

 **SPORTS CHAIN**



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All contributions will be applied towards the Foundation's objects, including without limitation advancing, promoting the research, design and development of, and advocacy for a blockchain-based decentralised e-sports ecosystem which would solve various problems in the industry such as unjustified incentive distribution by centralised, inefficient institutions, in order to achieve fair profit distributions among content producers and consumers.

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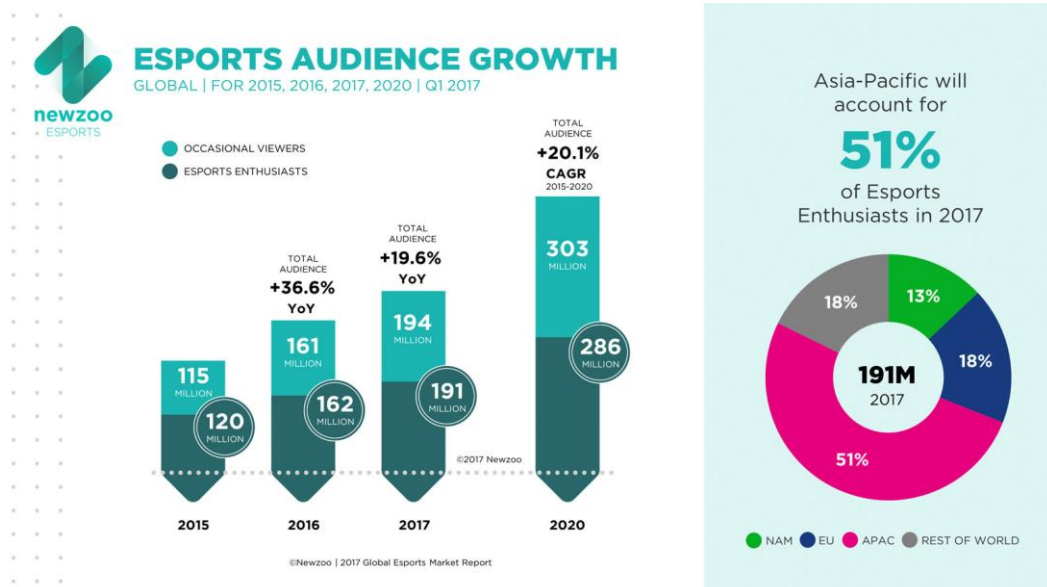


## 1. 1. Introduction of E-sports

E-sports is a newly rising sport and popular among the young. Since its emergence, the rate of growth of the number of participants for E-sports has remained at a steadily high level. E-sports has become an official competition event in the 2022 Hangzhou Asian Games and is a hopeful to be included in the 2024 Paris Summer Olympics.

### 1.1 The potentially first sport with a 50% growth rate in viewers in 3 years

Report data for global E-sports market analysis from an international market research institute Newzoo shows that in 2017, the number of global E-sports event viewers reached 385 million, which is composed of 191 million E-sports lovers and 194 million ordinary viewers. The total number is expected to be 589 million in 2020, which is 50% more than



its current state.

A research institute Sparks & Honey from the United States believes that with more standardised E-sports events and expanded channels for E-sports events broadcast, the total number of potential audiences will be 1.4 billion, and the ratings will exceed any other conventional events in the United States.

## 1.2 Chinese E-sports market scale has exceeded 75 billion in 2017

As E-sports gets more penetrated in the young groups, it shows massive industrial potential. During the League of Legends 2017 World Championship, over a million people snapped up the tickets online, and the price of scalped tickets rose up to 10 times of its original selling price at most.

According to China E-sports Industry Report by China Audio-video and Digital Publishing Association and Joynews, the E-sports market scale reached 50.5 billion in 2016 with 34.7% growth rate year-on-year; and it is estimated to exceed 75 billion in 2017.



## 2. Problems in the ecosystem of E-sports

### 2.1 E-sports transactions demand reputable intermediates

The population of game players is massive, and they have abundant demands for transactions, involving the game itself, game accessories, game currency, player accompaniment, etc. For each scenario, there are corresponding centralised platforms to help trading parties solve trust issues, these platforms build their business model around the collection of commissions from each transaction. However, in reality, much of these commissions should rightfully belong to the trading parties. Centralised platforms have great control over their commission rates because of their monopoly of the trading market, which leaves almost no place for the users to bargain. What is more, the current barriers towards market entry for new platforms are unable to separate good and bad operators, which results in good and bad platforms being intermingled. Financial losses for users caused by the bad operations management of platforms or even the usage of unqualified platforms is a normality.

### 2.2 Gambling in E-sports matches is opaque and lacking in credibility

In global gambling industry for E-sports events, centralised platforms also face the problem of having a mixture of good and bad. Users suffer losses in personal property due to opacity in transactions and problems from unqualified platforms. Meanwhile, gambling platforms often advertise themselves unscrupulously in ways that leave an impression of unreliability on users. As a result, users do not trust platforms much. In addition, traditional gambling platforms like Betway, Bet365 take a 15% to 20% percentage commission as their profit, and their “t+n” settlement method delays and reduces the profit of users in favour of the centralised gambling platforms through the leveraging of time value of money that should rightfully belong to users. In such case, users do not have the ability to bargain.

### 2.3 The KOL value of professional players and streamers is hard to evaluate

The essence of an E-sports event is the business logic of high quality IP, which is derived from E-sports professional player. However, value assessment on pro player is not completed by a

reasonable quantitative method, and the profit distribution among players and centralised organisers is often extremely unreasonable. In short, without a just profit distribution mechanism, players cannot get the portion they deserve. For example, Faker, a renowned pro player in E-sports event, of whose excellent performance and achievements make him highly commercial valuable. A Chinese E-sports club offered Faker 20 million RMB to join them but was declined because of personal issues and Faker continued to serve in SKT with a far less salary. Many medias, fan-related products and services use Faker's influence to make profit while Faker himself does not get direct increase in personal income. Aside of it, E-sports clubs are faced with the same problem. In some bottom clubs, arrears in salaries, no social security and lack of health care support often occur. A decentralised payment distribution mechanism should be taken to pro players for all kinds of E-sports events.

#### 2.4 Ordinary players are left short of sense of participation in co-building of ecosystem

Ordinary players are very fundamental contributors to the E-sports field with their attention and money. For example, the fundamental division ranking system and matching systems both rely on ordinary players, then comes the economic extensions to the fundamentals such as the levelling up of service economy, streaming economy and event economy. The value generated by the full operations of the game industry is consumed fully by manufacturers, event organisers, pro players, transaction platforms, etc. Under this ecosystem, ordinary players get nothing in return except entertainment and mental satisfaction.

#### 2.5 Protective measures to intellectual property are incomplete

Content generators in E-sports area are faced with the problem that their original videos, articles can be easily copied and tampered with. In such scenario, centralised content platforms like Jin Ri Tou Tiao, Portal League of Legends carve up the profits of the original content producers.



## 3. Viability for the combination of the E-sports ecosystem and blockchain

Blockchain is another milestone in the development of civilisation. Claude Elwood Shannon's Information Theory solved the technical foundation problem of quantitative information, built an information network and completed the decentralisation in information dissemination; Satoshi Nakamoto's blockchain solved the theoretical foundation problem of quantitative credit measurement, and blockchain is hopeful to build valuable network on the foundation left by predecessors, so the centralised transaction pattern can be avoided, which greatly improve the efficiency of value exchange and redefine the way how value is distributed.

Due to cognitive difference and the existence of conventional organisations, to achieve a consensus of blockchain in a short time is difficult. This is a problem as well an opportunity. This makes it possible to offer private blockchain services based on blockchain underlying protocol, which is exactly the development opportunity for private blockchain in any field.

### 3.1 Decentralisation

An E-sports competition event is not like traditional sports event. An E-sports event has natural advantages in the areas of data production and data collection. Both ordinary players and professional players generate large amount of data, which allows for quantification and analysis in the area of E-sports. Building the consensus mechanism of POC (Proof of Contribution) based on game data and a reliable system would help eliminate centralised organisations and build a valuable network that belongs to the E-sports community. Meanwhile, intelligent contracts provided by the ERC protocol of Ethereum concurrently increases efficiency in value exchange and equality in distribution of ecosystem value.

### 3.2 Immutability and uniqueness

After being verified and added into blockchain, information will be stored permanently and cannot be changed (except some private blockchain systems that will require special modifications). Modification on single node does not cause a valid change to data recorded on a block unless more than 51% of all nodes are being controlled. Therefore, the stability and reliability of data in blockchain is convincing. These characteristics not only potentially provides asset protection in

scenarios like E-sports transactions, but also is projected to represent the rights and interests of IP owners by making their contents scarce, changing the payment distribution mechanism for IP contents and increasing payments received by IP owners for provision of IP

### 3.3 Transparency and autonomy

Data records and all updates of information are transparent to all nodes, which is the foundation of a trusted blockchain system. Because of the open source structure of blockchain, open rules and high level of community participation, the data records in blockchain and its operating rule can be examined, traced by all nodes. So, blockchain has an inherent high level of transparency. Agreeable rules and contracts employed by blockchain provide a free and secure environment for exchanging, recording and updating data, by transferring the burden of trust from being borne partially by a person or institution within the ecosystem to being borne entirely by the blockchain system, in which any artificial interruption is rendered invalid. Based on these characteristics, the threshold for errors in system predictability is greatly lowered and point-to-point prediction based on the blockchain trust system is achieved.

### 3.4 Consensus mechanism and distribution of virtual currency

E-Sports Chain Network follows Bitcoin's Proof of Work Consensus Mechanism, building Proof of Contribution according to personal game data, streamer data, pro player match data and so on, with the consensus of nodes determining the distribution of the of E-sports Tokens (EST).

## 4. Applications

The native digital cryptographically-secured utility token of the E-Sports Chain Network (**EST**) is a major component of the ecosystem on the E-Sports Chain Network, and is designed to be used solely on the network. EST is the virtual currency of the ecosystem of E-Sports Chain Network and will be used for all exchanges of services and applications within the whole ecosystem. Pro players, users, streamers and so on will also receive corresponding digital currency incentives according to their contributions to this ecosystem.

EST is a non-refundable functional utility token which will be used as the unit of exchange between participants on the E-Sports Chain Network. The goal of introducing EST is to provide a convenient and secure mode of payment and settlement between participants who interact within the ecosystem on the E-Sports Chain Network. EST does not in any way represent any shareholding, participation, right, title, or interest in the Foundation, its affiliates, or any other company, enterprise or undertaking, nor will EST entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. EST may only be utilised on the E-Sports Chain Network, and ownership of EST carries no rights, express or implied, other than the right to use EST as a means to enable usage of and interaction with the E-Sports Chain Network.

In particular, you understand and accept that EST:

- (a) is non-refundable and cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Foundation or any affiliate;
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- (c) is not intended to represent any rights under a contract for differences or under any other contract the purpose or pretended purpose of which is to secure a profit or avoid a loss;
- (d) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument or any other kind of financial instrument or investment;
- (e) is not a loan to the Foundation or any of its affiliates, is not intended to represent a debt owed by the Foundation or any of its affiliates, and there is no expectation of profit; and

- (f) does not provide the token holder with any ownership or other interest in the Foundation or any of its affiliates.

#### 4.1 Consensus Mechanism

E-Sports Chain Network follows Bitcoin's Proof of Work Consensus Mechanism, building an arithmetic model for calculating contribution in game field with the data from personal game experience, streamer data, pro player match data and so to support Proof of Contribution, with the consensus of nodes determining the distribution of EST.

Computational resources are required for achieving block consensus on the E-Sports Chain Network, thus providers of these services / resources would require payment for the consumption of these resources (i.e. "mining" on the E-Sports Chain Network) to maintain network integrity, and EST will be used as the unit of exchange to quantify and pay the costs of the consumed computational resources. EST is an integral and indispensable part of the E-Sports Chain Network, because without EST, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on the E-Sports Chain Network.

#### 4.2 Distribution of virtual currency

Similar to the mining model in Bitcoin, which calculates once in 10 minutes, EST incentives are received by content contributors in the ecosystem of E-Sports Chain according to the principle of Proof of Contribution – A fixed amount will be set in the incentives pool to be distributed, distributions are to halve the amount in the incentives pool every 100 days as the payments for miners.

#### 4.3 Examples of application situations

##### 4.3.1 incentive distribution among professional players, streamers and ordinary players

For problems like unjustified incentive distribution and centralised institutions taking high levels of profit with a relatively low efficiency, E-Sports Chain Network adopts a solution that advocates a decentralised payment mechanism to enhance the efficiency of value exchange and payments to direct participants in the ecosystem.

The contribution of each pro player will be evaluated and incentivised with EST, based on the relevant event levels and event audience, the performance of the players and results. This process



would bypasses centralised institutions such as the event organiser, the club, agency, etc, and redefine the distribution of payments among professional players.

A distribution algorithm will evaluate the score of each user according to their positive and negative actions. Greater contributions would be represented by higher scores, resulting in greater EST incentives awarded. Users of the E-Sports Chain Network and/or holders of EST which did not actively participate will not receive any EST incentives. The detail of this algorithm is as follows:

1. Standardised original index

One collects p-dimension vector  $x = (x_1, x_2, \dots, x_p)$ , in which the total number of factors is n,  $x_i = (x_{i1}, x_{i2}, \dots, x_{io}), i = 1, 2, \dots, n, n > p$ , to build a sample matrix, then standardised transform

this matrix to get  $Z_{ij} = \frac{x_{ij} - \bar{x}_j}{s_j}, i = 1, 2, \dots, n; j = 1, 2, \dots, p$ , In which

$$\bar{x}_j = \frac{\sum_{i=1}^n x_{ij}}{n}, s_j^2 = \frac{\sum_{i=1}^n (x_{ij} - \bar{x}_j)^2}{n - 1}, \text{ standardised matrix } Z \text{ is arrived at.}$$

2. Transform index variables to principal components

$U_{ij} = z_i^T b_j^o, j = 1, 2, \dots, m$ , In which  $U_1$  is the first principal component,  $U_2$  is the second principal component...,  $U_p$  is the pth principal component.

3. Solve the characteristic equation of correlated sample matrix  $|R - \lambda I_p| = 0$  Arriving at

eigenvalues with a total number of p, the principal component can be arrived at. Confirm the

value of m by  $\frac{\sum_{j=1}^m \lambda_j}{\sum_{j=1}^p \lambda_j} \geq 0.85$ , which makes sure that the coefficient of utilisation is larger than 85%. To each  $\lambda_j, j = 1, 2, \dots, m$ , solve equation set  $Rb = \lambda_j b$  to get unit eigenvector  $b_j^o$ .

4. Make synthetic evaluation to all n principal components

$$\bar{x} = \frac{x_1 f_1 + x_2 f_2 + \dots + x_k f_k}{n}$$

Weigh and sum all n principal components to get a weighed score

5. The influence of time on match should be considered and all above should be Z-score standardised with  $Z = (x - \mu)/\sigma$ , in which  $x$  stands for a specific score,  $\mu$  is the average and  $\sigma$  is the standard deviation. When  $x$  is smaller than  $\mu$ ,  $Z < 0$ , in which case it can be considered

$$EPS = \sum_{i=1}^n k_i X_i$$

that  $Z = 0$ , meaning the contribution to the system is 0.

This algorithm can be deducted for all pro players, streamers and users in the ecosystem of the E-sports ecosystem. Different data dimensions are used to calculate their incentive model respectively as follows:

- Pro players: {event\_level, match\_attention, match result, player\_performance}
- Streamers: {game\_type, viewer\_size, stream\_performance, stream\_time}
- Game players: {game\_type, game\_level, game\_result, gamer\_performance, game\_time}

#### 4.3.2 The collections and transactions of IP derivatives

For top resources in game industry like pro players and streamers, E-Sports Chain Network can distribute the incentives more directly to players by making scarcity and using a decentralised sales approach.

For example, based on the data of a player during a match, a great amount of valuable marketing content has been produced, of which IP rights should belong to the player himself, but currently there are no corresponding services or products to actualise and distribute this portion to the player. With E-sports Token blockchain system, one can process these contents into consumable virtual products, which can be likened to electronic star cards. These kinds of products may be traded in EST, and the value generated by this trade will belong to player who owns the rightful IP of the contents.

The traded electronic star cards (as represented by secondary digital tokens) will illustrate their value under the supply and demand relationships in the market as a collector's item because of its immutability as a part of a blockchain and its natural scarcity. E-Sports Chain Network provides a

transaction system that helps these valuable star cards be traded point-to-point, allowing these IP derivatives to potentially possess not only a high consumable value, but also a substantial collectible and liquidity value.

Here is an example: Suppose Uzi achieved his 3,000 kills in a LPL match in 2018. The Intelligent contract system then would automatically execute statistic achievement task, then produce and register this statistic achievement, and wrap it as exclusive Uzi 3000 Kills Electronic Commemorative Cards with a total number of 1,000 and trade it on IP derivative trading platform. A fan of Uzi A paid Pa to get an exclusive card, and Uzi will receive the remaining EST paid (player remuneration). After that, the card will be collected and owned by the fan, these cards can be further traded on the platform provided by E-Sports Chain Network.



#### 4.3.3 Assets and services transactions between users

As for problems like non-standardised transaction platform and unreliable credit rating system, E-Sports Chain Network has come up with a brand-new solution.

Based on the transaction platform on E-Sports Chain Network, the problems of users regarding their game assets can be easily solved through the usage of EST. Through transactions with EST as the only platform currency for settlement, users would be able to list their goods for trade, make matches for trading, payment and delivery of goods, as well as sign and fulfil contracts. Through the usage

of EST, the E-Sports Chain Network potentially provides users a highly secured transaction platform. Items that can be traded in the platform include but are not limited to game peripherals, accessories and items in game, game accounts, IP derivatives, accompanied game experience service, etc.

Field	Description
Nonce	Transaction number
To	Consignee's address
Value	Amount
Data	Smart contracts need to perform functions and variables that need to be passed.
Signature	The transaction signature of the sender address.

#### 4.3.4 Prediction in E-sports matches

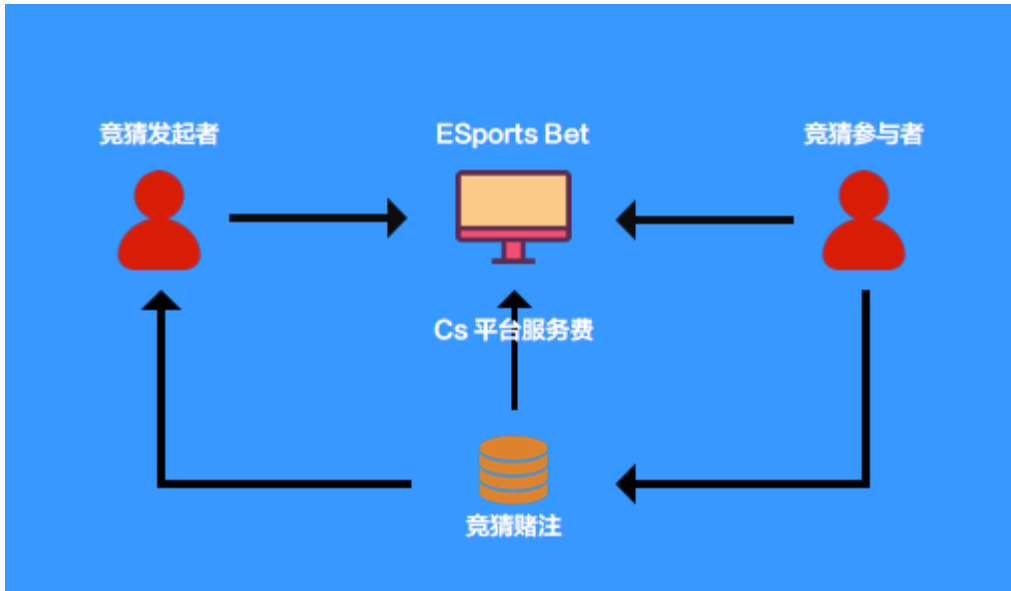
Current prediction platforms in E-sports matches exist problems like non-standard prediction platforms and lack of a reliable credit rating system. With the characteristics of transparency and decentralisation, E-Sports Chain Network can avoid risks brought by centralised prediction services.

Predictions for matches based on E-Sports Chain Network do not need any systemic oversight from centralised organisations. E-Sports Chain Network would support the making of predictions by users point-to-point, which efficiently avoids being taken a cut by prediction institutions and maximise the payments due to users. In comparison, a decentralised prediction market of E-sports event lower the threshold for initiating and participating in predictions; and with support of the E-Sports Chain Network as the basic foundation, this prediction market can reliably run itself and avoid collapse at a single point. In prediction market based on E-Sports Chain Network, players can start any type of prediction guessing title to satisfy their individual need for prediction gaming, which enhances their sense of participation and experience in E-sports.

Those who will the prediction game obtain  $C_{win}$  and those who lose get  $C_{loss}$ :

$$C_{win} = C_{loss} * (1 - Cs)$$

#### Personalised prediction gaming diagram



#### 4.3.5 Transactions and incentives for new types of advertisement

For unjust profit distribution among content producers and consumer, E-Sports Chain Network has a brand-new solution in advertisement system with its characteristics of decentralisation and autonomy.

E-Sports Chain Network will redefine the profit distribution method among advertisers, high quality content producers and game content consumers. In webcasting area, a part of the advertisement fee spent by advertisers is first drawn out by intermediates like streaming platform and agency, the rest of which is finally paid to the streamer; there is a similar situation in the areas of video and article content. Currently the attention consumers place on E-sports content is not remunerated. The new type of E-sports advertisement scenario demands advertisers advertise themselves with prices denominated in EST at a price of  $P_a$ , and content consumers will gain EST (consumer\_gain) depending on the amount of attention they put into the content and the platform.

$$P_a = \text{producer\_gain} + \text{consumer\_gain}$$

#### 4.3.6 Intelligent framework for E-sports event

There is high demand for ground events in the gaming ecosystem by the core users in the gaming arena who have contributed much attention to E-sports arena. However, only professional players at top events get relatively handsome remuneration, and ordinary E-sports lovers are unable to obtain any remuneration from their ecosystem supporting behaviour. This problem can be solved well with the new intelligent framework for E-sports event based on blockchain techniques. E-Sports Chain Network introduces an intelligent event system with distributed jackpot. This system allows players and brands to organise E-sports events themselves based on an intelligent contract system. The usage of EST would support the ecosystem surrounding this intelligent event system.

Technically speaking, intelligent event system in E-Sports Chain Network is an automatic software platform that tracks and manages every match in an event. The main purpose of this platform is to make sure the winners in group stage and incentive distribution among them. Non-impartial judgement is impossible since artificial factors are totally eliminated.

This is how this system operates: After players having entered the event, intelligent contract receives the prediction linked funds in EST form and stores it until the winner is determined and the event is over. Then the release of official results will convey ID of winners, their account IDs and the amount of payments due to each party through intelligent contract using API. Accordingly, the rightful winners will get their payments.



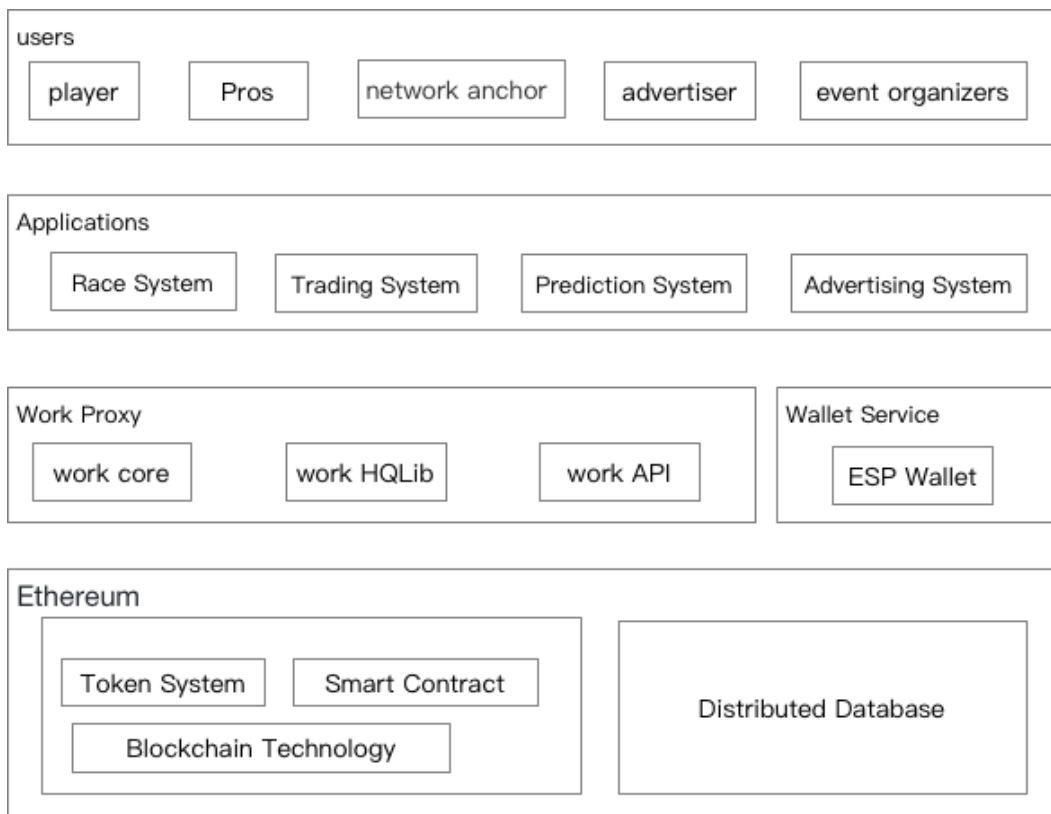


## 5. Details in technique and project planning

As a newly rising information technology, blockchain can serve as a source of trust for both parties in a transaction who do not have prior dealings to act as the basis for trust towards each other in order to complete an exchange of value, thus blockchain has been praised as a machine that creates trust. Blockchain is a decentralised and trust-free distributed ledger technology which consists of distributed data storage, point-to-point transmission, consensus mechanism, encryption algorithm and many other technologies, so it is being considered for many business applications primarily to build trust, increase transparency, reliability and security. Blockchain technology is a revolution in changing the way mutual trust can be achieved and it goes beyond merely the virtual currency and payment and settlement field to be able to impact supply chain finance, digital asset transactions, the sharing economy, food security, charity and many other fields, and it will bring new opportunities to cloud computing, mobile internet, internet of things and other new generation information technology. Also, it is believed that it will profoundly impact E-sports business.

### 5.1 General framework

At this point, relatively direct applications of blockchain in E-sports area include ground virtual currency, valuable media among users and players, registration of digital asset, evaluation of good content, decentralised streaming platform and so. The general framework is shown below:



## 5.2 Ethereum Module

With blockchain, all transaction information and user behaviour information in the whole E-sports ecosystem can be recorded in a decentralised ledger. Intelligent contract set an openly fundamental economic rule for electronic ecosystem to solve transaction and problems of incentives for each stage, making the whole ecosystem open and transparent.

Distributed data storage will store a massive amount media data. These data include professional players, users, clubs, game-related documents, content published by PGU, basic data needed by stream, game and third-party applications, and data of users and data contribution of players, E-sports derivatives and so on.

## 5.3 Work Proxy



Work Proxy mainly include Work Core, Work HQLib, Work API, and its design concept comes from Spark framework. Core is responsible for submitting topics and HQLib uses GraphQL to satisfy a request of a client for a data set based on back-end defined by graph pattern.

Work Proxy uses EST as fuel and uses blockchain combined with applicable and business scenarios in E-sports to provide users and developers a convenient and fast payment and settlement method and application development interface protocol based on intelligent contract and EST system. Users and developers can develop and publish their own applications on the E-Sports Chain Network or access their own data to acquire users and develop commercial value using data points, derivatives and network in E-sports. They can also benefit by making contribution to this community. The development platform on the E-Sports Chain Network will provide API of kernel application to help developers use EST to develop applications conveniently.

#### 5.4 Applications

Applications can be applicable in many ways on the basis of Work Proxy. It can be understood as the application of basic service, which includes the development of event system, transaction system (collections on IP, patterns, skill knowledge, virtual items and other E-sports derivatives), prediction system, advertisement system and so. Based on this ecosystem, anyone or any third-party software developers can contribute to the whole ecosystem on E-Sports Chain Network on the basis of Work Proxy.

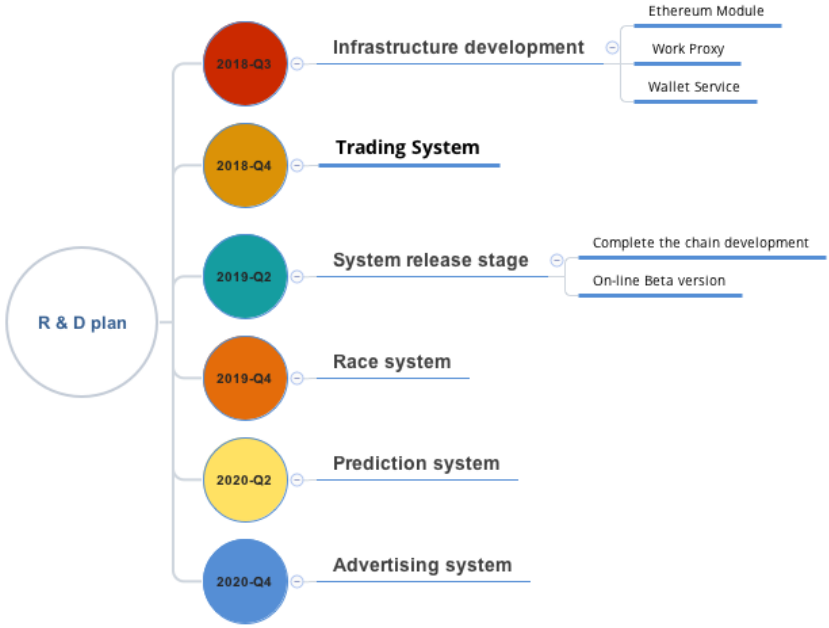
#### 5.5 Users

Participants in the ecosystem on E-Sports Chain Network are the users in blockchain system application. Main characters in ecosystem on E-Sports Chain Network are users, pro players, streamers, advertisers and event organisers. Different characters contribute to the same ecosystem. For example, when users submit high quality personal data, they will receive EST. Each object has his corresponded algorithm to ensure the operation of ecosystem.

#### 5.6 Challenges

The biggest challenge to implement blockchain+ is the extreme lack of potential employees. Many financial institutions and enterprises stay at the concept stage of blockchain, whose developers do

not understand blockchain; those who are interested in blockchain or who want to do business in blockchain industry do not systematically understand the theory and development of blockchain and the knowledge and techniques a blockchain developer should have.



5.7 History



## 6. Business cooperation and implement

- E-Sports Chain Network will deeply cooperate with E-sports APP in stages like personal data, event data, and content producer and so to support research and development of POC.
- Transaction scenarios in E-Sports Chain Network will be applicable in current E-sports products in market. Scenarios like virtual items transaction, gambling, sales of the IP derivative of the player will be implemented in a short time.
- The Foundation will rapidly promote E-Sports Chain Network by answering data queries and engaging the media, which will help users achieve consensus on.



## 7. Consultants



### VenturesLab

Co-founded by the founders of DFJ Tim Draper and the president of China Young Angel Investor Leader Association Mai, Gang.



### Wang, Lijie Co-founder of PreAngel Fund

Invested over 300 companies in technology. He has a diversified layout in blockchain field. He invested projects like Xiaoyi, Yuanjie, Gifto, and ObEn.



### Wu Sheng (2009) Famous DOTA player

World champion of DOTA. Founder of FTD ESports club and 09 ESports platform



### Xiao Cang Famous game commentator

World champion of Steelseries Iron Lady invitational tournament. Olympic torchbearer of Beijing Olympic Game 2008. She has made over 800 game videos and has a click-rate of 2 billion.



### Jeon Yong-jun Famous E-sports Caster and Commentator

Famous Korean e-sports caster called "Hype Man LOL". He has been engaged in the e-sports industry for over 20 years and has hosted the 2014 League of Legends World Championship.



### Lee Hyun-woo (aka CloudTemplar) Famous E-sports Commentator and Streamer

Former League of Legends professional player, won the 2012 League of Legends World Championship runner-up prize. Currently he is a well-known e-sports commentator and popular streamer. His Youtube channel has over 120,000 subscriptions.

## 8. Strategic partners



# 9. Token distribution plan

The Distributor of EST shall be an affiliate of the Foundation. The planned distribution of EST is as follows:

Total: 1000000000 EST ( ESports Token )		
Esports Chain Team	20% EST	Initially non-transferrable, and transferred over a period of 18 months
Foundation	15% EST	
Shareholders and consultants	15% EST	
Private Placement	30% EST	
Ecosystem Building	20% EST	

The contributions in the token sale will be held by the Distributor (or its affiliate) after the token sale, and contributors will have no economic or legal right over or beneficial interest in these contributions or the assets of that entity after the token sale.

To the extent a secondary market or exchange for trading EST does develop, it would be run and operated wholly independently of the Foundation, the Distributor, the sale of EST and the E-Sports Chain Network. Neither the Foundation nor the Distributor will create such secondary markets nor will either entity act as an exchange for EST.





## 10. Risks

### Risk Disclosure

You acknowledge and agree that there are numerous risks associated with purchasing EST, holding EST, and using EST for participation in the E-Sports Chain Network. In the worst scenario, this could lead to the loss of all or part of the EST which had been purchased. Every EST purchaser should read, understand and consider with caution the risks listed below before deciding whether to purchase EST.

Every EST purchaser should be especially aware of this fact: though the Foundation was founded in the Republic of Singapore, the E-Sports Chain Network and EST themselves exist only in internet cyberspace without any tangible form, which results that E-Sports Chain Network and EST belong or related to any specified country or region.

Participating this public sale plan should be a deliberate and mature decision and purchasers are regarded as have known and agreed the risks listed below.

#### ① Termination of this public sales plan

This EST public sales plan could be terminated ahead of time. At this situation, purchasers can only be refunded for a certain part because of the price fluctuation of Bitcoin or ETH and expenses of the Foundation.

#### ② Insufficient information provided

Until the publication of this white book, E-Sports Chain Network is still under development, the philosophical concept, consensus mechanism, algorithm, code and other technical details and parameters of which may be updated and changed often. Although this white book contains all key information of E-Sports Chain Network, it is not totally complete, and will be revised and updated by the Foundation for certain purpose. The Foundation is not able and not responsible for informing every participant about every detail in the development (including the expected milestone, delayed or not). Therefore, it is inevitable and reasonable not to necessarily keep purchasers up to data of the information in development.



③ Uncertain Regulations and Enforcement Actions

The regulatory status of EST and distributed ledger technology is unclear or unsettled in many jurisdictions. The regulation of virtual currencies has become a primary target of regulation in all major countries in the world. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including EST and/or the E-Sports Chain Network. Regulatory actions could negatively impact EST and/or the E-Sports Chain Network in various ways. The Foundation (or its affiliates) may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. After consulting with a wide range of legal advisors and continuous analysis of the development and legal structure of virtual currencies, the Foundation will apply a cautious approach towards the sale of EST. Therefore, for the token sale, the Foundation may constantly adjust the sale strategy in order to avoid relevant legal risks as much as possible. For the token sale the Foundation is working with Tzedek Law LLC, a boutique corporate law firm in Singapore with a good reputation in the blockchain space.

④ Cryptology

Cryptology is evolving progressively and cannot be guaranteed with define security. The evolution of cryptology (like cracking) or technology (like the invention of quantum computer) might bring systems based on cryptology (including E-Sports Chain Network) risks. This may result the stealing, disappearing, vanishing, destroying or depreciation. The Foundation will act preventive measure or make-up policy in a reasonable range, like updating the basic protocols of E-Sports Chain Network to deal with any progress of cryptology, and bringing into new and reasonable security measure. Though the future of cryptology cannot be predicted, the Foundation will try to cater to it.

⑤ Failure or abandon of development

E-Sports Chain Network is still under development. Because of its complexity, the Foundation may face unpredicted and insuperable difficult. Therefore, the development of E-Sports Chain Network may be failed or abandoned at any time for any reason. The failure or abandon will result no EST can be given to any purchasers in this public sales plan.

⑥ The stealing of crowdfunding

There may be someone who tries to steal the funds that the Foundation has raised (including the part that has been transferred to legal tender). This kind of stealing or will to steal may affect the development of E-Sports Chain Network. Although the most advanced security technology has been adapted, some cyberthefts are still hard to prevent.

⑦ Flaws in source codes

No one can guarantee the source codes of E-Sports Chain Network are flawless. Some flaws, errors, defects and bugs may cause problems like certain functions unable to operate, user information leaking or some other problems. If certain problem occurs, the usability, stability and/or security will be damaged, which has negative influence on EST. Open source codes will remain transparent to encourage verification and problem-solving from community. The Foundation will cooperate closely with E-Sports Chain Network community to steadily improve, optimise and perfect source codes of E-Sports Chain Network.

⑧ Admittance permission free, distributed and autonomy ledger

In current blockchain projects, there are three main distributed ledger. They are admittance permission free ledger, hyperledger and private ledger. The distributed ledger used by the ground of E-Sports Chain Network is admittance permission free, which means it can be visited and used by anyone without admittance permission. Although E-Sports Chain Network was initially developed by the Foundation, it is not owned, operated or controlled by the Foundation. The spontaneously formed E-Sports Chain Network community is completely open, centralisation-free and joinable without permission. It consists of users, fans, developers, EST owners and other participants globally. They have no relationship with the Foundation.

⑨ Update of source codes

The source codes of E-Sports Chain Network is open and can be updated, revised or changed by any member of the community at any time. No one can expect or guarantee the exact result of a certain update, modification or change. Therefore, any update, modification or change could lead to unexpectable or unexpected result, which may damage the operation of E-Sports Chain Network or the functions of EST.

⑩ Security weakness

E-Sports Chain Network is based on open source software and its distributed ledger has no

admittance permission. Although the Foundation makes great effort to guarantee the system security of E-Sports Chain Network, anyone could consciously or unconsciously bring weakness or flaws in the kernel infrastructure elements, which the Foundation cannot prevent or make up by the adapted protective measures. This may eventually result the loss of EST or other digital tokens.

⑪ Distributed denial of service

The ledger that Ethereum designated was open and admittance permission free ledger. Therefore, Ethereum may suffer distributed denial of service attack. This attack will make E-Sports Chain Network system suffer from negative influence, stagnation or paralysis, and result transaction being delayed writing or recording into the block or Ethereum, or even unable being executed.

⑫ Insufficient processing capacity

The rapid development of E-Sports Chain Network will accompany with the sharply rising demand in transaction volume and processing capacity. If the demands surpass the capacity offered, the E-Sports Chain Network network may stagnate or paralyse, and may cause fraud transaction like double payment. At the worst case, EST held by anyone could disappeared and rollback in Ethereum blocks or even hard fork could be triggered. The aftermath of these events will damage the usability, stability, and security of E-Sports Chain Network and the functions of EST.

⑬ Unauthorised claim for EST sales

Anyone who uses encryption or cracking to get purchasers registered email address or registered account access right can acquire the EST for sale bought by the EST purchasers. Thus, the EST on sale could be wrongly sent to anyone who registered their email address or registered an account to claim the EST, which is irrevocable and irreversible. Anyone who purchases or want to purchase EST should take measure like: (i) use highly secured password; (ii) do not open or reply any fraud email; (iii) keep the classified or personal information in secret.

⑭ Private wallet key

The loss or damage of private key is irreversible. Only through the one and only public and private key local or online can EST be operated. Every purchaser should take good care of his

EST private wallet key. If the private key is lost, leaked, damaged, or stolen, the Foundation or any other people cannot help the purchaser chase his EST back.

⑮ Inflation

Depending on the detailed ground protocols when E-Sports Chain Network platform releases, the total volume of EST may increase as time passes, and may increase further because of adapting new source code patch or updating. Therefore the inflation caused by such action may result the market price going down, which means economic loss of EST holders. There is no guarantee that EST purchasers or holders will be compensated at any form.

⑯ Popularity

The functions of EST depends majorly on the popularity of E-Sports Chain Network platform. E-Sports Chain Network is not expected to be popular shortly after release. In the worst case, E-Sports Chain Network might be marginalised for a long time that attracts only a few users. For the contrary, a big part of demanding need might be speculative. Lack in users might result big fluctuation in market price which affects long-term development of E-Sports Chain Network. When such fluctuation occurs, the Foundation will not (and is not responsible) to stable or influence the market price of EST.

⑰ Liquidity

EST is not currency released by any individual, entity, central bank or country, supranational or quasi-state organisation, and not supported by any hard asset of other credit institution. The liquidity and transaction is not the responsibility or aspiration of the Foundation. The transaction of EST is merely based on consensus achieved by related market participants. No individual is responsible to exchange or purchase any EST and no individual can guarantee the liquidity or market price of EST at any time on any degree. If an EST holder wants to transfer his EST, he should find one or more purchasers who are willing to make this transaction happen with agreed contract. This process might cost much, take much time and is not guaranteed to be successful. Aside of that, there might not be an encrypted transaction place or other online market that offers trading platform.

⑱ Price fluctuation

When traded publicly, cryptographic token often has great fluctuations on price, which may be caused by market force (including speculation), changes in regulation, technological innovation, and acquirability of transaction platform and other objective reasons. Such

fluctuation is a reflection of supply and demand relationship. Whether there exists secondary transaction platform for EST, the Foundation is not responsible. Therefore, the Foundation is not responsible to the price fluctuation and cares not. The risk related the price fluctuation should be taken by trading parties themselves.

⑲ Competition

The ground protocols of E-Sports Chain Network are based on open source computer software. No individual can advocate his pattern or any other intellectual property of the source codes. Therefore, everyone can copy, revise, design, redesign, modify, update, recompile, reprogram or any other way to use the source codes or ground protocols legally to develop or try to develop more competitive protocol, software, system, virtual platform or virtual machine that compete with E-Sports Chain Network, which even surpass or replace E-Sports Chain Network. The Foundation cannot control such thing. Aside of that, there already exists and will be more competitive platforms based on blockchain to compete E-Sports Chain Network. The Foundation cannot eliminate, prevent, limit or reduce this kind of competition or replacement.

⑳ Failure to develop

There is the risk that the development of the E-Sports Chain Network will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any digital asset, virtual currency or EST, unforeseen technical difficulties, and shortage of development funds for activities.

21 Other risks

In addition to the aforementioned risks, the potential risks briefly mentioned above are not exhaustive and there are other risks (as more particularly set out in the Terms and Conditions) associated with your purchase, holding and use of EST, including those that the Foundation cannot anticipate. Such risks may further materialise as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Foundation, its affiliates and the E-Sports Chain team, as well as understand the overall framework, mission and vision for the E-Sports Chain Network prior to purchasing EST.

## References

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