



ImmerComm, revolutionize the way you call

Team Members

- **Hu Yingdong**, Project Leader and Technologist at ImmerComm. Hu Yingdong is currently a PhD student at the Hong Kong University of Science and Technology, specializing in next-generation communication technologies. He has been dedicated to 3D reconstruction and holographic communication since his undergraduate studies.

Project Overview

The ImmerComm Project is an innovative initiative aimed at revolutionizing the way people connect and communicate in both personal and professional settings. By leveraging cutting-edge technologies in 3D reconstruction and holography, we aspire to create a 3D teleconferencing solution that offers an unparalleled immersive experience. Our system will enable users to engage in real-time, lifelike interactions that transcend the limitations of traditional video conferencing tools.

The project addresses critical challenges such as instant realistic reconstruction, bandwidth optimization, computational efficiency, and user accessibility, ensuring that our holographic communication system can be utilized effectively on edge devices like smartphones. In addition to developing the technology, we will conduct a comprehensive market analysis to understand the landscape of immersive communication and identify potential business models. Through this project, we aim to not only enhance communication quality but also raise awareness of the transformative potential of holographic technology in everyday interactions.

Market Analysis

Overview

The market for immersive communication technologies is rapidly evolving, driven by advancements in augmented reality (AR), virtual reality (VR), and 3D technologies. As remote work and virtual interactions become more prevalent, there is a growing demand for enhanced communication solutions that provide a more engaging and realistic experience.

Industry Trends

- **Growing Demand:** As hardware equipment becomes lighter and much more convenient to purchase, the global market for teleconferencing and virtual communication solutions is expected to grow significantly, with increasing adoption in the corporate, educational, and social sectors.

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- **Technological Advancements:** Innovations in 3D reconstruction, bandwidth optimization, and edge computing are paving the way for more accessible and efficient holographic communication systems. Our technology, especially, provides a solution for immersive and realistic communication.
- **User Expectations:** In this situation, consumers are seeking immersive experiences that traditional teleconferencing cannot provide, including spatial audio and realistic avatars.

Competitor Analysis

Currently, the market lacks comprehensive holographic communication solutions. Existing products focus on basic 2D teleconferencing and do not offer the depth of interaction that holographic systems can provide. This presents a unique opportunity to establish a first-mover advantage in the holographic communication space.

Our Product

Holographic Communication System

Based on software and hardware systems developed in our laboratory, our product is a cutting-edge holographic communication system aiming to redefine teleconferencing. Key features include:

- **Real-Time Realistic 3D Reconstruction:** Utilizing advanced algorithms to create realistic 3D representations of participants, our product provides a realistic human representation and instant communication experience for the customers.
- **Bandwidth Optimization:** Using human models derived from large Internet data as prior information for all users, our product reduces the required communication bandwidth, making the solution user-friendly and accessible on standard devices.
- **Edge-Device Compatibility:** Our product is designed to operate effectively on edge devices. All kinds of computers are expected to be launched, including smartphones, laptops, and desktops, with regular screens and only one camera needed, ensuring widespread usability.
- **Privacy Protection:** We prioritize user privacy by implementing robust encryption protocols for all data transmissions. Users have full control over their holographic representations, including the ability to customize visibility settings and manage sharing permissions. Additionally, our system adheres to stringent data protection regulations, ensuring that personal information remains secure and confidential.

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Expected Deliverables

- Prototypes of the holographic communication system.
- Comprehensive market analysis focusing on immersive communication and telepresence.
- A viable business model for holographic communication systems.

Target Customers

Primary Segments

- **Corporate Clients:** Businesses seeking enhanced communication tools for remote meetings, training sessions, and presentations.
- **Educational Institutions:** Schools and universities looking for innovative solutions for remote learning and collaboration.
- **Healthcare Providers:** Telemedicine applications requiring high-quality patient interactions.
- **Tech Enthusiasts and Early Adopters:** Individuals interested in the latest communication technologies and experiences.

Customer Needs

- Desire for more engaging and realistic interaction.
- Demand for accessible and user-friendly communication tools.
- Interest in innovative solutions that enhance productivity and collaboration.

Business Model

Revenue Streams

- **Subscription Model:** The holographic platform is free to use, but monthly or annual subscriptions are required for individuals and businesses to for a better holographic communication quality.
- **Multi-Personal Teleconferencing Payment:** Dual communication is free, but subscriptions are required for teleconferencing with more than two people;



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- **Licensing Fees:** Licensing the technology to other companies for integration into their products and services.
- **Consulting Services:** Offering expertise in implementing holographic communication systems for businesses and institutions.

Marketing Strategy

- Cultivate a core fan group of 500 people. Recruit the first batch of senior tech - savvy players through social media and have them participate in product development and feedback. This not only enhances their sense of participation but also builds a solid user base for the brand. (The main battlefield is universities.)
- Rapidly increase the market share in first - and second - tier cities. After the formation of the word - of - mouth effect, pool all resources, manpower, and management to expand market share. (At this time, first - and second - tier cities will be the main battleground.)
- After the market share reaches over 70%, pursue positive profitability. Through measures such as financial management, human resources management, and process management, achieve the company's positive profitability. (At this point, the main challenge will come from within the company itself.)

Research and Development Plan

Objectives

- Develop a functional prototype of the holographic communication system.
- Conduct thorough market research to identify customer needs and preferences.
- Explore potential business models and strategies for market entry.

Timeline

1. Phase 1 (0-6 Months):

- Conduct initial research on technology and market.
- Begin development of the prototype.

2. Phase 2 (6-12 Months):

- Test and refine the prototype based on user feedback.



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- Conduct market analysis to identify opportunities and challenges.

3. Phase 3 (12-18 Months):

- Finalize the prototype for commercial launch.
- Develop marketing strategies and business model based on research findings.