

# Fitness Ventures Litepaper

Developer: <https://github.com/codesport> Project Repo: <https://github.com/codesport/fitness-club-dao>

## 1. Project Overview

Fitness Ventures is a proof-of-concept for integrating Blockchain technology (specifically, DAO and NFT tooling) into a niche industry vertical. It is a quickly prototyped use case for Code Sport's larger vision of programmable and utility-based NFTs.

### Background

The concept was ideated on April 8, 2022. It was deployed to the Polygon and Meter testnets on April 10 and April 11, 2022. Although it was a solo project, it is part of a portfolio of Blockchain dApps that the Code Sport team is actively developing. We are building a portfolio of multi-chain applications which explore novel, but real world use cases for NFTs.

### What Is Fitness Ventures

1. Empowers companies, entrepreneurs as well as sports and fitness enthusiasts to launch sports teams and fitness groups organized as ERC-721 (NFT-based) DAOs
2. Allows individuals to register and join virtual and real life fitness, workout, and sports teams by purchasing memberships minted as NFTs

Fitness Ventures' DAO contracts are based on standardized contracts developed and audited by Open Zeppelin<sup>1</sup>.

### Readily Adapted to Serve Other Industry Verticals and Use Cases

The Fitness Ventures dApp is easily customized to satisfy multiple use cases across a variety of industries. It may be used to mint NFT-based certifications, diplomas, and payment streams. To illustrate:

1. A **community college** or even an **online certification program** may mint diplomas and certificates of completion as NFTs in addition to paper-based wall plaques
2. **Income, payments, and financial awards** may be "programmed-in" by using Open Zeppelin's Payment Splitter<sup>2</sup>

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<sup>1</sup> The minter contract has been customized with additional functionality. Refer to: <https://github.com/codesport/fitness-club-dao>

<sup>2</sup> <https://docs.openzeppelin.com/contracts/2.x/api/payment>

3. A **martial arts academy** may award black belt certifications as NFTs

## 2. Fitness Industry Market Analysis

*Planet Fitness added 1.7 million new members in 2021 and opened 132 new locations... At Crunch, membership in the United States has “increased 34% since pre-Covid levels...”<sup>3</sup>*

The fitness industry has been on an upswing since Summer 2021. According to *RunRepeat*<sup>4</sup>, the fitness industry’s global revenues for 2021 were approximately \$160 billion. This includes sales of fitness equipment, apps, trackers as well as traditional gym and health club memberships.

The fitness industry is not solely defined by gyms, health clubs, and fitness centers. It also includes fitness equipment, apps, trackers, sports nutrition, and of course athletic wear. However, please note, **the sales of athletic wear and sports supplements are most likely excluded from the industry figures cited herein.** As such, sales of physical goods from retailers such as Nike, Adidas, and Lululemon are excluded industry figures cited herein.

Finally, a fitness industry analysis would not be complete without mentioning the market for gym and health club management software. There are many software companies in this sector<sup>5</sup>. However, one of the most well known is MindBody which currently owned by Vista Equity Partners.

### Industry Growth Rate, Drivers, and Projections

Since the start of the pandemic in 2020, the strength in the fitness industry has been driven by direct-to-consumer sales. Such sales include fitness equipment as well as online and digital fitness applications (including fitness trackers).

However, as the pandemic becomes a more manageable endemic, it is predicted that revenue contributions gyms and fitness centers will stabilize.

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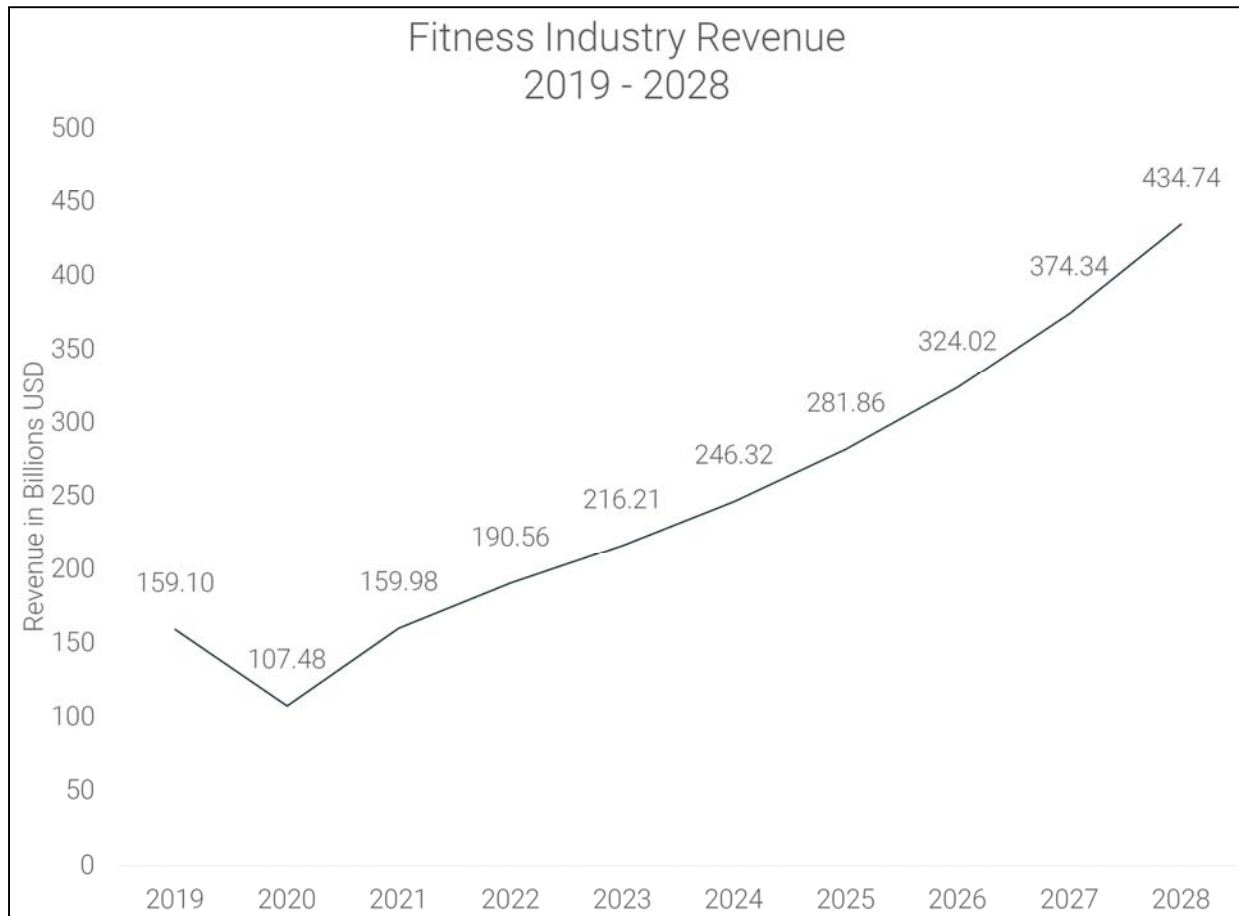
<sup>3</sup> <https://www.nytimes.com/2022/04/15/well/move/peloton-workouts-at-home.html>

<sup>4</sup> <https://runrepeat.com/fitness-industry>

<sup>5</sup> <https://www.getapp.com/customer-management-software/a/mindbody/alternatives/>

According to *RunRepeat*<sup>4</sup>, there were approximately 200,000 fitness clubs worldwide by the close of 2021. These clubs generated approximately \$87 billion in revenues in 2021.

Figure 1, illustrates historical and projected revenues of the fitness industry from 2019 to 2028:



**Figure 1: Fitness Industry Revenue in Billions from 2019 – 2028. Source: RunRepeat<sup>3</sup>**

Data compiled by *Grand View Research*<sup>6</sup>, asserts that market size for the fitness app industry will be approximately \$1.3 billion by the end of 2022.

According to a March 2022 research report by *The Business Research Company*<sup>7,8</sup>, “the online and virtual Fitness market is expected to reach \$79 Billion by 2026, [driven mainly by] the rising penetration of smart Devices”. And, according to *360 Research Reports*<sup>9</sup>

*In 2020, the market for fitness wearables that record your health and assist in training regimens was estimated at almost \$9.6 billion. With a predicted CAGR of 18.5%, it's expected to triple by 2026 [to \$26.6 billion]<sup>9</sup>.*

*RunRepeat*<sup>4</sup> and *360 Research Reports*<sup>8</sup> also provide the following revenue growth statistics related to the online/digital fitness, fitness apps, fitness equipment, and fitness tracker markets:

- 2020 Revenue Growth: ~41%
- 2021 Revenue Growth: ~66%
- **2021 to 2028 Compound Annual Growth Rate CAGR (CAGR): ~33%**
- 2026 Revenues: \$26 billion

### 3. Next Steps for Fitness Ventures

Fitness Ventures was a quickly prototyped use case for Code Sport's larger vision of programmable and utility-based NFTs.

#### **Programmability and Utility: Novel Use Cases for Non-Fungible Tokens**

Because NFTs are bound to smart contracts (and are programmable), they may be used as primitives to provide cash flow entitlements, Blockchain-based credentialing, proof of provenance, proof of work (completed labor), and proof of attendance (of events) for individuals in real life scenarios.

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<sup>6</sup> <https://www.grandviewresearch.com/industry-analysis/fitness-app-market>

<sup>7</sup> <https://www.thebusinessresearchcompany.com/report/online-virtual-fitness-global-market-report>

<sup>8</sup> <https://www.globenewswire.com/news-release/2022/03/22/2407884/0/en/The-Online-Virtual-Fitness-Market-Is-Expected-To-Reach-79-Billion-By-2026-With-The-Rising-Penetration-Of-Smart-Devices-As-Per-The-Business-Research-Company-s-Online-Virtual-Fitness.html>

<sup>9</sup> <https://www.smallbizgenius.net/by-the-numbers/fitness-industry-statistics/#gref>

Programmable “utility” NFTs have multiple uses cases. To illustrate:

1. NFTs may entitle holders to either (a) perpetual, (b) limited with expiry, (c) continuous, or (d) discrete claims on future cash flows based on
  - **Staking:** Amount of ETH staked by a member
  - **Labour:** Satisfactory completion of time based labour services performed by a member
2. NFTs may be used as primitives to provide Blockchain-based credentialing, verifications and certifications such as
  - **Proof of Work/Contribution:** Verifies satisfactory completion of time-based labour services performed by a member
  - **Proof of Ownership:** Attestation of ownership and therefore a claim on cash flows from a revenue generating product or business
  - **Proof of Attendance/Completion/POAPs:** Confirms attendance and/or completion of classes/courses/homework from an educational institutions
  - **Proof of Provenance/Origin:** Attests that NFT was issued by a smart contract owned and deployed by a specific entity (e.g., a school/educational institution, individual, or any organizational entity)