

The First Flower Card(花札) Gaming Platform

May 2019

The Origin of Flower Card & Guang Game

It is said that Flower Card is a mixture of the western card game and Japanese art. At the end of the 16th century, Portuguese missionaries introduced the western card game to the Japanese. It is believed that the Japanese then adapted the game format to their culture.

Flower Card was probably introduced to Koreans in the late 19th century. It then became deeply ingrained in the Korean culture, as it made its way into Korean folk songs and later into cartoons and movies that garnered great national popularity.

Guang Game takes its name from the symbol 光 (pronounced as "guang" and meaning "light"), which is a unique feature of the Korean version of Flower Card. As the guang mark denotes high scores in Flower Card, it is what players of the game aspire after. Guang Game wishes to embody this aspiration and bring value to people's lives like the guang card.



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1. Introduction

Guang Game offers a variety of card games based on the EOS blockchain. Players can enjoy fun and fair games on a safe and verifiable platform through the blockchain. Our goal is to leverage the strength of the EOS blockchain to build a platform where game developers and gamers can thrive together. We are aware that the value of the platform depends on developers and users alike, so we built a system through which we can share our revenue with our users.

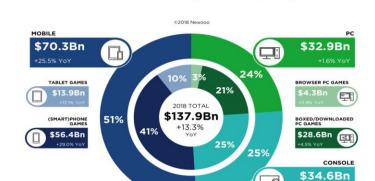
Our goal is to lead the blockchain games market by releasing games that are not only fun, but also effective in solving the main problems experienced by conventional online game platforms (such as platform limitations, token price instability, and low credibility).

2. Market Overview

2.1. The global games market

According to Newzoo, one of the leading providers of game analytics, the global games industry (including mobile, PC, and console games) turned over \$137.8 billion in sales in 2018. Moreover, the sales are expected to reach \$180 billion in 2021. Considering the sale of \$70.6 billion in 2012, this is a striking phenomenon: the global games market has been growing at the remarkable rate of +11.0% per annum over the past 10 years.

2018 GLOBAL GAMES MARKET
PER DEVICE & SEGMENT WITH YEAR-ON-YEAR GROWTH RATES

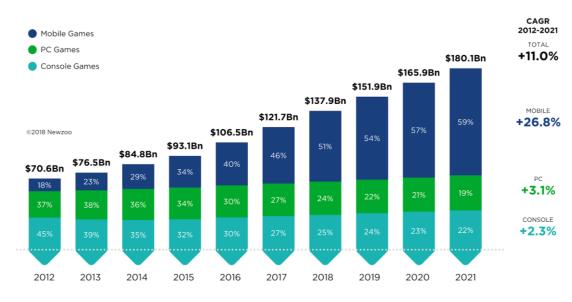


Source: NEWZOO

The bulk of that growth has come from the explosive performance of mobile games: over the past decade, the mobile game market grew by +26.8% per annum, while the PC and console game markets grew by +3.1% and +2.3% respectively. Due to their highly accessible nature, mobile games have become ingrained in the daily lives of people. Streaming services like AfreecaTV and Twitch have been growing in symbiosis with this trend. It is expected that this vital trend will naturally feed into the markets of Ethereum- and EOS-based blockchain games.

2012-2021 GLOBAL GAMES MARKET

REVENUES PER SEGMENT 2012-2021 WITH COMPOUND ANNUAL GROWTH RATES



Source: NEWZOO

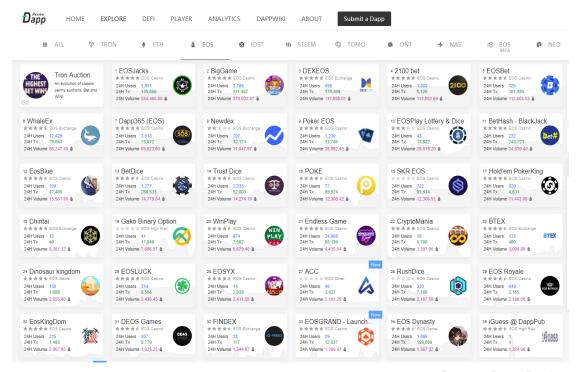
2.2. The EOS dapp¹ market

Mobile games can be played almost anywhere, anytime. This high accessibility has been very attractive to many, and now the mobile games industry accounts for 59% of the total games market.

¹ A decentralized application (dapp) is a computer application that runs on a distributed computing system.



The blockchain games market is also booming, much like the mobile games market 10 years ago. The development of blockchain technology is fueling this growth, as the technical transparency of blockchain-based applications has garnered considerable interest among gamers. Many gamers have complained about the lack of transparency in online games, and blockchain games can be the solution to this issue.



Source: Dapp Review

The biggest blockchain games market today is the EOS dapp market, which generates more than \$10 million in daily transaction volume. The market consists of online board games, mostly casino games (poker, blackjack, roulette, dice, etc), sports betting games, and lottery games.

In keeping with the rapidly evolving EOS dapp games market, Guang Game aims to produce a variety of online board games that are secure and transparent.



3. Guang Game and the Blockchain

One of the main advantages of blockchain games is the technical transparency that the blockchain provides. The blockchain system is hack-proof; and because it records every single transaction under a public ID, anyone can check the details of any transaction by searching for its ID on the web. This innovation has enabled gamers and game developers to develop a relationship of trust. Moreover, this transparent system allows game companies to cut management costs: unlike conventional online games in which considerable resources are spent on data-storage, the blockchain operates on the P2P network and does not require game companies to run expensive servers.

3.1. The EOS blockchain

EOSIO is a blockchain protocol designed to run blockchain-based application programs called dapp. Through continuous and active updates, the platform has quickly attracted developers to become the biggest of its kind, and is still evolving by continuously upgrading its transmission speed.

3.2. Strengths of the EOS blockchain

+ Enhanced extensibility

Although the amount of saved data in this blockchain has been increasing rapidly, the system continues to operate smoothly.

+ High throughput (transaction per second)

Among the existing blockchains, the EOS blockchain has the highest processing speed (which will get even faster due to upgrades).

+ Cost-efficiency

Unlike Ethereum, EOSIO does not charge commission on cryptocurrency transfers.

+ Suitable environment for programming

Dapps in this blockchain are coded using C++, but the coding gets converted to operate on WebAssembly (in order to make dapp development easier for more people). Meanwhile, Ethereum uses Solidity, which is known to be a flawed programming language in comparison to C++.



3.3. Smart contracts

In the offline world, a contract is information on paper; the main information consists of demands (made by the parties directly involved in a particular transaction), and the paper document functions as a guarantee for those demands. In the blockchain world, a contract is a computerized protocol that automatically executes the transaction when the demands are met.

The EOS smart contract recognizes transactions using EOS or EOS-based tokens. All the parties involved in a transaction will be provided their respective ends of the bargain; when the ends are met, the transaction will execute. The smart contract on the EOSIO database is executed on the EOSIO node. The rules and conditions of the smart contract are automatically saved on the blockchain and uniformly applied to each party to the contract. Game developers can readily engage in smart contracts using the EOS platform.

3.4. Decentralized Exchange (DEX)

DEX enables people to execute contracts via the P2P network, without the need for an intervening server. DEX was created by Ethereum, which has failed to operate its DEX smoothly due to inadequate processing speed. Meanwhile, the EOS DEX has solved this problem by incorporating servers into the blockchain, thereby creating a hybrid between DEX and the conventional way.



4. The Necessity of Blockchain Games: Transparency and Fairness

The profit models of online games (including mobile games) have been focusing on the *chance item*, a game product that gamers can acquire by gambling. And this profit model has created a trust issue between game developers and gamers; a trust issue hampering the growth of the online games industry. This issue will persist unless developers can absolutely guarantee (with evidential data) that probabilities are applied fairly in their games. Fortunately, the blockchain has solved this issue.

The conventional online games industry uses the game company's server to run the games. In this way, gamers do not have access to the gameplay data because they do not have access to the server. Although this way is beneficial due to the high processing speed it can provide, the lack of transparency and the uncertainty of fairness are two problems it has not been able to solve.

In the blockchain-based game, all transactions are saved on the blockchain itself, which functions as a public server. This means any user can access the details of a transaction or scan the system to find possible faults in it. This gives users a reason to trust the system.

Chance items account for over 90% of total profit in the PC and mobile games industry. And efforts to regulate these items have been increasing globally. The most common regulation is the requirement to make public the item composition of *random boxes*² and the probabilities assigned to each item. In Belgium, the regulation is more severe: *chance items* are legally treated as gambling products, so it is illegal for a minor to purchase them.

Developing your game character is the main point of playing online games; and getting superior items for your game character is a great way to do that. However, more and more gamers will distrust the *chance item* system as issues about probability manipulation continue to arise. In the blockchain, such issues will simply not occur.

² The random box is a game product that gamers can purchase. It contains a number of slots, each of which contains an item that appears when the product is purchased; the items appear according to the probabilities assigned to each item; the probabilities are assigned by the game developers and are not always made public.



5. The Guang Game Platform

A big strength of Guang Game is that it does not repeat the flaws of conventional online games.

5.1. Cooperation between users and developers

We believe our users are investors to our business; while it is important to attract as many investors as possible, it is also important to recognize that they are the source of our growth. In this belief, we have established a profit-sharing system: 40% of profits will be distributed to our users, based on the amount of TAZ chips they have used or TAZ coins they have staked³. (For more information, please refer to **7.1 TAZ & TAZ Chips**.)

5.2. A global multi-platform service

Our services are not limited to a particular country or platform: we seek to reach a wide range of people globally and across multiple platforms. Since our services are based on cryptocurrency, we are not restrained by national currencies, and that puts us in a favorable position to our aim.

5.3. A multi-currency platform

Users on our platform will not be restrained by a particular cryptocurrency: they will be able to choose among a number of major ones including EOS, BTC, and ETH. By incorporating a diversity of cryptocurrencies into the system, we expect to reach a diverse and wide range of people with our services.

5.4. Guaranteed fairness

Conventional platforms have had difficulties ensuring the fairness of gaming outcomes, because they cannot provide decisive evidence for that claim. Our platform can easily ensure fairness due to the verifiable nature of blockchain transactions.

³ By staking coins, a user can gain some decision power on the network (by gaining the right to vote), and receive dividends.

For example, a user of the game Guang Sicbo gets a random value generated by the server without having to send back information about what they are betting; the hash and signature of the random value function as evidential data. After placing their bet, the server exposes the random value and calculates the result. All the data generated by this process automatically become permanent and accessible to all users, so it is impossible for the game developer to manipulate the process in secrecy.

5.5. Stable currency

Some people say that cryptocurrencies cannot be a sustainable form of currency because their prices fluctuate too much. To solve this problem, we decided to implement the TAZ chip, which is a stablecoin⁴. TAZ chips are pegged⁵ on the EOS via algorithm. In this way, the TAZ chip can function as a stable form of game money.

5.6. A variety of games

We aim to release a new game every 1~3 months. Our team is equipped with an abundant pool of experience on online game development. We are also collaborating with other companies to develop new games. *Guang SicBo* is expected to be released in August, 2019; after that, we will release a new game every 1~3 months. Currently in development are *Guang Seotda War*, *Guang Seotda PvP*, *Guang Slot Machine*, and *Guang Matgo 10n1*.

5.7. Know your customer (KYC)⁶

We will implement the KYC process to prevent minors from playing our games which can be perceived as gambling. We will make the process as simple as possible in order to minimize discomfort. We will cultivate a healthy and stable gaming culture that is free of legal risk.

⁴ Stablecoins minimize price volatility by being pegged to other forms of currency.

⁵ To peg a currency means to fix its price on the price of another currency.

⁶ KYC is the process of verifying the identity of your clients in order to minimize risk.



6. Operation Plan

6.1. Plenty of missions

The games offer a variety of missions that users can choose to tackle; users get rewarded for accomplishing missions. In this way, users are encouraged to actively and continuously engage in the games.

6.2. The ranking system & the leaderboard

Another way we can encourage user engagement is by our various ranking mechanisms. The more a user engages in the game, the higher their rank gets. Users are rewarded for getting to higher ranks.

Yet another way to encourage engagement is via our leaderboard. The leaderboard lets users show off their merits to others. The user with a high rank may feel proud to have their username featured on the leaderboard, and this may generate motivation to engage more actively in the game.

6.3. The item shop

Users can purchase various items that can be used on the platform to serve their diverse interests. In order to encourage item purchasing, we are working on items that function as a means of self-expression.



7. Tokens

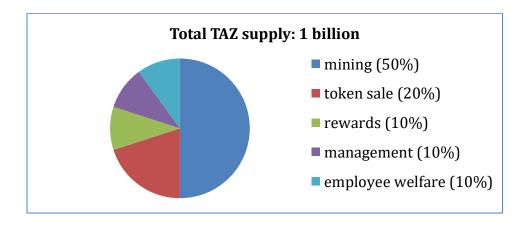
7.1. TAZ & TAZ chips

TAZ is a security token⁷ and TAZ chips are a utility token⁸. Users can play our games by purchasing TAZ chips, which they can buy with EOS or TAZ. We aim to provide dynamic gaming experiences that are inexpensive; one EOS can buy one million TAZ chips.

7.2. Origin of the name TAZ

时 (which can be written as "tazza") is a Korean word that means "expert gambler who has reached the highest skill-level of gambling." To reach the highest level of any skill requires great discipline; life can be a cold war where only victory and defeat exist; one must build the inner strength to really learn from their painful defeats, because that is the only way to become the best at any skill; and that is the only way to become a tazza. We think the tazza embodies a universal aspiration to be great, and we wanted to inspire our platform with this aspiration, which is why we named our game money TAZ.

7.3. TAZ distribution plan



⁷ Security tokens function like financial securities; holders of security tokens are like shareholders of the company.

⁸ Utility tokens are a means to purchase company products or services; they do not entitle the holder to have decision power over platform management or receive dividends.



Mining (50%)

In order to share our profits with our users, we have implemented the mining system as a part of the game. Every time a user bets a TAZ chip, they receive a certain portion of TAZ back regardless of the betting outcome. Users can purchase more TAZ chips with the TAZ, or they can stake the TAZ to receive dividends⁹.

Token Sale (20%)

Operating a gaming platform requires a large budget for a variety of ends; such as setting aside resources for rewards, CPU/NET staking, and RAM purchasing.

To mitigate funding pressures in the early stages of platform operation, we will set aside 200 million TAZ (20% of the total) to be offered for purchase. The first batch will be sold at 500 TAZ per EOS. The second batch will be sold at 300 TAZ per EOS. The user can buy the token (TAZ) to stake or to purchase game items.

Rewards (10%)

Signing up

During a certain period, TAZ will be rewarded to users simply for signing up.

Reporting bugs

We want our platform to run with perfect smoothness, and therefore will not tolerate bugs in our system. 1000 TAZ will be rewarded to the user who reports a bug. 100,000 TAZ will be rewarded to the user who reports a serious bug.

Bringing friends

We will reward users for bringing someone they know to the platform. We believe this will be a cost-effective way to attract new users. When a person is signing up to become a user, they will have the option to submit the username of the one who recommended the game to them; in this case, we will reward the user of that username. We believe word of mouth is an effective channel of information. By rewarding users for bringing friends, we will be utilizing the effectiveness of word of mouth.

⁹ A dividend is a sum of money paid to shareholders of a corporation out of earnings.

Events

Special events can be very good for publicity; and publicity can be very good for profit enhancement. Events are designed to attract attention; a successful implementation of an event will trigger the word-of-mouth effect, and thereby enable the company to cut marketing costs. We are working hard to develop events that are entertaining to users and beneficial to our marketing.

Management (10%)

The operation of the Guang Game platform requires a big budget for a variety of ends (server-related costs, network-related costs, marketing costs, etc). 10% of the TAZ that are issued will be spent on these basic management costs. TAZ allocated for this purpose cannot be staked.

Employee welfare (10%)

Our team is striving day and night in order to develop various games within a limited timeframe. To ensure strong and stable work motivation, 10% of the issued TAZ will be spent on employee welfare. TAZ allocated for this purpose cannot be staked.

7.4. Token usage

Staking

40% of our total profit will be allocated to our token-holders in the form of daily dividends. Staking tokens (TAZ) will enable users to receive a daily portion of income.

Token trading

The token TAZ will be listed on the exchange in the 3rd quarter of 2019. Users will then be able to trade TAZ on the exchange. Also, we are developing our own exchange in order to provide users with more options in trading TAZ. Furthermore, we are looking into the viability of a commission-free policy in our exchange.



Voting

We are constantly developing new games. All token holders will have the right to vote on some issues regarding game development. Our team takes the vote seriously, and will fully incorporate the token holders' interests into our games.

8. Contact Us

Thank you for paying attention to the Guang Game platform.

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