The Atomix Network - PRD

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Problem

As a Minecraft player, the server space is polluted with duplicate gametypes with highly similar features, shared resources, and low-content depth.

- Playing the same gametype on a varying server is just a matter of which community to join rather than which unique gamemode to play.
- These servers are exciting for several hours, then quickly lose breadth and playability due to lazy game design.

Vision & Opportunity

I see an opportunity to create a novel server with unique server features to join together a variety of game types and player types in effort to create a true MMORPG on the Minecraft platform.

- The most successful servers in the history of the space offer MMORPG gametypes with deep content value and joined ecosystems (see Hypixel and Wynncraft).
- The Minecraft server space is highly saturated with similar offerings with over 100,000 active Minecraft servers available to play on and choose from, making a unique offering a true outlier in the space.

Target Use Cases & Tasks

1. As a player, I want to play through a variety of objectives without siloing my progress and community exposure into individual disconnected microservers.
2. As a player, I want to play a server where my stats and progress are persistent, instead of being reset after each “Minigame”.

Proposed Solution

Connect a variety of game objectives into a cohesive ecosystem that preserves player stats and progress over the lifetime of the game, differentiating from public resources, creating a novel experience.

Top 3 MVP Value Props:

1. **Offer level clearing, PvE, and PvP on one server with conjoined stats, resources, and progress.**
2. **Differentiate each game objective enough from alternative server offerings to provide a fresh and unique experience with a high availability of content depth.**
3. **Blend each objective together to feel like a cohesive game, rather than a server with multiple objectives.**

Goals

- Create a balanced ecosystem where rewards from one objective promote and support engagement in other objectives.
- Encourage competitive play through tournaments and leaderboard rewards.
- Scale the server to hold hundreds of concurrent players as compared to standard 30-40 player caps.

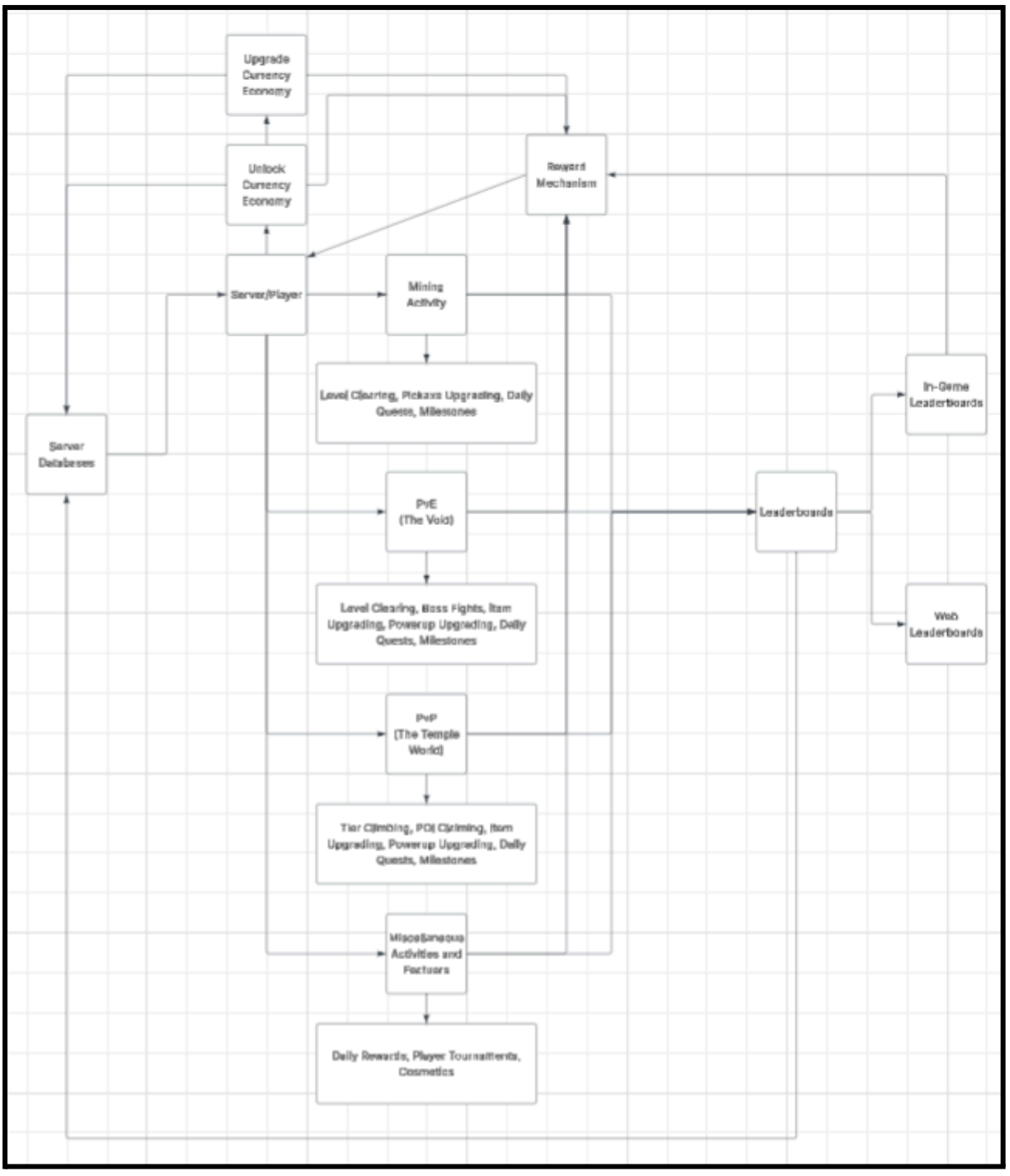
Non-goals

- Launch the server to support mobile and console connectivity.
- Deploy a coupled minigame server to increase player and market appeal.
- Scale beyond 1,000 concurrent players

Year 1 Success Metrics

- >300 concurrent active playercounts
- Content provides >100 hours of game playtime per game objective
- Server is profitable at a high-revenue per player factor (>$55 per player)

Conceptual Model



- **Server/Player:** this is where the software is run, and the player's character is interacted with
- **Unlock Currency Economy:** this is the economy in which players earn tokens to be used for various unlocks throughout the game
- **Upgrade Currency Economy:** this is the economy in which players earn atoms to be used for various upgrades throughout the game

- **Server Databases:** this is where the player's stats like token balances and overall progress is stored.
- **Mining Activity:** this is objective 1 of the game where players mine to earn resources and level up their items
- **PvE/The Void:** this is objective 2 of the game where players clear areas of mobs to then face the boss before moving onto the next area
- **PvP/The Temple World:** this is objective 3 of the game where players join a group and fight in an open world to level up their abilities and claim POI's alongside their teammembers
- **Reward Mechanism:** this is the general function on the server where players are rewarded for their activities towards various objectives on the server. These rewards are hooked directly into the unlock and upgrade economies.
- **Leaderboards:** this is where a player's centralized stats are compiled from their activities and ranked in order according to what is stored in the databases
- **In-Game Leaderboards:** these are leaderboards a player has the ability to view from inside the game. They are directly rewarded for landing a spot on the leaderboards.
- **Web Leaderboards:** these are leaderboards hooked directly onto a webpage, meant to build a community around a centralized location to view the best players on the server.

Requirements

Legend
[P0] = MVP for Testing
[P1] = Important for delightful experience
[P2] = Nice-to-have

As a player, I want to play through a variety of objectives without siloing my progress and community exposure into individual disconnected microservers.

Central Server/Database Setup

- **[P0]** The server will use a centralized database to sync stats and progress across objectives into one cohesive game ecosystem
- **[P0]** The server will advertise only one connection address to funnel all traffic towards a singular point of access to cater to a single, whole player community
- **[P1]** The server will link together server instances via HuskSync to expand the total server capacity, allowing an increased number of concurrent connections.
- **[P2]** The server will scale via kubernetes to add server instances when needed to cater directly to increased player traffic, creating a greater MMO feel with higher player capacity.

Multiple Objectives

- **[P0]** Players can engage in objectives that have unique progress unlocks and upgrades, yet offer the same unlock and upgrade currencies to be used across any objective on the server
- **[P0]** Players have the opportunity to move freely between objectives, will unrestricted access to engage in another objective at any time throughout their experience on the server
- **[P0]** Players will have ample experiences and touchpoints to learn about additional objectives they can engage in as they play through other areas of the server
- **[P0]** Players have an opportunity to climb levels and upgrade their pickaxe via working in the mines
- **[P0]** Players have an opportunity to increase their tier by engaging in combat in the Temple World and competing challenges directly related to their tier-unlocked abilities
- **[P0]** Players have an opportunity to clear areas of mobs and fight bosses to progress deeper into the Void, unlocking unique powerups as they progress

Centralized Community

- **[P0]** Players have a single point of contact to engage with the other players on the server, including but not limited to: in-game chat, discord, a web forum
- **[P0]** Players have a search function to view the stats of other players on the leaderboards to increase competition and engagement within the community
- **[P1]** Players can engage in community events announced through the various community channels to increase community cohesion and exposure to other players within the community
- **[P2]** Players can engage in a party system for targeting objectives on the server, like collaborative boss battles, individualized party mines, or exclusive POI battles done via Matchmaking.

Game Economy

- **[P0]** Players have access to a variety of upgrades to use their atoms towards for their items, as well as powerups.
- **[P0]** Players have access to a variety of unlocks to use their tokens towards for an improve
- **[P0]** Players can earn their in-game currencies across a variety of objectives on the server
- **[P2]** Players have the ability to purchase an additional currency from the server webstore that provides bundled rewards applicable to all objectives on the server

As a player, I want to play a server where my stats and progress are persistent, instead of being reset after each “Minigame”.

Balanced, Long Term Playability

- **[P0]** Players have a breadth of content to play through, making for long term playthrough value in the game
- **[P0]** Levels and progression frameworks are smoothed to ensure continuous progression feels rewarding and doesn’t hit any major ledges where time spent playing leads to diminishing progress return values, depleting player satisfaction
- **[P1]** The server progression frameworks are structured specifically to allow for additional content injections that expand playthrough value and player experience

Centralized Leaderboards

- **[P0]** Players can view their long-term stats on web leaderboards
- **[P0]** Players can view their long-term stats within the in-game leaderboards
- **[P2]** Players can create sub-character saves that allow them to experience the server and level up throughout the game on different tracks via focusing on different objectives