



Proposal to Supercell: Integrating Web 3.0 Nft-Based Avatars to Unlock New Revenue Streams in Clash of Clans

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Abstract: This proposal outlines an innovative strategy to integrate Web 3.0 technologies — specifically Non-Fungible Tokens (NFTs) — into *Clash of Clans*. By enabling players to own unique NFT-based avatars with special superpowers, Supercell can tap into the rapidly expanding blockchain gaming economy. This model would not only enhance player engagement and loyalty but also create new and sustainable revenue streams through NFT sales, royalties, and marketplace transactions.

Keywords: NFT, Clash of clans, NFT Sales, royalties, marketplace transactions.

1. Background

Supercell has consistently led the mobile gaming industry with its emphasis on quality, community, and innovation. However, with the advent of decentralized technologies and the rise of player-owned economies, there is a growing expectation for games to provide real digital ownership and tradable in-game assets. Web 3.0 and NFTs are reshaping how players perceive value in games. Successful integrations in other gaming ecosystems (e.g., Axie Infinity, Gods Unchained) highlight the demand for player-driven economies where assets are transferable, ownable, and scarce.





Fig 1 Clash of Clan

Table 1

Comparison between the proposed NFT-based superpower avatars and conventional Clash of Clans troops

Aspect	Conventional Troops	Proposed NFT-Based Avatars
Ownership	No real ownership; troops exist only inside the game and are rebuilt for each attack.	Players own NFT avatars permanently on the blockchain. They can trade, sell, or rent them.
Scarcity	Troops are unlimited and can be trained repeatedly.	NFT avatars can be limited edition , making them rare and highly valuable.
Superpowers	Regular troops have predefined abilities (e.g., Archer attacks at range, Giant targets defenses).	NFT avatars have unique superpowers (e.g., instant healing, shield activation, damage multipliers).
Monetization	Players spend on in-game purchases (gems, passes), but troops themselves have no external market value.	Players could earn by selling or leasing avatars in external NFT marketplaces, creating real-world value.
Player Progression	Progress depends on upgrading troops, heroes, and village over time.	NFT avatars could boost progression faster for owners, providing special strategic advantages.
Revenue for Supercell	Revenue comes mainly from in-app purchases and cosmetic items.	Additional revenue from NFT sales, transaction fees, marketplace activity, and secondary royalties.



Aspect	Conventional Troops	Proposed NFT-Based Avatars
Gameplay Balance	Strictly balanced; every player can eventually unlock the same troops.	Requires careful balancing to prevent “pay-to-win” criticism if NFT holders have too much power.
Community Impact	Traditional gaming community engagement.	Attracts both gamers and crypto enthusiasts , expanding the player base into Web 3.0 audiences.
Security	Entirely within Supercell servers; no blockchain use.	Blockchain integration means enhanced ownership security but requires robust anti-fraud mechanisms .

Summary of the Comparison:

- **Conventional troops** make the game *accessible and fair* but *limited in ownership value*.
- **NFT-based avatars** introduce *real ownership, new monetization, and exclusive gameplay perks* but need **careful balancing** to avoid harming the game's competitive fairness.

2. Proposed Concept

This proposal envisions the integration of Web 3.0 technologies into *Clash of Clans* by introducing NFTs for avatar characters and resource-generating structures. Players would be able to purchase or earn unique NFT avatars equipped with special superpowers that offer gameplay advantages, such as enhanced attack strength or faster troop regeneration. Alongside avatars, NFT-based Gold Mines and Elixir Collectors could be introduced, allowing NFT holders to generate greater in-game resources over time. These NFTs would be tradable and ownable outside the game, empowering players with real digital ownership. This concept not only enhances player engagement and competition but also unlocks significant new revenue streams for Supercell through initial sales, secondary marketplace fees, and increased player retention.

NFT Avatars with Superpowers:

- Special in-game avatars are tokenized as NFTs on a blockchain.
- Each NFT avatar has unique abilities (e.g., enhanced attack, faster troop training, defensive boosts).
- Only the NFT holder can deploy that avatar in gameplay.

Ownership and Transferability:

- Players can trade, sell, or lease their avatars on an official Supercell marketplace.
- Supercell earns a percentage of each secondary transaction (e.g., 5–10% royalty per sale).

Integration Model:

- Avatars remain purely cosmetic or boost-based to maintain game balance.
- NFTs can be bought through in-game events, limited drops, or loyalty rewards.
- Blockchain integration can be optionally *non-custodial* (easy for users unfamiliar with Web 3.0).





3. Revenue Opportunities

The gaming industry is rapidly evolving with the rise of blockchain and Web 3.0 technologies, creating new revenue models beyond traditional in-app purchases. By integrating NFTs into *Clash of Clans*, Supercell has the opportunity to tap into the booming digital asset economy. Offering NFT-based avatars and resource structures would introduce new monetization channels through direct sales, marketplace transaction fees, royalties on secondary trades, and exclusive NFT events. Additionally, the scarcity and uniqueness of NFTs would drive player demand, encourage longer retention, and create a vibrant in-game economy where players are motivated to invest both time and money. This approach positions Supercell to lead the next wave of innovation in mobile gaming while substantially increasing its revenue potential.

1. Primary NFT Sales:

- Limited edition drops of NFT avatars during special events.
- Tiered pricing based on rarity and power.

2. Secondary Market Royalties:

- Supercell earns a royalty fee every time an NFT is resold.

3. In-Game Utility Fees:

- Small fee to unlock or upgrade NFT avatars for in-game use.

4. Increased User Retention and Acquisition:

- NFT owners are likely to stay longer and invest more time/money.
- Attraction of a new demographic: crypto-savvy players and collectors.

Benefits to Supercell

- **New Revenue Streams** without altering the core free-to-play model.
- **Stronger Player Loyalty** through real asset ownership.
- **Market Leadership** by pioneering NFT use in mobile strategy games.
- **Brand Expansion** into the emerging Web 3.0 space.

4. Potential Risks and Mitigation

The gaming industry is rapidly evolving with the rise of blockchain and Web 3.0 technologies, creating new revenue models beyond traditional in-app purchases. By integrating NFTs into *Clash of Clans*, Supercell has the opportunity to tap into the booming digital asset economy. Offering NFT-based avatars and resource structures would introduce new monetization channels through direct sales, marketplace transaction fees, royalties on secondary trades, and exclusive NFT events. Additionally, the scarcity and uniqueness of NFTs would drive player demand, encourage longer retention, and create a vibrant in-game economy where players are motivated to invest both time and money. This approach positions Supercell to lead the next wave of innovation in mobile gaming while substantially increasing its revenue potential.





Table 2: Potential risk

Risk	Mitigation
Regulatory concerns around NFTs	Operate within clear Terms of Service, focus on utility NFTs rather than financial products.
Negative feedback from traditional players	Keep NFT features optional and cosmetic; maintain game fairness.
Technical complexity	Partner with a blockchain platform experienced in gaming (e.g., ImmutableX, Polygon).

5. Roadmap (6-12 Months)

To successfully integrate NFTs into *Clash of Clans* without disrupting the existing player experience, a carefully planned roadmap is essential. The roadmap should ensure a phased implementation, beginning with small-scale NFT releases to gauge player interest and gather feedback. Gradual expansion into avatar NFTs, resource-generating structures, and marketplace functionalities will allow Supercell to maintain game balance while scaling up new revenue opportunities. By adopting an iterative approach focused on transparency, player education, and ecosystem security, Supercell can smoothly transition into a Web 3.0-enhanced gaming model while preserving the core values that have made *Clash of Clans* a global success.

1. **Phase 1: Feasibility Study** (3 months)
 - Legal, technical, and player base research.
2. **Phase 2: Prototype Development** (3–6 months)
 - Limited beta with select players.
3. **Phase 3: Full Rollout** (6–12 months)
 - Global release with marketing partnerships in the Web 3.0 space.

6. Conclusion

Integrating NFT-based avatars into *Clash of Clans* presents an unprecedented opportunity for Supercell to innovate once again in the mobile gaming industry. This move would not only future-proof Supercell's business against Web 3.0 disruptions but also offer players a deeper, more meaningful connection with the game. We recommend initiating a feasibility study to validate this proposal and explore strategic blockchain partnerships.

7. Future Scope

The integration of NFT-based avatars and resource structures in *Clash of Clans* opens vast possibilities for the future of mobile gaming. By adopting Web 3.0 technology, Supercell can pioneer a new "play-to-own" model where players not only engage for entertainment but also derive real-world value from their in-game achievements. Future expansions could include NFT-based Clan Wars, where clans stake their NFT assets for competitive rewards, or seasonal NFT





drops that celebrate major game updates. Additionally, a decentralized marketplace could be introduced for players to trade their NFT characters and resource structures, creating a self-sustaining economy inside the Supercell ecosystem. By positioning itself early in this space, Supercell can establish leadership in blockchain gaming while ensuring long-term player loyalty and opening up sustainable, high-margin revenue streams.

Table 2 Future Scope

Aspect	Conventional Troops/Buildings	Proposed NFT-Based Avatars/Resource Structures
Ownership	Players use in-game troops and buildings but don't truly "own" them outside the app.	Players own unique NFT avatars and NFT Gold/Elixir Mines secured on blockchain.
Scarcity	Troops/buildings are infinite — every player can build them easily.	Limited-edition NFTs create digital scarcity . Only a few players have special mines/avatars.
Superpowers	Troops have fixed stats; resource buildings produce at a standard rate.	NFT Avatars have enhanced powers ; NFT Mines/Collectors generate more resources at boosted rates.
Earning Potential	No real-world earning. Players only grow inside the game.	Players can earn by trading NFTs or renting high-yield NFT mines . Maybe even real-money rewards.
Customization	Troops/buildings can be upgraded but look mostly the same.	NFTs can have unique skins, powers, production bonuses, and personalized metadata .
Gameplay Balance	Balanced for free-to-play and pay-to-win economies.	NFT integration would require new balancing to ensure fairness between NFT holders and regular players.
Revenue for Supercell	In-app purchases of gems, skins, builder packs, etc.	Supercell earns from NFT initial sales, royalties on trades, and premium NFT events .

New Points from your idea:

- **NFT Resource Structures** (Gold Mines, Elixir Collectors):
 - Special NFT versions produce **faster** or **more** than normal mines.
 - NFT holders could "rent" their mines to others.
 - Higher-tier NFT mines could even generate *small passive income* if connected to a blockchain economy.
- **NFT Marketplaces:**
 - Supercell could launch an **official NFT marketplace** to buy/sell/rent avatars and resource buildings.





- Supercell can take a small **royalty fee** on each transaction forever.
- **Exclusive Events:**
 - Only NFT avatar holders or NFT mine owners could participate in **special wars, mega loot events, or legend tournaments.**

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