



# Central bank digital currency

White Paper

## Execute the profile

This white paper describes a new decentralized metacosmological ecosystem that allows all gaming platforms, — — mobile, computers, consoles, and VR / AR, to sell game virtual items through smart contracts that execute blockchain technology and remove trusted intermediaries. The game item transaction will use the encrypted token "CBDC".

3asMtaera is integrating a variety of new technologies and the new integration of Internet application and social form, it is based on expanding reality technology to provide immersive experience, based on digital twin technology of the real world mirror, based on block chain technology, the virtual world and the real world in the economic system, social system, identity system, and allow each user to content production and world editing.

In order to achieve the huge metacentrorological ecology in the future, we need to establish the most comprehensive centralized game virtual props trading platform to prepare for the circulation of metacentrorological assets. As blockchain technology evolves, our new decentralized ecosystem will provide ubiquitous mobility to game items and provide more value to the game market and participants. Here, the participants are mainly game developers, publishers, and game players, as well as the game prop market, trading promoters, and other contributors. In this ecosystem, economic value is allocated among all participants to ensure that they receive the return they deserve.

The new decentralized ecosystem will bring huge benefits to gamers, game developers, and publishers. Players have unprecedented flexibility and the ability to buy, sell, and hand in game items directly with other gamers (P2P), giving players great value from hard-earned game items. And the point is that they will be trading in zero-fraud environments, something that never existed before blockchain technology was available.

Game developers and publishers will generate more revenue for:

First, the new ecosystem encourages players to buy more game items and are higher than they are now, because they know they can

take back their investments by freely and safely selling their game items in a highly mobile market.

second, game publishers will enjoy a brand new source of revenue- game publishers will receive commissions as long as gamers use smart contract blockchain transactions.

With our unique network growth model, game publishers actively adopting CBDC will get good returns.

To the above, the focus is that the benefits that the new system brings to game publishers cannot be underestimated. Game publishers will play a very critical role in this ecosystem, and each game publisher has to choose which encryption token to adopt. CBDC is the only encryption token with a built-in, specific ecosystem, and provides rich rewards for game developers. so we believe that CBDC will be quickly adopted, and will become the main cryptotoken in the Metaverse gaming industry.



# 1. market house

## 1.1 What is Central Bank Digital Currency (CBDC)

The digitization of currency is not new, so when people see the news that central bank digital currencies (CBDC) are being developed by global central banks, they may be very confused—deposits in bank accounts are obviously in the form of digitization? How is this different from the CBDC mentioned in the news? What are the considerations for the central bank to issue CBDC? What are the current specific practices in various countries?

### What is Central Bank Digital Currency (CBDC)

To explain what is the central bank digital currency (CBDC), we must first talk about the current monetary credit system.

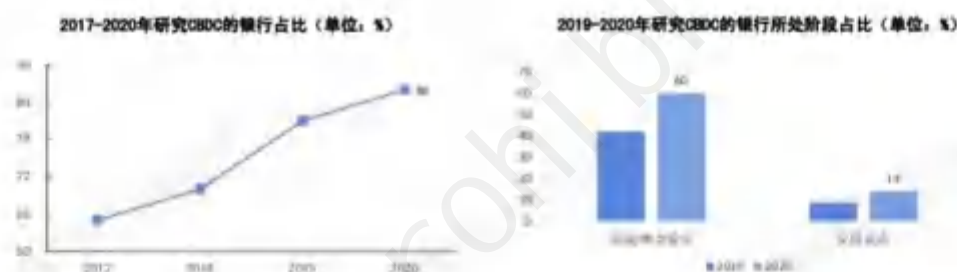
In this system, the top is the central bank, the middle is the bank, and the bottom is non-financial enterprises and residents. The most basic function provided by the monetary credit system for economic activities is payment and settlement. Under the above three levels, residents and enterprises as the main economic activity are mainly settled by the liabilities (deposits) of the banking system; within the banking system, the central bank's liabilities (reserves) are required for settlement.

In the monetary credit system, the actual currency is the central bank's liabilities, namely cash and reserves. The bank deposits that people usually think of as currency are actually bank liabilities. In other words, if the bank goes bankrupt, the money will be in vain (Of course, under normal circumstances, there is no need to worry about this problem, most countries have corresponding mechanisms to protect residents' deposits).

Reserves and deposits are both mature forms of digital currency, but CBDC is not the same as them. It discusses the digitization of part of the central bank's liabilities to the residential sector. The Bank for International Settlements (BIS) defines it as "a digital payment tool," Denominated in the national accounting unit, is a direct liability of the central bank."

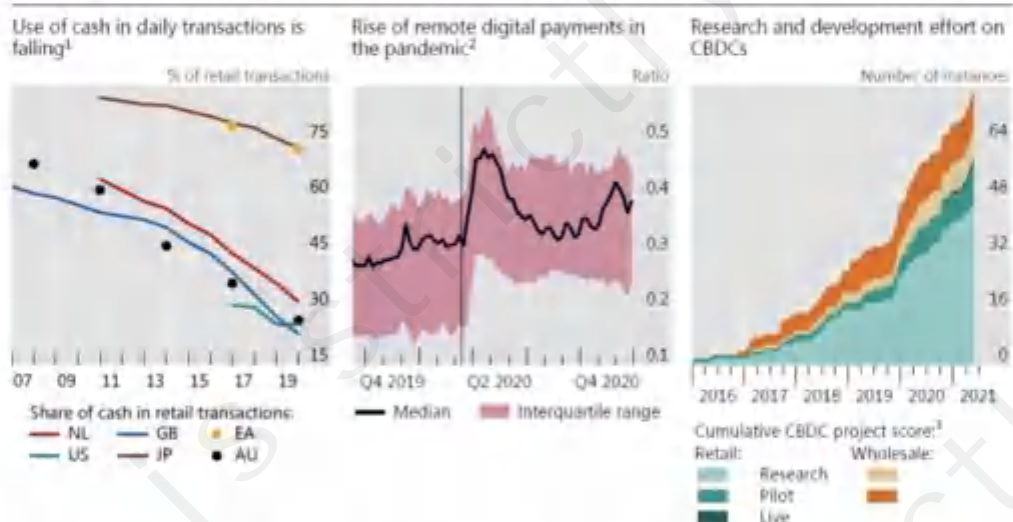
### Why does the central bank issue CBDC

According to the third survey of CBDC conducted by BIS in early 2021, the proportion of banks studying CBDC has increased in recent years. Among the survey respondents, 86% of central banks are actively studying the potential of CBDC, and about 60% of central banks are conducting CBDC experiments or proof-of-concepts. Why are central banks actively researching CBDC?



Obviously, the new crown epidemic has further promoted the decline in the level of cash transactions and the expansion of electronic payments. Countries intensified the research and deployment of CBDC. The first consideration is to meet consumers' demand for cash in the digital age, even though there are already electronic payment methods. In many cases, CBDC issued by the public sector can better protect residents' privacy and reduce hidden payment costs.

As cash use falls and digital payments rise, CBDC projects are moving ahead Graph III.1



Of course, the central bank also has its own considerations. In the recently released annual report "Central Bank Digital Currency: Opportunities in the Monetary System", BIS pointed out: "The central bank's interest in CBDC appears at a critical moment. Recent developments have made some Potential innovations involving digital currencies have become a priority on the agenda."

First, Bitcoin and other cryptocurrencies are getting more and more attention. BIS believes that, so far, it is clear that cryptocurrencies are speculative assets rather than currencies, and in many cases are used to facilitate money laundering attacks, ransomware attacks, and other financial crimes.

Second, the debate about stablecoins. BIS believes that stable accounts try to gain credit through the support of real money. Therefore, these measures can only depend on the governance



behind the support commitments. In addition, they may diversify the liquidity of the monetary system and weaken the role of currency as a coordination tool. In any case, because the so-called support involves traditional currencies, stablecoins are ultimately just an accessory to the traditional monetary system, not a game changer.

Third, large technology companies enter payment services and broader financial services. BIS believes that the business model of large technology companies relies on the direct transactions of users and the data that is a necessary by-product of these interactions. As large technology companies enter the field of financial services, their user data in existing businesses such as e-commerce, instant messaging, social media, or search provides them with a competitive advantage through powerful network effects. The more users flock to a particular platform, the more attractive it is for a new user to join the same network, leading to a "data network activity" or "DNA" cycle.

However, for users, network effects are mixed. On the one hand, the DNA cycle can create a virtuous cycle, bringing higher financial inclusion, better services and lower costs. On the other hand, it promotes further concentration in the payment market. Recently, the government has begun to worry about anti-competitive behavior in social media and e-commerce.

In addition, Maria Demertzis from the Bruegel Institute (Bruegel) believes that the central bank's interest in CBDC is that increasing the currency's availability can increase the currency's attractiveness outside the borders. However, she also pointed out that in most cases, providing more convenience through digital means has limited influence on which currencies are used internationally. The reason is that the real reason why a currency is used on a global scale is more related to the value and stability it represents, not just its availability.

On the whole, the main reasons for central banks to carry out CBDC-related research and development work include: maintaining financial stability, assisting in the implementation of monetary policy, improving domestic and cross-border payment efficiency and payment security, and promoting the development of inclusive finance.

**What are the specific practices of CBDC in various countries.**

At present, the types of CBDC development in various countries in the world are divided into retail and wholesale.

According to BIS statistics, the vast majority of CBDC currently in progress is for retail customers. This means that the

CBDC we are discussing is equivalent to the process of digitizing part of the central bank's liabilities to the residential sector. So, what role should the central bank play in CBDC clearing transactions?

BIS divides CBDCs in the retail sector into three categories based on the ways in which they cooperate with the private sector:

**Direct CBDC:** The central bank processes all payments in real time and therefore keeps records of all retail assets.

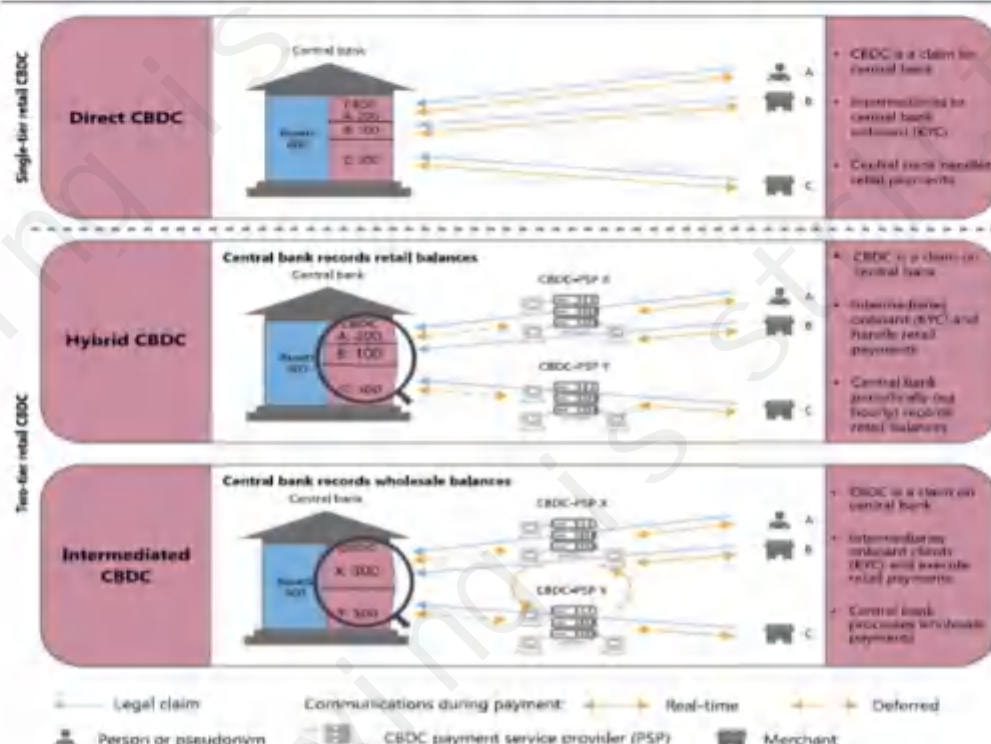
**Hybrid CBDC:** A two-tier structure is adopted. Real-time payments are processed by intermediary agencies, and claims are directed to the central bank. The central bank will regularly update all retail CBDC assets and keep a copy.

**Media-based CBDC:** operates in a wholesale ledger model. In this architecture, payment service providers should be closely monitored to ensure that the wholesale holdings they communicate to the central bank are indeed equal to the sum of all retail accounts.

These three methods have their own characteristics. Specifically, the direct type does not require an intermediate department, which will cause financial disintermediation, and requires the most technology and hardware investment; the media type is more dependent on the intermediate department and requires strict supervision; Hybrid is currently a more compromised approach.

Retail CBDC architectures and central bank-private sector cooperation

Graph III.7



The following is the specific project classification of each country:

#### **Retail CBDC**

△ **Direct:** The Rafkróna project in Iceland, the Sand Dollar project in Bahamas, the E-krona project in Sweden, the E-krona project in Norway and the E-krona project in Denmark, etc., mainly under research.

△ **Mixed type:** China, Brazil, European Union, Ecuador, Cambodia, Ukraine, Eastern Caribbean.

△ **Still uncertain:** Electronic legal tender project in South Africa, Billete Digital project in Uruguay, E-shekel project in Israel, E-franc project in Switzerland and E-euro project in France, etc.

#### **Wholesale CBDC**

Research on wholesale CBDCs is mainly applied to inter-bank large-value settlements and cross-border cross-currency payments, including the Jasper project in Canada, the Ubin project in Singapore, and the Lion Rock-Inthanon project in Hong Kong, China.



## 2. The Business . The Metaverse

### 2.1 Metaverse Overview

The word metaverse is derived from the 1992 science fiction novel "Avalanche" by famous American science fiction novelist Nicole Stevenson. Stevenson describes a network world parallel to the real world, and all real world people have a network separation. Stevenson's meta-sphere is a new form of the Internet after the next stage of virtual reality.

In the original work, the meta-universe (Metaverse) is composed of two words: Meta and Verse. Meta represents transcendence, Verse represents the universe (universe), which is the concept of "surpassing the universe": an artificial space running parallel to the real world, is the next stage of the Internet, the virtual reality supported by AR, VR, 3D and other technologies. The metaverse cannot be completely separated from the real world, parallel to, interconnected with, but independent of the real world, in which people can truly socialize and work.

Such a "avant-garde" concept was soon welcomed by the capital market. In fact, before the concept of the A-share market "metaverse" exploded, far in Silicon Valley on the other side of the ocean, a group of Internet head companies have begun to actively embrace the "metaverse". In July, Facebook CEO Zuckerberg said publicly stated that Facebook would fully transition to Meta Universe by 2025. Zuckerberg announced the company's plans for the "metaverse" in an internal employee letter, noting that "in five years, or seven years later, people will primarily see us as a 'metaverse' company, not just a mobile Internet company."

### 2.2 Why do we need the metaverse

The reason why the metaverse will become a trend or hot spot today, or the metaverse can exist forever, is more important to have the following attributes: sustainability, real-time, compatibility, economic

attributes, connectivity, and creativity. Let's explain one by one, let you completely understand the value and opportunity points of the future virtual world-the meta-universe.

Nowadays, many people in southeast Asia make money by playing games, keep pets in the virtual world of games, and then sell them for money, so is this the Metaverse? Of course, not that the metaverse can be sought after by capital shows that it has certain rationality and achievability, but it is too early today. The metauniverse is another virtual world parallel to the real world, so the most important first point is sustainability.

The virtual world can be permanent, not because a company is gone, the world does not exist, not even because of someone and the end of the world, only in this way, people assets in the virtual world, money will become as valuable and the real world, like the money in your mobile phone, won't because you broke the mobile phone, it doesn't exist.

The second point is about creativity. The content in the virtual world can be created by anyone, just like we can build a house in the real world, you will sew clothes, you will grow corn, are their own technology, with the virtual world can work forever.

Connectivity. For us, the virtual world can exist, because it can create the same value and the real world, we can use the virtual world to make friends, can use the virtual world work to make money, can use the virtual world to exchange money to the real world, only have the virtual world and the real world connection, so the world is more valuable.

Economic attributes. Even the virtual world is an economic system, goods sales, money transactions can be traded.

Finally, there is the compatibility. It can be compatible with people around the world and keep in step with the real world, so it is a metauniverse.

As shown in the figure above, The value of the metacaverse is multiple, But we see the concept of metaverse is not a few games or



movies at all, But a virtual world system, There will be virtual characters in it, Virtual houses and goods as well as currency, Z paper and more, And the future is to form such a metaverse, Technologies such as 5G, GPU, and AI will be needed as an infrastructure, AR / VR and these wearables are also needed as a hardware base, Blockchain NFT and this is also needed as the underlying architecture, Plus, scenes like games, so the companies related to the metaverse, It is basically the companies related to these technologies and concepts.

We are going to be one such an enterprise, the game experience real, let the game metaverse liberate people's productivity. But this is the long-term goal of the future, and before we grow up, we will go from a metaverse game asset trading platform.

### **3. CBDC . Metaverse Ecology**

#### **3.1 CBDC platform introduction**

The CBDC platform ecology is divided into three sectors, namely, GameFi asset trading platform, P2E game financial platform, and NFT platform.

1. CBDC Metaverse Asset Trading Platform: It is an important platform to provide the metaverse asset circulation. It is the basis of all the value exchange in the entire metaverse, equivalent to Amazon in the metaverse field.

The CBDC trading platform provides unassailable, safe and transparent P2P network digital e-commerce services for the game field. With our rich experience in the game industry, Perfect World delivers value with its unique positioning and attracts the majority of gamers. Players can participate in a variety of video game items from multiple platforms, and Perfect World is currently the only platform to provide the following features:

- v It can enter the market at any time from a laptop, or through iOS or Android mobile APP;



- v With a high degree of fraud detection function and prevention function, to escort safe transactions;
- v Provide satisfactory electronic product hosting, automatic delivery services;
- v The seller's reputation / evaluation can directly request service or support from the seller;
- v Advanced inventory management tools, including AP1 login that can make sales more convenient;
- v Game items have a wide range of options, including computer, mobile and console game items; the most abundant options, including in-game items, in-game currency and digital coding.

2. CBDC online financial investment platform: it will provide financial services for high-quality projects in the whole metaverse ecology. P2E finance is a brand new financial model, which will be safer and safer than traditional P2P finance and can provide more efficient financing services.

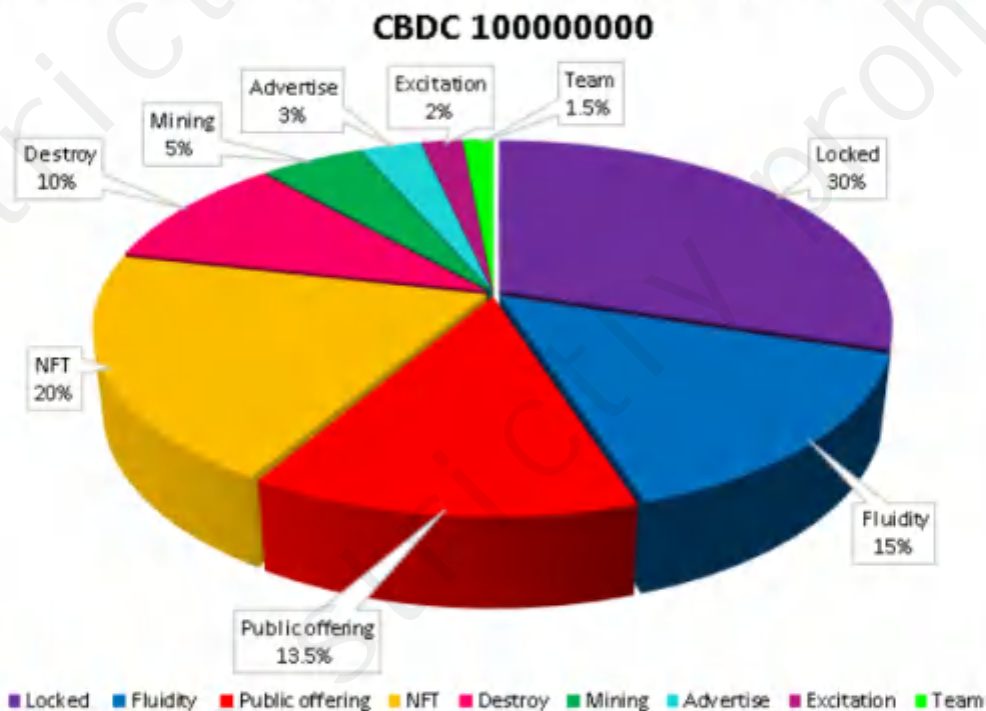
The P2E model is one of the safest Internet financial models nowadays, both Person to Entity and Industry, but also known as P2E financial management or P2E finance. The platform will focus on supporting investment in some public teams with technology and vision to provide them with financial and technical support to help them realize their vision and provide the necessary resource support.

3. CBDC NFT platform: It is the core asset of the entire metaverse ecology. There are many valuable NFT assets born in the metaverse, which need to be traded and circulated.

CBDC build NFT platform will mark the real world won Christie's auction house, allow asset providers to sell valuable NFT assets, for user auction and trading, through the NFT reform technology and upgrade, the real sense of NFT cross-century initiative, committed to become the industry's premier NFT asset auction platform.

### 3.2 Introduction of the P F W economic model

The CBDC will establish a new P F W tokens based on the currency security smart chain BsC, with a total of 10000 trillion yuan. A new decentralized ecosystem based on the token will further help our vision of fully transparent and frictionless infrastructure for game item trading. Blockchain will provide the most secure storage space for virtual assets, and smart contracts will create a transparent public account book.



The CBDC is a fixed-supply cryptographic token, the CBDC supports subdivision, and its units are replaceable and transferable. CBDC chose the currency Ann smart chain because it values its flexibility and wide application. As long as both the seller and the buyer have a compatible wallet, the gamer can easily send the game items and CBDC to each



other. Game publishers can integrate this feature, making it easy to easily move game items out of the game. Blockchain will serve as a multi-game database that securely stores all game items and CBDC and can track their owners.

With the new CBDC tokens, our goal is to unlock game items in each game and promote decentralized ecosystem transactions to create asset liquidity and then change the industry paradigm. With blockchain technology, such transactions are not only suitable for perfect world platforms, but also safely and reliably promoted in all markets. In other words, this will drive the entire game item ecosystem forward.

CBDC will use the currency security smart chain, the current industry standards for issuing customized digital assets and smart contracts. By confirming the BRC-20 token interface, the CBDC will be compatible with the existing Ethereum infrastructure, such as development tools, wallet, and trading platforms. The core virtuator in the Binan blockchain allows for the deployment and execution of smart contracts, thereby creating complex issuance rules for cryptocurrencies such as CBDC and implementing automated reward structures. In short, it eliminates any issue of trust and protects the parties to the transaction from fraud. These powerful features and dynamic ecosystems make the currency Ann smart chain perfect for CBDC, and we firmly believe it will be quickly accepted by game publishers and gamers.

For game publishers, we will offer all open-source plugins and software development kit (SDK) so that their games can identify transfers between game items and the game player's blockchain wallet. These can be in-game digital currency, weapons, or armor items, or different skin, additions, special versions of the game, or even collectible badges, and the blockchain network will keep track of ownership of all of these game items.

Players can simply use the ready-to-shelf Ethereum wallet to save its CBDC and game items and trade freely anywhere. Players can use familiar features to send CBDC and game items, such as the Wechat Wallet, Paypal, and Venmo inter-user transfers. All transaction records and ownership



data will be securely retained on the block, with smart contracts taken to protect against fraud.

Game publishers or third-party tool developers can also provide their own brand of wallets, making it easier for players to browse and manage inventory, and we firmly believe that blockchain technology will help overhaul the ecosystem.

### **3.3 CBDC publisher and player earnings**

CBDC will greatly expand the overall size of the game props market, creating significant gains for players and game publishers.

#### **v player**

The key to gamers is the flexibility to sell, buy, and trade these game items.1mportantly, the decentralized ecosystem of the Perfect World will also eliminate most of the friction in the limited existing market, as smart contracts will solve the fraud problem.

The security of selling, buying, and trading will have a multiplier effect: players will buy more products and pay higher prices.Players are willing to pay more for the game props, and thus have more sense of belonging.1n addition, players will buy more game items, more skin, stronger weapons, etc., after they find that they can retain their investment value and sell them later.1n turn, this would have a viral scatter effect as players who have yet to use CBDC games need to maintain speed-they also need to get more game items to stay competitive or have the same "unique" cool " skin as his friend.This will strongly drive the overall growth of the terminal gamers, and even the game props market.

#### **v Game publisher**

Game publishers adopting CBDC will benefit from:

1. Ability to sell more game items at higher prices;

2. 1ncrease the game life;

3. New revenue source.

Given the benefits of these players and the impact of players buying more game items at higher prices, game publishers will directly receive higher revenue. 1n indirectly, gamers will also stay in the game longer when they buy more items. From the game's publisher perspective, the stay metrics will increase and an increased lifetime value (LTV), thereby increasing the service life of the game.

1t is important that these game publishers will also receive brand new revenue sources, as long as the player buys and sells game items with CBDC, a small portion of each transaction to their game publishers, and a large portion of the revenue as a reward. Even more attractive is that because these revenues cost almost zero, these revenues are essentially pure profits for game publishers, so this is a perfect business model.



Thank you  
for  
watching