HorizonSync: Real-time Peer Perspective Platform

Product Vision & Value Proposition

The Future of Shared Focus. HorizonSync transforms collaboration from merely seeing each other to truly seeing with each other. It’s the invisible handshake that locks two remote views onto a single, objective reality.

We enable "deep collaboration" by digitally aligning perspectives, ensuring that when discussing a blueprint or a physical object, both users observe the same scale and spatial relationships—making miscommunication regarding orientation obsolete.

Unique Selling Points:

Zero-Bias Perspective: Automatically corrects geometric distortions and viewing angles to unify the visual plane.

Enhanced Precision: Critical for industries where millimeters matter (engineering, manufacturing, diagnostics).

Inevitable Immersion: Delivers a level of presence that current 2D video feeds cannot replicate, making remote work feel truly collaborative and seamless.

Consumer & Market Impact

Primary User Personas & Solved Pain Points:

1. The Distributed Engineering Team (Enterprise): Pain Point: Inefficient remote design reviews due to difficulty in visualizing shared spatial contexts and scale discrepancies. Solution: HorizonSync provides immediate, trustworthy visual consensus on complex 3D models or physical prototypes.

2. The Virtual Medical Trainer (Education/Healthcare): Pain Point: Inability to accurately guide a remote trainee's attention to a specific point during a procedure simulation, leading to confusion. Solution: The platform ensures the trainee sees the instructor's focal point precisely as intended.

3. The Hybrid Field Service Technician (Non-Obvious): Pain Point: Receiving complex maintenance instructions from a remote expert whose perspective of the machine differs significantly from the technician's on-site view. Solution: Synchronization guarantees the expert is seeing exactly what the technician is seeing in relation to the machine components.

Testimonial Quotes:

“This completely changes how we approach international design iteration. It feels like we are finally in the same room.”

“No more guessing what the other person is pointing at. Feels like something from the future.”

Feasibility Assessment

TRL & BRL Overview: NASA's TRL (Technology Readiness Level) assesses how mature the underlying technology is (1=Basic principle observed, 9=Proven in operation). KTH Innovation's BRL (Business Readiness Level) assesses how mature the commercial viability and business model are (1=Idea formation, 9=Market launch & scaling).

Technological Readiness Level (TRL): 3 (Experimental Proof of Concept)

Why TRL 3: The basic principles of perspective correction algorithms (involving computer vision and spatial mapping) have been formulated, but we lack experimental proof that real-time, zero-latency horizon alignment is consistently achievable across varied hardware and environments.

Next TRL Stage: TRL 4 (Component and/or breadboard validation in a laboratory environment). This involves building a dedicated prototype rig to prove the synchronization mechanism works effectively under controlled conditions.

Business Readiness Level (BRL): 2 (Concept Validation)

Why BRL 2: The market problem (perspective bias in remote work) is clearly identified, and the solution is architecturally defined. However, early-stage user needs confirmation and preliminary customer segmentation are pending. The pricing model and competitive analysis are superficial.

Next BRL Stage: BRL 3 (Targeted Customer Validation). Focus shifts to interviewing potential pilot users (e.g., mid-sized engineering firms) to confirm willingness to pay and feature prioritization.

Prototyping & Testing Roadmap

Phase 1: Minimum Viable Synchronization (6 Months)

Develop an **MVP** focused solely on core horizon alignment for two fixed users using standardized camera setups.

Internal stress testing of latency and perspective drift robustness.

Phase 2: Targeted Field Trials (9 Months)

Launch **private beta trials** with 5-10 early adopter teams in the engineering sector, focusing on collaborative annotation on 2D shared documents (BRL progression).

Iterative refinements based on usage feedback, particularly addressing real-world environmental variables (lighting, camera shake).

Phase 3: Platform Expansion & Model Validation (12 Months)

Integrate broader hardware compatibility (laptops, AR/VR headsets).

Parallel business model validation: Test subscription tiers (e.g., Basic Team vs. Enterprise Precision) against validated usage data from beta groups.

Strategic Launch & Market Integration

Go-to-Market Strategy: B2B Precision Focus. HorizonSync will initially target high-value, high-precision sectors where spatial clarity directly translates to cost savings or risk reduction (Engineering, Architecture, Advanced Manufacturing).

Strategic Partnerships: Seek integration partnerships with major existing remote collaboration platforms (e.g., MS Teams, Zoom Enterprise) to offer HorizonSync as a premium layer for spatial tasks.

Pilot Program: Offer deeply discounted "Precision Alignment Pilot" packages to major international firms known for distributed design teams.

Macrotrend Integration:

Future of Remote Work: HorizonSync positions itself as essential infrastructure, moving remote work beyond basic communication toward complex, shared physical tasks.

Spatial Computing Evolution: Provides a critical utility layer, making upcoming consumer and enterprise AR/VR deployments immediately more useful for co-presence and instruction.

Next Step:

Secure seed funding to hire two specialized Computer Vision Engineers capable of developing the core TRL 4 prototype (dedicated spatial mapping and perspective correction algorithms).