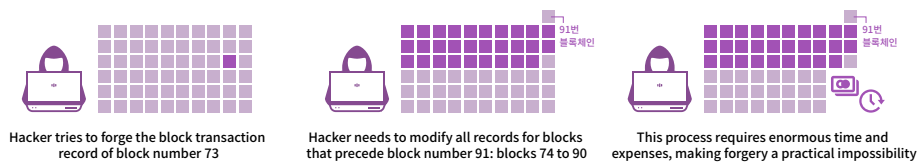### b. Real-time synchronized digital mutual distribution ledger using P2P network

· [P2P Network] Data changes that occur in the system are not unilaterally controlled by the main server and is separately recorded in the computer of the network participant (node)
· [Mutual Distributed Ledger] Network participants keep the ledger on which transaction information is recorded in a distributed state on their own computers
· Whenever a new transaction occurs, the distributed ledger content is always the same by modifying all the distributed ledgers through the network.
· Whenever a new transaction occurs, the distributed ledgers are all updated together by the network so that all the distributed ledgers are identical.

① A transfers to B ② transaction information between A and B created ③ transaction information sent to all network participants ④ transaction information added to new block

⑦ all participants check validity of the transaction ⑥ approved block is linked to existing 'blockchain' ⑤ actual payment transaction complete

c. Data Manipulation Impossible

· In order to change records on a past transaction, information must be updated on not only the relevant block but also all blocks that are linked behind that block. This needs to occur on all the network partici- pants' distributed ledgers.

- Creating a ledger by linking blocks in chronological order and it being stored as a distributed ledger between all participants make data ma- nipulation difficult.

· Currently, it is technically impossible, even with hundreds of super computers, to manipulate the mutual distributed ledger of blockchain technology.

Why blockchain hacking is difficult

Hacker tries to forge the block transaction record of block number 73

Hacker needs to modify all records for blocks that precede block number 91: blocks 74 to 90

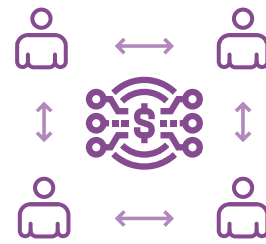This process requires enormous time and expenses, making forgery a practical impossibility

d. Reliability Can Be Secured Through Blockchain Technology Without An Authorized Third Party

· Reliability of a transaction record used to be secured through an authorized third party. However, in the event the authorized third party's reliability is compromised, a single point of failure problem could occur to the entire transaction recording system.

· In contrast, blockchain ensures the reliability of the transaction record without an authorized third party.

- Instead of an authorized third party, network participants verify, record and store transaction records, thus averting a single point of failure problem.
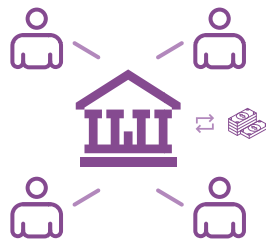
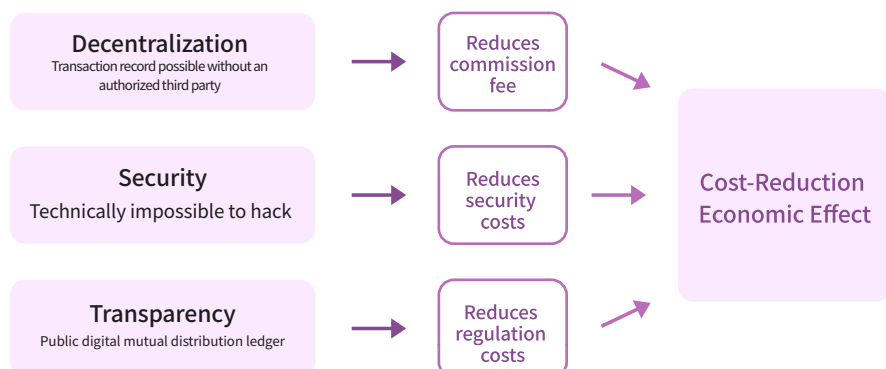**Basic Centralized Financial Transaction**   **Financial Transactions Using Blockchain**

e. Advantages Of Blockchain Technology

· Technical Advantages: decentralization, security, transparency

  – [Decentralization] transaction verification, record and storage possible without an authorized third party

   – [Security] the network's computing power makes it technically impossible to hack

   – [Transparency] public digital mutual distributed ledger provides transparency

· Cost-Saving Effect From An Economic Standpoint

  – Reduction in unnecessary fee payment to authorized third parties through decentralization

   – Reduction in security costs to prevent hacking and single point of failures

   – Reduction in regulation costs for transaction record transparency

Cost Reduction Effects of Blockchain Technology

Type	Authentication System	Blockchain System
Active X Installation	Required	Not Required
Certificate of Authentication Storage	Saved to user's choice of storage	Blockchain storage (without personal information)
Cost	KRW 4,400 p/1	KRW 20~30 p/1

Advantages of Blockchain Technology

Decentralization
Transaction record possible without an authorized third party
→ Reduces commission fee →

Security
Technically impossible to hack
→ Reduces security costs →

Transparency
Public digital mutual distribution ledger
→ Reduces regulation costs →

Cost-Reduction Economic Effect

2. Development of A Platform Applying Blockchain

1) Securing Transparency Of The Platform Ecosystem

Blockchain technology which makes forgery and falsification of data recorded in the network fundamentally impossible, can almost completely guarantee the transparency of the K-WAVE platform ecosystem.

Like the blockchain network, information stored in the K-WAVE block can be accessed by anyone and transaction history can be monitored. As the main activities of the platform are open to the public, fans won't have to doubt their hard efforts amounting to nothing. Fans can be proud of their support for their favorite stars and trust the platform ecosystem.

With such trust as its basis, K-WAVE platform participants will do their best in their respective roles and this drive will certainly be mutually beneficial for the participants and the entire platform.

Fan participation is the most important factor in the entertainment industry.

The images and influence of these 'artists', often called 'stars', are assets in the entertainment industry. As such, the entertainment industry is very different from the average service trade or the commercial market.

Fan and star interaction – that is, human interaction and bond – is the main commodity in this market, Trust between the artist, fan, and content provider (producer) is therefore the most important factor in managing an entertainment business and sometimes even a sore point for fans.

When trust is broken between artist, fan and the artist management company, some artists lose their popularity and are no longer able to exercise their influence with a tarnished reputation, while a fallout between the management company and artist may result in the artist leaving that agency.

In addition, the trust between investors, producers and advertisement companies also has a huge influence in the entertainment business. K-WAVE will fortify the trust between such parties by implementing the blockchain technology to the entertainment industry.

This will also minimize the risk rising from the existing information inequality and play a big role in forming a culture where everyone is satisfied.

It will play a big role in reducing the risk of information inequality in the industry and forming a culture where everyone can be satisfied.

2) Fair Compensation and Evaluation For Participation

Another reason why K-WAVE wants to adopt blockchain technology is because it can justly compensate all participants of the platform according to their level of involvement.

By using blockchain technology, all activities by the participants of the platform ecosystem can be monitored and saved in the K-WAVE block. The pre-arranged smart contract system can then automatically recognize and process the efforts of each participant and provide fair compensation.

When such a fair compensation system is in place, participants will voluntarily spend more time and effort because direct economic benefits will follow as a reward for their efforts and interest. It will also serve as a driving force for continued activities.

Compensation and ranking according to these efforts within the platform ecosystem will encourage more content consumption and product purchases for their stars.

For example, a user may receive back a certain portion of a goods or service purchase price as tokens, or earn tokens through community attendance check, content and/or product reviews, or by participating in an event. Then the user will spend the earned tokens on another service and/or product to complete the cycle.

This model is being successfully used in many token systems and is expected to be more successfully applied to the entertainment industry where fan participation is critical.

The attention and affection fans have toward their stars will boost the cycle and ensure economic benefits as well as the continuous growth of the fan community as well as the platform ecosystem.
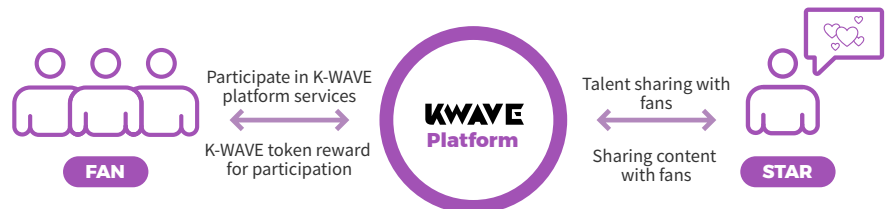
Economy

K-WAVE Token Economy

1. K-WAVE Token Concept

K-WAVE tokens are used by the K-WAVE platform and is an ERC20 based utility token.

K-WAVE tokens are used in the app as rewards for active community participation, various stars' PR activities, watching in-app advertisements and other K-WAVE activities. The earned tokens can be used as payment for in-app content, digital item purchase, favorite star's personal item auctions, voting and other content that boosts the participant's favorite stars.

The K-WAVE team strives to expand the use of K-WAVE tokens and grow the token economy by providing additional benefits to actual users and by maintaining the value of the K-WAVE token through continuous updates, active partnerships and developing new services and items to use the tokens.

Concept & Acquisition of K-WAVE Tokens

FAN — Participate in K-WAVE platform services / K-WAVE token reward for participation — KWAVE Platform — Talent sharing with fans / Sharing content with fans — STAR

2. How To Use K-WAVE

• Make A Wish

Fans upload wishes that they want a celebrity to grant on an upcoming live broadcast, and of the wishes, the most voted wishes are delivered to the celebrity's agency and a wish wish is chosen by the celebrity or the agency to be granted during the live broadcast.

Coins are used to upload and vote on wishes. This corner will expand to invite celebrities directly onto the K-WAVE platform without a live broadcast connection to grant a fan's wish.

a. Preferential treatment for the members with K-WAVE tokens
b. Additional heart rewards based on the amount of K-WAVE tokens
c. Heart item purchases using tokens
d. Tokens as reward for the wish being selected

• Custom Entertainment Station

A variety of simple templates allow fans to create mini games, quizzes and in-app content to be enjoyed by other fans. Creators are rewarded based on other fans using the content. Game creators also earn FanTok tokens by managing their own game creations.

a. Gain tokens as a reward for games and quizzes
b. Profit from game development through in-app game advertisements
c. Purchase items for content production using tokens

• Merchandise

K-WAVE-made goods are packaged into kits based on fan levels and sold to each fan tier. Limited edition goods based on a particular live broadcast concept are also released in sync with the wish granting schedule.

a. Goods purchased with hearts and tokens
b. Special goods production and purchase with hearts and tokens
c. Assigned VIP status depending on the amount of K-WAVE tokens

• K WAVE Gallery

An "All-Star Online Gallery" experience, with XR technology 360-degree viewing angle, recreates a virtual museum where all of KWAVE images and videos are on display.
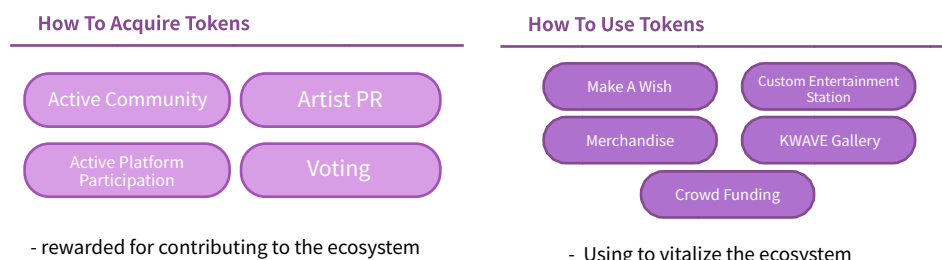
a. Special exhibition tickets can be purchased with K-WAVE tokens
b. Celebrity signed images can be purchased with tokens

• Crowd Funding

Fans can directly influence their favorite artist's activities through crowd funding and receive unique and special benefits through ViFROST.
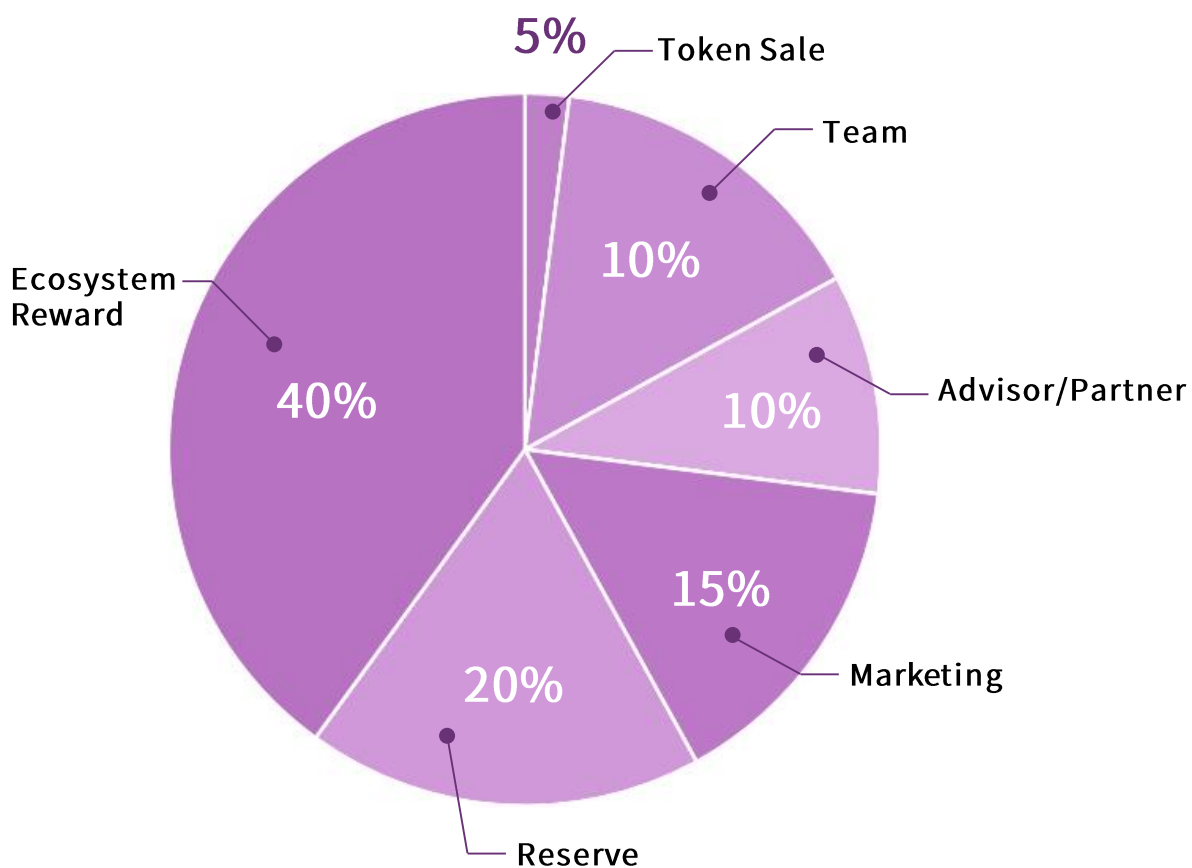
a. Donations using hearts or tokens
b. Rewards for donating

Token Utility Summary

How To Acquire Tokens

| Active Community | Artist PR |
| Active Platform Participation | Voting |

- rewarded for contributing to the ecosystem

How To Use Tokens

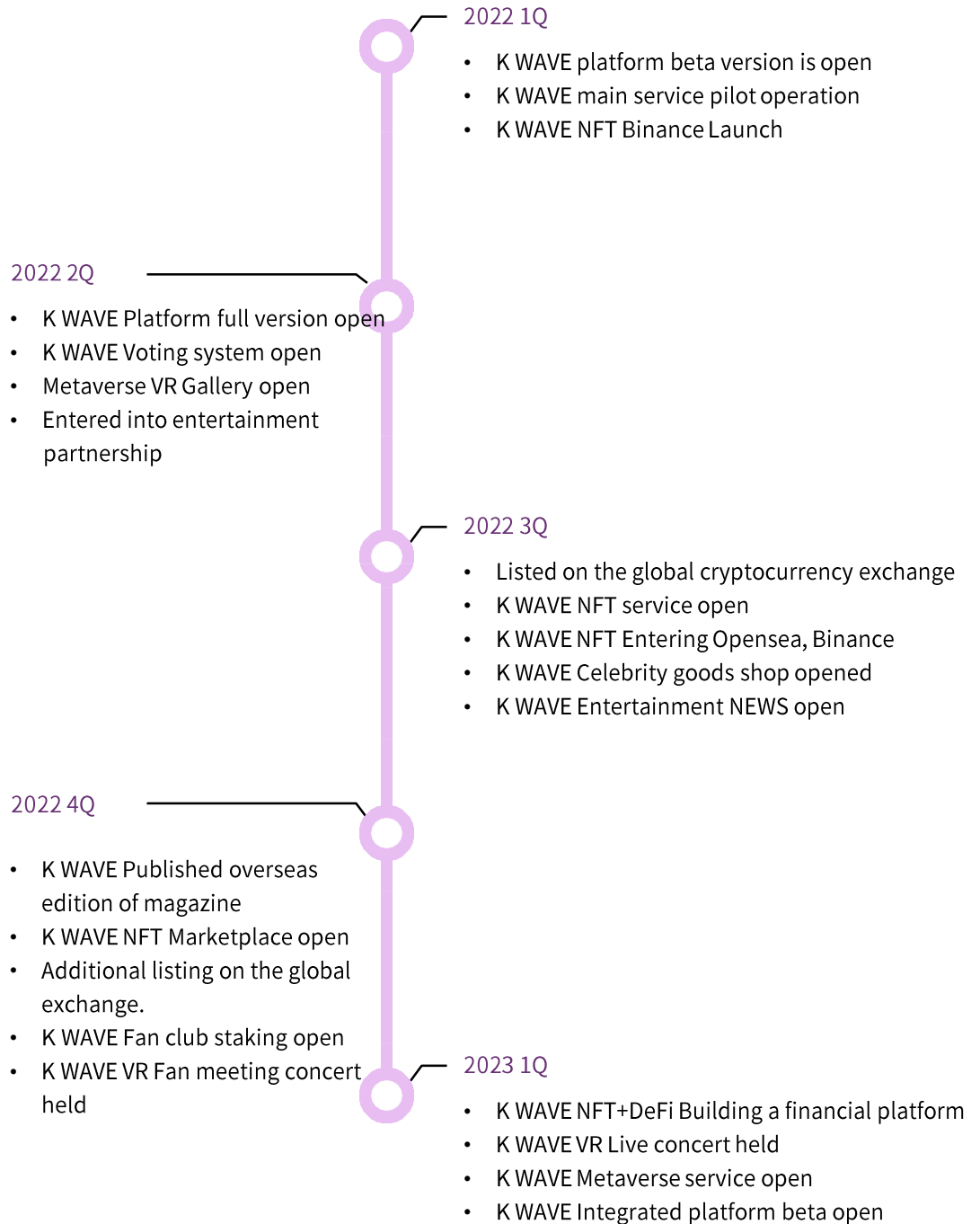| Make A Wish | Custom Entertainment Station |
| Merchandise | KWAVE Gallery |
| Crowd Funding | |

- Using to vitalize the ecosystem

3. K WAVE Token Issue & Distribution

a. Name Of Token : K WAVE
b. Token Symbol : KWAVE
c. Token Protocol : ERC-20
d. Total Issue : 3,000,000,000
e. Token Distribution : - Team : 10%
                    - Advisor/Partner : 10%
                    - Marketing : 15%
                    - Reserve : 20%
                    - Ecosystem Reward : 40%
                    - Token Sale : 5%

Token Sale — 5%
Team — 10%
Advisor/Partner — 10%
Marketing — 15%
Reserve — 20%
Ecosystem Reward — 40%

Roadmap

6

2022 1Q
- K WAVE platform beta version is open
- K WAVE main service pilot operation
- K WAVE NFT Binance Launch

2022 2Q
- K WAVE Platform full version open
- K WAVE Voting system open
- Metaverse VR Gallery open
- Entered into entertainment partnership

2022 3Q
- Listed on the global cryptocurrency exchange
- K WAVE NFT service open
- K WAVE NFT Entering Opensea, Binance
- K WAVE Celebrity goods shop opened
- K WAVE Entertainment NEWS open

2022 4Q
- K WAVE Published overseas edition of magazine
- K WAVE NFT Marketplace open
- Additional listing on the global exchange.
- K WAVE Fan club staking open
- K WAVE VR Fan meeting concert held

2023 1Q
- K WAVE NFT+DeFi Building a financial platform
- K WAVE VR Live concert held
- K WAVE Metaverse service open
- K WAVE Integrated platform beta open

Team

7

Richard Yoon President / CEO

- HANYOU KOREA CEO
- IPSL Limited Co-founder
- ANIVERSE Project Advisor
- DGAMES Co-founder
- Korea Blockchain Contents Association Advisor
- Korea Mobile Game Association China President

Ethan Park Director / COO

- YESKIN IT Division Director
- Knowlworks Strategic Planning Director
- Mining Star Co., Ltd. CEO
- KOREAMCN Co., Ltd. Director
- HANYOU KOREA General Manager
- GNE Inc. International Sales Dept
  General Manager

Jenny Jang Director / CFO

- Present – Kairos CEO
- 10 Years of Overseas Business &
  Marketing Experience
- Jeju University of MBA
- Shenzhen University in China

Scott Oh Director / CTO

- Supercompany Co., Ltd. CEO
- Megaholdings Co., Ltd. Co-Founder
- BND Mobile Co., Ltd. Director
- GGSOFT Co., Ltd. Director

Luke Lee Director / CBO

- NOKNOK,Inc Producing Director
- Webzen,Inc Dev PM
- NGNTsoft,Inc Businese Director
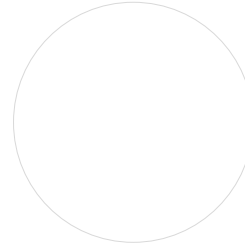- TubaN Brand Business General Manager
- Centillion SB,Inc CEO

Heenam Chae Director / CMO

- VINSKOREA Co. CEO
- MGTRADE Co. CEO
  CLICKZOA Co. CEO
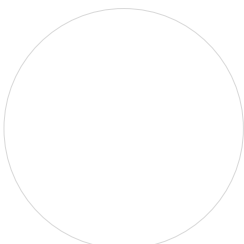- BIZENITH Co. CEO
- Alibaba.com Korea team Advisor

TaeYoon Kim Director / CIO

- Prime Play CEO
- Prime Ad CEO
- Utopia Director
- Sporive Sales Planning&Consulting
- MK Sales Planning&Consulting

Heonho Jung

- The Live Co., Ltd CEO
- Live K Co., Ltd CEO
- Korea MCN Co., Ltd CEO

Gihyeong Jun

- TubaN Head of Digital Traffic Business
  Division
- Mr. Games Co., Ltd CEO

Doseon Lee

- Share Times Korea Co., Ltd CEO
- Director of the National School
  Association Steering Committee
- Secretary General of the Guus
  Hiddink Foundation

Adviser

Steven Edelson Senior Adviser

- MSEG & IFGDG Co-founder
- Miami Baseball Field, Yankees Stadium
  Convention investment and operation
- Chicago Bulls and White Sox co-owners

Ana Saniez Advisor

- Content Development Director
- Walt Disney Branding, Licensing
  17 Years of Digital Transformation
- IBM 6 years experience as a social
  branding director

Alex Egorov Adviser

- 15 Years of Experience in Banking
  and Fnance.
- National Reserve Bank Vice President
- GIFTD.tech Solution CEO

Taeseop Yoon Adviser

- The Chosun Ilbo (Culture Section)
- Chief Editor, Deputy Editor
  (Entertainment)
- Judge – The Blue Dragon Awards
- Judge – SBS Supermodel Contest
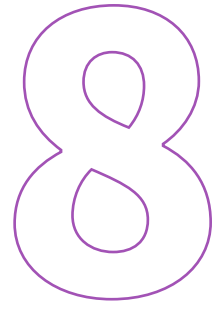- Graduated – Yonsei University

Shaun Kim Adviser

- Written and Composed
  (Over 300 songs've been published)
- Rep. Works

  Bigbang, EXID, Hot Pink, T-Ara,

  Wanna One, Boa, ETC…

  Aespa _ Dream come true(2021)

Tim Seo Adviser

- Davox Technology CEO
- Dcoin Exchange Korea CEO
- Director of E-SPORT, Actozsoft
- General Manager CMGE Overseas BC
- GBLP Program at Huobi University
  in China

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6. It is the sole responsibility of the K-WAVE token purchaser to determine the legal possibility of overseas currency exchange and disposition of income tax and other issues that may arise in relation to the acquisition and disposal of K-WAVE tokens within their relevant legal jurisdiction.

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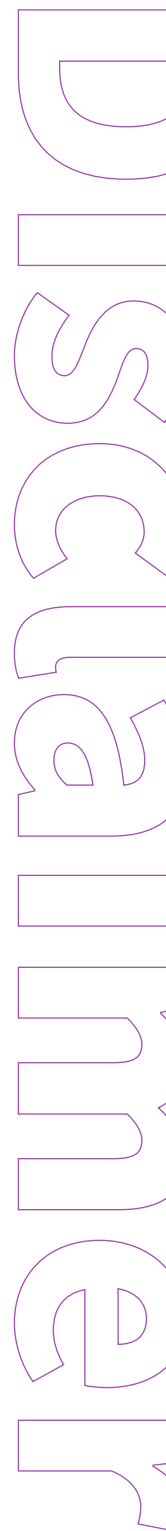
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Investment Risks

The K-WAVE team notifies potential buyers of the various types of risks, including the risk of incurring a loss equivalent to the purchase price of K-WAVE tokens. The accuracy of the information regarding risks or the uncertainties mentioned below are not guaranteed.

Buyers are deemed to be aware of and agree to the purchase of K-WAVE tokens at their own risk and without any warranty of any kind expressly or implicitly, for the sale and purchase of K-WAVE tokens.

1. Blockchain Risk: Transactions may be processed late or invalidated due to congestion in the blockchain system. In particular, the smart contract responsible for the issuance and distribution of FanTok tokens is based on a technology called the Ethereum blockchain. The Ethereum protocol may have weaknesses and vulnerabilities, and various bugs may exist, including a bug in which K-WAVE tokens are lost. In addition, problems with the Ethereum blockchain may cause material damage to the K-WAVE team and to the K-WAVE token purchasers.

2. Personal Information Risk: Personal information of the user is necessary for the distribution and control of the K-WAVE tokens in the purchaser's electronic wallet. In the event personal information is leaked, the K-WAVE tokens in the buyer's electronic wallet may also be leaked. Moreover, the leak may allow a third party to access the buyer's e-wallet and steal the K-WAVE tokens.

3. Security Risk: Like all other cryptocurrencies, Ethereum is vulnerable to mining attacks such as 'double-spending attack' or '51% attack'. Hackers or other groups with malicious intent can attack the K-WAVE team or the K-WAVE token via the above attack method, and if such blockchain attack is successful, it can seriously damage the K-WAVE token transaction and the K-WAVE token.