HoloRange

Next-Gen Sim for Shooting Sports

Confidential Overview

Reimagining Shooting Sports

Golf simulators revolutionized how people engage with the sport. What would that transformation look like for shooting sports?

That’s the question that sparked Sverial!

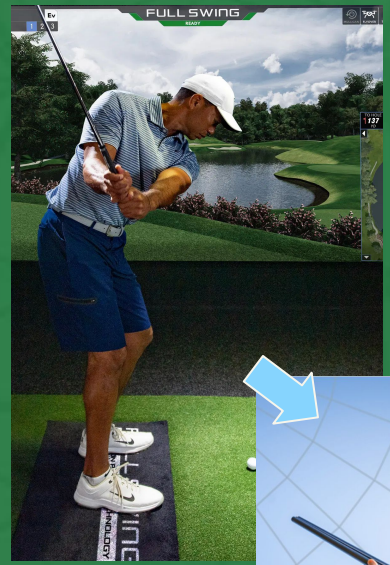
The founders, with deep roots in connected hardware development, immersive media, and interactive entertainment, knew the answer wasn’t VR headsets or arcade-style games

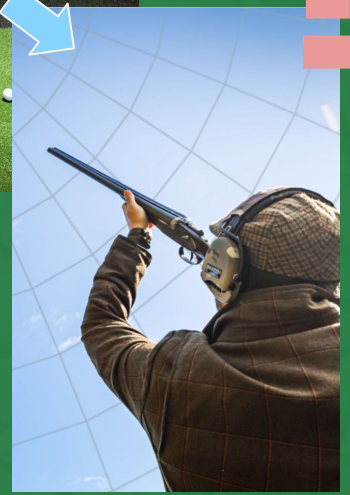
To create a true breakthrough, the system has to meet three core criteria:

- **Use real gear in real ways:** No fake guns; no awkward headsets
- **Provide accurate feedback:** Actionable insights = a coach at your side
- **Deliver an experience that’s social, fun, and addictive**

But…simulating shooting sports is challenging compared to golf:

- You can’t fire real shells in a simulator
- The environment isn't optional—it’s essential
- A full field of view, 3D audio, and true depth perception are mission critical



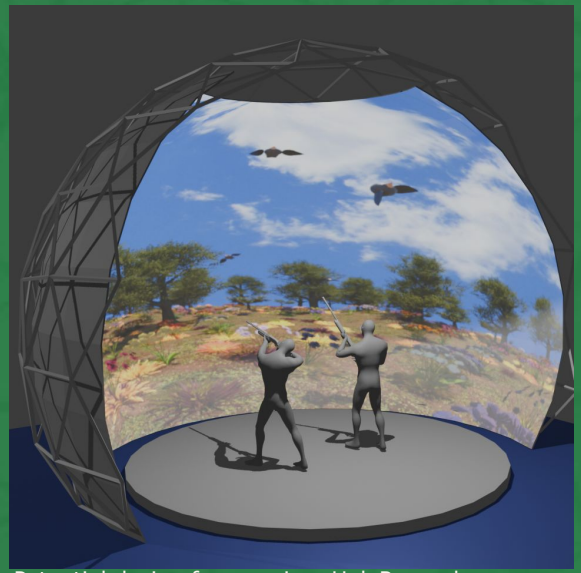


Introducing HoloRange

Sverial's HoloRange is a dome-based, ultra-immersive shooting simulator built for elite training and incredible shooting experiences

- Full-range motion: Freely swing real firearms as in real life
- Hollywood-grade visuals: Transport yourself to new and familiar worlds
- Stereoscopic 3D: Experience realistic depth for target leading and tracking
- Spatial audio: Hear the world around you—crucial for reaction training
- Haptic feedback: Feel the recoil with our patent-pending smart shells
- Advanced interactivity: Choose from a wide range of training and gameplay formats for both single players and groups
- HoloSys platform delivers customer management and analytics

We aren't just building a shooting simulation—we're building the ultimate platform where the next generation plays, trains, and competes



Potential design for premium HoloRange bay

- Capacity up to 4 players
- 62.5 sq m screen
- 225° X 96° (66° above equator, 30° below)
- ~16M pixels, 12 bit color depth
- Stereoscopic 3D at 120 Hz frame rate
- Average viewability score 30 †

† viewability score = (VD - ACVD)/(ACVD - VAD)*100

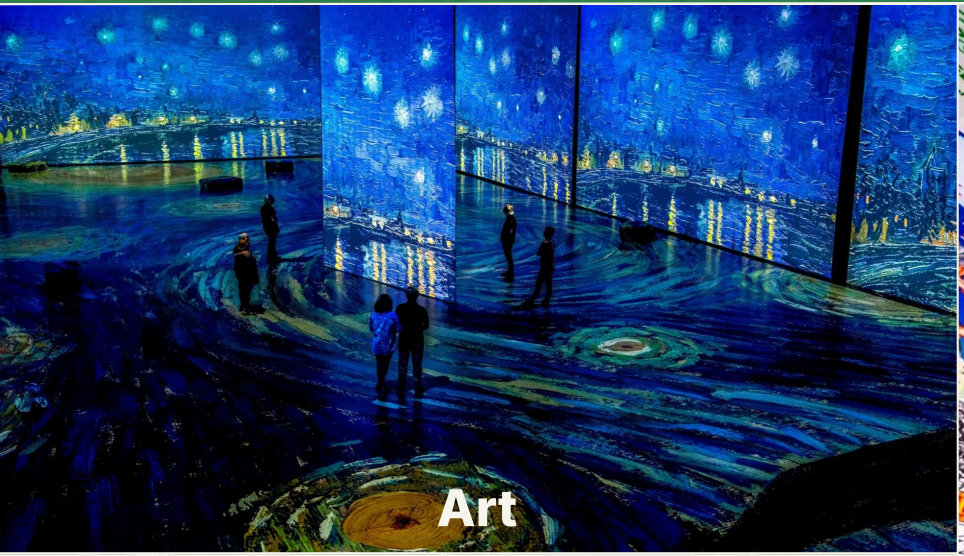
- VD = viewing distance
- ACVD = avg. comfortable viewing dist.
- VAD = visual acuity distance

Avg. viewability score > 10 is good

The Case for HoloRange

- ✅ Proven Success of Sports Simulators - Golf as the Benchmark
- ☐ Riding the Wave of Immersive Entertainment, "Eatertainment", and Luxury Lifestyle Trends
- ☐ Untapped Market Potential
- ☐ A Compelling "Bucket-List" Proposition
- ☐ Technical & Financial Feasibility

Immersive experiences are becoming more accessible, compelling, … and popular!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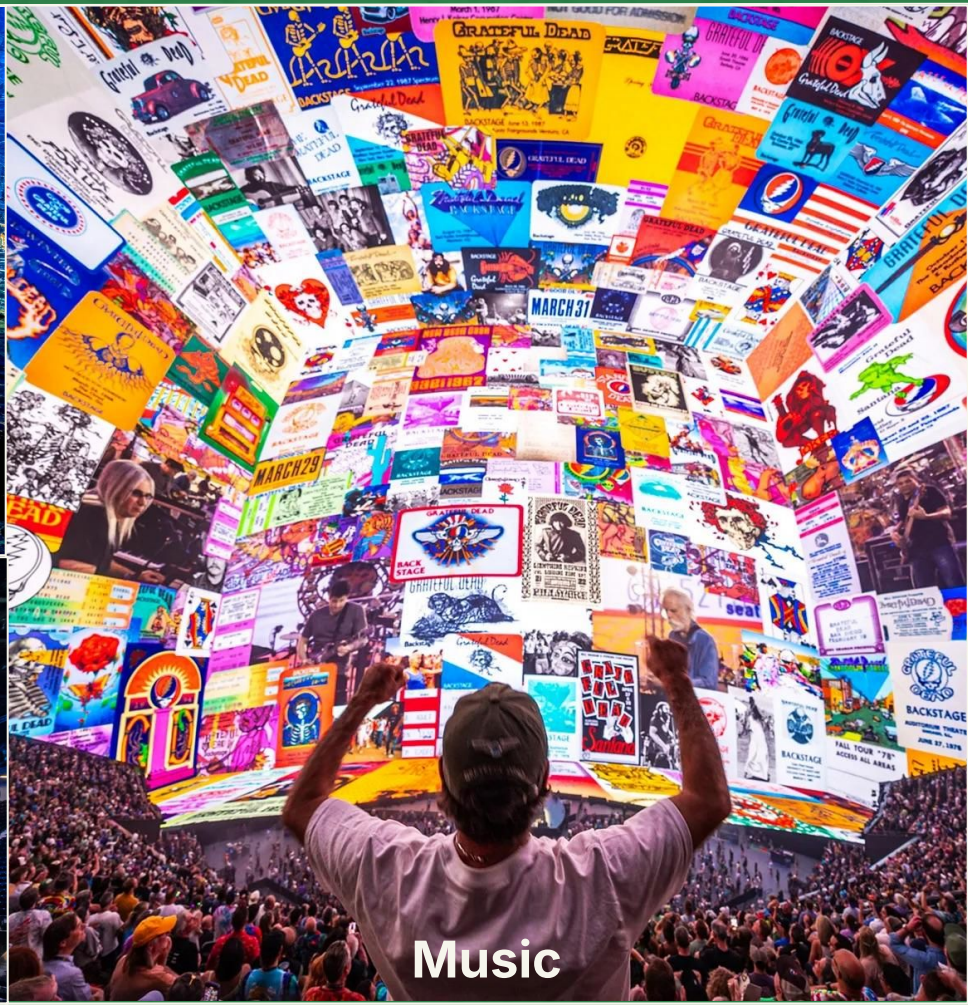
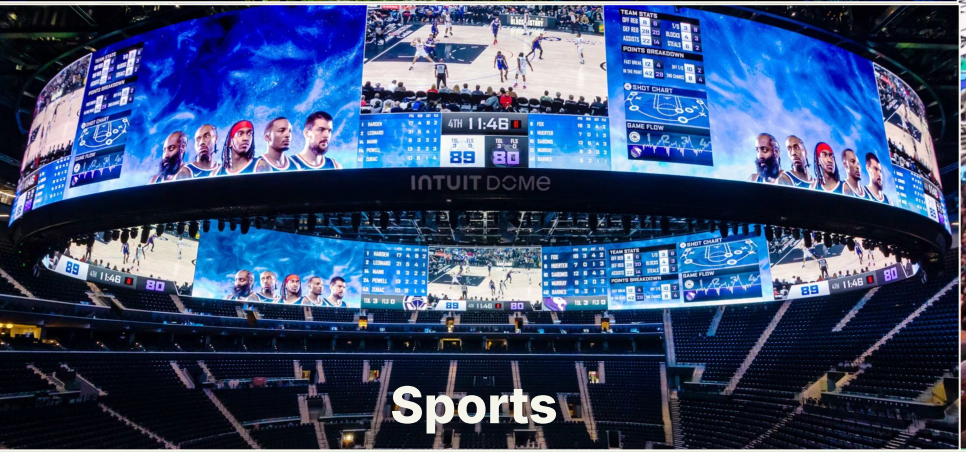
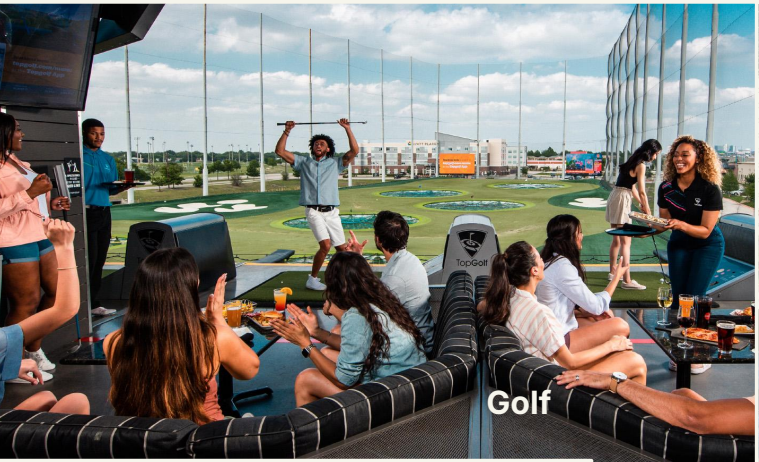
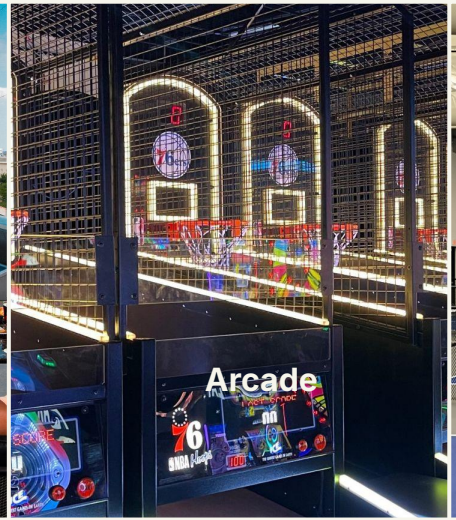

Music


INTUIT DOME
Sports

"Eatertainment" venues - ones that combine food, beverages, and activities - are thriving

Properties in the high growth global resort market seek activities and amenities to stand out


Golf


Arcade

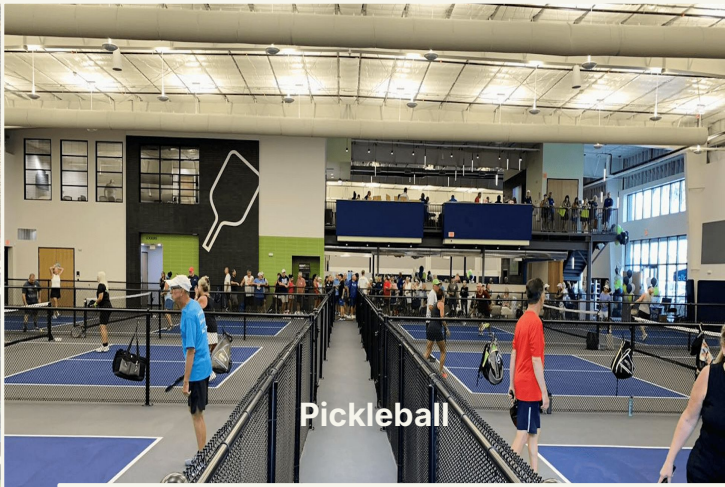
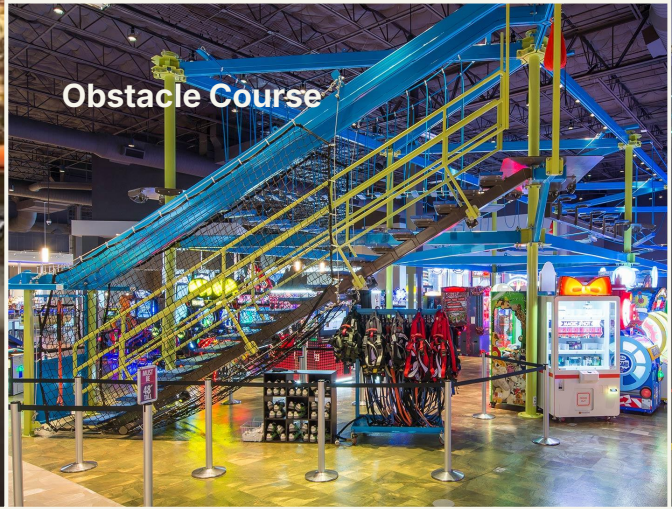

Pickleball


Table Tennis


Obstacle Course


Axe Throwing

The Case for HoloRange

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Large Addressable Market

Firearm ownership

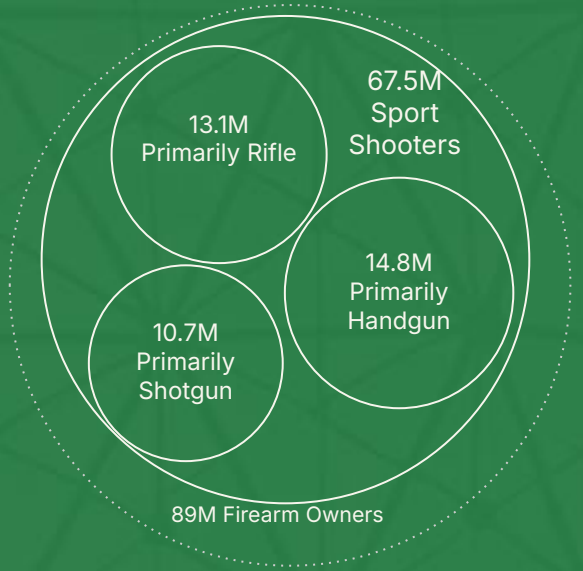
- 32% of US adults personally own a firearm (Pew Research)
- US sporting arms industry had $90B economic impact in 2023 (NSSF)
- 16.7M firearms were sold in 2023 (safehome.org)

Shooting sports, games, and training

- 63M overall US participants in sport and target shooting (NSSF)
- 3.6% growth rate from 2009 to 2022 (last year of comprehensive data)
- Hunting: 14.7M active hunters in 2022 (Outdoor Industry Assoc)
- Police/military training: $1.2B market in 2023, growing at 14% (Data Intelo)
- VR shooting games: $2.5B market in 2025, growing at 18% CAGR (AMR)

⇒ Takeaways

- Shooting sports market is large and growing, overall firearm market is even bigger
- Gaming, law enforcement and military markets are great expansion markets
- Convergence of firearm ownership, recreational shooting, and digital simulation presents a compelling investment case



Notes:

- U.S. only
- Areas of circles $\propto$ market size
- 2025 estimates based on 2023 National Shooting Sports Foundation report

Shotgun Sports Market is Initial Focus

It's big enough

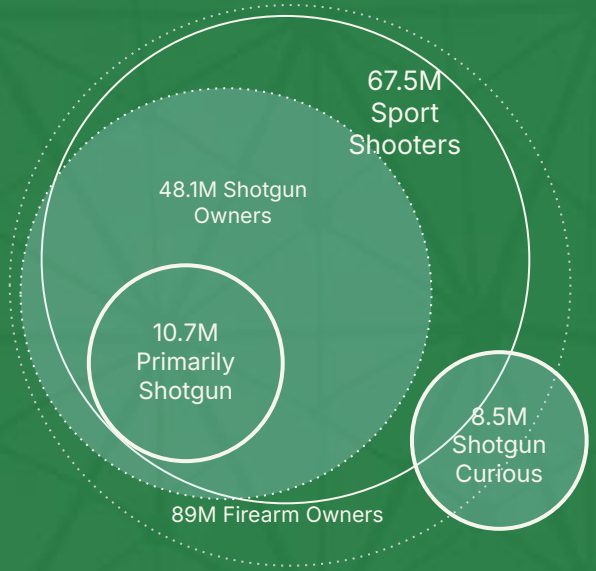
- 48.1M shotgun owners
- 10.7 shooting sports participants in U.S. are primarily shotgunners (NSSF)
- 8.5M additional people interested in shotgun sports (based on golf comps: NGF)

Shotgunners benefit most from HoloRange's features

- Large arc spans
- Support for stereoscopic vision
- Exceptional feedback

Shotgun shooters are more affluent than average

- Waterfowlers and Heritage Upland Hunters have incomes 2 to 3 times national average



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Shotgun Sim Key Benefits

- **Skill Transfer** - If you are good in the field are you good in the sim? More importantly, if you get good in the sim, does it transfer to the field?
- **Realism** - does the sim look feel and sound like being in a real world scenario
- **Analysis** - does it give you immediate and actionable insights that can help you diagnose your misses and improve in real time?
- **Ease of Use** - How easy is it to set up for the first session? For subsequent sessions?
- **Safety** - What are the chances of hurting yourself or others?

Competitive Landscape

Shotgun laser-training systems

- Laser-equipped firearms/adapters to simulate target shooting
- E.g.: *DryFire, Laser Shot, Smokeless Range*

VR shooting simulators

- Virtual environments to practice shotgun shooting skills
- E.g.: *Gaim, Clay Hunt, Xtreme Hunt 3D*

Mobile and PC shooting games

- Games that help with target tracking and timing
- E.g.: *Clay Hunt PRO, Duck Hunting Simulator*

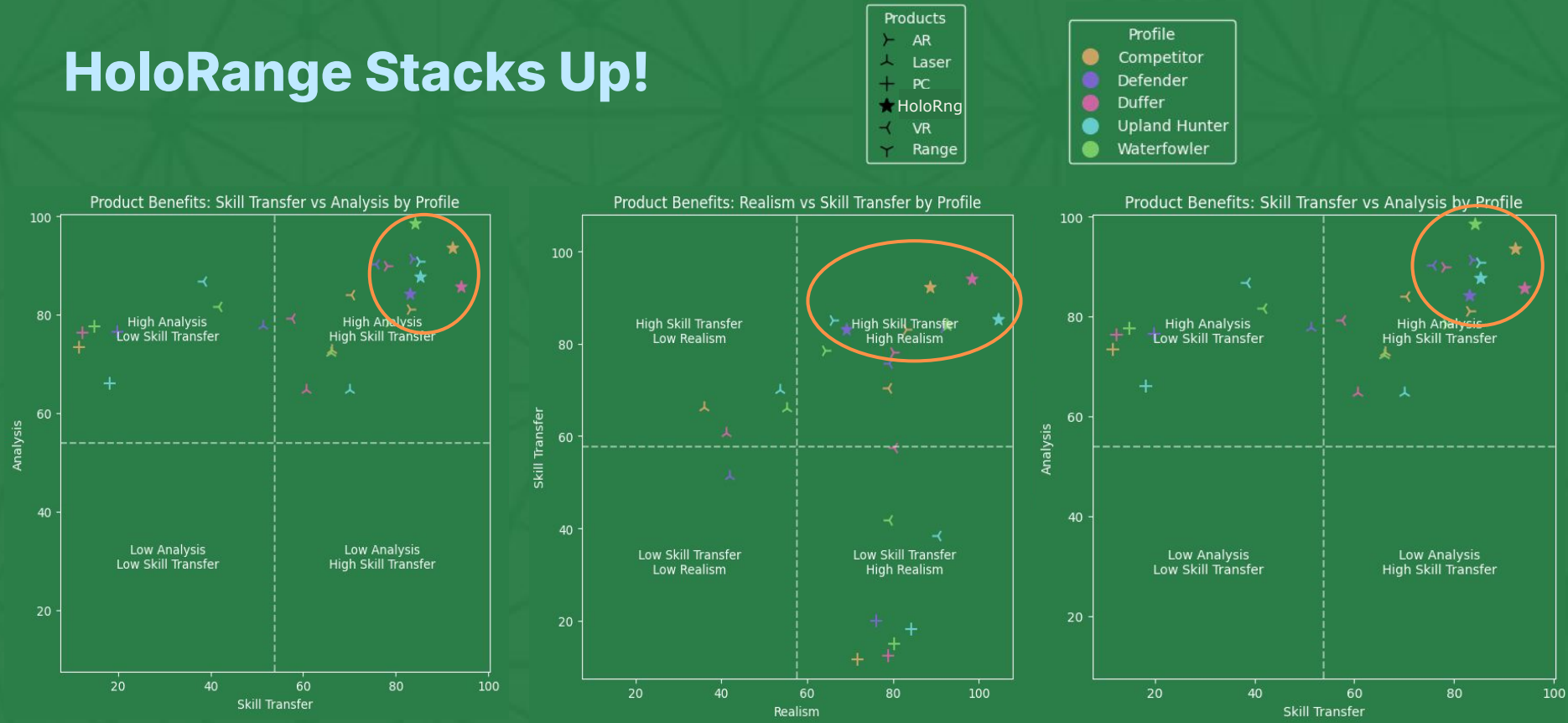
Augmented reality (AR) and online analysis

- Mobile apps that use AR to simulate shooting practice
- E.g.: *Mantis X*

Live-fire ranges

- Shooters with own their guns and ammunition
- E.g.: target shooting, trap, skeet, sporting clays, five-stand

HoloRange Stacks Up!



HoloRange Stacks Up!

While existing shooting simulations and training applications can offer *some* benefits for *some* use cases, only HoloRange checks **most** boxes for **all** of them

HoloRange offers best-in-class benefits across for all groups

- **Skill Transfer**: Train exactly as you shoot in real life
  - Peripheral and depth vision without isolating VR headset
  - Use of real guns with haptic recoil
  - Accurate ballistics and flight patterns
- **Realism**: Experience truly immersive 3D graphics and audio
- **Analysis**: Improve with precise data and analytics, not guesswork
- **Ease of Use**: Forget about setup/prep, ammo, range time, weather
- **Safety**: Virtual shells remove all risk. Great for hunter safety training too!

Best of all, HoloRange is fun and social

The Case for HoloRange

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A Compelling Bucket List Proposition

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Technical & Financial Feasibility

The details of how HoloRange goes to market are to be determined (*see "Strategic Partnerships"*), but we can estimate the basic cash-on-cash payback period for revenues most directly tied to bay.

$250K Target cost including installation
(*see "Phase 4a: Design for Manufacturing"*)

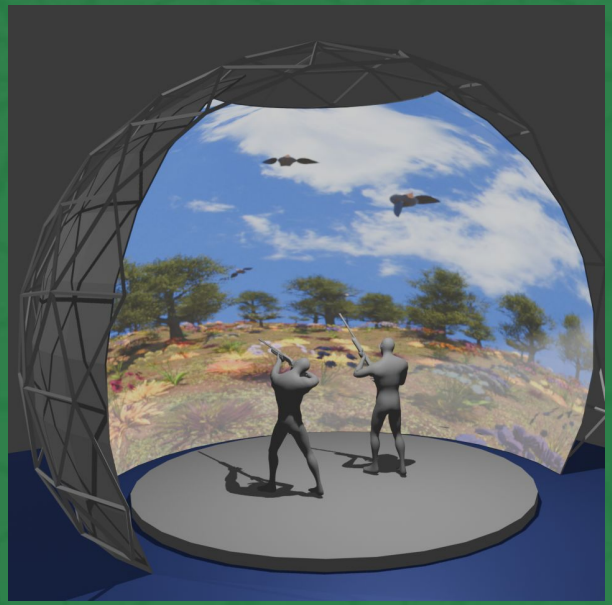
$100K - Estimated annualized usage fee revenue
(*see "Pricing Analysis" in appendix*)

$15K - Annual operating expense - maintenance, power, supervision.
(Very little human intervention past onboarding required)

2.9 yrs Cash-on-cash payback period. (build cost)/(rev. - oper. exp)
Estimated useful lifetime is 12+ yrs
(*see "Phase 4a: Design for Manufacturing"*)

Costs exclude finance fees, taxes, occupancy costs, etc.

Revenues exclude food and beverage, instruction, merchandise, memberships, etc.



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- Average viewability score 30 †

† viewability score = (VD - ACVD)/(ACVD - VAD)*100

- VD = viewing distance
- ACVD = avg. comfortable viewing dist.
- VAD = visual acuity distance

We believe an avg. viewability score > 10 will be fine for our application.

Founding Team

BO LASATER

Bo is product and technology executive with broad experience in B-to-C software development in media and entertainment with a specialization in video games.

Bo has led major design and development projects for Reelay (a social network for user-gen reviews of films and TV shows), Imgur (a MediaLab company), Electronic Arts, Lottery Now, Kixeye, My Space, and Lolapps, among others.

His video game projects have spanned many genres including simulation, real-time strategy, first-person shooter, x-war, interactive sitcom, adventure, and puzzle in categories ranging from casual and educational through mid-core, core, and hardcore. He also has expertise in AI systems, blockchain, and data science. Bo holds a BA in math from Princeton as well as a Masters in computer science and an MBA, both from Rice.

GREG EASLEY

Greg is a tech executive, entrepreneur, and consultant with experience at the forefront of immersive media, VR, and interactive entertainment. He has founded multiple startups, including Realtime Immersion, which pioneered VR camera systems and live 360º video for sports and entertainment events. Four of his companies have achieved exits to date.

With expertise in emerging technologies and software/hardware development, Easley has co-authored patents and launched over 100 technology products.

He earned a BA with High Distinction from UVA, where he also pursued graduate studies. Currently, Easley leads Laurel Labs, a consultancy focused on developing technology platforms and advising companies on venture capital, acquisitions, and strategy. He also teaches media studies at The New School in NYC.

AIKE MULLER

Aike is an entrepreneur, hardware innovator, and developer with deep expertise in IoT products, software platforms, and industrial solutions. Starting his career at PwC, he focused on technical diligence for M&A transactions and later advised on secure logistics, government projects, and supply chain sustainability.

As founder of Keezel, Aike created an award-winning IoT security device, raising venture capital and scaling globally to sell in 135+ countries and through major retailers. Since then, Aike has advised and invested in early stage hardware and software startups, leveraging his expertise in electronics development and manufacturing/supply chain in Asia.

He excels in strategy, scalable software platforms, firmware development, and IoT products bridging hardware and software.

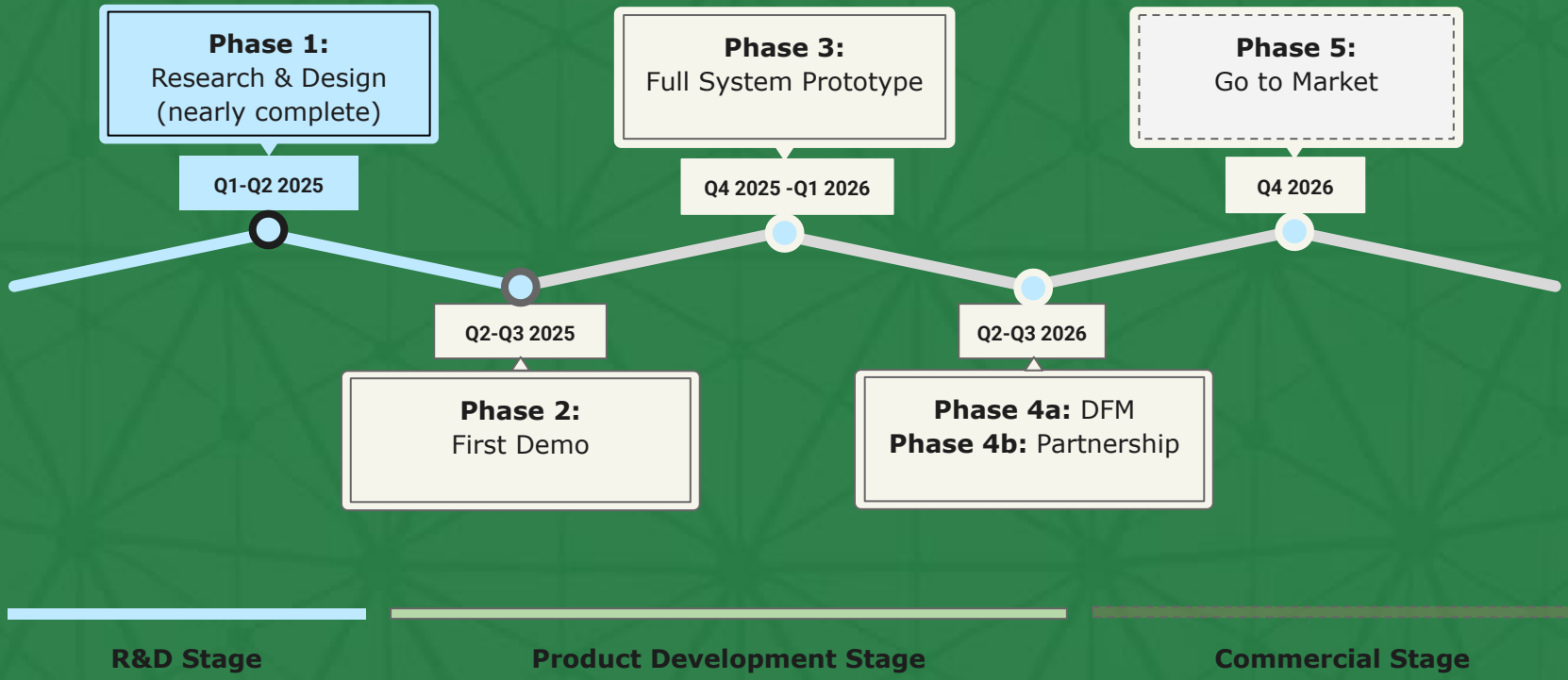
JEFF SMITH

Jeff is a creative director and technologist with over 30 years of experience in interactive and immersive entertainment. As the founder and creative director of Eye Vapor, Jeff has blended cutting-edge technology with compelling storytelling to create rich, resonant experiences.

Under his leadership Eye Vapor has redefined location-based augmented reality and immersive entertainment, designing experiences for brands like Microsoft, Nike, Pepsi, Red Bull, and Samsung. His projects have been featured at high-profile events including CES, Coachella, the Super Bowl, and SXSW, bringing innovative experiences to audiences worldwide.

A graduate of the ArtCenter College of Design, Jeff combines understanding of traditional art with deep technical skills to drive innovation.

Launch Timeline



CURRENT PHASE

Phase 1: Research & Design

Objectives

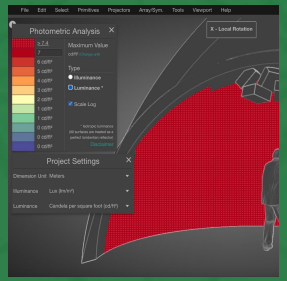
- Determine technical and financial feasibility
- Finalize immersive experience requirements (dome construction, LED specs, 3D, spatial audio)
- Identify key technologies (tracking, haptic smart shells, rendering engines)
- File initial patents, assign inventions
- Secure seed funding (in progress)

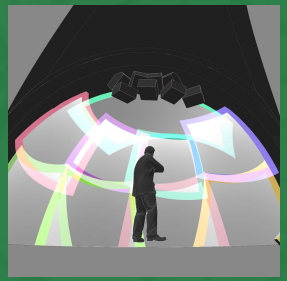
Deliverables

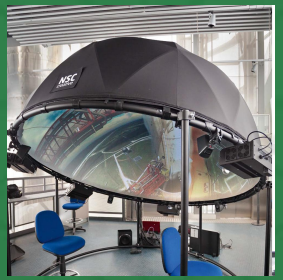
- High-level design for single-player experience
- Concept visuals
- Core system components identification and sourcing
- Market sizing and competitor research

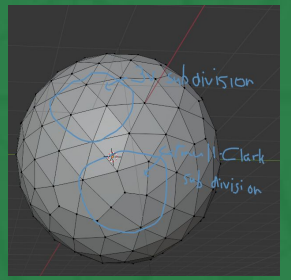
Questions addressed

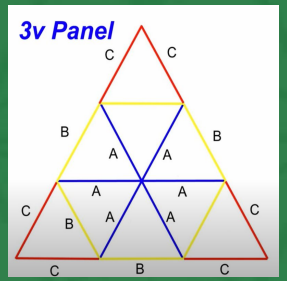
- What display technologies should be used?
- What tracking systems do we need?
- How will use haptics?
- What is budget for first demo?

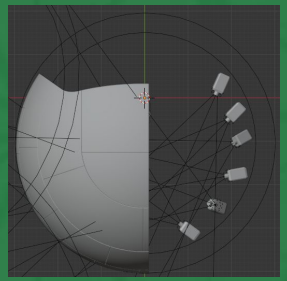












Phase 2: First Demo

Note: *First demo will use existing tech from military-grade simulator based on 5m dome*

Objectives

- Assemble partial dome (123°x60° coverage)
- Prototype smart shell
- Integrate key systems: dome LED display, rendering pipeline, optical tracking, haptic feedback
- Test and tune complete system
- Use demo to raise money for next phase

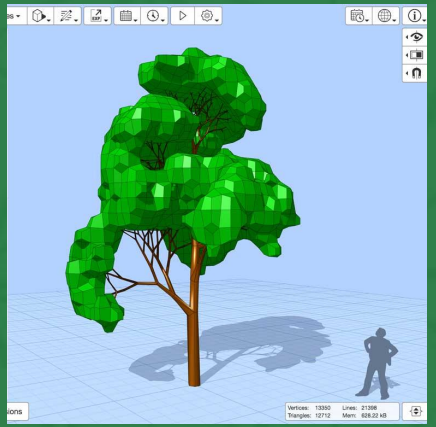
Deliverables

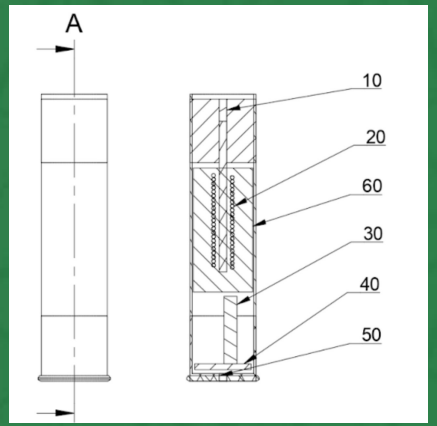
- Single-player experience in partial dome
- Testing protocols and early user feedback reports
- Design for Customer Management Platform

Questions addressed

- Does demo deliver skill transfer benefit?
- Does demo deliver verisimilitude benefit (realistic sights and sounds)?
- Will demo be being compelling and fun?

UNREAL ENGINE





Phase 3: Full System Alpha

Note: *Sverial suppliers are working on a larger format dome with lower cost per pixel LEDs. Perceived resolution (px / steradian) will be slightly better than first demo and all other display metrics will be the same.*

Objectives

- Develop full-size HoloRange experience
- Develop multiplayer prototype alpha
- Build customer manager platform alpha
- Develop game configuration system
- Improve and create content; iterate on capabilities demo

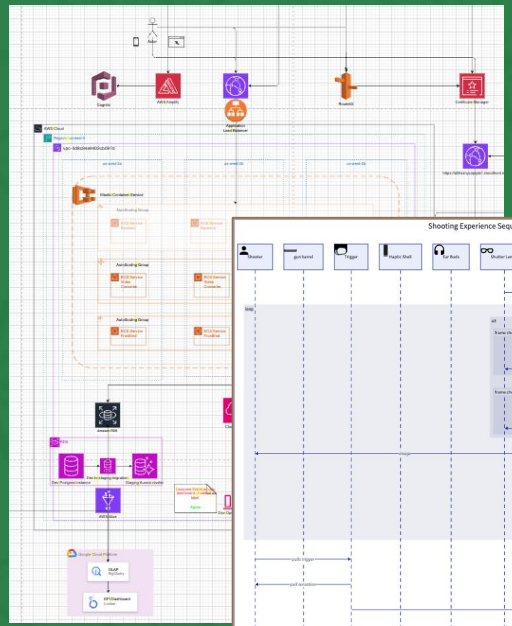
Deliverables

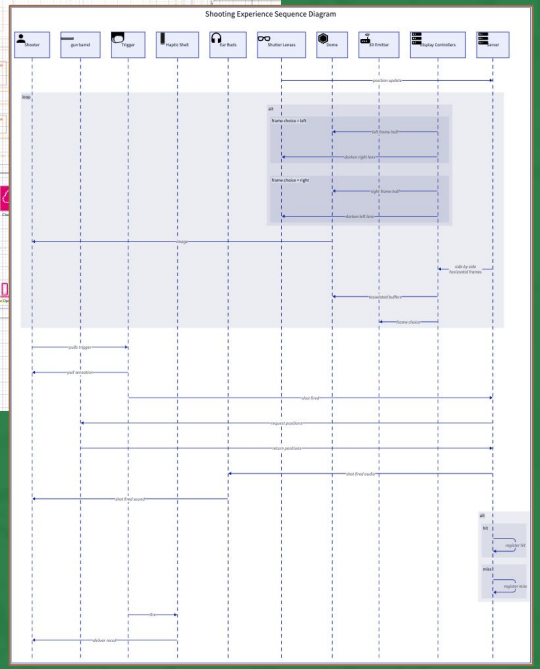
- Full-size **Premium HoloRange** with near-final usability
- 4+ content themes, multiple game modes, and configuration UX
- Usable **HoloSys** customer management platform
- List of potential venue partners

Questions addressed

- Hardware configurations for full-screen experience?
- Multi-player and screen configurations?
- Game configuration system placement?
- Prototype performance under real user testing?

Customer Management Platform architecture





HoloRange event sequence diagram

Phase 4a: Design for Manufacturing

Objectives

- Finalize dome design for scalability and efficient manufacture
- Develop customer management platform
- Improve overall user experience

Deliverables

- DFM reviews, cost optimization, and supplier negotiations
- MVP of customer management platform
- Beta of HoloRange experience software

Questions addressed

- Can we hit our shooter bay cost targets (Roughly 1/3 cost per steradian of first demo)?
- Is our software ready for real customers? Is it easy to use? Does it provide comprehensible, understandable and actionable analytics?

Premium HoloRange bay cost targets

Components		
LED display	$	269,199.23
Display support	$	69,847.86
Video controllers	$	12,610.00
Render server	$	8,000.00
Optical tracking	$	11,000.00
	$	370,657.09

Note: Bay lifetime = **12+ yrs** (conservatively)

Technical obsolescence = 12+ yrs

System will render and display at or near human perception limits for resolution, color depth, and framerate.

Physical failure = 15+ yrs

LED screen, shortest lifespan component, has mean lifetime of 15 yrs continuous use at intended setting.

Phase 4b: Strategic Partnership

Note: Sverial's founders are emerging tech and product development specialists who see the need to partner with other entities to commercialize Holorange. We will begin outreach when we have compelling physical demos and understanding of launch costs.

Objectives

- Identify strategic partner(s); enter negotiations
- Determine market entry approach
- Establish business and tech infrastructure rollout

Deliverables

- Preliminary commercial and operating plan
- Preliminary marketing + branding materials, draft pricing
- Early partnership and funding agreements

Questions addressed

- With whom will we work to commercialize the product?
- How will we bring it to market?

Phase 5: Go to Market

Objectives

- Launch HoloRange product in a high-profile flagship location
- Optimize operational processes and gather customer feedback
- Position HoloRange as premier immersive experience

Deliverables

- Real customers using the product
- Final integration of all operational systems
- Comprehensive commercial and operational planning
- Comprehensive marketing and branding plan, refined pricing model

Questions addressed

- Flagship venue meeting expectations and performance standards?
- Operational challenges and resolutions during initial launch?
- Impact of additional services on customer satisfaction and operating margin?
- Strategies for continued market growth and user engagement post-launch?

LEDs ready for assembly into spherical form

Next Steps

With the research and design phase now nearly complete, Sverial is raising $750k+ in seed financing structured as a $4M post-money SAFE

Use of proceeds: complete phase 2 (First Demo)

- Purchase, set up, and test first proof-of-concept demo system
  - 3D curved screen “slice” with 124° x 60° coverage
  - Screen hardware is selected and ready to order today
- Develop/integrate V1 software, test environments, hardware
- Design initial interactive components: gameplay, UI, and UX
- Produce demo video for investor outreach
- Fund lean operations

Notes

- First demo system will be available for initial investor review within 3-4 months of funding close
- Phases 3 and 4 will be funded through post-money SAFEs as well
- Phase 3 funding proceeds estimated to be $1.5 - 3M
- Mechanism for funding phase 5 (go to market) and beyond TBD

Contact Bo Lasater (bo@laurellabs.com) or Greg Easley (greg@laurellabs.com) for more information

Phase 1 "First Demo" Budget

Equipment & Materials	
Server	$8,000
Display pipeline	$7,500
Partial dome	$200,000
Tracking systems	$15,000
Software licensing	$7,500
Miscellaneous	$10,000
	$248,000
Development	
Integration and tuning	$60,000
Hardware engineering	$60,000
System development	$50,000
Content creation	$25,000
Demo visualization	$25,000
	$220,000
General & Admistrative	
Software licensing	$7,500
Real estate	$30,000
Travel & lodging	$80,000
Administrative	$20,000
	$137,500
Contingency (25%)	$151,375
Total	**$756,875**

Thank you!

For more information contact Greg Easley: greg@laurellabs.com

Appendix

Previous Work

Sverial founders have produced hundreds of immersive entertainment events, including over 50 dome projects, plus dozens of VR experiences, video games, and connected hardware products for partners and clients worldwide:

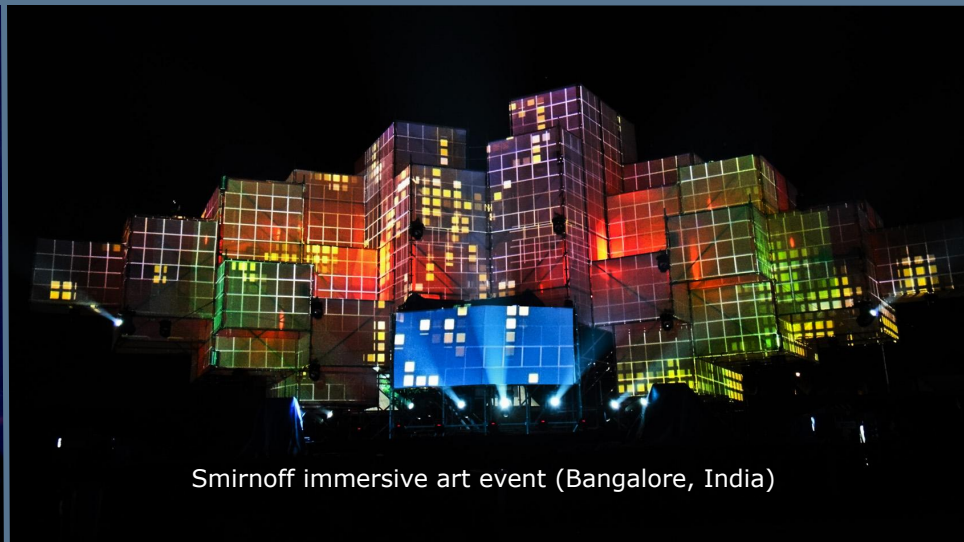
- ABC, Fox Sports, NBC Sports, Red Bull, Viacom
- Amsterdam Schiphol Airport
- AT&T, Microsoft, Samsung
- Bob Weir, Childish Gambino, Deadmau5, Pharrell
- Electronic Arts (*Design Home, Covet Fashion, Sims*)
- Kixeye (*Backyard Monsters, Knights of War*)
- Formula E, Major League Baseball, NASCAR, NBA, NFL
- Making Fun (*Eternium*)
- Mattel (*Barbie High School Mystery*)
- Six Waves (*Yakuza Lords, Kaos Wars, Dante's Inferno*)
- Sony (*Rat Race*)

The following slides feature highlights from previous projects

Red Bull three-story interactive screen (Los Angeles, CA)

Pharrell concert at Coachella (Indio, CA)

Deadmau5 show at Glastonbury Festival (UK)



Smirnoff immersive art event (Bangalore, India)

360º VR shoot for Fox Sports and NFL (Charlotte, NC)

360º VR shoot for Fox Sports and NFL (Arlington, TX)

360º VR live stream for AT&T Final Four (Indianapolis, IN)


360º VR for Samsung with Outside TV (Aspen, CO)


360º VR shoot with Red Bull aerobatic helicopter (Los Angeles, CA)

3D VR live stream for Jimmy Kimmel at SXSW (Austin)

360º VR shoot for Fox Sports and NASCAR (Charlotte, NC)

360º VR shoot with Bob Weir and Lukas Nelson (San Rafael, CA)

Hawk 2 live-stream 360º VR camera developed by RTI

Shotgun Sports Segmentation

Profile Name	Age	Income	Gender	Share	Key Interests
Tournament shooter (competitive clay shooter) key = *competitor*	25–60	$75K–$150K+	~85% male, 15% female	15%	Trap, skeet, sporting clays, high-performance shotguns
Hardcore waterfowler (waterfowl hunter) key = *waterfowler*	18–55	$50K–$125K	~90% male, 10% female	25%	Duck and goose hunting, weather-resistant shotguns, camouflage gear
Heritage upland hunter (traditional bird hunter) key = *upland_hunter*	40–70	$100K–$250K+	~95% male, 5% female	10%	Classic shotguns, upland bird hunting, guided hunts
Tactical defender (home defense shooter) key = *defender*	25–55	$40K–$100K	~80% male, 20% female	30%	Home security, tactical shotguns, accessories (lights, red dots)
Weekend warrior (rec shooter) key = *duffer*	18–50	$35K–$90K	~75% male, 25% female	20%	Casual target shooting, fun and affordable shotguns

Early Assumptions

Pricing Analysis

Sverial offers high-performance skill development like GOLFTEC and private golf lessons — but with greater entertainment crossover

Entertainment comps: Cosm, Sphere, Imax

- Sverial equals or exceeds immersion levels found in premium movie theaters and “shared-reality” shows
- Interactivity and physicality are key differentiators

Experiential pricing ceiling

- Elite experiences like heli skiing and wave pool surfing cost $400–$1,000 per hour, validating ultra-premium potential for private and small-group buyouts

Sverial occupies a unique premium niche

- More immersive than VR, more physical than gaming, more accessible than live fire
- This supports high customer spend and strong potential for memberships, group bookings, brand partnerships

Activity	Low	High	Unit
Indoor tennis	$20	$84	per hour
Private golf lesson	$50	$200	per hour
Golf round (resort or club)	$75	$500	per round
GOLFTEC coaching	$125	$200	per hour
Cosm ticket ("shared reality" venue)	$33	$83	per game
NFL ticket	$50	$582	per game
NBA ticket	$50	$600	per game
Imax ticket	$15	$30	per movie
3D movie ticket (Avatar)	$16	$16	per movie
Taylor Swift ticket	$49	$899	per concert
Broadway theater ticket	$120	$998	per play
Las Vegas Sphere concert	$170	$300	per concert
Ski lift ticket	$17	$50	per hour
Heli skiing	$233	$417	per hour
Kelly Slater Wave Pool	$833	$1,167	per hour
Shooting range	$20	$100	per hour
Skeet shooting	$50	$100	per hour

Early Assumptions

Revenue Model

Revenue is driven by walk-in sessions, monthly memberships, and premium group sales

Model highlights

- Blended ARPU: combination of walk-ins, memberships, and group sales creates a diversified revenue base
- Premium pricing: walk-in pricing exceeds traditional shooting ranges and movie theaters
- Recurring membership revenue: Even at modest levels, membership builds predictable revenue foundation
- Operational efficiency: Time-limited session durations streamline staffing, scheduling, and maintenance
- Expansion path: Model can be cloned in key markets or operated under licensing/franchise agreements
- Upsells: instructor-led sessions, branded gear, F&B, tournaments, and brand partnerships

Monthly attendance model		Monthly revenue model	
3D immersive domes	2	**Walk-in sales**	
Capacity per dome	4	Monthly walk-ins	5985
Operating hours/day	10	Walk-in ticket price	$60
Occupancy rate	70.00%	**Total walk-in sales**	$359,100
Capacity	2400		
Attendance	1680	**Membership sales**	
		Monthly members	250
3D single-player rooms	6	Membership fee	$150
Capacity per room	1	**Total membership sales**	$37,500
Operating hours/day	10		
Occupancy rate	70.00%	**Group sales (corporate, clubs, etc)**	
Capacity	1800	Monthly group sessions	399
Attendance	1260	Group fee per participant	$100
		Total group sales	$39,900
3D multi-player rooms	4		
Capacity per room	6	**Food/bev sales**	
Operating hours/day	10	Total monthly attendance	7,980
Occupancy rate	70.00%	Food & bev spend/person	$30
Capacity	7200	**Total food/bev sales**	$239,400
Attendance	5040		
		Other revenue	
Total attendence	7,980	Gun rentals	$49,248
		Merch/accessory sales	$28,728
Walk-ins	75.00%	**Total other revenue**	$77,976
Members	20.00%		
Groups	5.00%	**Gross revenue/month**	$753,876