TwinHome

Digitizing physical spaces for online collaboration

twinhome.online

What exists today and gets better in the future

- LIDAR scanning has already come to consumer devices (iPhones) and may penetrate deeper into day to day gadgets. Precise (3d) scanning will get cheaper and accessible in the days to come
- AI models are becoming increasingly precise and commonplace. What is being scanned can be identified, like is it a sofa, chair etc
- Gaming platforms like Unity / Unreal Engine provide an easy to use platform for interacting with 3d models

Our solution builds on these growing trends and we believe that LiDAR on Phone enables a large ecosystem what GPS enabled on Phone 15 years ago.

Why do we need TwinHome?

The user generated content like Youtube is a big platform today. We anticipate the same for 3d models in the next 3-5 years

Many of the small businesses, retail / warehouses and other business workflows will be digitized in the form of 3d models

What we need is a framework which can easily manipulate (move and interact) these models , share components with an easy to use mobile application or web interface

What is TwinHome?

TwinHome is a Software As a Service (SaaS) which can be accessed using a mobile phone / web based interface that allows users to import a 3d Model of a physical space, invite others to collaborate in that model. Examples of collaboration could be for locating / finding objects in the physical space via the virtual copy, share methods of organizing and manipulation of the physical environment via virtual copy for training and remote collaboration purposes.

What is the market size for TwinHome?

Global market size for Team collaboration software was more than 20 Billion USD in 2021

Building Information Modeling Market Size is going to be more than 10 Billion USD by 2026

The global User Generated Content market was more than 3.5 Billion USD in 2021

Collaborative Robot market size is estimated to be more than 10 Billion USD by 2027

TwinHome is a solution which is an overlap of the above four market segments. We estimate it to be an enabling technology to power several billions of dollars of use cases in next 10 years for small and medium businesses/ individuals as they digitize their physical environments and collaborate with their teams, customers and robots.

User Story : Locating something in a physical space in collaboration with another person 2023

Arun who is a new intern in the workshop needs to find the right screw for a machine part he is working on. He calls his boss Suresh with the question. Suresh has already digitized the workshop and have the model in TwinHome application. He opens the TwinHome app and locates the box where the desired screw is stored and sends the link to Arun over whatsapp.

Arun opens the whatsapp link which opens the TwinHome app on his phone and he can now see the exact location of the storage box where the desired screw is stored with navigation guidance.

User Story : Locating something in a physical space in collaboration with a robot in 2026

Sunita lives alone and is a 65 years old. She has a collaborative robot (rita) which her son brought to her in helping her in day to day task like lifting household items and other chores.

She is in her living room and has some friends visiting her and she wants to show them a jewelry box she recently purchased on her travels. Which is in the bedroom. She opens the twinhome app and locates the jewelry box from her virtual bedroom and share the link location with rita, Rita is able to know the precise location of the desired object and is able to bring the object to Sunita and her friends while they enjoy their cup of tea in the living room.

Demo Video

Team

How can you help?