# INFRAAMINDS

IMPROVISING
INFRASTRUCTURE
INTELLIGENCE

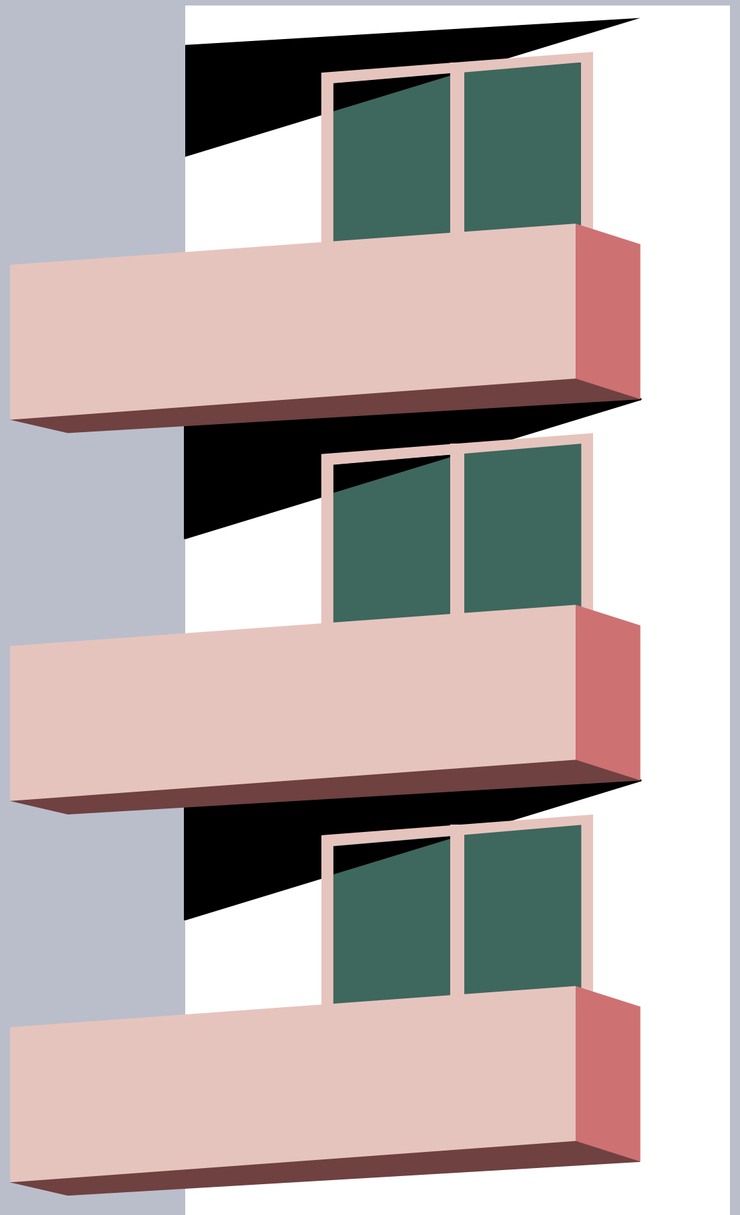
# INFRAAMINDS

## OUR MISSION

To democratize and simplify infrastructure planning by making intelligent design, cost estimation, and architectural experimentation accessible to everyone—homeowners, architects, and builders—at a nominal price.

## OUR VISION

To become the leading digital platform that empowers all stakeholders in the construction ecosystem to make smarter, faster, and more informed infrastructure decisions, bridging the gap between technology and traditional architecture.



INFRAAMINDS

# PROBLEM

**Limited Experimentation:**
Homeowners and small builders often have no way to visualize or experiment with different architectural layouts before engaging an architect, leading to missed opportunities and dissatisfaction.

**Inefficient Communication:**
Multiple design iterations with architects can be slow, costly, and frustrating, resulting in delays and increased expenses.

**Complexity & Accessibility:**
Designing a building, estimating costs, and ensuring compliance with local regulations is complicated and intimidating for non-professionals. Users must also consider fire safety laws and seismic regulations, making the process even more challenging without expert support.

**High Costs:**
Professional architectural services are expensive and out of reach for many, especially for those who just want to explore ideas or get rough estimates.

INFRAAMINDS

# SOLUTION

**AI-Powered Design:**
Users input plot details, Vastu and personal preferences, number and type of rooms, and sustainability needs.

**Interactive Layout Editor:**
Instantly preview, edit, drag, and resize rooms on the architectural layout. Make changes via chatbot prompts or manual adjustments.

**Professional Reports:**
Automatically generated, downloadable reports with layouts, cost breakdowns, and compliance notes.

**Smart Recommendations:**
Users receive actionable advice on design, compliance, and cost optimization.

**Central Dashboard:**
All conversations, layouts, and reports are saved and accessible for future reference or sharing.

**Instant Cost Estimation**
Our AI models analyze regional municipality regulations and real-time market trends to provide accurate construction cost predictions, including compliance with essential fire safety standards such as fire exits, alarms, and sprinkler systems. This ensures every estimate is both regulation-ready and safety-focused, tailored for each project's location and requirements.

**Accessible & Affordable:**
Designed for ease of use and available at a price point accessible to all.

INFRAAMINDS

# USER PERSONAS

**Homeowner (Rajesh, 30)**

- Recently purchased a plot with no architectural background.
- Wants to visualize different home layouts, understand costs, and feel confident before meeting professionals.
- Seeks a user-friendly, affordable tool to experiment with ideas.

**Architect**

- Professional designer working on multiple projects.
- Needs rapid prototyping tools to generate layouts and cost estimates.
- Wants to offer clients modern, AI-driven options and stay updated with trends.

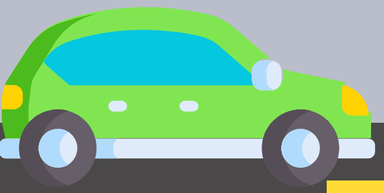
**Builder**

- Manages several construction sites and teams.
- Requires fast, accurate cost predictions and layout options for efficient planning.
- Seeks to streamline project discussions with clients and architects.

# USER JOURNEY

**Discover & Login**
Rajesh, a 30-year-old plot owner, logs into Infraaminds after hearing about it online.

1



**Chatbot Interaction**
He is greeted by a friendly chatbot interface and a layout/report generation panel.
He tells the chatbot his plot size, Vastu preferences, number and type of rooms, and any special requirements like sustainability features.

2

**AI-Driven Output**
Within seconds, the AI generates a customized architectural layout and a detailed professional construction report, including cost estimates, compliance notes, and smart recommendations.

3

**Experimentation & Iteration**
Rajesh tries out different ideas, tweaks room sizes, and rearranges layouts using both the chatbot and the drag-and-drop editor.
All his designs and conversations are automatically saved to his dashboard.

4

**Collaboration & Sharing**
Rajesh now has multiple layouts and reports ready to discuss with his architect or builder, making the professional consultation more productive and informed.

5

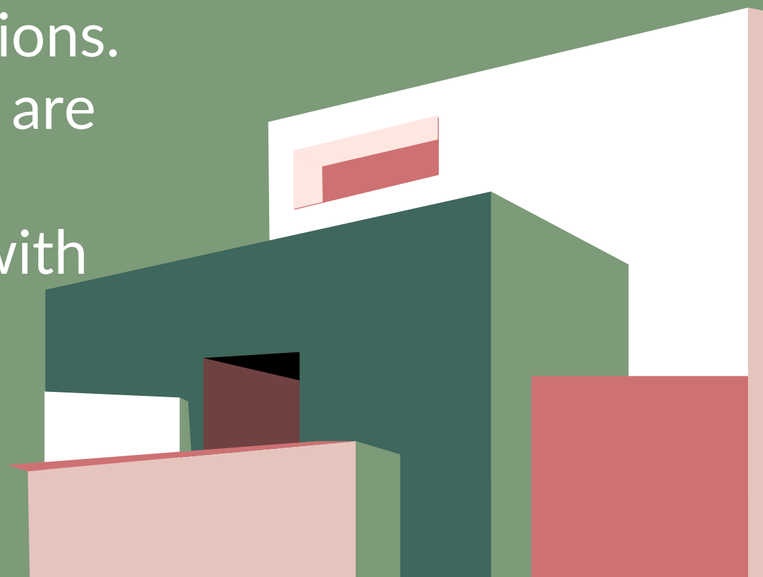
**Architects and builders** can use the same process to quickly generate and iterate on layouts, get cost predictions, and stay aligned with client expectations.

INFRAAMINDS

INFRAAMINDS

# PROTOTYPE

- **Editable Layout Preview:** Visual editor to drag, resize, and modify rooms in real time.
- **AI Chatbot:** Interactive assistant for gathering requirements, answering queries, and making instant design changes.
- **Professional Report:** Downloadable PDF with cost breakdown, compliance details, and smart recommendations.
- **Dashboard:** All user sessions, layouts, and conversations are saved for easy access and sharing.
- **Collaboration Tools:** Share layouts and reports directly with architects and builders.



# DEMO

INFRAAMINDS

## Infraabot Chat

Generate a layout in this format:\n(91,157)(47,157)(47,113)(91,113), living_room: (209,143)(121,143)(121,69)(209,69), kitchen: (165,187)(106,187)(106,157)(121,157)(121,143)(165,143)\n\nA house with two bedrooms and a kitchen adjacent to the living room:

bedrooms and a kitchen adjacent to the living room:

Send

Add Room

Plot Width: 1000 Plot Height: 800

## Layout Preview

Send a prompt to see your layout!

# DASHBOARD

INFRAAMINDS

## Your Project Dashboard

Manage all your construction planning reports in one place.

JS

**John Smith**
test@example.com

- Back to Home
- My Projects
- Account Settings
- Admin Dashboard
- Notifications
- Help & Support

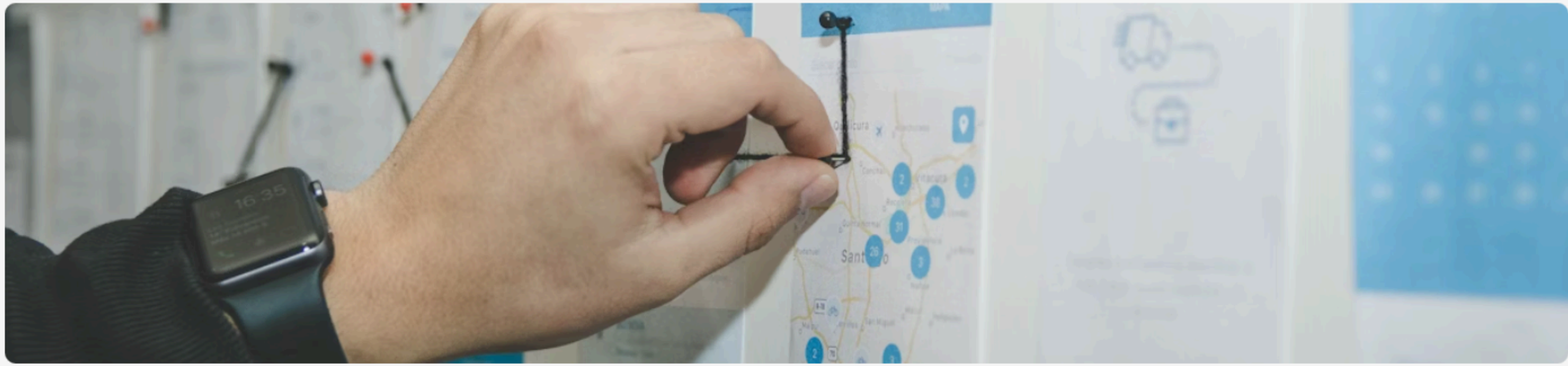
### Quick Stats

| | |
|---|---|
| Projects | 8 |
| Storage Used | 32 MB / 50 MB |
| Subscription | Free Tier |

### My Construction Reports

Search reports...

+ New Project



#### Residential - raipur

Completed

Created on 5/21/2025

Size: **3,500 sq ft**
Terrain: **Flat**
Usage: **Residential**
Design: **Standard**

Project completion **46.25%**

#### Residential - Bangalore

Completed

Created on 5/21/2025

Size: **261,360 sq ft**
Terrain: **Flat**
Usage: **Residential**
Design: **Standard**

Project completion **46.25%**

# CHATBOT INTERFACE

INFRAAMINDS

## Infraabot Chat

Hi John! What to build today ?

Hi Infraabot! Generate a layout of a 3BHK modern residence.

Sure. Here it is!!

Reduce the size of Bedroom 2.

Send

Add Room

Plot Width: 1000 Plot Height: 800

## Layout Preview

INFRAAMINDS

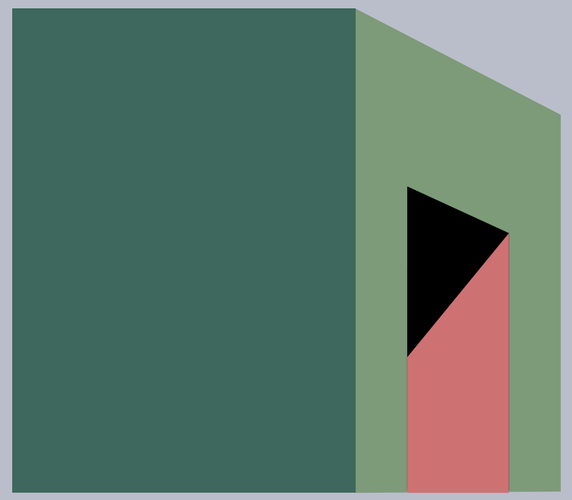
**Target Segments:** → **Homeowners, architects, builders, and real estate developers.**

# MARKET OPPORTUNITY

**Market Size:**

- The Indian home construction and renovation market is valued at over ₹2.5 lakh crore annually.
- More than 30 lakh new homes are constructed every year in India.

**Opportunity:**
Infraaminds addresses a massive, underserved market of first-time builders and small professionals seeking intelligent, accessible planning tools.



**Trends:**

- Rapid digitization of the construction and design industry.
- Growing demand for affordable, DIY, and semi-professional design tools.
- Increasing focus on sustainability, compliance, and transparent cost estimation.

INFRAAMINDS

# COMPETITIVE LANDSCAPE

**Current Solutions:**

- Traditional architects: Personalized but expensive (average ₹1–3 lakh per project) and slow.
- Generic design software: Complex, not tailored for Indian regulations or cost estimation (licenses ₹20,000+ per year).
- Manual estimation: Time-consuming, prone to errors.

**Infraaminds Advantage:**

- AI-driven, real-time, interactive platform.
- Seamless integration of design, cost estimation, and compliance.
- User-friendly and affordable, democratizing access to smart infrastructure planning.
- Saves time, reduces costs, and empowers users to make informed decisions.

INFRAAMINDS

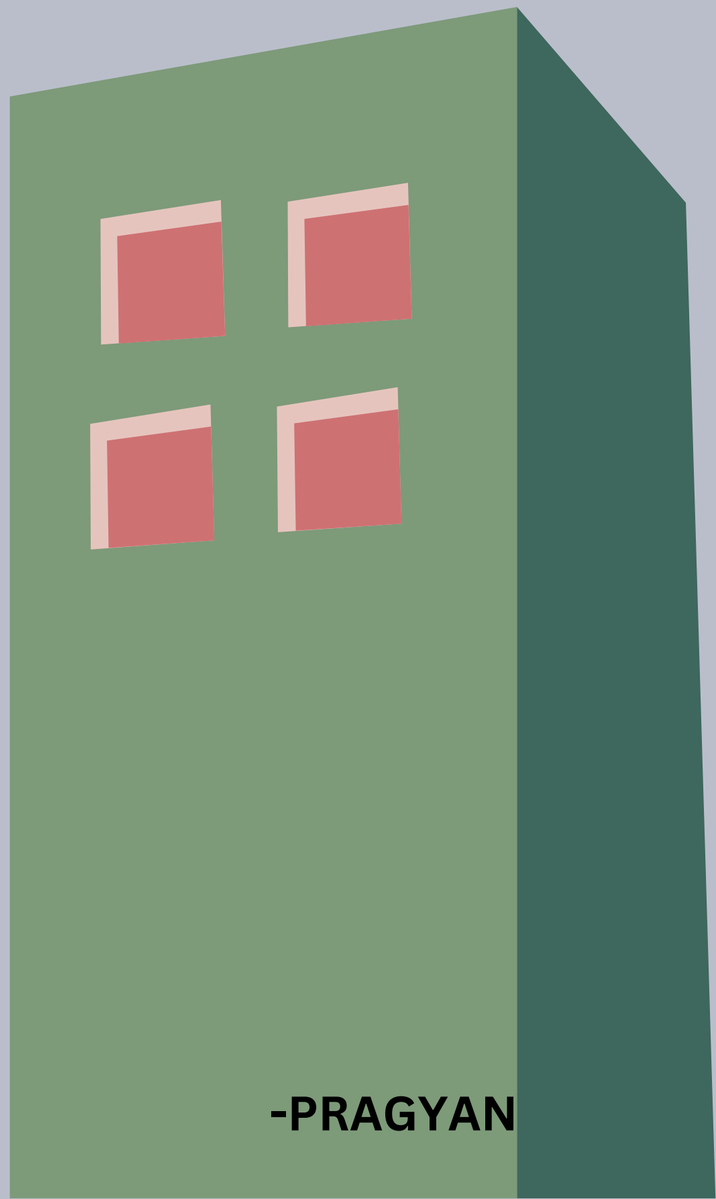
# Thank You

**Join Us in Transforming Infrastructure Planning!**

Infraaminds empowers every plot owner, architect, and builder to create smarter, more accessible designs.

Let’s build the future together: efficient, affordable, and intelligent.

**Let’s connect and shape the next generation of infrastructure!**



**-PRAGYAN**