



WE ENRICHED OPTIMUM NUTRITION'S VIRTUAL REALITY FOOTPRINT



Objective

Build a compelling, experiential virtual reality program to engage participants at fitness trade shows.

Solution

Seisan crafted a ninety-second virtual boxing experience with an integrated heavy bag and boxing gloves, integrating branded video and product placement inside the 3D environment.

LEVERAGED TECHNOLOGIES

- Unreal Engine 4
- 3D Virtual Assets & Animation
- Gameplay Software Development
- External Mirroring

PLATFORM INTEGRATIONS

- HTC Vive Headset
- HTC Vive Tracker Pucks
- ROG gaming laptop
- Blueprint Coding Language

CAPABILITIES

- Emerging Technology (VR)
- UI/UX
- Brand Engagement

EXTENSION OPPORTUNITIES

- Additional Immersive Experiences
- Application Development
- Product Placement

Seisan revitalized Optimum Nutrition's custom, branded VR experience to improve audience engagement and provide an immersive boxing experience with the power to increase brand awareness through a positive and memorable encounter.



Seisan envisioned and created a branded virtual training game that put participants right into a private boxing gym. Utilizing tracking data from boxing gloves with attached sensors, participants score points by hitting targets within the game.

This design incorporated 3D modeling, software development, hardware updates, database architecture, and gameplay development and

testing. Working in conjunction with Optimum Nutrition, Seisan conceived of and executed a virtual environment with embedded promotional opportunities. The high level of attention to detail and focus on user experience led to high levels of participant satisfaction, as well as increased dwell time in the Optimum Nutrition booth.

SEISAN'S APPROACH / ENGAGING VIRTUAL BOXING GAME

PROJECT OVERVIEW

This project was an outgrowth of a previous collaboration between Seisan and Optimum Nutrition - a virtual reality weightlifting experience. Due to the success of that VR engagement, Do It Outdoors, one of Seisan's partner firms, circled back to develop a new experience with a longer development timeline and an improved user interface.

Seisan was responsible for growing the idea, processing the concept into something usable in a 3D environment, and executing the design and hardware integration. Inspired by popular virtual reality games involving rhythmically hitting various targets to the beat of music, Seisan proposed a similar concept but with a foundation in striking through boxing. The blending of a high-quality virtually realized environment with the tactile fulfillment of wearing boxing gloves gave users an increased immersive experience, while the addition of in-game product placement through posters, canisters of branded products, and embedded brand videos playing on virtual TVs provided additional direct marketing for Optimum Nutrition.

Users stood in an 8'x8' square in the trade show booth, but once they put on the HTC Vive headset and entered the virtual reality environment, the space grew to 25'x25'. HTC Vive Independent Trackers attached to the wristbands of the gloves tracked user movements as they targeted red and blue spheres on the virtual boxing bag. Users scored one point for each target they hit with the correct hand and lost one point for hitting

a target with the wrong colored hand. An actual, physical heavy bag was hung at some trade show locations, though this was optional as the trackers in the gloves registered points with or without it present.

A digital display kept track of scores for each day of a trade show event, with the high score winning a canister of product from Optimum Nutrition. To engage onlookers, monitors in the booth offered mirror displays of the gameplay.

TECHNOLOGY DETAILS

The virtual environment that Seisan created for this VR boxing game was built through Unreal Engine 4, a 3D computer graphic gaming development platform from Epic Games. The Blueprint coding language allowed for customization of the gym environment, including tailor-made marketing materials and embedded branding.

As both hands needed to be tracked simultaneously, the HTC Vive Pucks attached to the gloves had to each track the physical location of the user's hands across the x, y, and z coordinate planes. Calibration included distance from the virtual heavy bag, as well as setting boundaries for user movement through a calibration routine. The physical heavy bag's location was factored in through an average distance during product testing and accounted for when physically placing users once the headset was on.

Product testing was conducted with Optimum Nutrition athletes as well as the Seisan team,

with target speeds being adjusted through extensive user analysis to ensure that the game was enjoyable for all participants.

RESULTS

The speed and power of the Optimum Nutrition VR Boxing experience proved to be a huge success at multiple trade shows. The VR experience engaged thousands of participants, drawing high levels of consumer interaction and tens of thousands of estimated total impressions. The game continues to be a focal point for Optimum Nutrition in its event marketing efforts.

The game itself required minimal setup and maintenance by staff on the floor, with total turnover time including gameplay, disinfection between users, and instruction being 3-4 minutes. Actual gameplay is around a minute and a half. Seisan was able to provide technical support throughout the process, including remote walkthroughs at conference events.

As with the previous VR Gym experience from Seisan, users and observers requested information about how to download the game for their personal use. Thanks to the foundational coding and extensive playtesting from Seisan, it's feasible to translate the current game for the Steam platform in the future should that be a direction Optimum Nutrition would like to go.

RIVETING VR TRAINING

Participants were immersed in a boxing experience that felt real and engaged them with direct marketing messages about Optimum Nutrition's brand.



CUSTOMIZED BRAND RENDERINGS

Video advertisements were embedded into the virtual environment, along with rendered versions of Optimum Nutrition products to extend brand identity through gameplay.

