HOMEROS

Whitepaper

February - 2020

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1. Introduction

The entire media and entertainment market has consistently been on the rise[1] and is projected to grow to $2.2 trillion by 2021. Among the segments that have affected the high revenue of this industry is the ever-developing nature of the online gaming sector.

By definition, online games include social gaming, mobile gaming, free-to-play (F2P), pay-to-play (P2P), and most commonly, massive multiplayer gaming (MMO)[2]. These games can be found on the internet or preferably downloaded on smartphones and tablets. Handheld consoles like PlayStation, Nintendo Wii, and Xbox, as well as downloadable PC games, are also considered to be part of online gaming.

Most games now have an online element to them as this expands more opportunities for players. These opportunities include taking part in global leaderboards, joining multiplayer games, or chatting with others.[3] Internet connectivity in a game also allows players to find and play against, or with, other players despite being located miles away from each other.

Online games are often associated with video games[4] as these games cover a huge span – from a simple game of Tetris to a wide range of MMO with virtual universes that typically involve role-playing of characters and user interaction with other players. The most popular MMO games[5] are World of Warcraft, Final Fantasy, and Tera. In this context, video games are played exclusively online while some are purchased and installed on smart devices.

In fact, gaming industry leaders, particularly leading video game developers namely Electronic Arts, Ubisoft, and Activision Blizzard, have recognized the potential exhibited by the rising online gaming sector. Major players within the social gaming scene including, but are not limited to Supercell, Zynga, and King.com, have also contributed to the billion-dollar revenue of this segment.

When it comes to the online video gaming world, several subgenres in MMO gaming have taken the world by storm but it can be said that the most popular at present is the Battle Royale gaming mode.[6] This game has the 'last man standing' gameplay elements. Players are often locked in combats with opponents, with the core objective of being the only competitor who survives the action.

Aside from the fighting to survive instinct, players must move quickly around areas where the action is ongoing to explore and find new tools and items to equip themselves in beating their opponents. Such elements make this subgenre stand out when compared to other MMO games like multiplayer online battle arena (MOBA). While MOBAs involve strategic team-based play, Battle Royale games are fast-paced, exciting, and more adventurous.

Due to the off-the-charts success of the eSports scene, many game developers have also opted to design their games to qualify in the professional competitiveness subculture. Specific gaming categories such as real-time strategy, first-person shooter, fighting, and MOBA have a competitive edge to be eligible for eSports tournaments.

The contemporary eSports market was initially popular only in core Asian markets such as South Korea. In the said country, live-streaming of pro-gaming competitions across 24-hour cable channels was introduced, which eventually expanded globally. Over the years, eSports has grown significantly with increased viewership and competition prizes.[7] Some of the most successful games in this arena are League of Legends, Dota 2, Fortnite, and Counter Strike: Global Offensive.

From professional sport-related games to mission-based games and quests that stimulate users to finish challenges, interactive games cater to a diverse range of interests and may enable users to connect and play together.

With thousands of online games being released regularly by mainstream developers and indie creators, the "gamer" title has become very broad, with many people – who play games in any of the above formats

— adopting the title.[8] No matter which platform these people have been using in playing, they can now be considered to be gamers. With this, the number of gamers worldwide is expected to jump to almost 2.7 billion by 2021.

In general, men spend more time playing video games than women. Their choices vary based on the genre which includes arcade, simulation, puzzle, athletic, shooter, strategy, and adventure games. Gamers of all ages also exist as well — from older women who prefer single-player games to young men who are hardcore players of war games. The demographics have dramatically shifted with the widespread usage and adaptation of games on smartphones.

Video games have gone mainstream and penetrated mobile devices for user convenience. Mobile phones are now the preferred gaming device[9] by the majority of gamers. Growth in the mobile industry segment is also promising due to the aspect of mobile gaming. At present, mobile gaming accounts for more than 50% of the global games market.

Digital distribution of games has also grown exponentially, with Apple and Google as the main distributors for mobile gaming, and Steam for PC gaming. The mobile gaming segment has attracted new audiences, content creators, and a stream of investments. Notably, mobile games are split into two main categories: ad-driven and freemium. In line with this, in-game purchases are also on the rise. New content, game upgrades, and additional features for a particular game are now offered via in-game purchases.

For instance, out of Fortnite's $2.4 billion of revenue, over one billion was generated through the sale of in-game items. With this trend, the majority of online games have been shifting to the F2P model with a focus on generating profits through in-game items.[10]

Mobile gaming has demonstrated advancements almost beyond recognition as these games have evolved the capability to feature in-depth stories, character development, massive online 3D worlds,

and immersion through augmented reality (AR) and virtual reality (VR).

In relation to this, video games are more than just a booming entertainment business – they're reshaping the way we interact with the world.[11] AR, VR, cloud-based gaming, artificial intelligence, and blockchain in gaming have been exciting innovations[12] that have improved the overall gaming experience of users.

1.1 Existing Concepts

The application of blockchain technology to the gaming industry has been a venture of several projects. These projects intend to provide additional services to the global gaming community, which include gamers, developers, enthusiasts, and merchants.

In October 2016, the Chimaera project was established and was later rebranded as **XAYA** in early 2018. The founders of this project envision blockchain as a revolutionary technology wherein games can transform from the virtual landscape into a real-world dimension. Free marketplace, censorship resistance, and cryptographic security are available within the XAYA blockchain. With XAYA, games can be serverless for seamless around-the-clock gaming, profitable with human mining, innovative, and community-driven. These games can also introduce new economies and unique game genres.

ITAM Games mainly supports game developers with blockchain technology. Alongside this, it aims to create real value for game users by allowing them to play and earn, as well as transform game items into assets with real-world values. Both game developers and players will experience an all-new gaming ecosystem with ITAM Games. Through the ITAM Store, gamers can own and hold their in-game assets in their wallet. They can also search for digital assets and access users' history in the ITAM Market.

Committed to being the pioneer of a new dimension of gaming, **Horizon** is a blockchain infrastructure company that aims to create an open,

inclusive, fair, and transparent gaming ecosystem for everyone. It is the mastermind behind **Arcadeum**, a video game network and wallet built on top of the Ethereum blockchain. Through this wallet and platform, users can have fun, easy, and intuitive gaming experiences.

The Sandbox is a community-driven platform where game creators can monetize Voxel assets and enjoy blockchain gaming experiences. Through the VoxEdit, users can create their own Voxel models and animate them. While on the Marketplace, gamers can sell and collect the best assets available and compatible with different games within the platform. It also has a Game Market that enables users to make and play their own games. Being a part of the Sandbox community can give the gaming community an opportunity to create their own adventures and play faultlessly and securely.

PlayPoint is a blockchain gaming platform that creates decentralized solutions for sports, betting, gaming, and online payments. It utilizes smart contracts to ensure secure payoff of prizes and rewards on competitions, games, and tournaments conducted within its platform. It aims to create a fair and trusted environment for both developers and gamers that will allow a secure, transparent, and entertaining gaming ecosystem. Gamers can acquire tokenized rewards while developers can have greater opportunities to monetize their games.

1.2 Market Overview

The online gaming landscape is booming as 74% of all the video games and computer sales were sold in digital format form, according to the Entertainment Software Association. In fact, the revenue in the online gaming segment is projected to reach almost $17 billion in 2020. Accordingly, the user penetration rate is expected to hit 13.0% by 2024.

Leading Gaming Markets Worldwide by Revenue (2019)
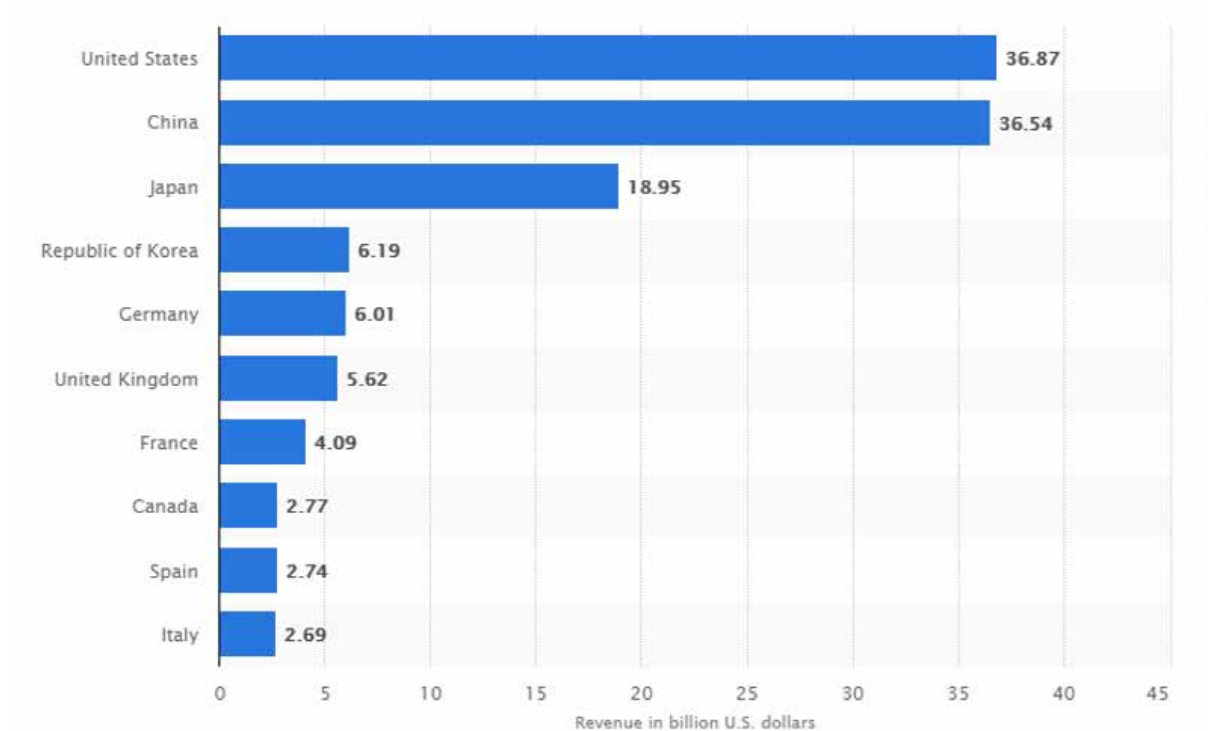
Source: Statista

From a global perspective, the United States led the list of the leading gaming markets by a revenue worth $36.87 billion. Coming close in second place, China also contributed to the overall market revenue of $36.54 billion. With a market of diverse preferences when it comes to digital gaming platforms, Japan ranks third by generating $18.95 billion. Succeedingly, South Korea remains to be a major player within the global gaming market followed by Germany which is Europe's largest gaming market. Completing the top ten list are the United Kingdom, France, Canada, Spain, and Italy.

Online Gaming Players by Age (2019)
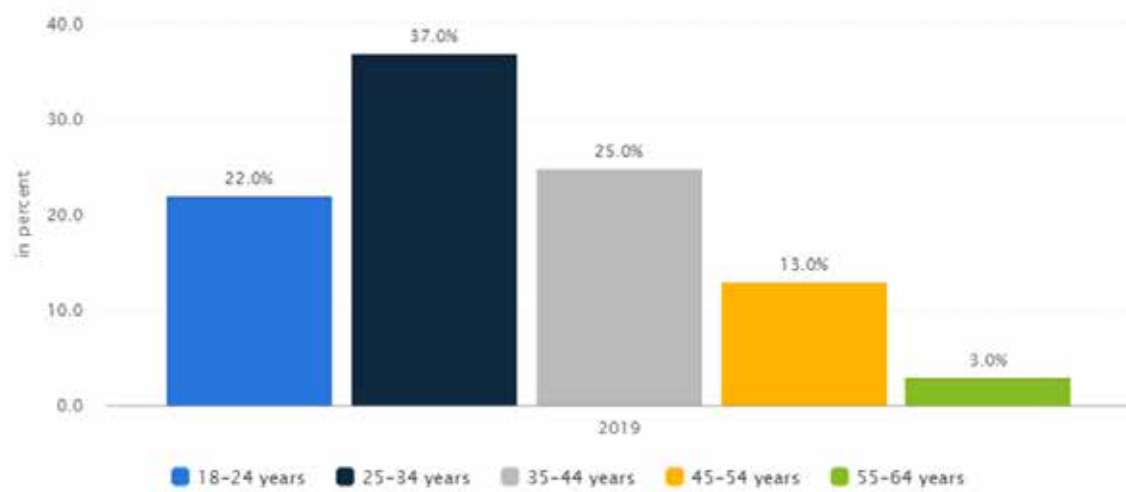
Source: Limelight Networks[13]

The State of Online Gaming 2019 report highlights the latest findings in Limelight Networks' surveys about online habits and opinions. This report is based on responses from 4,500 gamers located in France, Germany, India, Italy, Japan, Singapore, South Korea, the United Kingdom, and the United States.

Based on the results, the majority of the people who play online games are aged 25-34 years old (millennials) followed by 35-44 years old (Generation X). In contrast to the notion that the young adult generation (Generation Z) are the most active gamers, 18-24-year-olds only accounted for 22% of those who responded within the survey. The rest of Generation X is recorded to be 13% while the Baby Boomers (55-64-year-olds) are also playing online games involving 3% of the respondents.

Video Game Preference by Gamer Type (2019)

| Gamer Type	Casual Single-Player games (e.g. Candy Crush or Angry Birds)	Casual Multi-Player games (e.g. Words With Friends)	First-Person Shooter games (e.g. Call of Duty)	Single-Player Role-play games (e.g. The Elder Scrolls)	Multiplayer Online Battle Arena games (e.g. League of Legends and DOTA 2)	Massively Multiplayer Online Role-Playing Games (e.g. World of Warcraft)	Battle Royale games (e.g. Fortnite and PUBG)
Aspiring professional	1.69	1.74	2.06	1.87	1.98	1.90	1.92
Expert	1.76	1.62	2.02	1.82	1.74	1.75	1.86
Casual gamer	1.83	1.13	1.18	1.10	0.92	0.90	0.95
Novice	1.54	0.65	0.56	0.68	0.48	0.44	0.52
All	1.75	1.13	1.22	1.16	1.00	0.99	1.05

Source: Limelight Networks13

There are many different types of video games available online. The surveyor has managed to ask different types of gamer on their gaming genre preference when playing. Gamers were asked how often they play each type of game namely, casual single-player, casual multiplayer, first-person shooter, single-player role-play, MOBA, MMORPG, and Battle Royale.

On a scale of 0-4, 0 meaning they never spend time playing this specific type of game and 4 implies that this game is the one they are playing most of the time, respondents have made their choices. As shown in the table above, aspiring professional and more experienced gamers play First-Person Shooter games often while casual and novice gamers prefer Casual Single-Player games. For this reason, we can presume that long-time players prefer to be challenged and play games with a more complex storyline and intense gameplay. Occasional and beginner gamers, on the other hand, prefer games that will stimulate their minds and provide an entertaining factor.

Gamers' Concern: Online Security
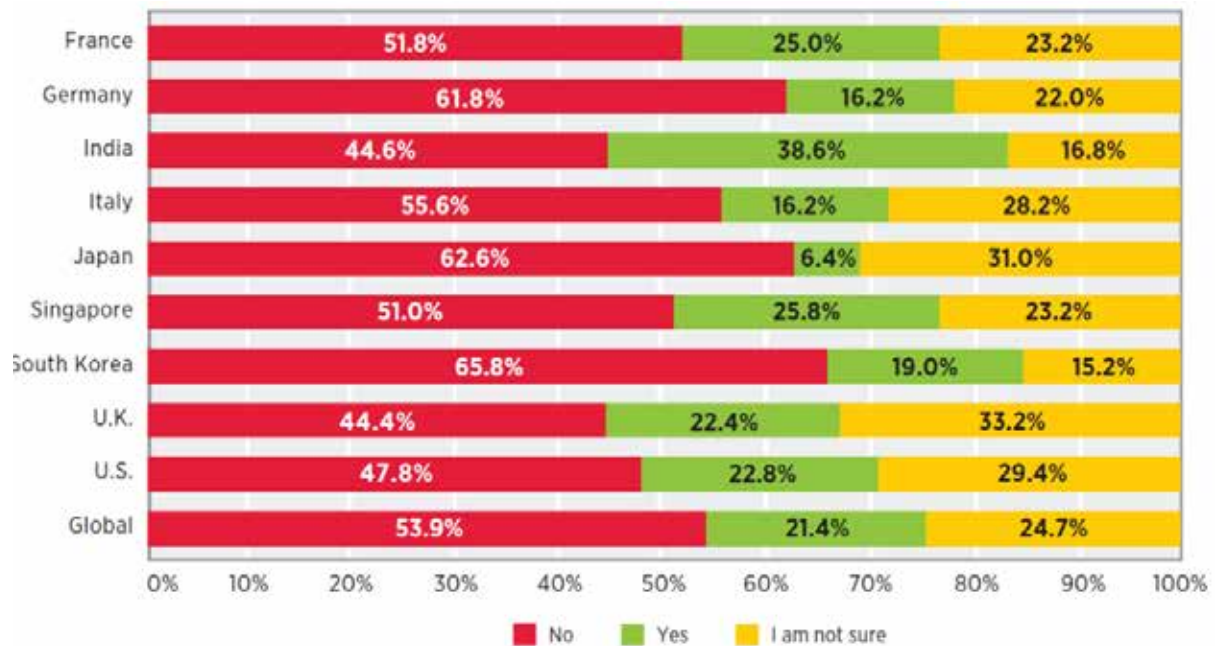
Source: Limelight Networks13

When asked the question, "will you continue to play online games or make purchases from a gaming website that has previously experienced a security breach or been hacked?", gamers have expressed their concern regarding online security.

Globally, more than half of gamers (53.9%) would not continue to play games or make any gaming purchases or transactions on a platform that has been reported to be hacked or has experienced security issues like a data breach. South Korea and Germany showed great disinterest in this instance with more than 60% of gamers leaving a gaming website that has shown any red flags regarding online security. Despite this, some gamers will continue to use a website or remain uncertain whether to trust a certain website in case they encounter any safety matters.

2. Current Issues of the Gaming Industry

a. Limited and Unreliable Gaming Walkthroughs

More than 30% of both teen and adult gaming communities watch video game trailers/previews/reviews to guide them upon playing any games. Regardless, the availability of gaming walkthroughs and its usage is a debate among gamers. There are those who prefer not to use it to avoid spoiling themselves while playing while there are those who rely on these guides to finish a certain level or explore a specific area thoroughly.

Gaming walkthroughs serve as a one-stop guide for gamers. This usually includes an overview of the game including its characters, storyline, skill availability, gameplay preview, shortcuts, and additional game achievements to be unlocked.

These walkthroughs can be done in various formats like text and video. A lot of these files can be accessed on the Internet but only selected ones are deemed to be credible and reliable. Issues of copyright infringement for video walkthroughs are also faced by some gamers, making the accessibility of walkthroughs to be limited.

b. Centralized Servers

When playing games, gamers easily get frustrated once they experience any disturbance like game lag, server suspension, connection lost, or player loss. Typically, a public multiplayer game ecosystem uses either client servers or peer-to-peer (P2P) hosting, both of which have these weak points.

In the online gaming scene, MMO games require high service scalability, fast response time, and low network latency. P2P architectures that form centralized servers are able to address these problems. Despite this, centralized servers are susceptible to vulnerabilities like cheating and instability.

Distributing a game among different clients or nodes makes maintaining control over the game more complicated. Since the connection will be

based on one client to another, there will be a high possibility of poor connection that can lead to a poor gaming experience for everyone. Stability and customizability are not ensured with this type of server. Suggestively, MMO games must operate under a distributed P2P network to work seamlessly for the huge amount of gamers present within a gaming online community.

c. Unsecure Marketplace

Online gaming marketplaces are commonly digital platforms where gamers can sell or buy their items and services. Users can freely register and choose their preferred purchases depending on categories like game genre, boost, game coins, top-up, and skins, among others.

The Internet is known to be a hub of various gaming marketplaces. It is up to the gamer's discretion to choose a genuine seller from a well-organized platform. In this case, gamers also face concerns regarding the authenticity of the items being sold and the payment security within the gaming souq.

Gaming marketplaces lack encryption and privacy to ensure that gamers can acquire items and services that are high quality and value-worthy. Moreover, the buyer's protection against misinformation and swindling must be prioritized by the market owners and sellers.

d. Lack of Interoperability

Within the gaming industry, game assets and developed games must be interoperable between different consoles and applications to accommodate players of all kinds. Online video games have different classifications and when it comes to compatibility, the rise of non-fungible tokens (NFTs) resolves the limitations of gaming assets within the digital gaming ecosystem.

To provide real value to gamers, in-game items and assets must be exchanged for actual value instead of being bound only within the virtual gaming world. Game developers are working on this significant feature that will allow their games to transcend and provide a whole new gaming experience to the users.

Highly-immersive RPG games, for example, intend to provide an ultimate social and physical experience than the traditional online video games. Adopting standards of interoperability can benefit both developers and users and facilitate the growth of the gaming industry further.

e. Growth in Data

The surge of social and multiplayer online games provided an explosion of data intake which resulted in a higher demand for a robust and more secure data management system. Most games require online accounts to be created to enable users to play. These accounts can be associated with an individual's consumer behavior, playing preference, and purchase activity.

Game developers also consider the data-driven aspect of their games. Every player interaction and movement recorded within game logs produce incredibly valuable data that can be used for data analytics. The streams of big data generated within the gaming industry would entail the necessity of having a secure and unhackable network.

This data can be used for various purposes such as research, game development, and monetization building. As the gaming industry evolves, the amount and quality of data become more significant. It must be utilized properly for the benefit of the global gaming community.

f. Online Security

Being exposed to the digital world opens up great possibilities of security issues, especially within the gaming industry. Oftentimes, games themselves can contain malware. This happens when a game is a lure created as a fake version of an existing game or hackers have manipulated the game code, causing a threat to the player's security.

Acquisition of in-game items or services within gaming marketplaces can also lead to the risk of ransomware targeting your game progress once

used. Additionally, keylogging malware or password stealers are also victimizing gamers in order to steal their account credentials. Once the malware has spread within the system, hackers can acquire more than the user's game login details.

3. Executive Summary

This document presents the basis, technology, use cases, and roadmap of Homeros and its underlying blockchain network. It explains how the gaming industry can benefit from a decentralized and distributed system that could resolve the issues of security, scalability, interoperability, and authenticity.

Homeros will introduce a blockchain-based solution that will benefit the global gaming community including gamers, developers, merchants, and investors.

Through the decentralized structure of the Homeros blockchain, the launch and development of games become more scalable and secure. Gamers can play games, acquire in-game items, and get access to authentic gaming walkthroughs within the platform.

HMR will be the utility token used for the services deployed within Homeros, which include game crowdfunding, game and item purchases, walkthrough fees, and incentives.

The target audience and use cases for Homeros involve professional and amateur gamers, game developers, investors, and merchants. All prospect participants will benefit from the robust and secure gaming ecosystem, monetization opportunities, and accessibility to a wide variety of blockchain-powered games.

In the latter part, we provided the timeline of Homeros' development. This provides an overview of what Homeros aims to do as it progresses through time such as the launch of its platform, token exchange listings, and blockchain development.

4. Current Issues of the Gaming Industry

4.1. Develop and Launch Games

Homeros offers an innovative, secure, and scalable platform intended for both game developers and gamers around the world. Through this platform, game developers have the freedom to develop and launch their games with the assurance that all data and information are stored, utilized, and protected within the blockchain. Cross-console compatibility will also be highly encouraged.

Different types of online video games can be created and released at Homeros. These include, but are not limited to, the following:

- First-person shooter game (FPS)
- Real-time strategy game (RTS)
- Massively multiplayer online game (MMO)
- Multiplayer online battle arena game (MOBA)
- Battle Royale games
- Simulation games
- Sports games
- Puzzle games

Mode of playing can vary from single or multiplayer as well as player versus environment (PvE) or player versus player (PvP). Homeros game developers are encouraged to make use of blockchain into designing an immersive gaming experience to the users. To minimize the game development clutter, Homeros will grant developers and graphic artists access to Game Barracks, a specialized game incubator and code repository for game developers to store their game creation progress.

With the rise of digital distribution and blockchain technology, Homeros game developers can offer a more dynamic and responsive gaming experience to the players. Alongside this, interested investors and gaming enthusiasts can have the opportunity to choose a game that will

be worked in-progress and show support through a crowdfunding initiative known as initial game offering (IGO). Those who want to support game developers can buy their access to the game at discounted prices.

Game developers must submit a clear proposal with the concept of their games and novel gameplay that will stand out among other developers. Once the Homeros game investors have successfully invested their HMR Tokens to the game, they will get exclusive access to the beta version of the game, as well as other special in-game perks.

Once the full version of the game has been finalized, it will be made available to all players across the Homeros Marketplace. IGO investors will have more advantage over others since they bought the game at a cheaper cost and have prior knowledge of the game mechanics.

4.2 Access Game Walkthroughs

Homeros allows the gamers community to be engaged with one another and use their expertise in gaming through the opportunity of submitting game walkthroughs. Depending on the level of a player, he/she can create a text or video game walkthrough that can guide beginner players on how to finish a game, what choices to make to find alternative scenarios, how to solve in-game quests, and how to find hidden treasures and items.

Accessing these game walkthroughs is free, even though there will be bonus quests and special features that can only be accessed by paying HMR Tokens. For every guide, the walkthrough creator can generate profit based on the upvotes given by the community. The more the players find the walkthrough to be useful, the greater the chances are of receiving a generous amount of HMR Tokens. On top of this, the walkthrough creator can make a name for himself and earn the respect of the community.

Amateur players can worry less of being stuck in a game as they can use the game walkthroughs to get an idea on the points of interest (POIs),

locations, non-playing characters (NPCs), and quest starters within a game. These walkthroughs can be read or viewed anytime within the Homeros platform.

Though these guides are widely accessible, players are still highly-advised to play the games themselves without any guides. These walkthroughs are only supplemental and are made available to assist those players who may need support.

4.3 Purchase and Sell In-Game Items

Games within the Homeros platform are unhackable, secure, and they integrate novel in-game purchase capability. Each game has varying levels of difficulty, with rare dungeons and bizarre worlds being introduced to add more game dynamics. These contain rare loots and limited-edition treasures that cannot be obtained anywhere else in the game.

In most cases, these are level-specific, and loots that can be obtained from these can only be equipped by players at a certain level.

These special areas can also contain seasonal boss monsters that grant players higher-level points when engaged in and destroyed. Players can also unlock a premium level walkthrough, which can guide players towards improving their skills, items, and equipment.

By using HMR Tokens, players can buy these rare loots from others who are lucky enough to get them. Players can list these items at the Homeros Marketplace. They may also request for a specific item on the marketplace and negotiate with any seller regarding the price in HMR.

By enabling HMR tokens as a mode of payment for in-game purchases, players do not have to go through the time-consuming process of fiat payments. All transactions will be verified and stored within the blockchain, ensuring accuracy and legitimacy. Moreover, in-game items can also be traded to other items depending on the arrangement between the two parties.
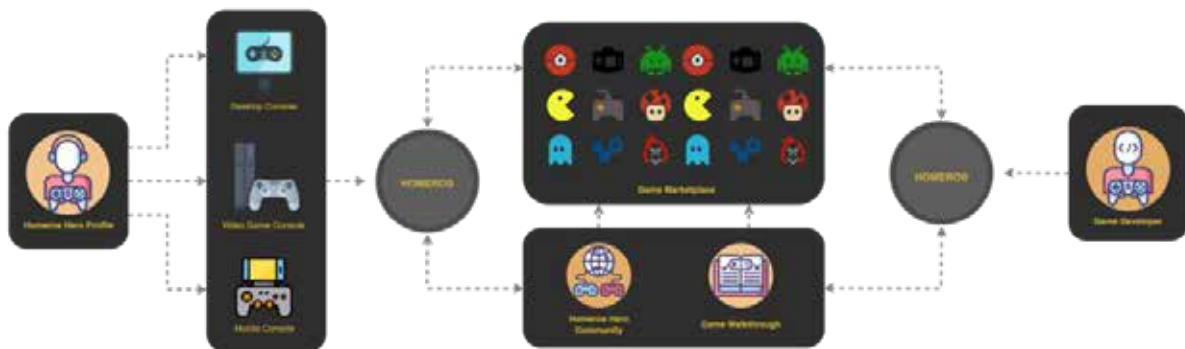
5. Key Features

Image 1: How the Homeros gaming platform works

5.1 Game Marketplace

The Homeros Marketplace offers a scalable and secure platform where players can choose from the variety of its games. Players can access free-to-play (F2P) games available on Homeros, or they can purchase pay-to-play (P2P) games that are critically-acclaimed by the community.

These pay-to-play games enable gamers to enjoy the high-quality game interface and collect in-game start bonuses to better equip them in their quests.

Free-to-play games (available for all)

Homeros offers the best free games that enable its players to experience hours of fun and excitement without even making a purchase. These games may vary in format and playstyle: players can enjoy first-person shooting games, MOBAs, battle royale, sports, and more.

Players can interact with each other in the games and even hold competitive matches. They can earn experience, loot items, and trade with other players in-game. All the items that the player collects in the game can

be exchanged for HMR tokens, which can then be used to purchase any items compatible across the different games created within the Homeros platform.

Pay-to-play games (pay HMR to acquire)

Aside from F2P games, Homeros also offers its players a number of pay-to-play games that can be purchased using HMR tokens. Game developers who already have established a reputation within the community can decide on whether to make their games F2P or P2P. These can also be developed in partnership between game developers and exclusive merchants.

Many of these games are expected to be critically-acclaimed by Homeros and the Hero Community. As the gamers are expected to be fewer in these games, the community can expect in-game loots to be valued at a higher price than from those in F2P games.

Level-specific and game-specific items

Players that seek to advance their gaming experience can acquire premium items with the use of HMR Token. These can be used to buy items such as skins, armor and weapons, gems, charms, nitro boost, and many more depending on the game and the player level.

Using the Hero Marketplace, players can list their in-game items and sell them to others. Players who are interested in buying a specific item can request and negotiate with potential sellers and pay in HMR.

5.2 Homeros Hero Profile

Homeros enables players to choose from the different kinds of avatar available on the platform that fits their style. Through the Hero Profile, players have the power to customize their character in a wide variety of ways.

The player's Hero Profile will be his or her main identity both in-game and within the Homeros Hero community. The profile can interact with other players and contribute to the community. Those that strive to maintain the growth of the community by adding valuable content and relevant insights will earn a good reputation not just in-game, but in the entire Homeros ecosystem.

5.3 Game Walkthroughs

Homeros has a platform wherein users can browse and submit game walkthroughs. These are generally in text and picture format, with the aim of helping newbies with their struggle in understanding the game mechanics and the practical how-to's. Those who submit walkthroughs that are helpful and provide value can be upvoted by the community and tipped with HMR tokens.

High-level players can submit in video format

Players with a high level and reputation can also submit a full video walkthrough which can help other players in the platform in understanding the gameplay better and build better strategies on how to overcome certain difficulties on different levels of the games.

The video walkthrough may also contain tips and tricks on how to enhance their experience in the games that they play. It also provides players the knowledge to find rare loots and other rewards.

Walkthroughs in video format are that are submitted by high-level players on the Homeros platform can only be accessed by paying HMR tokens. These tokens will unlock the premium version of walkthroughs available in the Homeros platform.

Players can access different walkthrough content formats

Players who do not wish to pay to have premium access to walkthroughs can still access them, albeit with certain limitations. Some of these are

like the players view lesser gaming tips and tricks, and a limited list of finding rare characters and items along with the gameplay.

Other players may debate on whether these will cause the games to be unbalanced. However, virtually all games that are offered by traditional gaming outfits have walkthroughs; many game creators and publishers even welcome veteran players to provide walkthroughs to help the newbies adjust to the game.

6. Homeros Opportunities

6.1 For Professional Gamers

Homeros is in charge of providing its players on the platform the best games in the market. Depending on their preferences, players can choose from virtually any type of game that is created by Homeros game developers. They may access F2P games, or use HMR token to purchase the P2P game of their liking. Many of these games can be played on different types of consoles such as desktop, video game, and mobile.

Homeros provides earning opportunities to professional players by allowing them to record and upload the video of their actual game on the platform. The most liked and viewed walkthrough video has a significantly higher chance of receiving rewards from the Homeros platform and its community.

6.2 For Amateur Gamers

Amateur players can enjoy games on Homeros. If they are not planning on investing anything and they only want to have fun, they can play the F2P games. These games can allow them to earn HMR tokens even though the rewards are lesser than those given in P2P games.

These players can also check walkthroughs to guide them at the beginning of their game. These will enable them to know how professional gamers

complete their challenges and earn their profits.

6.3 For Developers

Game developers can enjoy many benefits as they can earn through the games they create on the Homeros platform. Aside from the games, developers can also profit through the in-game market of each game they develop by selling rare in-game items, skins, and other gaming packages that could upgrade the players' accounts.

Developers can also create an exclusive video walkthrough of the games they develop, which can only be watched by players who pay via HMR tokens.

6.4 For Merchants

Gaming-related merchants can also utilize the decentralized community of Homeros to look for freelance game developers or budding game creators to partner with. They can negotiate about how a particular gaming concept can provide them mutual benefits. Moreover, the merchants can become partner sponsors of tournaments held exclusively within the games.

6.5 For Investors

Interested investors in the Homeros platform can choose from the variety of projects that developers will present through an initial game offering (IGO). Investors who will participate in the development of projects via IGO will have the opportunity to pre-buy the game at a discounted price. Aside from this, they can also have exclusive sneak peeks of the game project and be the first to experience the game before its public release.

7. Ecosystem

7.1 Homeros Token (HMR)

Homeros Token is the native cryptocurrency of the Homeros platform. It will be the main token to be used in practically all transactions that will take place on the platform. As of now, HMR is an ERC-20 token that is issued on the Ethereum platform. In time, HMR will be migrated to its own mainnet through a mainnet swap.

7.1.1 Use Cases

Integrate within games and the community

HMR will be the standard digital token that will be used across all the games on the Homeros platform. These can be used to purchase various in-game items such as weapons and armor, avatar skin, potions, and other consumables. It will also be the native asset used to purchase pay-to-play games and other in-game purchases.

Moreover, HMR can be used within Homeros' decentralized gaming marketplace and community when tipping other members who contribute to its stability and vitality. With this system, community members will be encouraged to provide quality opinions and good behavior.

Access or create walkthroughs

New and struggling players can access walkthroughs and other guides within the platform to aid them in their early gameplay journey. On the other hand, professional players can submit the video replay of their actual game that shows how they complete difficult stages.

The video walkthrough with the most views can be awarded by all users within the Homeros community. Meanwhile, game developers also have the option to create their own walkthroughs themselves and submit them to the Homeros platform. These are expected to be heavily favored by the community, adding more profit to the developers.

Upgrade in-game items

Some games have in-game items that can be refined or upgraded. In this case, players that prefer to upgrade their items rather than buy them ready-made in the Homeros Marketplace and can opt to purchase upgrade ores and materials by using their HMR tokens. They can also take advantage of numerous skin options, cosmetics, items, and magic upgrades. Some of these will be limited-edition, which means that they will only be available in the market for a certain period of time. With this, gamers will be encouraged to purchase HMR to avail of these upgrades and limited-edition items.

Crowdfund for game development (IGO)

Gaming concepts sent by game developers and approved by the Homeros team undergo a specialized crowdfunding event called an initial game offering (IGO) and receive the necessary resources to jump-start and sustain its development. These games will be incubated at the Game Barracks.

All users that participate in the IGO can take advantage of buying the game for a discounted price, not to mention having early access to it while it is not yet ready for public release. With the early access, they can understand the game mechanics better while it is still being developed at the Game Barracks and be on top of the game when it is officially released. Those who aspire to become walkthrough contributors can also take advantage of this seasonal opportunity and gain recognition within the community.

HMR token will be the primary crowdfunding asset used for IGOs on the Game Barracks. These will be made available across different crypto exchanges so that all interested crypto investors may participate in the event. Then can exchange their cryptocurrencies — and fiat money as in the case of other exchanges that accept fiat-to-crypto transfers — and obtain HMR, which they can readily invest in the IGOs.
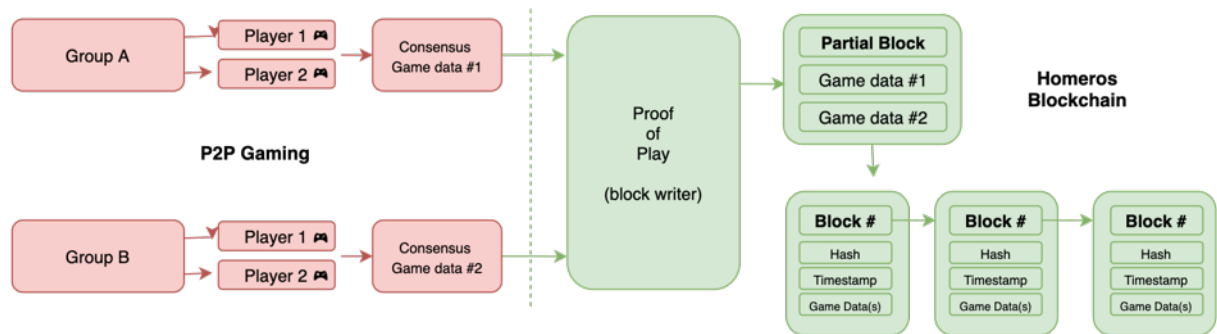
7.2 Consensus Protocol (PoP)

Image 2: Proof-of-Play consensus

Homeros applies the Proof-of-Play (PoP) consensus protocol. This concept awards the platform users HMR tokens based on the gaming performance the player has achieved. The amount of HMR token awarded to players relies on many factors and conditions called Homeros Blocks. Once all these conditions and factors have been met, or if enough "play" has been done by the gamer, then he will receive HMR tokens as a reward.

As shown in Image 2, there can be many players who play a specific game at any given moment. The protocol gives equal chances to all members, but the player who will get the most HMR as reward is the one who satisfies the Homeros Block conditions well. Nevertheless, the Homeros Block reward will be split among all members depending on their amount of "play".

Homeros Block factors include Time Condition, Difficulty Condition, and Accessibility Condition.

Time Condition refers to the amount of time (expressed in hours, minutes, and seconds) needed for the player to actively spend in-game before getting a reward. The player must be active in-game, and should not be idle, or in popular gaming terms, away from the keyboard (AFK).

Difficulty Condition is determined by the difficulty of game mechanics. This is affected by the game level, quest difficulty, and other variables. Games that have been appraised to be more difficult than others by game developers and the community will yield more HMR rewards in this aspect.

Accessibility Condition refers to whether the game is free-to-play or pay-to-play. It can also be influenced by seasonal events and exclusive dungeons. Players who access these special events can satisfy this condition better, on top of providing them exclusive rewards and higher bounty.

Based on these three factors, we can express Homeros Blocks through the following equations:

$$HB_i\ (A_{iw}) = \{1 \text{ if } A_{iw} = 1, \quad w \in \{T, O\}, 0 \text{ otherwise}\} \text{ with } i \in N$$

Wherein HB_i assumes the value 1 if all actions – with all of the three conditions have been taken into consideration – have been satisfied, 0 if otherwise. We can define Proof of Play as:

$$P(HB_i) = \{y \text{ if } HB_i = 1, 0 \text{ otherwise}\} \text{ with } i \in N, y \in R+$$

Where P corresponds to the amount of "play" or Homeros Block reward, tantamount to the value y of P, if the Proof of Play of level i is satisfied.

If all of the conditions stated above are met by the player, Homeros will reward him/her with HMR tokens on his/her Hero Wallet. This can be readily available for any transactions that the player wishes to make within Homeros.
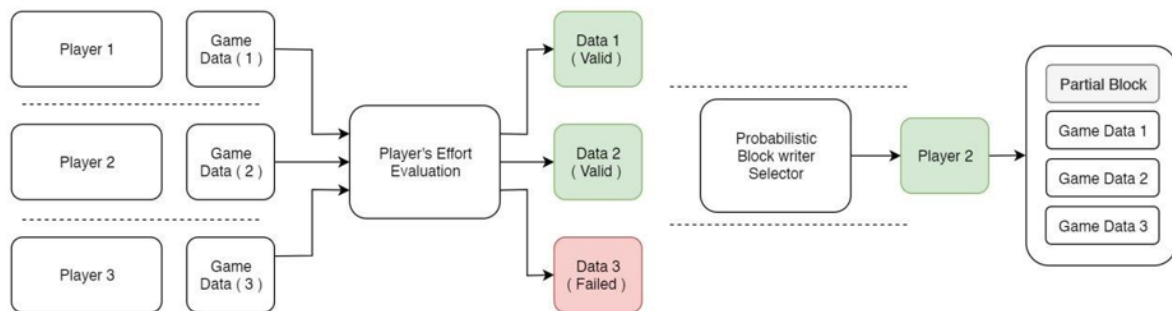
7.3 Homeros Mainnet

Image 3: Homeros Mainnet

Homeros will develop its own mainnet that will free the platform from the restrictions set by the Ethereum network. Once the Homeros mainnet has been established, the platform can have the liberty to set its own codes and rules. It will also enable the platform to revolutionize its technology further with the use of blockchain.

Image 3 shows how each block is discovered within the Homeros mainnet. Each player can be considered a node within the blockchain and provide valuable data. Data is time-stamped and encrypted, making sure that no one will be able to alter it. Validity and integrity of data are further supported by the system through the nodes. To maintain consensus, data must be consistent on virtually all nodes within the blockchain. If the network detects a particular discrepancy, the data that causes it will be rejected. In the community layer of Homeros, members contribute to market valuation of equipment and other loots that they earn in-game. These exclusive in-game assets can be traded to HMR tokens.

Conversion between items and HMR will be slightly different from Homeros Blocks even though they are built on a similar mechanic. The former is determined through a combined effort of the Homeros platform and the members of the community, while the latter is computed based on the above formula. Supply and demand will play a huge part in determining their price. This can also be affected by the number of

walkthroughs and guides available for access. Loots from games that have lesser guides can have higher appraisals than those that have more available guides.

8. Road Map

2020

Q1 - Homeros launching

Homeros introduces the platform to the gaming community and launches the website. The team starts to create HMR tokens using the Ethereum platform.

Q2 - Partnerships

Homeros partners with different tech and game development companies, as well as cryptocurrency exchanges, to jumpstart its platform and list its token for it to be made available to the general public.

Q3 - Game Proposal Submissions

All interested game developers can send their proposal to the Homeros team for review. All submitted proposals will be subject to approval, depending on certain factors.

Q4 - Initial Game Offering (IGO)

All projects sent by the developers that are approved by the team of Homeros can start their IGO immediately. It will be open for private and public sectors to get funding development.

2020

Q1 - Game Development

The developers can start the creation of their game projects as soon as they complete the IGO. All developers and the Homeros team will closely work together to create state-of-the-art games.

Q2 - Game Presentation

The developers in the Homeros platform will provide the Homeros team and community a report regarding the progress of their work about the game projects they are working on.

Q3 - Game Beta Testing

The Homeros team, together with the developers, will check the game projects for possible bugs, glitches, and errors before releasing it to the public. All the investors participating in the IGO of the project will have an exclusive invitation to the trial and test the game by themselves.

Q4 - Game Launching

Homeros will officially launch its first wave of games to the public through the Homeros platform. The game's availability will still depend on the restrictions set by the country of residence and the type of law they allow.

9. References

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10. Disclaimer

Please read this disclaimer thoroughly as it includes the most significant information about Homeros and Homeros Token (HMR). Please be aware of the market threats and consult your legal, financial, or any other suitable professional advisor before making any investments. In line with this, we strongly encourage you to take time to read this whitepaper before making any HMR purchases.

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We reserve the right to make any modifications to the contents of this document at any time without prior notice. By and large, we are a platform that uses blockchain technology to deliver our services in line with our vision and purpose. We aim to provide a blockchain-based solution for game developers, professional and amateur gamers, merchants, and investors, and there is a possibility that some of our features may be identical to other existing platforms. Please rest assured that none of these similarities are intended.

This whitepaper is used to introduce us to the community and to emphasize all of our key features. It only serves the purpose of providing broad and

detailed information to the reader regarding our blockchain-based project and nothing else.

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