

Utilities & Infrastructure Overview

The concept of gaming has evolved dramatically over the years, from a simple Pong game to complex software solutions on mobile devices, consoles, and computers that offer an almost infinite variety of genres and interaction mechanisms. The underlying blockchain network enables this development and deployment of NFTs within games, transforming the gaming industry from simple interactive forms of entertainment into complex universes that fully immerse and captivate gamers.

Blockchain-based games have the potential to significantly extend gaming economies, establish new gaming categories, and incentivize the development of new games due to NFTs being structured to retain value outside of the game in which they are acquired.

It's necessary to first grasp the underlying infrastructure of NFT gaming to further understand how this process works. NFT gaming infrastructures such as public blockchains like **Flow and Near**, side chains like Polygon, xDai, and Ronin, and also Layer-2 scaling solutions like **Immutable X**, which is built on sharding, high throughput EVM processing capacity protocols, and on-chain smart contracts that integrate SDKs to enable developers to leverage multiple Layer 2 solutions concurrently. This digital infrastructure is what holds the framework together and provides gamers with the seamless experiences being developed right now that will undoubtedly extend the utility of crypto NFT gaming. These services operate in the background, solving difficult problems and providing functionality so that developers can focus on more essential activities.



Altura is a blockchain startup that provides the **infrastructure for all types of in-game items, digital assets, and the Metaverse, allowing developers to create and integrate Smart NFTs in their video games and applications**, all with the ability to program dynamic functionality in their NFTs. Imagine a video game sword that becomes stronger every time it is used to slay a monster. This is possible using Altura, which allows the development **of smart NFTs that are programmed to have properties that change in response to certain situations.**

Altura is a platform for smart contracts that enables game developers to mint, distribute, and trade Smart NFTs representing in-game items. Their mission is to develop an intuitive interface and API for creating Smart NFTs, to build an open marketplace for trading NFTs using the Altura token (\$ALU), and to bring genuinely random smart loot boxes to the blockchain. As smart NFTs are the next step toward mainstreaming decentralized in-game items, Altura opens up a plethora of new opportunities not feasible with conventional NFTs.

Smart NFTs

Altura will provide both an intuitive user interface for minting smart NFTs and an API for developers to mint NFTs. These NFTs will be stored on the blockchain alongside their associated metadata as Binance smart chain (BEP721) smart contracts.



Altura's smart NFTs components

A breakdown of smart NFTs :

Logo	Unlike traditional NFT marketplaces like OpenSea or Rarible, the logo, or image, is not the NFT itself. Instead, the NFT is the actual in-game item represented by a developer within a game. The look, feel, and the game developers entirely determine the functionality of this item; however, the underlying item itself cannot be fundamentally changed.
Name	Item name; appears in wallet and marketplace
Description	Item description; appears in item product page
Collection	Collections are unique, meaning there cannot be two of the same collections. Collections are simply categories that are used to group NFTS
Game	The game property is used to identify NFTs by the game they originated from. Games are unique and there cannot be two of the same games. The game property may be used to search for NFTS that belong to the same game. Additionally, games may have their product page with a title, description and image.
Properties	Properties are essentially the stats and unique traits that make up an in-game item. Properties may be numerical values such as damage or strings such as rarity, type, etc. Properties may be read by the game developers and can affect the functionality of an in-game item. For example, a weapon can have a „strength“ property that affects the amount of damage it deals.
Static Properties	Static properties are set when the NFT is first minted and cannot be changed afterward.
Dynamic properties	Dynamic properties may or may not have an initial value. They can be changed in three possible ways: time-based, function call-based, or oracle-based. Game developer may attach a script to an in-game item that changes its dynamic properties. This is where the term smart NFTs comes from. Having dynamically programmable properties opens the door for a wide range of possibilities.
Transaction tax	The creator of an NFT can set a tax paid to them every time the NFT is transacted on the Altura marketplace. This allows game developers to earn revenue from their in-game items even after they are initially sold.



Types of dynamic properties

Time-based	Dynamic properties can be set to change when a specific date and time are reached or every specified time interval. For instance, a Pokémon NFT may have a property representing its evolution, and that property may be programmed to increment by one every 20 days until a specific value is reached.
Function call-based	Functions may be written to change a dynamic property. These functions can be programmed such that they can either be called by the owner of the NFT or solely by game developers or both. Having dynamic properties that the creator of the NFT can only change make it such that game developers can continue to have control over their items regardless of who they belong to.
Oracle-based	Oracles, such as ChainLink, are third-party services that provide smart contracts with real-world data. An NFTS dynamic properties can be programmed such that it will change based on real-world conditions. For instance, a playing card of a soccer player can have a property called „games won“, which represents the number of games won by that player in his career. Oracle-based dynamic properties are a revolutionary idea and greatly expand the possibilities of what NFTS can

Source: <https://drive.google.com/file/d/1xjCoKdDAsmS2lvAcNglszxhu3l15lajb/view>

Loot Boxes

Loot Boxes are a lucrative revenue stream for many crypto game developers. They are NFT items themselves that can be traded within games and contain additional hidden NFT items. When opened, they are destroyed, leaving just the now revealed item it contains that is randomly generated from a predetermined list of in-game item options. These items are used to advance the player's game more quickly and have a set probability of being acquired from the loot box, making some rarer than others.

Altura's \$ALU token currently has over 50,000 holders. Its recent popularity surge coincides with the debut of its NFT loot box capabilities in November of last year when its value increased more than 600% to an all-time peak. The primary factors driving this trend are growing interest in blockchain and NFT games among developers, users, and investors and the increased coverage the metaverse have recently received.

\$ALU may be preparing for another upward spike with the forthcoming debut of the Supercharge grant program. Altura Supercharge is a grant program that provides financial support to projects looking to utilize the Altura ecosystem with Crypto NFT game projects like **Age of Tanks** already on the platform.



Altura aims to capitalize on the growing popularity of NFTs by establishing a new standard for loot boxes for gamers and developers. By integrating with **Chainlink's Verifiable Random Function (VRF)**, the team will enable developers to verify that treasure boxes operate transparently. With leading publishers such as Ubisoft, Square Enix, and Electronic Arts already realizing the relevance of NFTs for the industry's future, blockchain initiatives are rushing to develop the standards that will define the convergence of blockchain and gaming.

Conclusion

Multiple small independent game developers wish to offer users the ability to trade in-game items but creating a whole inventory and marketplace infrastructure from scratch is time-consuming and complicated. Altura has arrived on the scene to solve this challenge. Developers will be able to easily develop games and mint in-game assets with the help of Altura's smart NFTs and industry-leading API, which will provide players a genuine financial incentive to acquire them as well as provide game developers an additional revenue source.

Please, see more information on utilities and infrastructure in our first report.



OUR OPINION // ALTURA

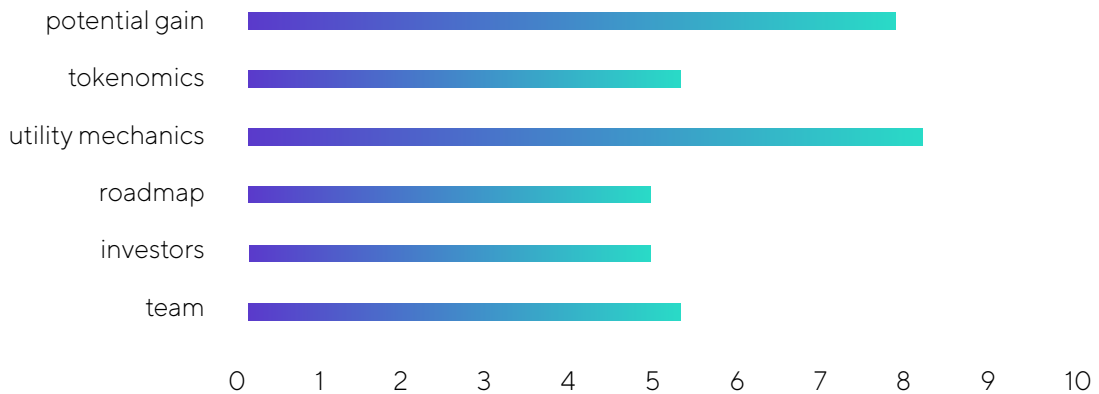
The Altura project has seen a consistently steady growth in terms of online followers and new users on the platform since November 2021. Added to this are the recent partnership announcements from the team that include industry heavyweights Chainlink and Rune.

Altura is a pioneer in the dynamic smart NFT space with their smart NFT’s possessing dynamic properties that can adapt to external events as well as time and game functions. They are also leading the way in smart NFT loot box capabilities development. **In our opinion Altura below \$0.063 is a good accumulation price zone.**

Token Symbol: **ALU** | Chain: **BSC** | Exchange: **Gate.io, Pancakeswap V2**

Short Term Investment: **Yes** | Long Term Investment: **Yes**

Price : **0,07602 USD** | Market Capitalization: **46.434.859**



Potential Gain through market cap comparison:

GROWTH POTENTIAL THROUGH MARKET CAP COMPARISON (IN MILLION USD)

