

# Grassroot level experiments in Affordable Housing

Prof. Uday Athavankar  
IDC, IITB



**Local Dissemination Workshop**  
15th and 16th September, 2017. KRVIA, MUMBAI



Funded by the  
Erasmus+ Programme  
of the European Union

My background : Arch + Industrial Designer

Architecture practice is getting closer to ID

1. Client is not the user
2. You create building before commitments to buy
3. There is a term 'industry' connected to construction



# Structure

1. Designing a home as a cultural act
2. New approaches to urban Affordable housing
3. UN-affordable housing : Need for mad questions

# 1

See designing a home

“As a cultural act”

Cultural act

1. It is not a top down decision making
2. Accept diversity .... Investigate it, not bulldoze and
3. Yet a mass housing ..... + ID

Income group 1.5 L to 5 L

How did we study potential unwilling residents

Derived from grass-root studies of how people live

- Conflict is to deal with non-homogenous society,
- Every person is different ...
- Personas in ID.

Studying cultural issues (interviews? Ethno?)

Nobody in slum wants to talk. Time is money for them

A hand with a wooden pointer is pointing at a whiteboard. The whiteboard is covered with several colorful sticky notes in shades of pink, orange, and yellow. The notes are arranged in a structured manner, possibly representing a process flow or a project plan. The background is slightly blurred, focusing attention on the hand and the sticky notes.

## Part I

Understanding users &  
Buyer Engagement Tools

## Challenge

Slum dwellers

Could not spare time on interviews

Unwilling to answer questions

## What it does

Gamification using specially designed engagement tools

## Result

Each family spent 1.5 to 2 hrs

Talking of their needs, aspirations, and stories



A typical gamified field session

- If home is a cultural act,
- We need to spend time at grass-root to understand their culture

## Glimpses of the rich data

- How do they organise homes?  
Entrance experience?
- Privacy?
- Access to aspirations





Aspirational house  
(Listen to the language used)





# Gamification

Using specially designed group tools

# Takeaway

Rich data

Who is buying what and for what purpose?

How do they differ from each other?

How much they value different features?

How do they spend their income?

How .....





Eg. Kitchens

Space, furniture, products



# Personas

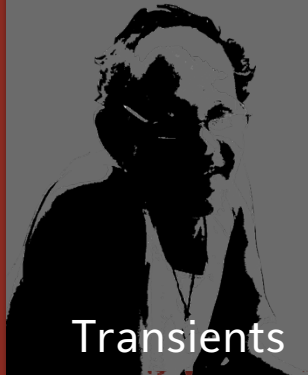
Raju Channe

35 – 55 yrs

Studied upto 4<sup>th</sup>

Laborer, tailor or  
driver

75 – 90K p.a.



Transients

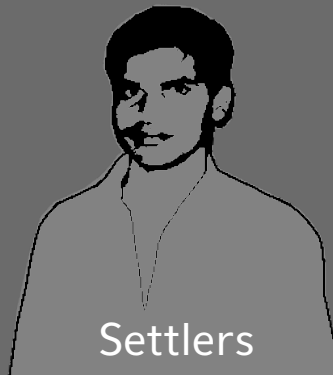
Anil Mohbe

25 - 45 yrs

Studied 5<sup>th</sup> - 9<sup>th</sup>

Skilled laborer,  
Vendor

1 – 1.5L p.a.



Settlers

Imtiaz Patel

15-25 yrs

Studied 5<sup>th</sup> - 9<sup>th</sup>

Worker, driver

48 – 96K p.a.



Hedonists

Deepak Kamle

15-25yrs

HSC or Graduate

Accountant,  
Teacher

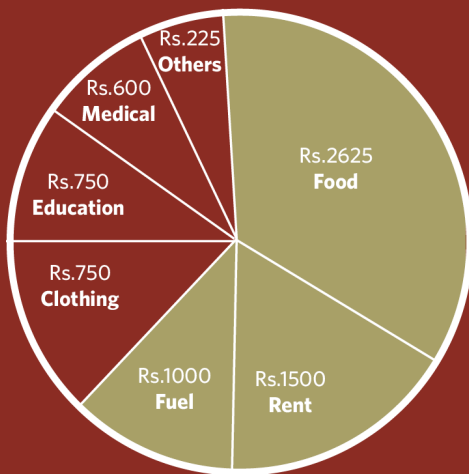
1.5L – 3L p.a.



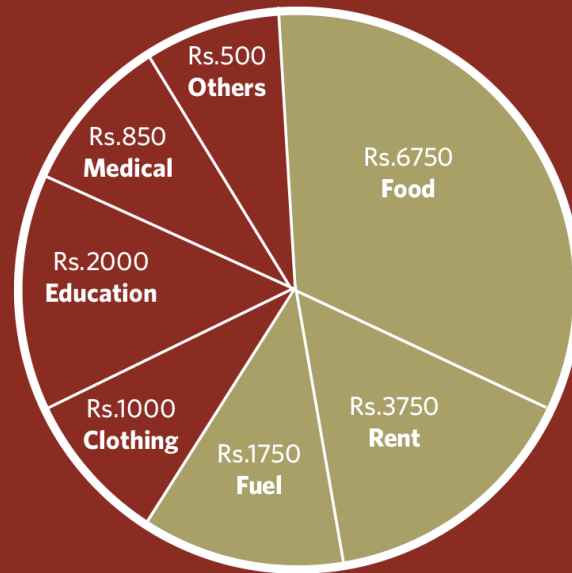
Risers

Recent Migrants

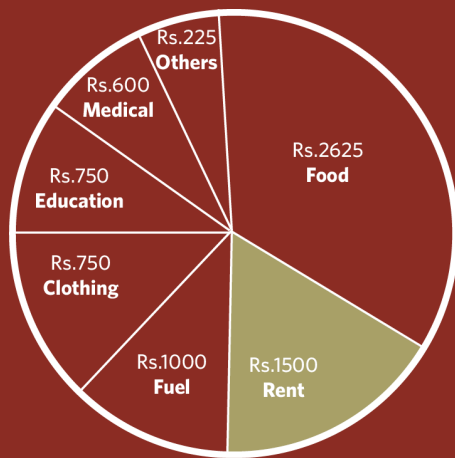
Future Migrants



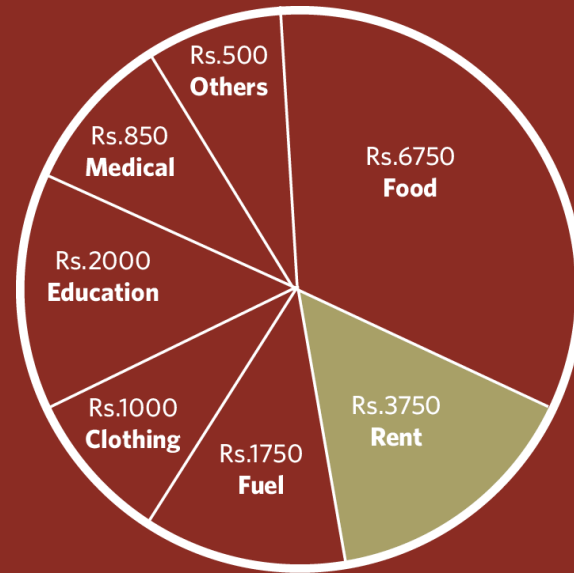
Transients Living  
@ Rs. 5,125 p.m



Settlers Living  
@ Rs. 12,250 p.m



Transients Housing  
@ Rs. 1,500 p.m



Settlers Housing  
@ Rs. 3,750 p.m

Raju Channe

35 – 55 yrs

Studied upto 4<sup>th</sup>

Laborer, tailor or  
driver

45 – 60K p.a.



## MUST HAVE

- Hassle-free service acquisition
- Ready-to-use housing and transferability
- Proximity to work place and opportunities

## WOULD LIKE

- Facilities for children (private, silent space, furniture to study)
- Frugal (low-maintenance) living

## CAN COMPROMISE ON

- Individual privacy
- Dedicated spaces



Raju's wife

35 – 55 yrs

Studied upto 4<sup>th</sup>

Housemaid

20 – 30K p.a.



## MUST HAVE

- Uninterrupted services
- Proximity to high-income households
- Flexible & transformable spaces

## WOULD LIKE

- Working-women's kitchen (compact, efficient, stand-up)
- Privacy (toilet + bath + changing)
- Childcare facility

## CAN COMPROMISE ON

- Individual privacy
- Dedicated spaces

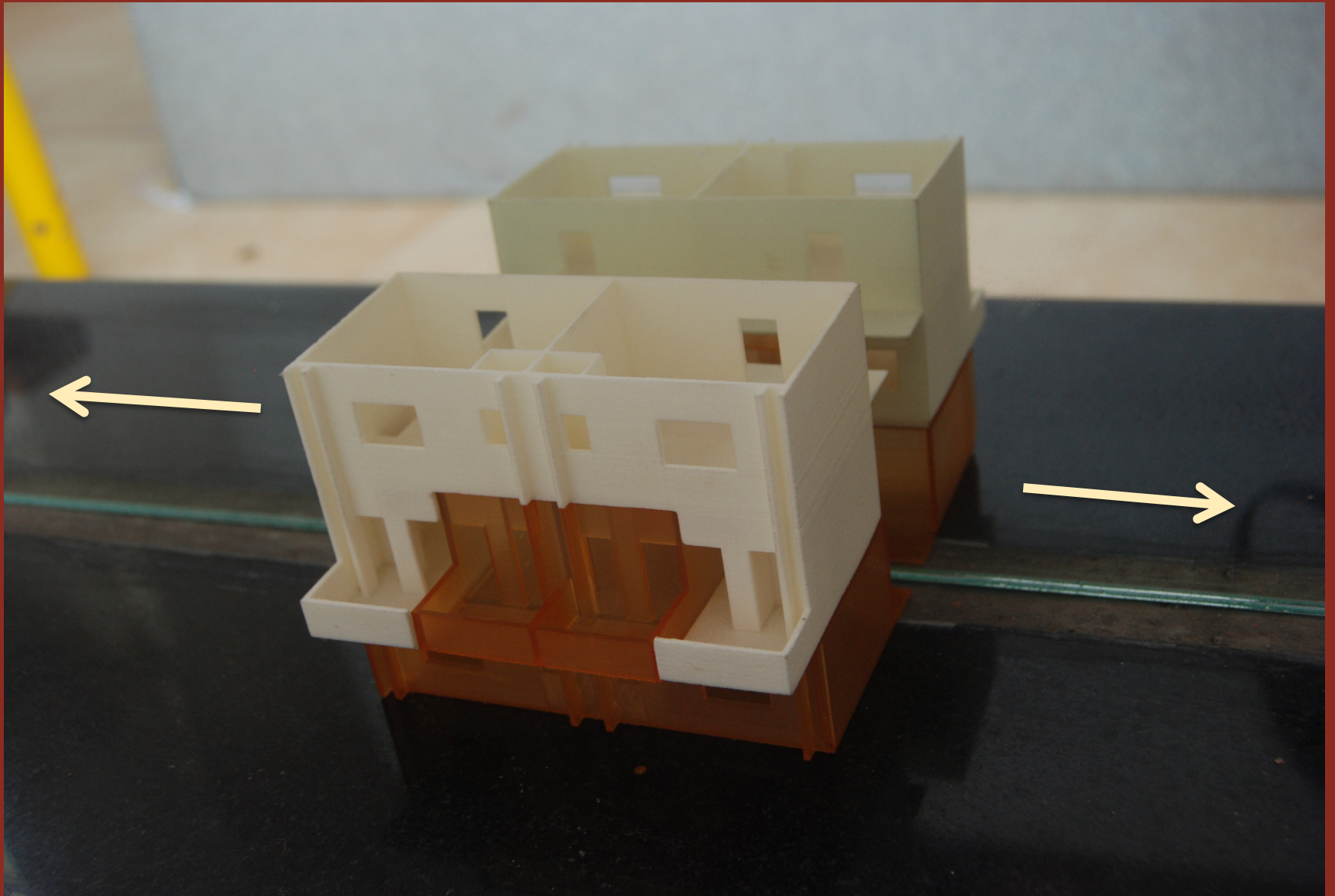


# 2

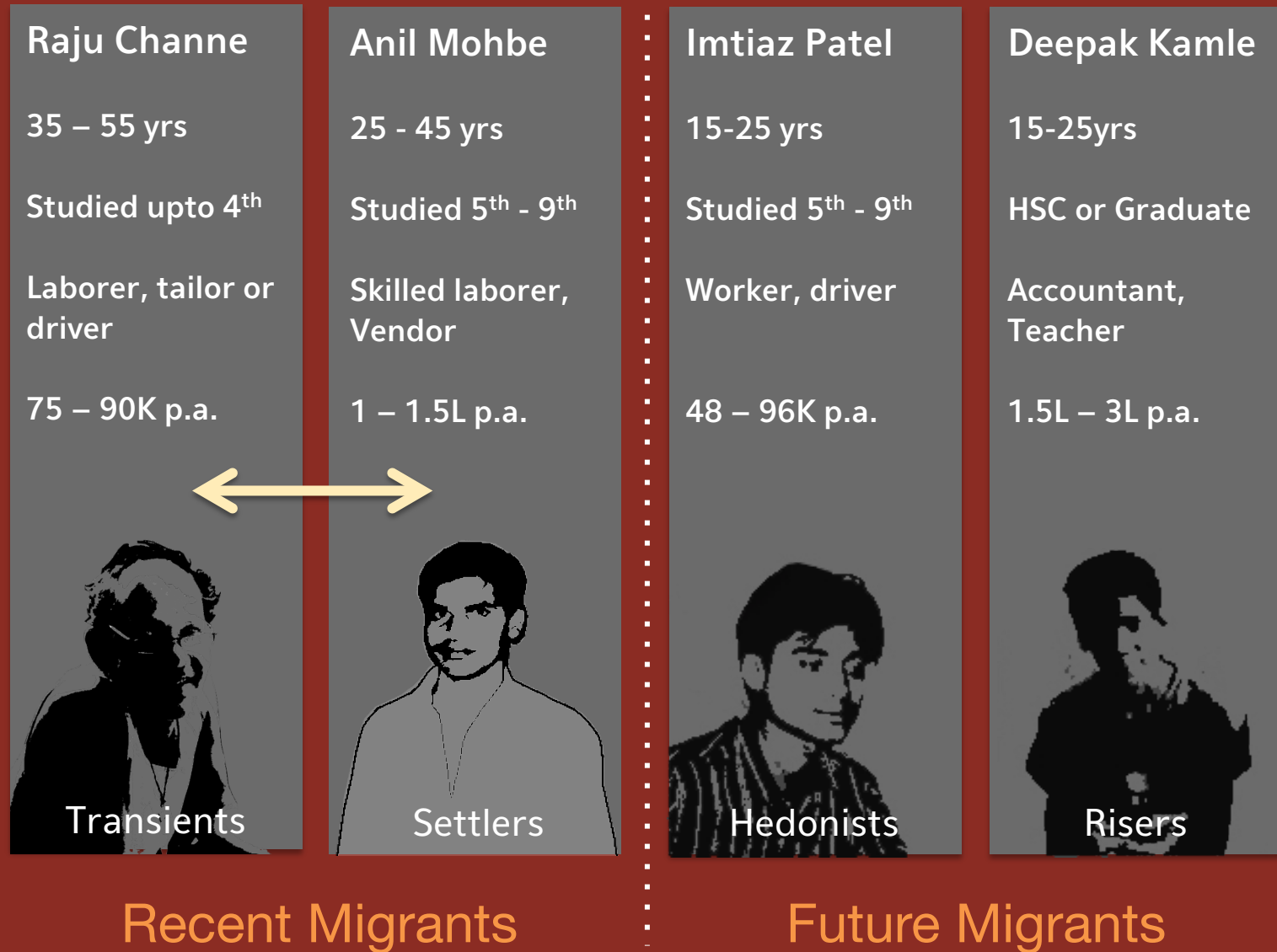
New approaches to urban Affordable housing

Reframed the problem from affordable housing to

- Affordable living
- Serviced living (added a service providers)
- Created business model for housing (15 y)



# Personas



# 4 D Living



# New approaches to urban Affordable housing

It is not just a architectural design project

We need a very large interdisciplinary team,

1. Design and technology  
(Construct. + Production + MEP)
2. Innovative business and marketing
3. Innovative legal framework
4. The team needs a bit of madness

# 3

## Un-Affordable housing : Need for mad questions

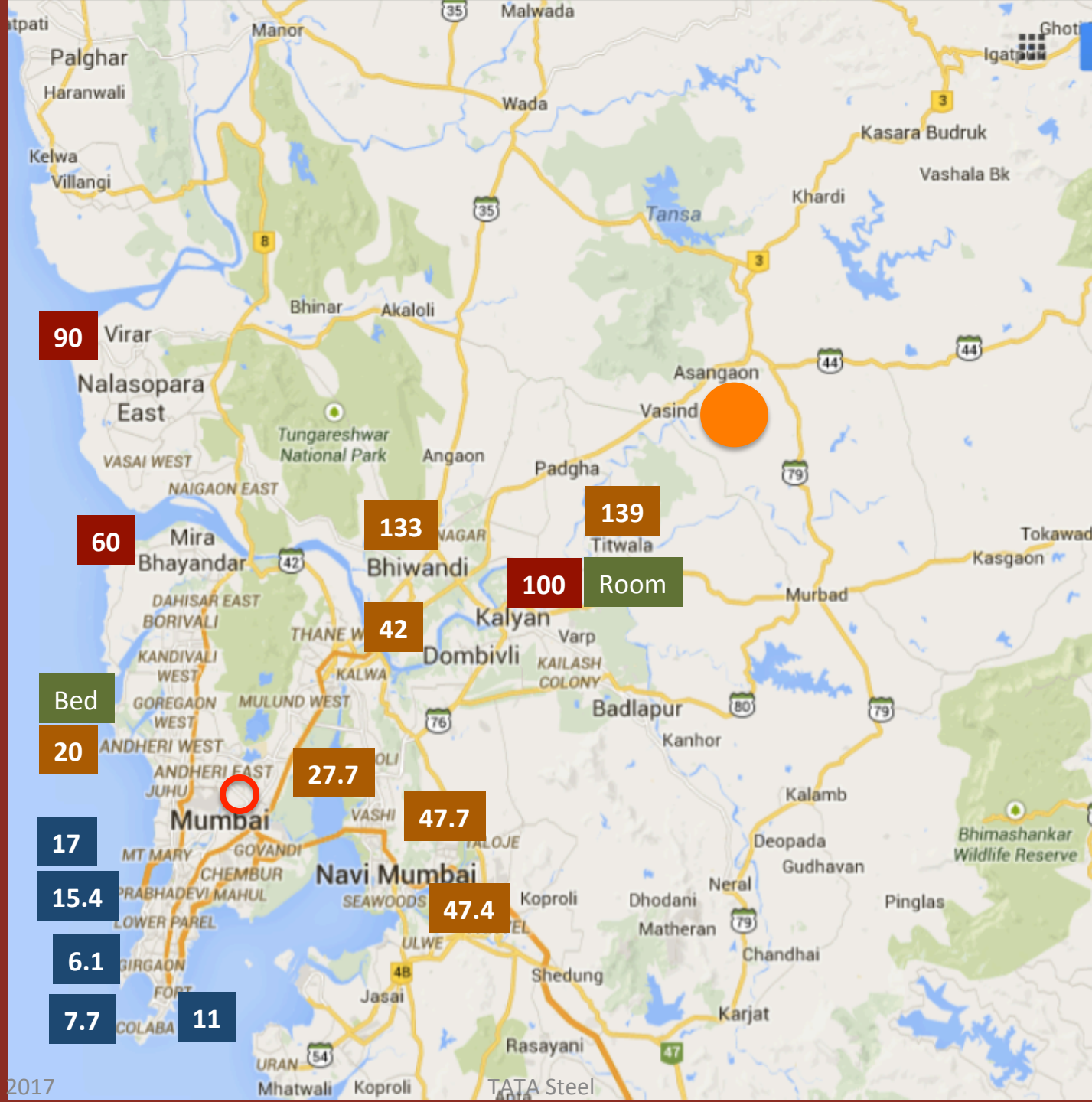
Land cost is out of control

Logical & analytical is unlikely to work.  
This project was inspired by a quote,

Some men see things as they are, and ask ..... why?  
I think of things that never were, and ask .....why not?



Size of home you can buy for Rs 5,00,000



# 3D Living: Student project

## Out-of-the-box questions

- What if we sell building space, not on a sq. ft. basis but as cu. ft. basis?
- Can we accommodate a family of SIX in 10 x 10 x 12.5 ft. with reasonable comfort?
  - (Slum houses, Tiny houses, Aircrafts, Ships, Buses, Caravans ...)
- What if IKEA decides to address this market through 'designed' furniture?





## Stage 2: Full scale flexible mockup



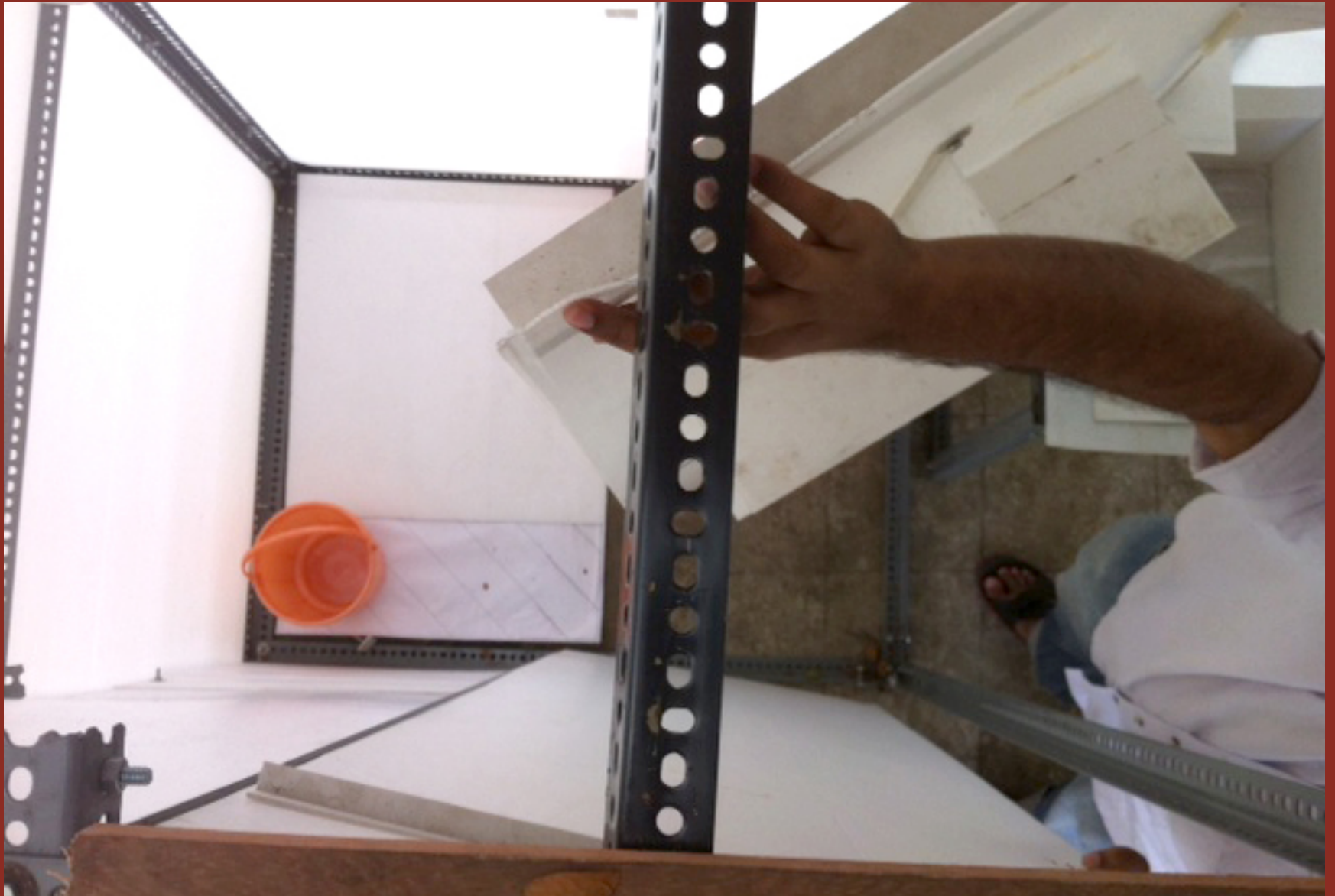














## Home as a source of income

- The top floor can be rented out to another couple/family
- The family can stay on top and use part bottom floor for commercial use
- It conserves FSI (9 sq. m.), costliest entity in Mumbai

But

- It does not meet housing standards completely
- Can be criticized as exploiting the poor





October 3, 2017

think bottom up

35















# Lessons for us

1. How to see housing as a cultural act
2. How to look at housing project as a business model
3. Desperate situations, we need to experiment with out-of-the-box solutions

Housing industry?

Has it become full blown industry?

If it has to compete on the basis of innovation / experimentation

1. It needs to invest in experimenting
2. Not ape western models of living but  
Explore several new ways of urban living
3. Venture capital approach

Then the transition in the housing industry will be complete

- Thank you