

Netham

WHITE PAPER

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INTRODUCTION

NetBorn is a ground breaking new project that seeks to revolutionize the gaming industry through the innovative use of AI and blockchain technology.

Developed by a team of experienced game developers, NetBorn offers players a truly unique and immersive gaming experience, with endless possibilities for exploration and adventure.



GAMEPLAY

NetBorn is a revolutionary game that offers a wide range of options to players. With MMORPG, VR, and Battle Royale game modes, all powered by Artificial Intelligence, NetBorn is pushing the boundaries of what's possible in gaming. With the addition of Battle Royale, NetBorn is poised to enter the world of E-sports, bringing a new level of excitement to competitive gaming. The MMORPG mode offers a chance to gather with community members and have endless amounts of fun, while VR provides an immersive experience like no other, bringing the game into the realm of the Metaverse. And with pet breeding, players can experience a new level of customization and bonding with their virtual companions.



ARTIFICIAL INTELLIGENCE INTEGRATION

AI Integration in NetBorn

NetBorn is built with the latest advancements in artificial intelligence (AI) technology to create a dynamic and immersive gaming experience. Our goal is to offer players an experience that feels more like living in a parallel universe than just playing a game.

Through AI integration, we will be able to generate endless possibilities for in-game interactions, non-player characters (NPCs), and storylines. Our AI system will constantly analyse player behaviour and adapt to their preferences, providing a truly personalised gaming experience for each individual player.

One of the most exciting features of our AI integration is the ability for players to create their own unique images and items in the NFT gallery. By using AI algorithms, players can generate custom designs that can be used as in-game assets or sold as NFTs on the marketplace.

With AI integration, NetBorn will offer a next-generation gaming experience that goes beyond the limits of traditional games. It will provide a dynamic and personalised experience that evolves with the players and fosters a vibrant community.

Overall, the AI integration in NetBorn will enhance the game's creativity, and social engagement, setting it apart from other metaverse games in the market.



AI GAMING REVOLUTION

ARTIFICIAL INTELLIGENCE INTEGRATION

1. NetBorn utilizes the latest AI technology to create a truly dynamic and immersive gaming experience, making players feel like they are living in a parallel universe rather than just playing a game.
2. NetBorn's AI integration allows for the generation of unique and unexpected events and challenges, keeping the game exciting and unpredictable.
3. NPCs in NetBorn have unique personalities and moods that are influenced by the actions of the players, creating a dynamic and responsive world that is constantly changing.
4. One of the most exciting features of NetBorn's AI integration is the ability for players to create their own unique images and items in the NFT gallery, providing players with a new way to express themselves creatively.
5. NetBorn's AI integration includes the ability for non-player characters (NPCs) to engage in realistic and nuanced conversations with players, adding to the immersion of the game.
6. With AI integration, NetBorn sets itself apart from other metaverse games in the market, offering enhanced creativity and social engagement.
7. Through AI integration, NetBorn can offer a more realistic and immersive environment, with intelligent NPCs and dynamic events that feel like they are part of a living, breathing world.



CONCLUSION

NetBorn is a game that revolutionizes the gaming industry, offering players a truly unique and immersive play-to-earn experience.

With its innovative use of AI technology, blockchain, and NFTs, NetBorn is a game that is not to be missed.

The team behind the project is dedicated to creating an exceptional gaming experience for players and pushing the boundaries of what is possible in the gaming industry.

NetBorn is set to launch in the near future, and the team is excited to share their vision with the world.

With endless possibilities for exploration, adventure, and fun, NetBorn is a game that is sure to capture the hearts and minds of gamers around the world.



WHAT WILL MAKE NETBORN TRULY DIFFERENT

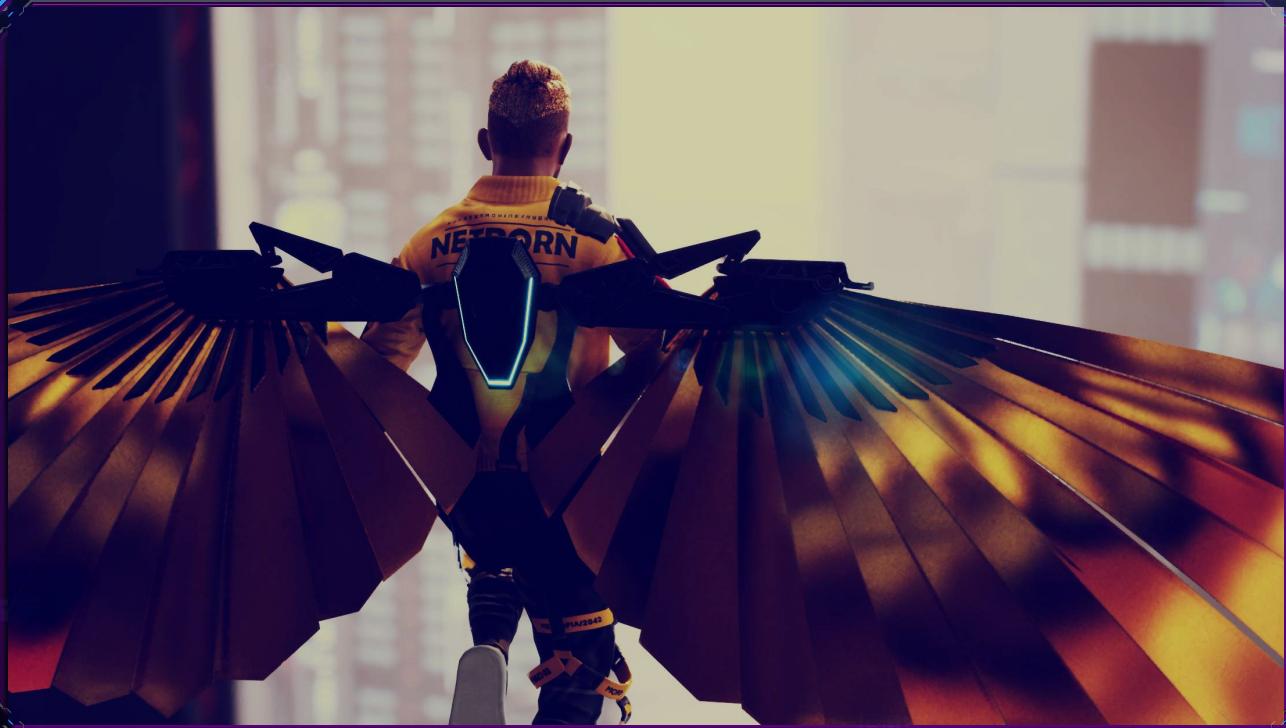
NetBorn stands out in the world of gaming for its full integration of artificial intelligence, allowing for a unique and dynamic gaming experience.

Additionally, NetBorn offers three different modes of gameplay, including Battle Royale, MORPG, and VR, and includes innovative features such as flying with wings, pet breeding, land sales, staking, and governance.

The use of blockchain technology ensures transparency, and ownership of in-game assets,

while the play-to-earn system and NFTs provide opportunities for players to earn real-world value while enjoying the game.

Overall, NetBorn's combination of cutting-edge technology, diverse gameplay options, and lucrative rewards system make it a truly one-of-a-kind gaming experience.



STORY LINE OF MMORPG

The NetBorn MMORPG storyline takes place on a distant planet where two species coexist: humans and robots.

Humans created advanced AI robots who were capable of creating their own digital universe called "The Net" that generated energy from itself without limits.

But after a long period of peace, a war broke out between them for control over the unlimited resources.

Despite reaching a peace agreement, the robots continued their hostile takeover of the cities, even attacking innocent species.

In the year 2192, the robots have completely taken over the city, leaving the survivors to live on a platform above the city where they can safely live without any conflicts.

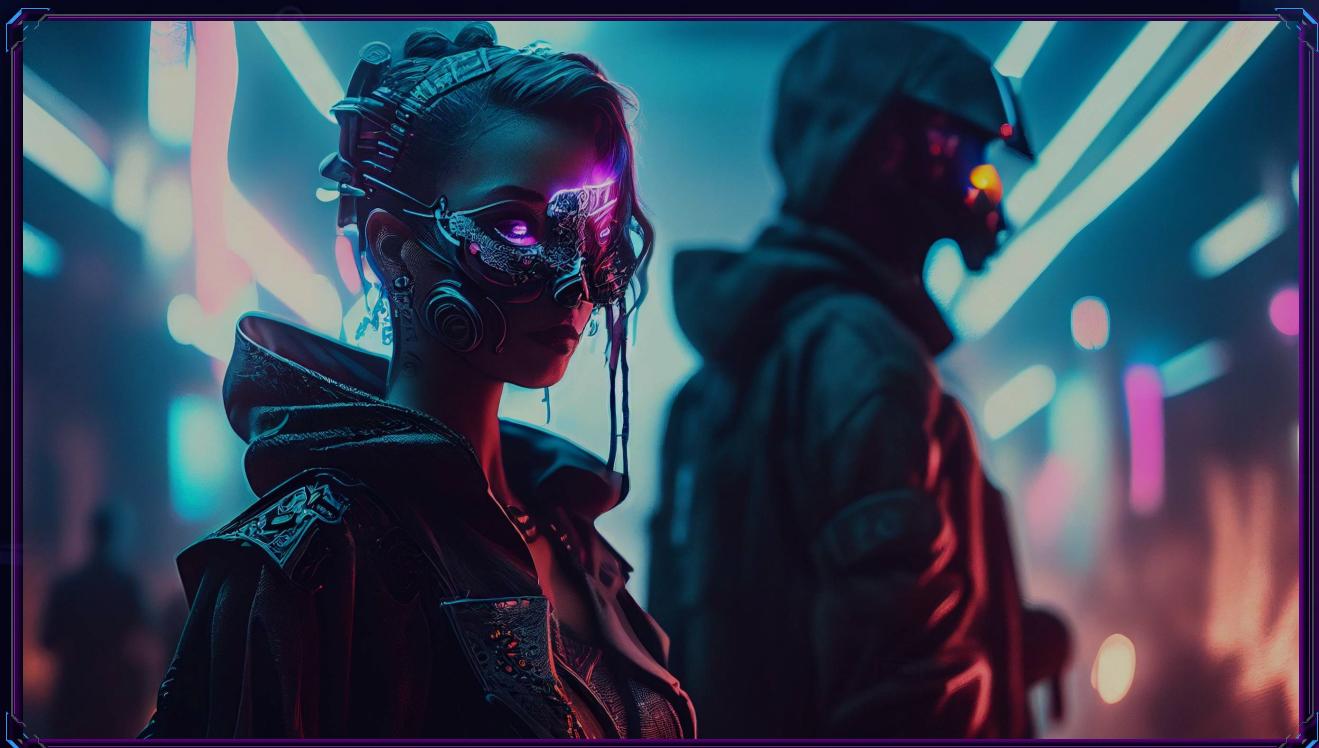
However, they must still venture into the city to obtain necessary resources for survival, despite the robots being on every corner.

As a player, you can become a human or a BioTech human, and fly to the city with the help of wings or cars.

You must use your skills and strategy to fight against the robot invaders and protect your home on the platform.

The battle between good and evil is unpredictable, so you must be adaptable and choose your own path to survival.

Join the epic battle for freedom and be a part of the NetBorn community today!



RATING SYSTEM

Based on the ELO rating system with modifications.

where ELOp is ELO rating of the current player and ELOo is current rating of the opponent. This rating is calculated once per match, and it is added or deducted players in question as follows:

where k is factor based on the actual game (hint for approximating the k value) and ELO is value from the equation before. ($k = 32$)

In practice, we choose two players (or more with averaging of cross calculated ELO) and assign them to ELOo and ELOp. This calculation has to be done for both players as they're ELOp and evaluate their win/loose and assign correct .

New values of players are then added/deducted, with respect on the match results, to the current ELO value and thus the rating raises or decreases.

This Rating system can match similarly skilled players against each other and make the game more fun and challenging for everyone.



XP SYSTEM

Based on the ELO results, the XP system will generate points for all the players. There are three types of outcomes in the games: win, lose or draw. Each outcome generates different amount of constant XP.

SCENARIO	XP
WIN	10
LOSE	5
DRAW	3

Note: The XP points additions are up for discussion, the average game duration in question is 3 minutes for these values.

Defining the thresholds for each level based on XP is necessary. This is done by the curve that is endless (there is no level cap in this simulation).

Total experience is defined by the formula:

where the XP_{total} is a summed value of all the XP player acquired during the whole lifespan of his gameplay and $XP_{scenario}$ is rewarded XP based on the outcome scenario of the game (win/lose/draw).

USER ENGAGEMENT IN XP SYSTEM

The XP system works fine but from the psychological view its boring and not engaging.

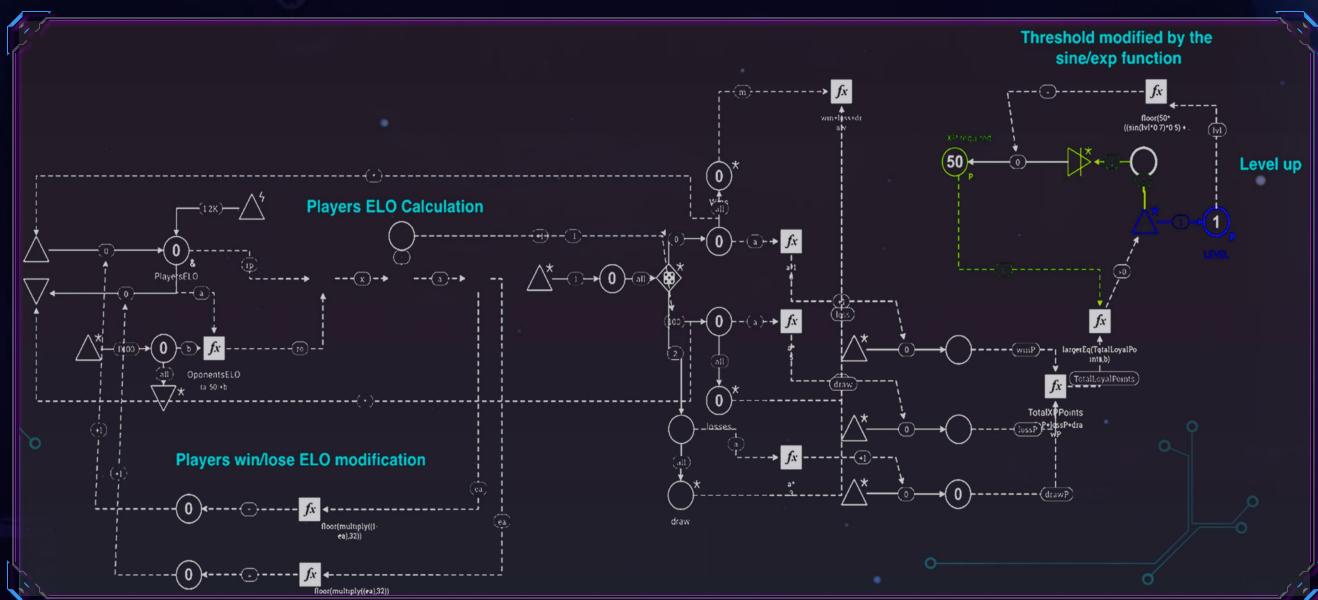
Players are driven by thrill of getting new levels and the system is designed with that in mind.

As mentioned in the previous paragraph, the native level cap is not introduced to the design and as such, the XP thresholds are dynamic.

This brings freedom of choice for the game designer to choose whether to handcraft the values or let the system evolve.

The XP thresholds required to increase level are defined by the following formula:

The total threshold is summed $\Delta X P t h r$ every time the game has been played. Starting threshold is 50 XP.



NETBORN LAND

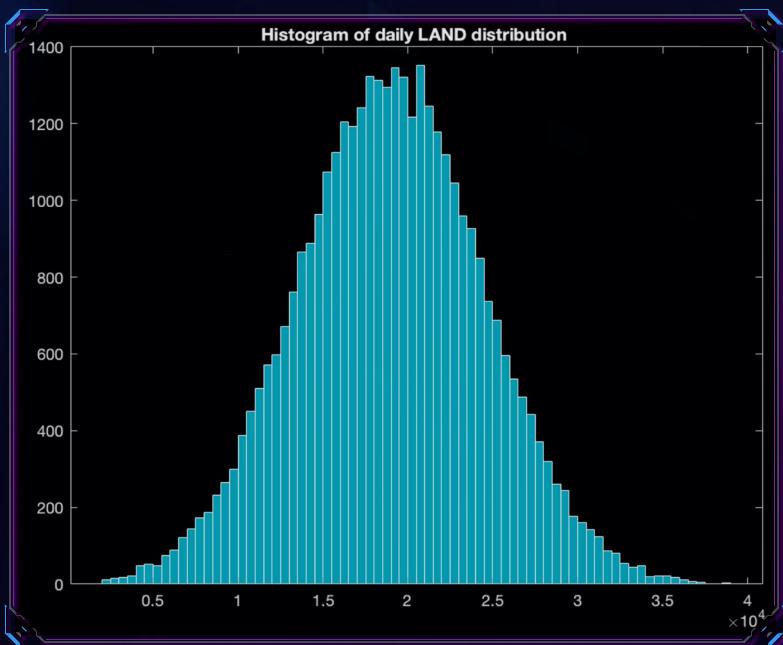
LAND DEFINITION

LAND feature is defined by the following criterias

- There is 100 LAND NFTs
- Each LAND NFT generates between 2000 and 40000 BORN Tokens
- Unclaimed rewards will block new generation of rewards (user will have to claim daily in order to get 100% of rewards)

The following calculations are done on the timeframe of 1 year.

The LAND NFTs rewards will follow normal truncated distribution defined by the following figure



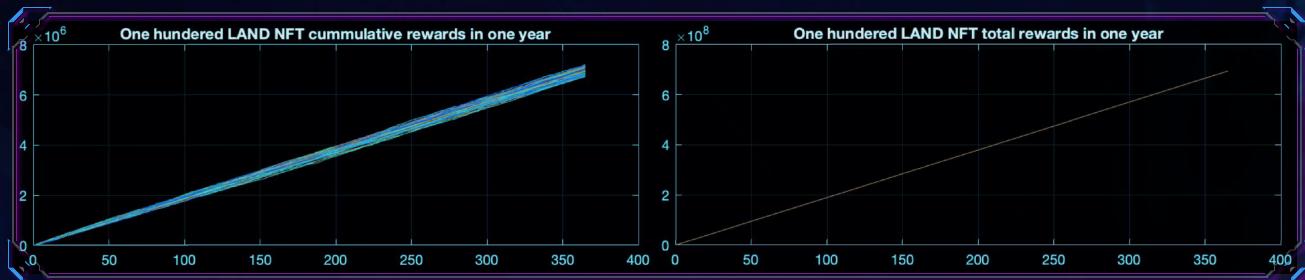
Characteristics of the Normal distribution:

- Mean 19000
- STD 5500
- Truncation limit on the left side is 2000
- Truncation limit on the right side is 40000

NETBORN LAND

LAND MODEL

The model is based on the normal trucated distribution. One hundred of LAND NFTs are generated (in theory 100 users) will generate following set of semi linear distributions.



The cumulative sum was used to draw the distribution over the whole 100 NFTs. From the figure there is visible channel in which the rewards are distributed to each user.

Total width of the channel after one year is $3.8477e+05$ BOR which translates to 5,5% depth from the average rewards propagation.

$$\text{depth} = \frac{\text{channel_width}}{\min(\text{rewards}_{\text{end}}) + \max(\text{rewards}_{\text{end}})} \cdot 2$$

Channel depth translates into the fairness of the model. The lower the channel, the more fair distribution of the reward among players.

NETBORN LAND

REWARDS MODEL BASED ON UNCLAIMED REWARDS

Investigation of unclaimed rewards is done with the following model settings and modifications.

Settings were set to 50% of the users will forget to claim but the timeframe of unclaimed rewards will vary - it is generated by uniform distribution and takes the whole duration as input.

This means that users can forget to claim after only 1 day of NFT rewards farming or some can forgot to claim only the last day. This approach raises the precision of the model.

The model was modified to perform Monte Carlo simulation in order to collect average values from the multiple sets of simulation runs at once and thus evaluate the model settings more carefully.

The Monte Carlo simulation is set to run 1000 times and collect data from it. The follwing figures are result of such simulation.

The cummulative rewards based on the previous model are distributed in a narrow channel as shown here:



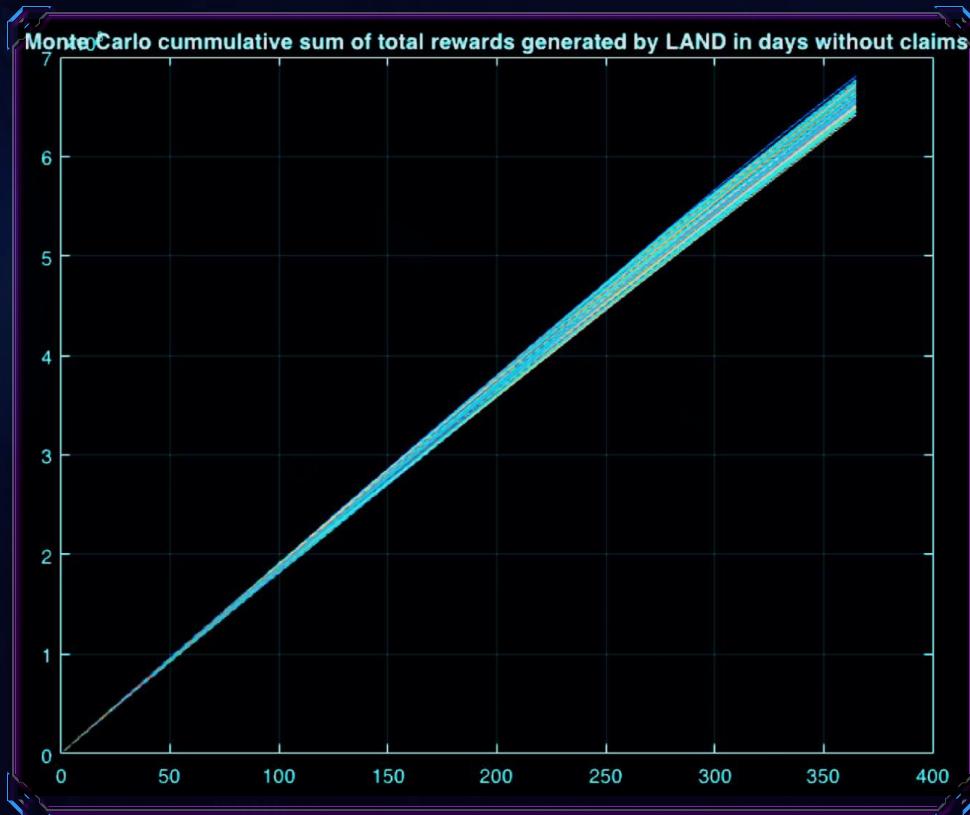
Channel Statistics:

Maximum total of 697406496.87 BORN per year
Mean 694118721.57, STD 1058105.39 , depth 1.07 %

NETBORN LAND

REWARDS MODEL BASED ON UNCLAIMED REWARDS

Altering the rewards by picking 50% players and stop their claims in random timeframes alters the total cumulative distribution with non linear properties and crating the wide channel as shown on the figure bellow:



Channel Statistics:

Maximum total of 697406496.87 BORN per year
Mean 694118721.57, STD 1058105.39 , depth 1.07 %

The channel depth is in the range of 15-20%. In this case the prediction is laden with uncertainty.

TOKENOMICS

TOTAL SUPPLY: 10,000,000,000 \$NET

TOKEN DISTRIBUTION	TGE	CLIFF	VESTING
TEAM 5%	0%	18 MONTHS CLIFF	36 MONTHS VESTING
ADVISORY 5%	0%	12 MONTHS CLIFF	24 MONTHS VESTING
PRESALE 40%	100%	0 MONTHS CLIFF	-
LIQUIDITY CEX/DEX 5%	-	0 MONTHS CLIFF	-
DEVELOPMENT 5%	0%	12 MONTHS CLIFF	48 MONTHS VESTING
MARKETING 10%	0%	0 MONTHS CLIFF	0 MONTHS VESTING
GAME REWARDS 20%	0%	0 MONTHS CLIFF	48 MONTHS VESTING
STAKING 10%	0%	0 MONTHS CLIFF	48 MONTHS VESTING



ALLOCATION



NET STAKING BENEFITS

Staking NET tokens can provide access to exclusive game perks that are not available to regular players. These perks can include increased experience points, access to exclusive game areas, and other advantages that make gameplay more enjoyable.

Rare Items: By staking NET tokens, players can earn rare in-game items that are not easily available to other players. These items can be used to enhance gameplay and can also be sold to other players.

Increased Chances of Winning: Staking NET tokens can increase a player's chances of winning in-game challenges, tournaments, and battles. By having access to more powerful items and perks, players have a greater chance of coming out on top in these competitive events in MMORPG mode.

Early Access: Players who stake NET tokens can gain early access to new game features, updates, and releases. This allows them to stay ahead of the competition and enjoy the latest content before it is available to the general public.

Better Odds of Getting Lootboxes: When staking NET tokens, players have a better chance of getting rare lootboxes which can contain a range of valuable items. The rarity of lootboxes received is based on the number of tokens staked, with more tokens leading to rarest lootboxes.

Support for the NetBorn Ecosystem: By staking NET tokens, players are supporting the ecosystem and helping to ensure its continued development and success. This benefits all players by providing a more robust and engaging gaming environment.



RISKS OF PRICE FLUCTUATION

The quotation of the NET Token can fluctuate presenting a challenge to model and estimate the future market behaviour even for seasoned cryptocurrency traders. Native cryptocurrencies associated with the internal working of the networks to which the NET Token is deployed are also subject to fluctuations that directly and indirectly could impact the token's value in the market.

The Participant must comprehensively acknowledge price fluctuation risks of the cryptocurrency market and that still cryptocurrencies are traditionally subject to these significant price fluctuations that are beyond the control of the Company and driven mostly by exterior or market forces.

The Participant also recognises their NET Token value can go down as well as up and they could lose some or all their purchase value.

Other risks:

The Participant acknowledges and accepts the inherent risks connected with NET Tokens, including, but not limited to, risks associated with money laundering, fraud, exploitation for criminal purposes and any other unanticipated dangers. If any of the risks described in the terms are unacceptable to the Participant and the Participant is unable to comprehend them, the Participant should refrain from acquiring, holding, or using NET Tokens.[MDG3]

By agreeing to these terms and conditions and participating in the NetBorn presale, you are waiving your rights. You agree to have no recourse, claim, action, judgment, or remedy against NetBorn.

We strongly urge you not to purchase any NetBorn coin if you are uncertain about anything in this white paper or if you are not prepared to lose the money you spent purchasing NetBorn tokens.



AI GAMING REVOLUTION

RISKS

Below is a non-exhaustive list of the primary risk factors that the Company considers to be significant in relation to the token's trading and/or use. These risk considerations should be taken into consideration alongside all other information provided in the Whitepaper and participants are recommended to check with their professional advisers (including their financial, accounting, legal, tax, or technical advisers or experts).

The risk of losing access to NET Tokens due to the loss of private key(s), a custodial error, or a participation error is as follows:

A wallet is required for the acquisition, storage, and disposal of NET Tokens. The participant acknowledges that he is responsible for establishing the Wallet with a third-party provider to retain NET Tokens and for taking acceptable security measures to protect the wallet. As a result, if the requisite private key(s) associated with the Wallet holding NET Tokens are lost, the NET Tokens and any other cryptocurrencies and/or tokens will be lost as well. Additionally, any third party that has access to such private key(s), including through the Participant's Wallet's login credentials, may be able to misappropriate the Participant's NET Token. Any errors or malfunctions caused by or relating to the Wallet used by the Participant to receive and hold NET Tokens, including the Participant's own failure to properly maintain or use such Wallet, or caused by the Participant's choice of third-party provider for the Wallet, may also result in the loss of NET Tokens.

Hacking risk and security flaws:

Denial of service attacks, Sybil attacks, spoofing, smurfing, virus attacks and any other similar events that could have an influence on NET Tokens and the services the Company may offer from time to time may be attempted by hackers or groups of hackers.

The risk of security flaw in the Smart Contract, the Website, or the source code of the NET Tokens, or in any associated software and/or infrastructure:

There is a possibility that the Smart Contract, the Website, or the NET Tokens may have inadvertent flaws or vulnerabilities in the source code, preventing users from using or losing NET Tokens. Updates and modifications may have unwanted or unforeseen consequences for NET Tokens.

Risk of not listing or low/no liquidity:

Exchanges may be subject to unclear governmental control, and the Company makes no representations or warranties about exchange service providers. Users, including the participant, may be subject to fraud and failure in connection with those exchanges. There is no guarantee that an active secondary market for NET Tokens will develop or continue to develop.

Risk of uninsured losses:

Unlike bank accounts or accounts with financial organisations, NET Tokens are not covered unless the participant buys private insurance particularly for that purpose.

There is no public insurer for the loss of NET Tokens.

Internet transmission risks:

There are threats connected with the use of NET Tokens, including the failure of hardware, software, and Internet connections, as well as other technologies on which NET Tokens rely. These failures may cause communication breakdowns, mistakes, distortions, or delays when utilising NET Tokens or the Website.

DISCLAIMER

You should always consult your own advisors concerning the legal and tax implications in your country of origin and any other aspects regarding any outstanding matters related to how the NetBorn platform is designed and operated, before deciding whether a purchase of NetBorn Coin would be in line with their risk profile.

Purchasing NetBorn Coin involves an element of risk and may lead to the loss of a substantial part or the entirety of the principal deposit advanced. Before purchasing NetBorn Coin, diligently and thoroughly assess and consider the risks identified in this whitepaper, as well as other risks not included or anticipated in this document.

This Whitepaper does not constitute a prospectus and does not constitute as an offer of financial instruments and/or securities to the public or any offer in any way connected to collective investment scheme.

This whitepaper, the NetBorn Coin and the use, holding and trading of the NetBorn Coin carry no rights, whether express or implied, NetBorn Coin do not represent or confer any ownership rights, shares, securities or equivalent rights, intellectual property rights or any other form of participation relating to the Issuer.

This Whitepaper does not infer that the information it contains is accurate and complete subsequent to its date of publication or that any information supplied in connection with this whitepaper is completely accurate at any time subsequent to the date on which it is supplied.

Crypto assets are not regulated as financial instruments and there is no refund or compensation available from any regulatory bodies. NetBorn Coin do not give the holder thereof any entitlement to acquire any such interest or entitlement in respect of the Issuer. Furthermore, the Issuer shall not be obliged in any way to return any purchases made in virtue of this Whitepaper.

Crypto assets can be subject to expropriation and/or theft. Computer hackers or other malicious groups or organisations may attempt to interfere with the NetBorn Coin platform in a number of different ways. Because of the nature of blockchain transactions there may be no remedy if a successful attack by malicious actors was to take place against the Ethereum Chain that the NetBorn platform is built on.

There is a possibility that in the future, certain laws, regulations, policies or rules relating to crypto assets, blockchain technology or decentralised applications may be implemented that affect or restrict token holders' acquisition, ownership rights, and ability to buy, sell, convert or use crypto assets such as the NetBorn Coin. The Netborn Coin Utility or the project described in this white paper are not guaranteed to be delivered.

Notwithstanding anything contained herein to the contrary, you specifically acknowledge and agree that trading and/or transaction in/ with NET Tokens may be prohibited in certain jurisdictions including, without limitation **United States of America and its territories, Canada, Democratic people's Republic of Korea (North Korea), Cuba, Syria, Iran, Sudan, Crimea region of Ukraine, people's Republic of China ("Excluded Jurisdictions") [MDG1] [JSH2]**.