

Attracting The Next Generation Of Alexa Customers

With Personalised Voice Coaching For Gen-Z Specific
At-Home Workouts

alex
amazon

x

TKS

Executive Summary

Problem

Gen-z don't have the tools to enjoy their workouts.

49% of Gen-Z work out weekly, but 69% want to exercise more. In addition, almost **94% of Gen-Z want to improve their health with fitness apps**, but they are unmotivated and unconfident when working out, due to a **lack of knowledge, encouragement, fun, and personalization** in their current fitness routines.

Solution

A personalized voice-based fitness coach and app.

Using Alexa as a personal at-home fitness coach will motivate and **increase confidence** in users' workouts, because of more **personalized guidance**. Alexa will also be addressing Gen-Z's fitness needs with **unique fun and community features**, and will make Alexa a staple in their everyday lives.

Impact

Over 3 million Gen-Z users in 24 months, with more than \$4,063,835 made by 2025.

Our proposal will lead to a **healthier, happier, and more motivated Gen-Z**, who will use Alexa every day as a necessity. It will **increase revenue** made through Alexa, **expand market share** in the digital fitness and app spaces, and will also attract millions of **new Gen-Z users**.

Gen-Z Don't Have Enough Guidance Within Workouts

63%

63% of Gen-z want to exercise more, but don't have the tools to carry it out. Gen-z wish they had more knowledge and expertise in fitness to **gain the motivation they lack**.

90%

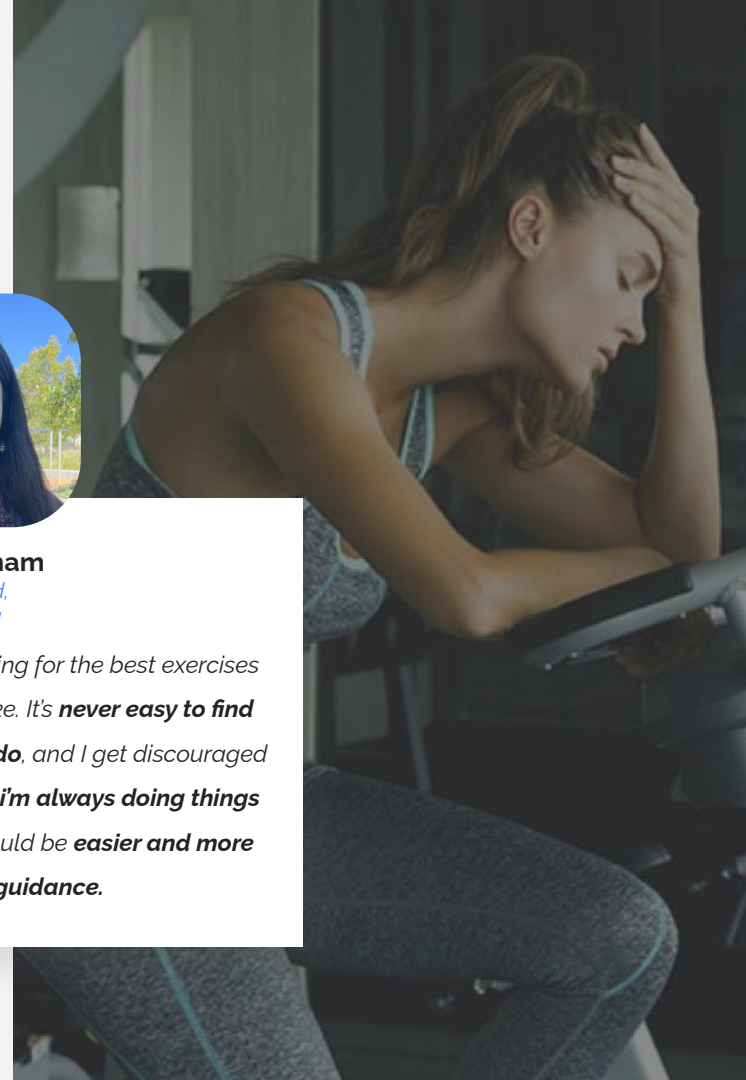
More than **90% of Gen-z have had psychological or physical symptoms of stress** in the last year, and almost **77% are motivated to use fitness to improve their mental health**.



Rufaida Imam

*13 year old,
California*

*I spend way **too much time** looking for the best exercises to fit my sport and the things I like. It's **never easy to find the exercises I actually want to do**, and I get discouraged from working out. I also **feel like i'm always doing things wrong** while I exercise, and it would be **easier and more fun if I had more guidance**.*





Damon Neri

17 years old

Paris, France



I am always looking for a great at-home workout, but with my injury, that can be hard. **I need a workout that makes me meet my goals, helps me train, and still have fun while doing it.**

Meet Damon Neri

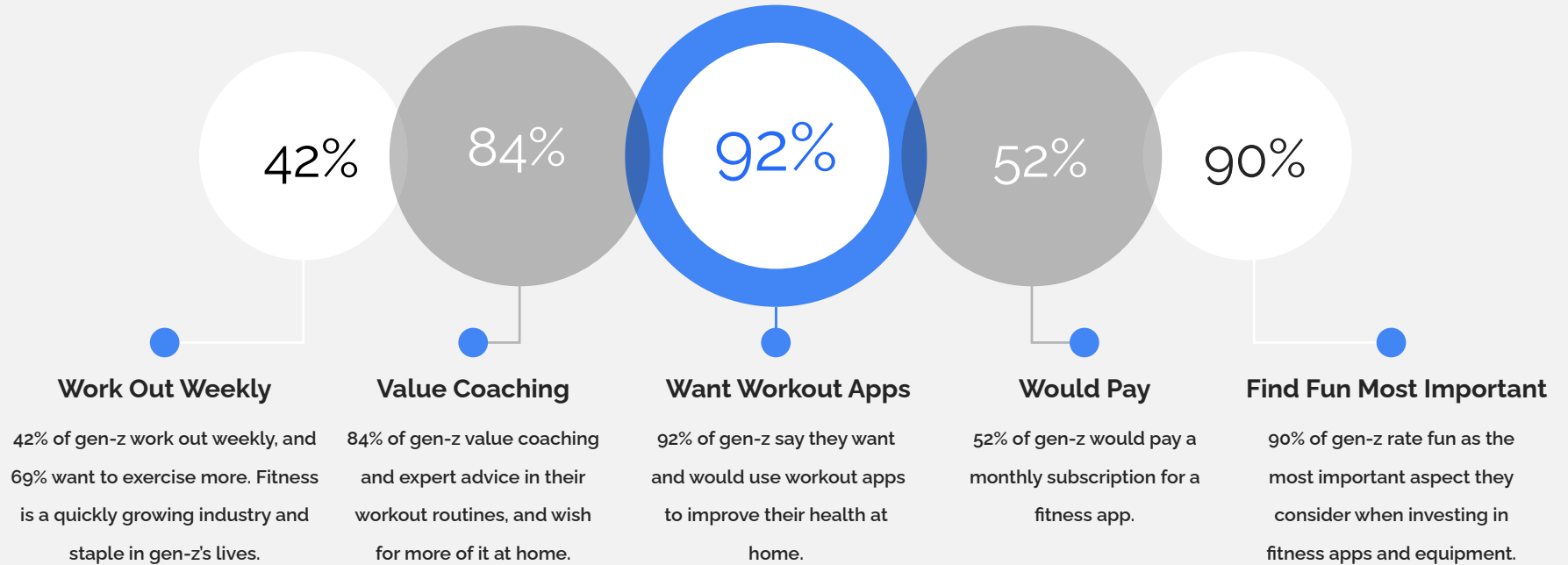
Damon is a 19 year old who plays football on his school's team. **He has a leg injury that makes working out hard**, but he still wants to train to play his best at football

He's tried various workout apps, but he never feels satisfied. He **wants the workouts to be more personalized, part of a community, and more fun.**

91%

Damon's not the only one struggling with injuries. **Around 91% of Gen-z have experienced chronic pain between the ages of 10 and 20.** This is significantly higher than other generations, and poses a **risk for Gen-Z who want to work out but are stopped because of their injury.**

Gen-Z Want A Better Workout



A person is shown from the back, wearing a black sports top and dark leggings, sitting on a gym bench. They are holding a smartphone in their right hand. The phone screen displays a fitness app interface with a profile picture of a person and the text "Escpi curf". In the background, a dumbbell is visible on the floor. The overall scene is dimly lit, suggesting an indoor gym environment.

Introducing Alexa Fitness

A Personalized Alexa Fitness Coach



Personalized Voice Workout Plans

Based on sport, injury, goals, and feedback, Alexa will create a unique exercise routine and guide the user through it, optimizing for their needs and feedback.



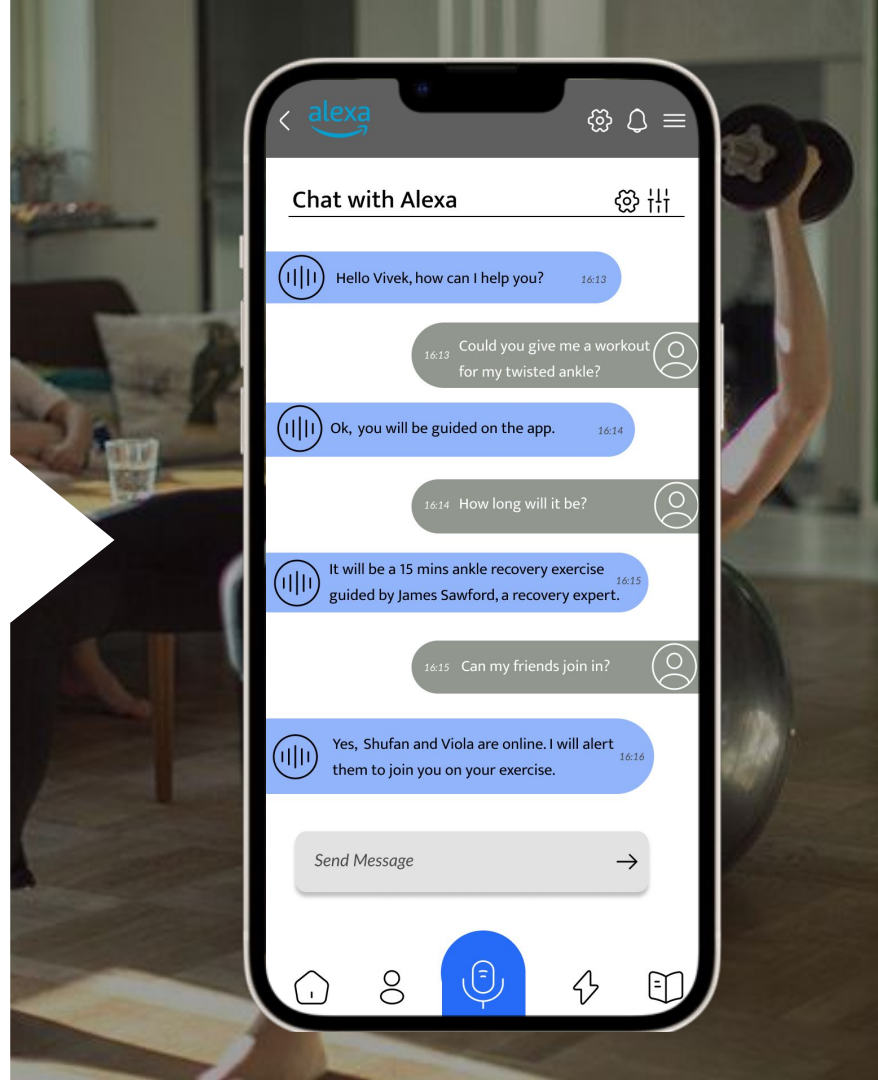
Advanced Fitness Features

Features like form correction, unique user-friendly exercise routines, community challenges and leaderboards, and a reward system make it a smooth and desirable experience.



Integrated Into An App

The Alexa exercise assistant will be available on a smart speaker, but the main user interface will be a phone, which can be used as a digital touchpoint as well as the computer vision sensor for Alexa to help with form and tracking.



How Customers Engage With Alexa

Getting Set Up

A user can start their experience by simply saying, “Hey Alexa, Let’s exercise!”

Alexa will then **generate a workout** for them, with easy step-by step instructions to follow along.

Doing A Workout

Alexa will guide them through the workout. If the next activity is push ups, Alexa might say, “**Next you will be doing 20 push ups. 3, 2, 1. Start.**”

Alexa will also give motivation during exercises by saying “**You got this!**” and “**You’re about to move up on the leaderboard. Keep going!**”

Completing A Workout

After a workout, the user will **receive gems on the app**, and get a streak.

They will also see how their **friends did in competition** mode, and see their **score on the leaderboard**. They can also **tell Alexa if they liked the workout** or not, so next time it can improve.

*When setting up the app, the user will take an **very short survey to determine their goals, injuries, sports, and other personalized information for generating workouts**. Over time, workouts will change based on what the user likes, which can be determined by either the user telling Alexa they don’t like that workout, or by **analyzing tracking data to see if they are not in the optimal range** (if they are struggling or its too easy.)*

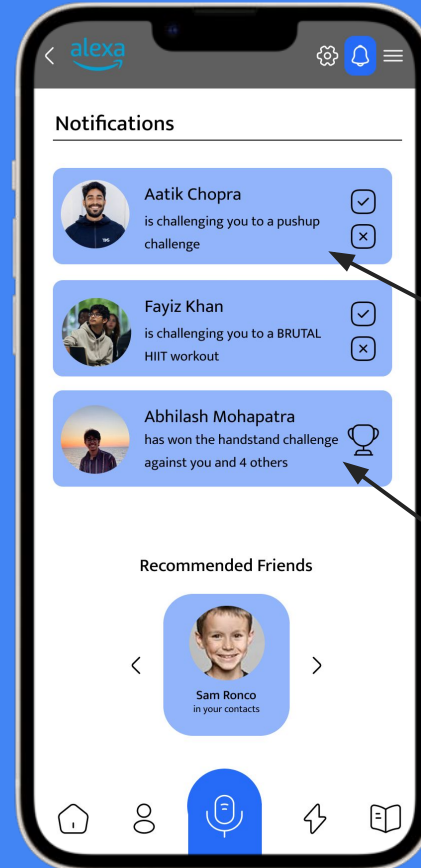
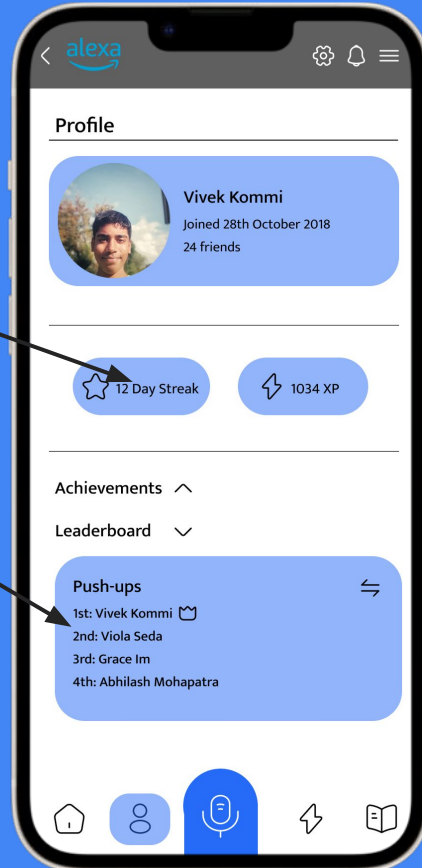
Motivating Through Rewards And Interactions

Incentive reward system

A reward system to motivate users to exercise. This is by using XP by working-out to earn access to premium features.

Leaderboard & Streak system

These are for active competition and engagement with the community to enhance daily usage.



Challenges against friends

To enhance Gen Z customer engagement, a sense of competition through work-out challenges. Friends accessed through contacts.

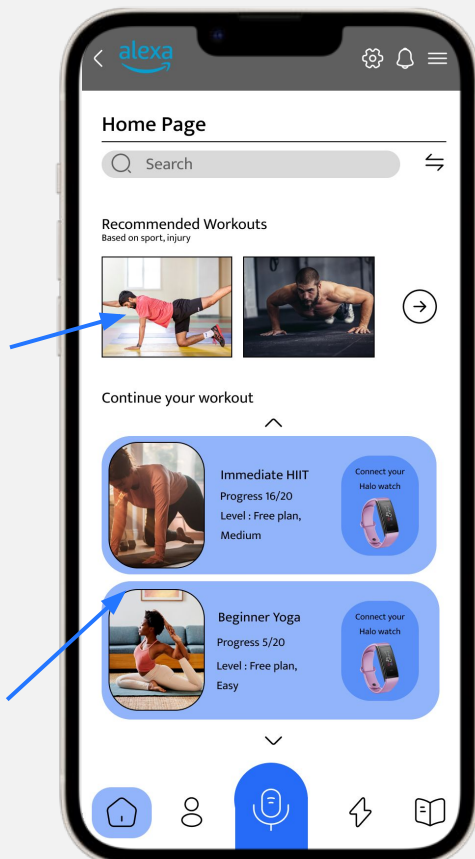
Frequent Reminders

Our app will give frequent reminders for users to exercise to maintain activeness through the day and for users to not forget.

Expert Guidance And Friendly Competitions

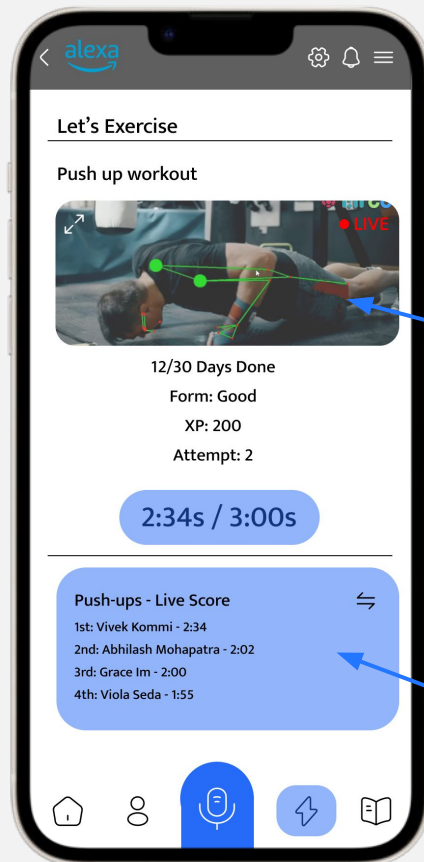
Recommended Exercises

There will be recommended exercises that will be based around your skill level, sport, disability, and injury.



Expert Courses

In the subscription plan, there will be expert-run workouts which will be personalised to your sport, disability, and injury.

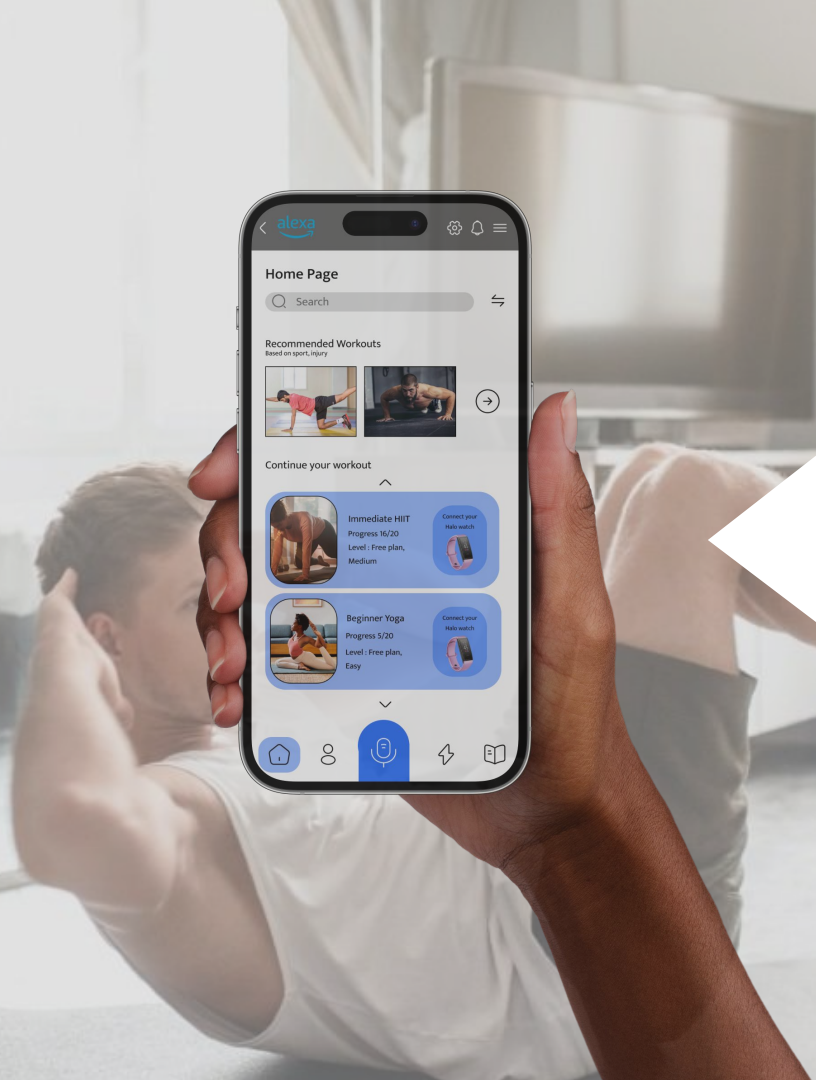


Example Demo

Depending on your plan, there will be a demo of how the exercise will look like. On the subscription plan, it will be an AI expert run demo.

Live Competition

A way to compete against friends while exercising and see a live update in the leaderboard.



Technical Analysis

For the most personalized and user-interactive workout, we plan on using open source GPT-3 models, large language models, and reinforcement learning to make Alexa the best coach possible.



Input Data

The user will take a survey that collects initial data to generate a basic workout, then we will use the computer vision model to get basic data of the users level of expertise as they workout.



LLM And Gpt-3 Algorithms

To generate personalized workouts, Alexa will use large language models and open source GPT-3 algorithms to analyze input data and turn it into the voice coach.



Analyzing Tracking Data

After data from the phone (using computer vision) is given, Alexa checks whether the data fits in a certain range. For example in pushups, if the user goes down to a certain height they will be in the 'correct' category, but if they are outside of that range Alexa will give them advice on how to improve.



Reinforcement learning

Over time, workouts will become more personalized because of feedback given to Alexa and analyzed through a reinforcement learning algorithm so it can generate a better workout next time based on the data.

Tracking Using Computer Vision

The tracking using computer vision would work by using trained datasets of various different exercises and would be able to do complex fitness features like form correction. This would be done by using a phone camera. **We also made a prototype showing a form correction model of a pushup.**



Get data

We hope to use **Xtravision AI's API's** for access to their vast datasets at around **250 + exercises**, and even get data from online open sources ones like InfiniteForm. But as time goes on we hope to partner up with Xtravision to optimise and enlarge the database.

Train and test with data

We will use Xtravision's API with data in it to train the dataset to enable **form correction and tracking of reps**. This could be a very important step as it would take a much more easy and effective way to track.

Implement using phone cameras

Once the model has been trained, we would then implement it as a feature in the app so we could **track easier with the already-present phone camera**. The app would give the user form correction data and count reps.

The Working Prototype

Gen-Z Love Alexa Fitness



Allison Cerron

13 y/o, United States

"As someone who plays a lot of sports, exercise is an important part of my everyday routine. **I would definitely use this as an app, and in my alexa, and I think it would be amazing to improve my at-home workout experience and personalize it to the sports I'm playing.**"



Jamie Jijo

15 y/o, England

"I think a product like this would really **elevate my motivation and productivity for fitness** and exercise, as this would definitely make a schedule more relevant and personalised to my skill-level. Overall, this would probably **motivate me more than current apps to begin a fitness session.**"



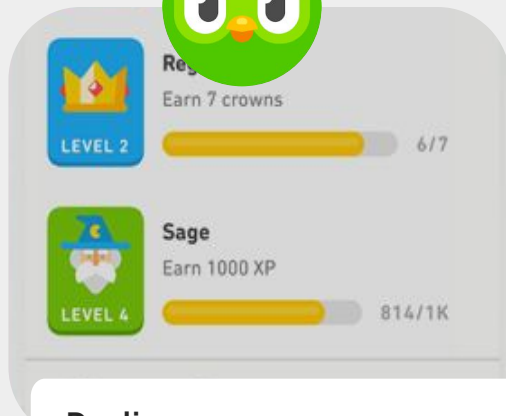
Shlok Verma

15 y/o, France

"I think that working on a workout buddy on Alexa is an **great idea**. It could make people more motivate to work out, as interacting with it requires no further complications. So I definitely think it would be an **interesting idea** and with it could be a **success among many people.**"

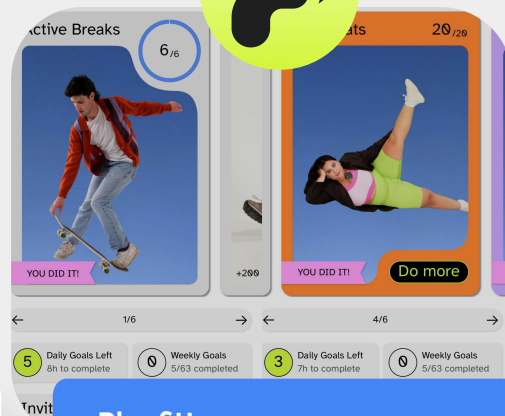
More Customer Reviews

Gamification And Remote Fitness Are Promising Sectors



Duolingo

a company that shows the immense potential (**3+ billion dollar valuation**) for gamification and freemium model. In 2021, 6% of monthly active users were paid subscribers of Duolingo and contributed **72% to the revenue generated**.



Playfit

An app that shows a successful integration of gamification and freemium model in fitness: **65% of the users come back 2x a week**. From February, 2020, more than **4M squats and pushups** were recorded.



Lululemon Studio Mirror

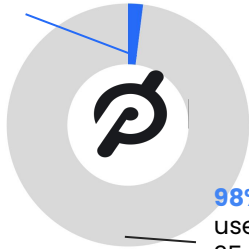
A device that shows us the demand for affordable remote fitness coaching. (**Lululemon \$500 million investment in Mirror**). They also offer 10,000 + AI-driven masterclasses, including yoga, dance, etc..

Extended Case Studies

Peloton's Cost Is **Not Worth It For Gen-Z**

Peloton has not succeeded in attracting Gen Z customers

2% Peloton users are Gen Z



98% Peloton users are 25+ (not Gen Z)

87% of Gen Z are students and the others recently entered the professional sector. As such many of them don't have enough money (45% of Gen Z are financially unstable) to buy the expensive Peloton subscription even though they value fitness. This leads to Peloton having few Gen Z users.

Peloton Guide Camera

Peloton's expensive and thus unsuccessful attempt to create a remote AI powered fitness coach using computer vision

Upfront device cost of \$295

Also requires an All-Access Membership to Peloton. They are currently offering this for \$24/month for Guide-only members

The Peloton Studio Camera demonstrates a **demand for our solution** and validates our idea but the execution in terms of **pricing failed it**.



Anonymous Expert from Peloton
about our solution with regards to the Studio Camera

"This idea is a **unique and viable idea** that has the combination of versatility, uniqueness, and simplicity of the best fitness technology out there. The main feature that impressed me was the **AI generated exercise routines, this is the most unique solution I have seen in this market.**"

Monetizing the User Experience

It will take 25 months^[1] to reach profitability (in our conservative estimates).

Many Different Monetization Techniques: Direct and Indirect

Direct revenue

Premium plan

\$7.99/month

Ads: Free users generate revenue through ads

Indirect Revenue

"buy now" buttons that suggest fitness equipment from Amazon's Basics

Associated purchases (ex: the halo)

More Financial Analysis

Gen Z Weekly Active Users in the US	2.3 Million
Revenue from premium subscription per year (\$7.99/month)	\$ 18 Million
Revenue generated by the free users per year	\$ 2 Million
Yearly Revenue	\$ 20 Million
Revenue after 25 months ^[1]	\$3.2 Million

We filtered for Gen Z interested in our solution by using the statistics and then accounted for the fact that not everyone interested would use it .

Yearly subscription price × Percentage of premium users (Duolingo) × Weekly Active users

[2] × number of free users on our platform

Predicted nb. of free users × [2] + Predicted nb. of premium users × Yearly subscription price

Development cost	1.7 Million
Yearly Expenditures	\$500k
Cost after 25 months ^[1]	\$2.7 Million
Cost per unit at 25 ^[1] months	\$1/unit

Payroll for team required for the 10 months of development

Marketing team salaries + Maintenance (around 20% of development cost)

Development cost + yearly cost/nb. of months [1]

Nb. of users at 25 months / Cost on month 25

Profit after 25 ^[1] months	1.3 Million
Profit yearly from then on	18 Million

Revenue after 25 months [1] - Cost after 25 months [1]

Revenue Yearly - (Development cost + yearly expenditures)
Assumed that we would need constant staff for maintenance at this size

[1] From launch

[2] Value of a free Duolingo user

Engaging Gen-Z Customers With Indirect Marketing On Social Media

Our Marketing Plan

- 01 Grow Alexa Fitness on social media apps like **TikTok, Instagram, and Snapchat**, whose users are a majority of gen-z.
- 02 Build a brand on these social media apps, and market without advertising, by **posting frequent content that catches gen-z's eyes** by showing fun features of the product.
- 03 Develop a cult-like following, with millions of gen-z followers who see posts and are **reminded of their app, prompted to join challenges**, and motivated to use it because of its **popularity on social media and unique brand**.

A **great example** of marketing to Gen-Z



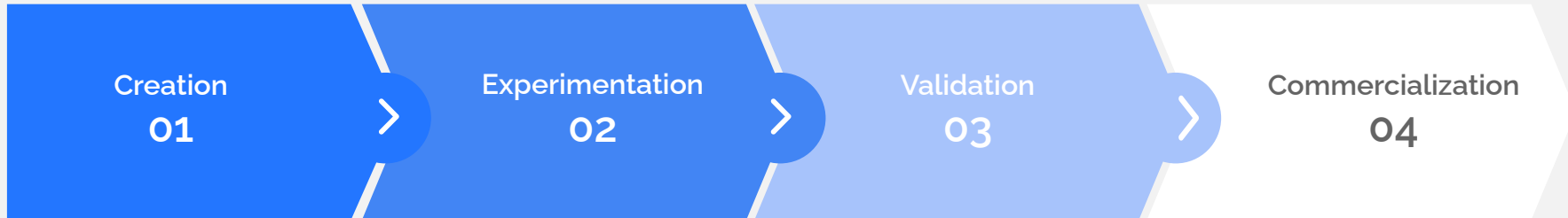
duolingo

A **bad example** of marketing to Gen-Z



Creating, Testing, Commercializing

Short-Term Timeframe: **6 Months**



Creation 01

Hire software engineers and develop AI and ML algorithms to create a **personalised workout routine, and additional community features**. Also hire 2 UI / UX designers to design a **Gen-Z friendly user interface**. Start hiring experts in sports for the premium subscription plan.

Experimentation 02

Integrate the app with Alexa, and develop AI tracking by using a computer vision model. This will track exercises and physical movement to provide further feedback and recommendations. Reach out to **partner with XTRA-vision to gain access to their databases**.

Validation 03

The app will **undergo 2 rounds of beta testing** to a set group of our demographic of GenZ' to improve the model to their preferences. After Beta testing, adapt the idea based on their feedback. This is done while finishing reaching out to 50+ **sporting experts so they can do the courses**.

Commercialization 04

The app will be released with a subscription plan that will **allow for extended feature and masterclasses from athletic experts**. This is released with documentation about the API and also a **manual to how to set up**. The app will continue to constantly update.

Integrating With Wearables And Equipment

Long-term Timeframe: **3 years**



Main idea

~ 2023 - 2024

Alexa fitness will be released as an app to customers. This will enable community and personalization features to take place. Also a tracking system using computer vision.

We will also add a **subscription plan that will include extended personalization, community features**. Along with masterclasses with experts in a sport, increasing motivation. There will also be documentation for the user guide, and a add-your-friends feature.



Add features into Halo Watch

~ 2024 - 2025

As another way to attract customers and to **increase market share**, Alexa will add some features to the existing Amazon Halo watch for enhanced features while exercising and frequent reminders to work-out. This will not only add value to our app but also to the Halo watch, thereby increasing **multiple revenue streams**. We want to add to the Halo watch as it is not a very utilised piece of Amazon equipment, and we see a lot of potential in it.

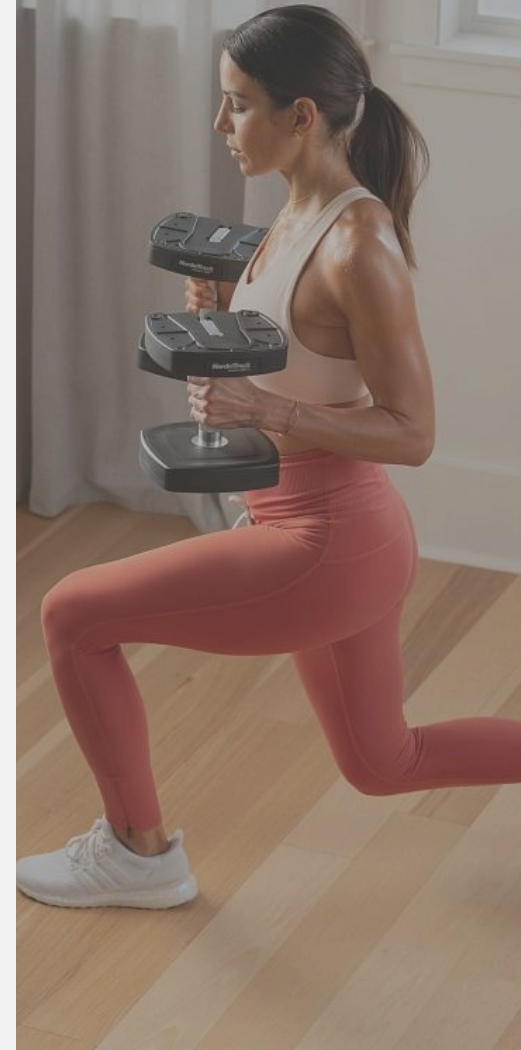


Embed into equipment

~ 2025 - 2026

We can maximize the utility of our app by **embedding sensors into at-home gym equipment** from Amazon Basics to ensure efficient tracking to convert into data input for **increased user convenience**.

and will make sure the solution is **very versatile and easy to track** using computer vision. This is because over $\frac{1}{3}$ of gen Z usually use weights and other equipment in their exercises and can make our idea more versatile and unique.



Experts Say This Is The Next Big Thing



Justin Evans

COO at PlayFitt -
IntelliSports

*"After reviewing their proposal, the mix of GPT-3, and customized voice-based personalized coaching feels like **a unique take on a very serious problem**. This combined with great execution of gamification could lead to a **strongly unique and viable product.**"*



Pierangleo Raiola

Co-founder & CEO at
XTRA-Vision

*"I am very impressed with the depth of this idea as well as the advanced fitness features met with **a lot of effective features for Gen Z**. I really believe that once implemented with the right API's, it **could enhance the user experience and feasibility of the idea**. I can't wait for this idea to develop and be implemented!"*



Rayyan Ahmed

CEO at Rayze Consulting | Google
Gen Z-Council | TEDx Speaker

*"As a Gen Z Consultant, I've seen the different strategies companies launch to try to attract Gen Z, and I know what works. I'm confident that this **team has crafted a solution that can attract and retain Gen Z daily.**"*

5 More Experts, In 5 Different Fields, Reviewed Our Idea

Appendix

The Prototype

The Code

Computer Vision

More Customer Reviews

More Expert Reviews

Customer Survey

XTRA-Vision's API

Privacy Issues Resolved

Case Studies

Bad example of marketing

Good example of
marketing

Financial Analysis

From Our Team

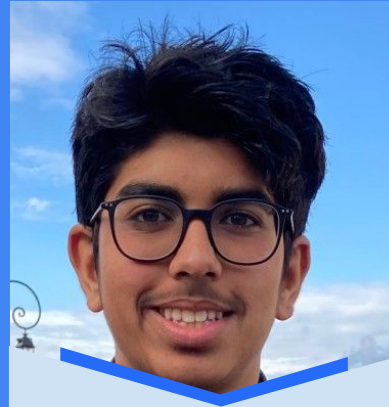
Thank You!



Viola Seda



Vivek Kommi



Abhilash Mohapatra



Grace Im



We want to thank Amazon Alexa for this incredible opportunity. As a team of innovators from the US, UK, and France, we are very grateful for this challenge and the ways we have been able to learn, connect, and grow through it. We hope that our personalised fitness coach can improve customer experience globally.