1. The potential of advertising business under the sustainable development of science and technology

1.1 The layout of "Metaverse " has become the biggest thing of our time

The concept of "Metaverse" and "Web 3.0" has recently sprung up in the technology industry. Metaverse is an ever operating decentralized virtual world with its complete economic system, where thousands and millions of people can socialize, entertain, create and trade at the same time.

In the Internet industry, increasingly more attention has been drawn to the sub-categories bridging the gap between "virtual" and "reality", including AR/VR, blockchain, etc. Leading Internet enterprises are laying out in the Metaverses and the capital market are re-investing into VR/AR and blockchain.

Mark Zuckerberg, CEO of Facebook, announced in 2020 that, in the next five years, Facebook will transform into a Metaverse company, including the establishment of an external investment fund of US $50 million for Metaverse related technologies, and plans to create 10000 new jobs within the EU to help establish Metaverse.

In November 2021, Facebook officially announced its new name - "Meta", becoming a Metaverse business focused company. Notably, Apple acquired NextVR, a forerunner in this category, in April 2020 for $100M.

Twitter will allow its users to tip their favorite creators on the platform with Bitcoin, making it the first social network to use cryptocurrency as a method of payment. The company also said that it is planning to let peopple connect their crypto wallets and support the autientication of NFTs, also known as Non-Fungible Tokens.

As major US tech giants are intensifying their push into Metaverse, Bytedance has also made its first public move into virtual reality (VR) by acquiring the third biggest VR maker Pico. The company's subsidary Tiktok has launched its first creator-led NFT collection, exploring the world of NFTs as a new creator empowerment tool.

1.2 The vigorous development of on chain business has largely increased advertising demand in the vertical field of blockchain.

The blockchain industry has witnessed a upsurge of "play to earn" GameFi model represented by Axie Infinity. At the same time, the competition of DeFi space is becoming increasingly fierce, for example DEX, FARM and other businesses. The vigorous development of on chain business has created a stronger demand for new users, new traffic and efficient diversion channels.

Axie Infinity is a NFT-based online video game with 1.5 million daily active users, the

blockchain game sits at the forefront of NFT gaming. On-chain analytics show that the game is currently one of the highest growth crypto applications. The company closed the recent investment round at nearly $3 billion valuation.

Data from Axie World reveals that the gaming platform generated revenue of approximately $364 million or 120,547.17 ETH in the month of August. This number is historic as the platform generated more revenue than it has since it came into existence in 2018. According to Token Terminal data, the gaming company's revenue in September was second only to Ethereum's $830 million.

Source: Token Terminal, https://www.tokenterminal.com/terminal/metrics/revenue
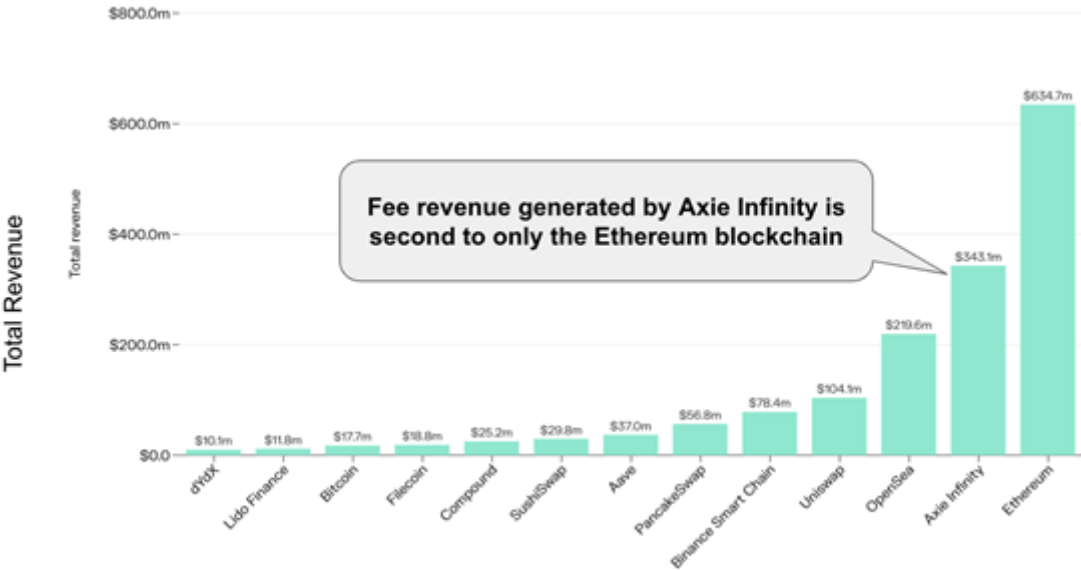
The game is best known for its "Play to Earn" model and gained popularity especially in developing countries hit hard by COVID-19 related unemployment. Most players are not crypto-native and found the game through word of mouth. Players who invest several hours a day can earn anywhere between $8 to $40.

The popularity of Axie Infinity has driven the whole "play to earn" game sector. In the past third quarter, the number of Unique Active Wallets (UAW) associated with decentralized blockchain game applications reached 754000, accounting for 49% of the average daily UAW of the whole blockchain industry.[1] Blockchain games are developing rapidly and new games are emerging one after another. With fierce competition, game companies have an increasing demand for rapid diversion of new users.

With the rapid development of the blockchain industry, the advertising business related to the blockchain field presents the following characteristics

1.3 Due to the development of the industry, the total amount of advertising investment in the blockchain field is smal, comparing with the overall volume of the industry.

Global advertising for blockchain applications often face restrictions, such as local regulatory policy, remote information imbalance and limited choice of payment method,

etc. Marketers find it hard to launch global advertising campaigns in the most commonly used advertising networks such as Facebook & Twitter, thus advertising in the blockchain space hasn't seen a significant number of spending.

1.4 At present, most of the mainstream blockchain projects are financial and game projects. The marketing expenditure accounts for a considerable proportion of the total expenditure of each project, and advertisers have strong payment capacity.

Taking DappRadar ranking data as an example, in the list ranked by user volume and transaction volume, the top 7 Dapps are all composed of online trading products and game applications.

		CATEGORY	BALANCE	USERS	VOLUME	ACTIVITY
Ad	Olympus BSC	DeFi	$456k	35 -16.67%	$2.02k	
1	Atrix SOLANA	DeFi	$114.94M	467 -17.78%	$736.62B	
2	ApeSwap BSC · Polygon	DeFi	$42.86B	10.62k -19.09%	$3.45B	
3	Uniswap V3 ETH	DeFi	$3.35B	15.13k -13.51%	$3.4B	
4	Venus BSC	DeFi	$2.04B	1.7k -44.80%	$2.49B	
5	Raydium SOLANA	DeFi	$4.05M	24.72k -10.38%	$2.43B	
6	PancakeSwap BSC	DeFi	$2.42B	474.22k -6.91%	$559.89M	
7	Uniswap ETH	Exchanges	$10.69B	24.21k +2.53%	$471.03M	

		CATEGORY	BALANCE	USERS	VOLUME	ACTIVITY
Ad	SportX Polygon	Gambling	$1.75M	63 -58.82%	$152.19k	
1	PancakeSwap BSC	DeFi	$2.42B	474.22k -6.91%	$559.89M	
2	Splinterlands Hive · WAX	Games	$263.54k	349.18k -3.40%	$7.25k	
3	Alien Worlds WAX · BSC	Games	$12.15M	219.24k -6.70%	$937.16k	
4	CryptoMines BSC	Games	$182.74M	208.06k +10.21%	$18.53M	
5	AtomicAssets WAX · EOS	Other	$1.02k	112.51k +172.85%	$479.66k	
6	Axie Infinity RONIN · ETH	Games	$4.58B	100.22k -2.84%	$34.01M	
7	Farmers World WAX	Games	$0	55.62k -19.47%	$0	

In 2015, there were roughly 25 Dapps. Today, there are almost 3700 Dapps ranging from decentralized finance services to plan-to-earn games to NFT marketplace and more. These applications process close to $500 million ($182.5 billion annualized) worth of user transactions each day.[2]

1.5 The number of users in the blockchain field is small, but their overall education and economic level, is slightly higher than that of traditional internet users, with strong self-learning and profit seeking quality. Therefore, the effect of advertising can be multiplied.

For example, the DeFi users may develop into GameFi users in the future, while in traditional Internet, Telegram users are not necessarily KakaoTalk users.

2. In the Metaverse era, advertising business needs transformation

As many large Internet enterprises enter the Metaverse industry and actively expand relevant new technologies, the advertising model in the Metaverse is bound to change in the future. Taking the blockchain industry as an example, great changes have taken place in the technological innovation and business model of the industry in the past two years. With the popularity of online play methods such as DeFi and GameFi, the behavior of users in the blockchain industry has also changed significantly. Taking trading users as an example, it has gradually changed from "centralized trading platform website" a few years ago to "DEX" as the main use platform. The number of wallet addresses and activity on the chain have also increased exponentially.

According to the data collected by The Block, the trading volume of DEX reached a record high of $163.3 billion in May, an increase of $100 billion over January.
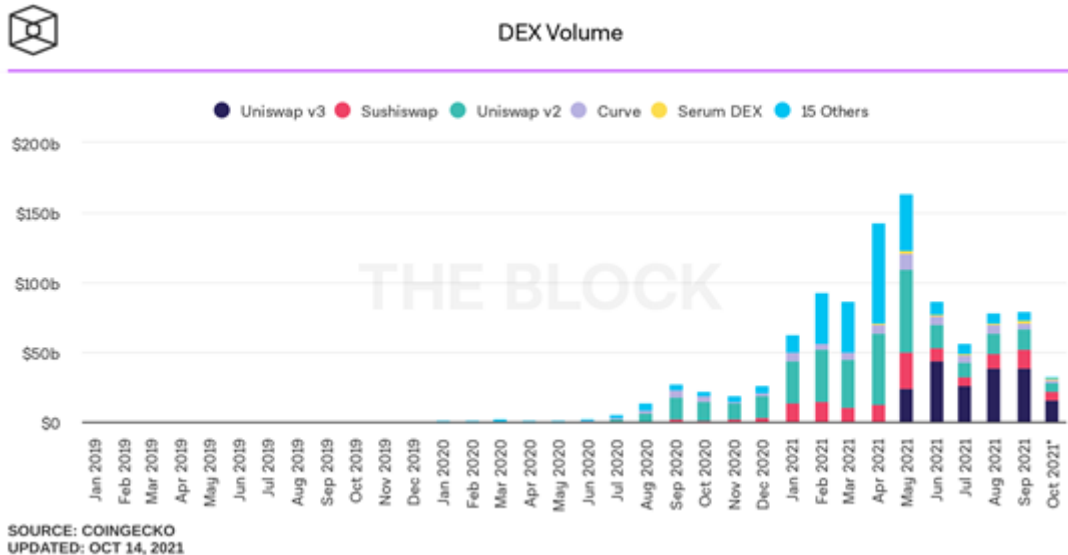
The total number of DeFi users exceeded 3.5 million in October, an increase of nearly 300% compared with January this year. There are four main protocols driving this growth, namely Uniswap (2805881), Compound (331246), 1inch (337334) and Sushiswap (305598). Obviously, Uniswap still occupies a leading position, with nearly 80% of the total number of DeFi users.[3]
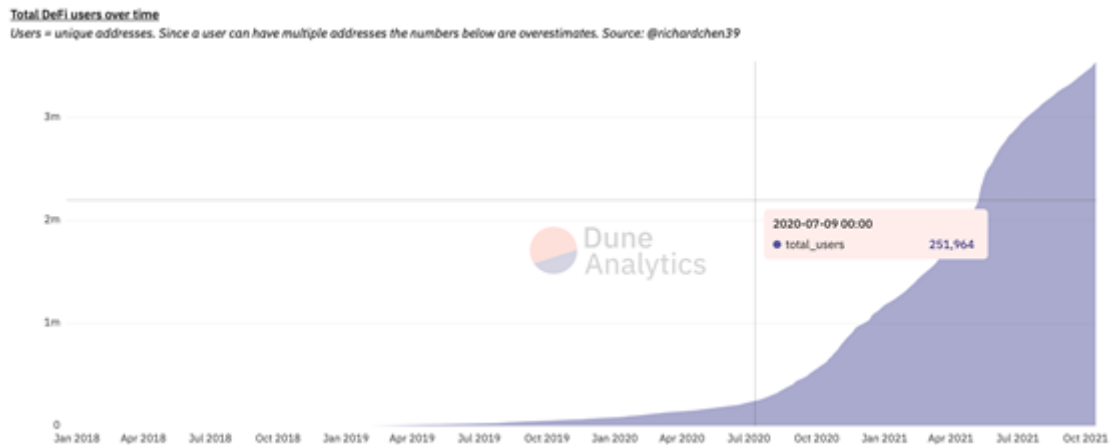
Total Number of DeFi users from January 2018 to October 2021.[4]

For the increasingly active on chain behavior in the future and the Metaverse world with the rise of new technologies, it will be difficult for the traditional delivery channels, content and mode to promote the development of the advertising industry. In the future, Metaverse world and Web3.0 network industry will give birth to more new advertising services based on blockchain technology.

3. Bottleneck of advertising business development in the Metaverse Era

3.1 In order to achieve a "sustainable" and "real-time" digital world in the Metaverse era, blockchain applications, as an important foundation, are difficult to launch on a large scale due to problems such as local regulatory policies, unequal information in different places and limited payment methods.

In late January 2018, Facebook, the world's second largest online ads provider, banned all ads that promote cryptocurrencies to prevent the spread of "financial products and services frequently associated with misleading or deceptive promotional practices."

This ban set a precedent that is quickly followed by other platforms such as Google and Twitter to restrict advertising for cryptocurrencies and any related content.

In December 2019, YouTube aggressively deleted hundreds of cryptocurrency-related content from several dozen accounts, some of which are the biggest influencers in the industry.YouTube, one of the most popular social media platforms for video sharing, has aggressively started deleting cryptocurrency-related content from some of the biggest influencers in the industry.

On top of content restrictions, traditional advertising providers also apply limitions on accepted currency payment in different geographical regions. For example, in Russia, it is only possible to pay in local currency RUB, not in other currencies such as USD or EUR, nor any cryptocurrency.

3.2 Traditional advertising only puts in information and cannot directly deliver value.

After receiving the information, users need to go through additional decision-making process to make contact with advertisers.

In the future world of Metaverse, "real-time experience and high interaction" will be the time feature. In this environment, advertisements for various digital products and service commodities need to interact closely with the audience in terms of advertising content, channel and delivery form, and even reach the state of "see and try".

3.3 In the traditional advertising channels, we cannot count the user behavior in the Metaverse, nor can we judge the digital identity and potential user value in the Metaverse world.

For traditional advertising channels, such as paper media, Web 2.0 websites, print media, etc., their classification of target users comes from the age, address, education and other information of users in real life. When the scientific and technological society enters the Metaverse world, the user classification based on physical and geographical coordinates in the real world will no longer have the primary reference significance, but will be replaced by the digital identity and browsing habits of users in the Web3.0 network. The scope of users will also be expanded to the whole world, and the collection and screening of user information will be completed in a more transparent and efficient way, Blockchain technology will be an important technical solution to complete this change.

4. DAD 2.0

In the new version of DAD, we will combine blockchain technology to solve the advertising problem in the Metaverse era and provide a bridge to connect Web 3.0 network traffic in the Metaverse era.

4.1 Payment without borders

Support digital assets with value and liquidity as advertising payment method, and take smart contract as contract signing method.

Advertisers can use their own tokens or DAD to pay advertising fees. The contract will be signed in the form of smart contract. Therefore, organizations in any country and any subject can use the advertising services provided by DAD.

4.2 Value delivery - "highly interactive" delivery

The way to deliver advertising is not only graphic and video information, but also task-oriented advertisers' token airdrop and NFT airdrop.

DAD can not only put ordinary graphic advertisements, but also directly carry out task airdrop. Taking the game as an example, users can directly obtain reward token airdrop or NFT after clicking or playing.

4.3 DAO Governance

Focus on researching the collection and delivery mode of media, products and channels in the blockchain field

DAD can set up a blockchain advertising alliance or DAO. Advertisers in this alliance can provide advertising resources in an automated way and obtain DAD token rewards. If the effect is good, they will continue to receive rewards, and if not that good, they will quit. Members of the alliance can provide new advertising ideas through proposals, and ideas conducive to project development can get DAD incentive. Members can formulate rules such as advertising content review, exposure frequency and members' leaving and staying by voting.

4.4 Blockchain-based Delivery database

Based on blockchain technology, in the process of delivering to the audience, taking address as destination, collect the audience's behavior data on the chain, supplement the user portrait on the chain, and build the unique online user database of DAD.

For example, DAD can classify users according to the behavior of addresses on the chain. They can recommend deep users of DeFi to play on-chain games, or high net worth users of on-chain games and DeFi to participate in Farm. Various services can be pushed to each other. Finally, according to the effect of advertising push, new return on-chain user data will be returned and updated to the database. If the database is updated perfectly, it can cooperate with other on-chain applications.

4.5 Token Economy

The token incentive system will be used to enhance the stickiness of advertisers and users to the DAD platform. Advertisers can stake DAD and get more advertising exposure opportunities. Users can stake DAD to get more task incentives.

5. DAD Token (DAD)

DAD Token is the native token of DAD program, it can be used for:

• Advertisement Fee Payment and User Incentive
DAD token will be one of the common payment methods on the DAD advertising platform. Advertisers can use DAD for advertising expense settlement and users can also receive DAD as an incentive to participate in advertising interaction.

• Community Governance
As part of the DAD community governance, community users will be able to use DAD token to initiate proposals and vote.

• Staking
Advertisers and users can participate in the DAD staking program, so as to obtain more

advertising exposure opportunities and more advertising interaction incentive bonus.

•   User on-chain data index service charge
In the future on-chain user information database will be built by DAD. Advertisers can use DAD to apply for access and index the information of target user groups.

6. Roadmap

Stage 1: Gate Era

Milestone: At this stage, DAD will be focusing on expanding users attention range and open up the migration channel of audience traffic from Web 2.0 to Web 3.0.

Main contents:
•   Build keyword recommendation algorithm model based on blockchain industry
•   Taking the first version of browser plug-in as the main product form, build a framework to get through Web2.0 keyword content, on-chain wallet address and on-chain data
•   Start the plug-in product test and gradually complete the user end flow introduction strategy and implementation
•   Start public test of DAD-DAO V2

Stage 2: Bridge Era

Milestone: Bridge advertisers and audience.

Main contents:
•   Complete the development and release of advertiser end auto-delivery of information content, digital asset settlement and data feedback terminals.
•   Improve the keyword recommendation algorithm model based on blockchain industry
•   Release the first version of DAD-ID user-portrait database
•   Complete the official implementation of DAD-DAO in the whole community
•   Complete the development of DAD-Staking function

Stage 3: Commerce Era

Milestone: Realize the overall automatic process of advertising in blockchain world

Main contents:
•   Complete the development and release of advertiser end automatic delivery of active content, digital asset settlement and data feedback terminal
•   Continuously improve the keyword recommendation algorithm model based on the blockchain industry

- Release the second version of DAD-ID user-portrait database and open up for industry cooperation
- Start the development based on decentralized DNS protocol module and provide advertisers with DNS based advertising landing page solutions
- Release DAD-ADFi module of the online advertiser's delivery algorithm, enabling the advertiser to open the delivery strategy for other users to pay for reference, so as to realize "Advertise to earn".

Stage 4: D Era

Milestone: Realize the vision of being Flow Bridge in Metaverse world.

Main contents:
- Release advertising service based on main public chain DNS.
- Provide any assets as advertising expenses and user rewards to realize cross-chain full-asset support.
- Launch the DNS based DAD-ID universal user-account login system to provide users with a one-click path to log in to the Web3.0 website.
- Release the third version of DAD-ID user-portrait database.
- Integrate and cooperate with AR, VR and other fields in Metaverse ecosystem to develop more advertising forms suitable for the sensory experience of Metaverse world.

[1] Data from DappRadar

[2] Data from https://www.stateofthedapps.com/stats/category/finance#new

[3] number of users = number of unique wallet addresses

[4] Data from Dune Analytics