

BIGTYNI VENTURES LLP

Reimagining shelters



About Bigtyni

Bigtyni is idea of an innovative 400 sq.ft **relocatable shelter**. This unique shelter can enable **scalable solution** to needs of **habitation** and can unravel **innovative operating models** that benefit individuals, businesses and institutions in goals of welfare , financial inclusion, business growth and sustainability

Key Details about Bigtyni

Industry Type : Manufacturing/ Construction

Date of Incorporation : 09/08/2023

LLP Identification Number: ACC-4248

DPIIT Registration Number: 151378

Current Stage: Prototyping

IPR Status: Design Patent Filed

Name of Directors

S. No	Name	DIN#	% Share
1	Arti Sinha	9260433	50%
2	Sharad Sinha	9260434	50%

} Registered in
India

About the Problem addressed

There is need (absorption appetite) for 30 Lakhs + shelters in India in Tourism, Construction and residential segment (recreational) ; those that can be addressed by a small relocatable shelter (400 sq.ft)

The existing market/institutions offer neither suitable product nor viable business model to address this need on large scale.

- Traditional construction methods are not suitable as they are resource intensive. Also, the **permanent** nature of product (constructed shelter) is a deterrent in investment options and risk appetite.
- Available alternates that are easily deployable in large scale (Tents and Modified Container) are not accepted widely due to constraints in size, architecture and finishes.

Available
alternatives are
non-optimal



About the Solution and Incorporation of Technology

Our solution to this problem is a combination of measures:

Right Product

At core of our solution is a pre-made modular Shelter (about 400 sq.ft) that is relocatable. The product is specifically engineered to be factory made and can be assembled, disassembled, transported and reassembled with ease.



Right Business Model



Enabling Ecosystem

The underlying principles of our business model are:

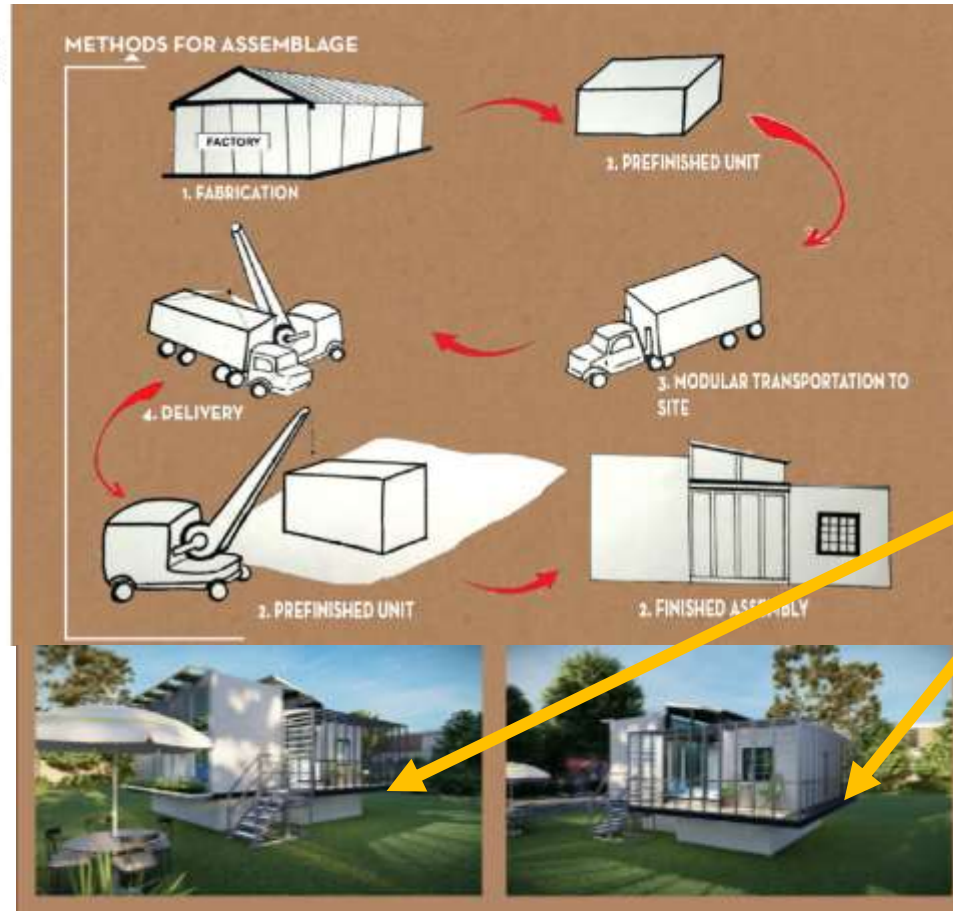
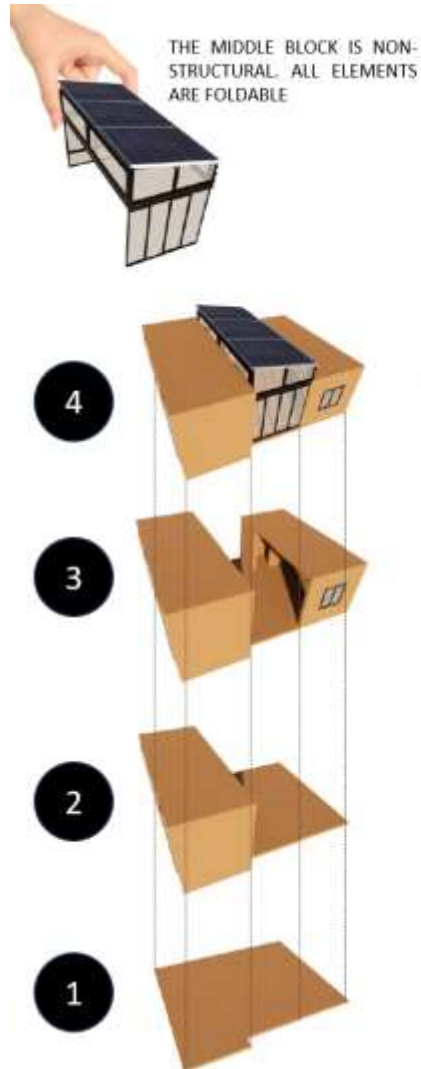
- Differentiated ownership
- Shorter duration/risk-free commitments.

Because the product is 'relocatable', the ownership of the shelter can be different from the ownership of the land on which the shelter is to be put. 'Relocatable' feature of the product will de-risk the commitments from either parties and will lead to higher deal conversions.

The key to the model success would be a robust ecosystem to support the product and the underlying commercial deals

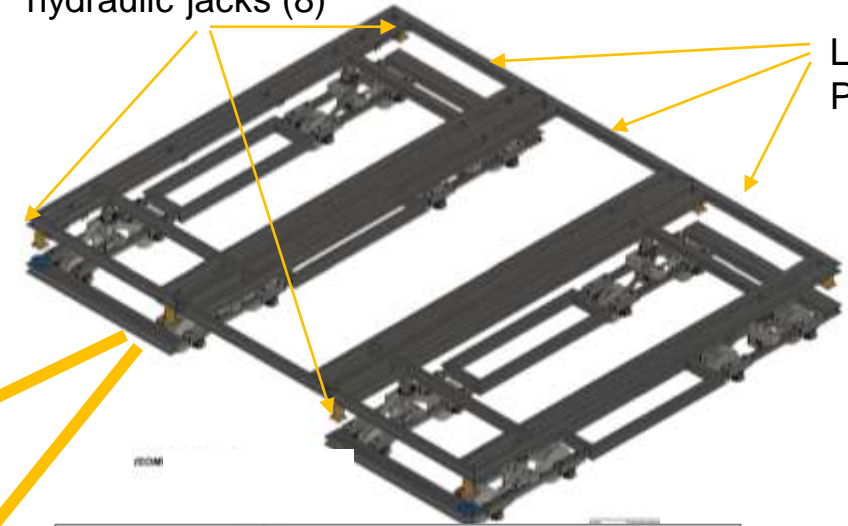


Product Photograph (Working Principle)

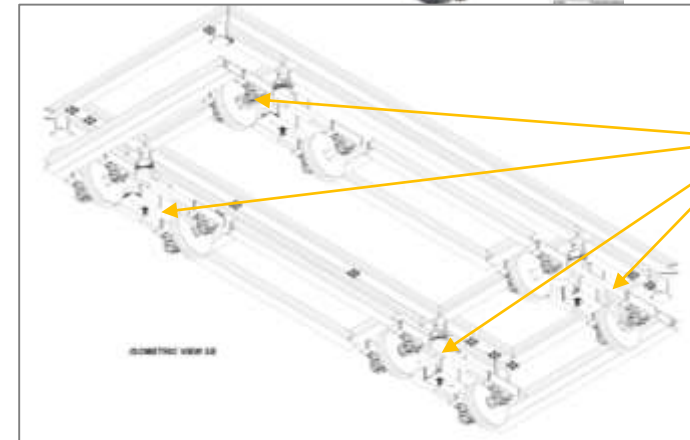


Sensing enabled / external hydraulic jacks (8)

Levelling Platforms (3)



Wheel sets (8) with lead screw, gear, locking mechanism



Product Photograph (Architectural Rendering)



Project Stage



WIP Prototype Production at MSME Bhopal

Done

- ✓ Basic design package for Mechanical and Electronics prototyping
- ✓ Prototype production started in May 2024 – Expected completion by March 2025
- ✓ Nidhi Prayas Fund of INR 4 Lakhs
- ✓ Site mobilization for making the prototype : including municipal/environmental approvals
- ✓ Design Patent filed

To be Done

- ✓ Prototype completion
- ✓ Design Optimization
- ✓ Logistics and Transit Trial
- ✓ Market Validation

Support Asked

- ✓ Design Optimization (Technical Support)
- ✓ Funds for completing Prototype
- ✓ Funds for Initial Production/ Inventory
- ✓ Marketing Support (connect with construction companies/ Hospitality / Govt)

Project Impact (Socio-Economic)



- ✓ **Addresses a very pressing problem of habitation and land commercialization** :Our product is a unique relocatable shelter that addresses the issue of deficit in habitable spaces in a unique way. It has potential of large-scale deployment to improve lives as well as livelihood of people.
- ✓ **Makes possible participation of larger communities for Mutual good**: The 'relocatable' feature of the product de-risks the Investments in product and enables integration of third parties for a collaboration and commercialization. This will unlock lot of potential in recreation, tourism as well in commerce industries.
- ✓ Useful in disaster relief applications
- ✓ **Will be a cost-effective solution and scalable and will lead to employment generation** :The product is unique and patented and thus will aid aggregation of volumes for mass production and cost optimization. Also, our collaboration business model will open participation from across geographies thus making it scalable. Thus, we are ensuring scalability both from the supply side as well as from the demand side. The model has an elaborate value chain and will involve many stakeholders from production site to the deployment site. This will generate employment in a large scale.
- ✓ **Product is sustainable** : 1) It is relocatable 2) Uses scrap steel 3) Reduces waste, as it is factory made

About the Team



Sharad Sinha

CEO



Arti Singh

HR and Admin



Pankaj Goyal

Lead BIM



Ashutosh Bhagat

B.Tech Mech

Lead Mechanical Design

1 Year Experience

Worked as Intern on this Project. Passionate Innovator



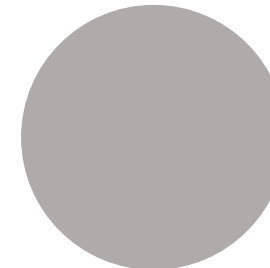
Sidharth Sharma

B.Tech Electronics and Comm

Lead Embedded Design

1 Year Experience

Worked as Intern on this Project. Passionate Innovator



Dhananjay Bhosale

ME. Structures

Lead Consultant ,
Structures and PPVC

PPS
PRECISION PRECAST SOLUTIONS Pvt. Ltd.

MBA | B. Arch

25+ years overall
Marketing
Sales, BD, Design
(Architecture)



B.ED

20+ years
Education
Entrepreneur



B.ARCH

23+ years
Design (Architecture)
Entrepreneur



About Market-fit

\$ Million USD

Total Market: 45K

Addressable Market: 22K
Refer EXIBIT -1

Target Market: 14K

Notes on Market Size

- 1. Only India Market considered
- 2. Market considered only for cases where presently there is no solution or where some alternate product is used (non traditional construction methods like containers /Tents etc)

EXIBIT -1

		# Units Per Year	Year 1-3	Year 3-5	Year 5-10	Base Data
			10%	20%	20%	
			Early Adapters	Early Majority	Late Majority	
Government	Fairs and Exhibitions	8000	800	1600	1600	8 K Tent Units in Kumbh Fair
	Infra Projects	10000	1000	2000	2000	10 K Large Govt. Infra Projects
	Disaster Relief	100000	10000	20000	20000	
Construction	Large Private Projects	100000	10000	20000	20000	1.75 Lakh Construction Companies in India
Tourism	Home Stays/ Nature Lodge	2500000		250000	500000	India Needs 2.5 Million More Rooms in Home Stays
Residential	HNI	70000	7000	14000	14000	16 Lakhs HNIs projected by Year 2027
	Main Stream Residential	1400000			140000	3 Houses per Year per 1000 People
		# Units Per Year	28800	307600	697600	
		INR Cr	7200	61520	122080	
		USD Million	847	7238	14362	22K

About USP of the Product

	Refurbished Container	PEB	BIGTINI
Foor Area > 350 Sq.ft	✗	✓	✓
Quick assembly : 2/3 days	✓	✗	✓
100% Salvageable/Relocatable	✓	✗	✓
Specifications/ Finishes /comfort at par with usual Brick and Mortar	✗	✓	✓
Can be assembled/erected with semiskilled /local labor	✓	✗	✓
Self sufficient Power and Sanitation	✗	✗	✓
Energy Efficient/Green	✗	✓	✓
Can be installed on level ground (No base foundation needed)	✗	✗	✓

Use of precast concrete

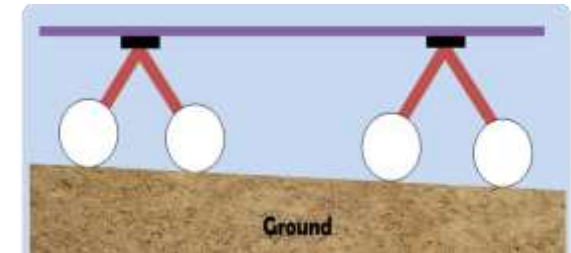
Superstructure of precast concrete (volumetric precast). :

- Reduce/eliminate material wastages
- Eliminate need for wall plastering and flooring. *The base concrete itself can be polished for elegant surface finish*
- Easy to repair/maintain
- Very sturdy :Monolith Modular unit



Eliminating the need for traditional foundation

Multiple disjointed platforms supported on wheel and tracks in place of traditional foundation . Sensing and correction mechanism to keep the platforms levelled at all times



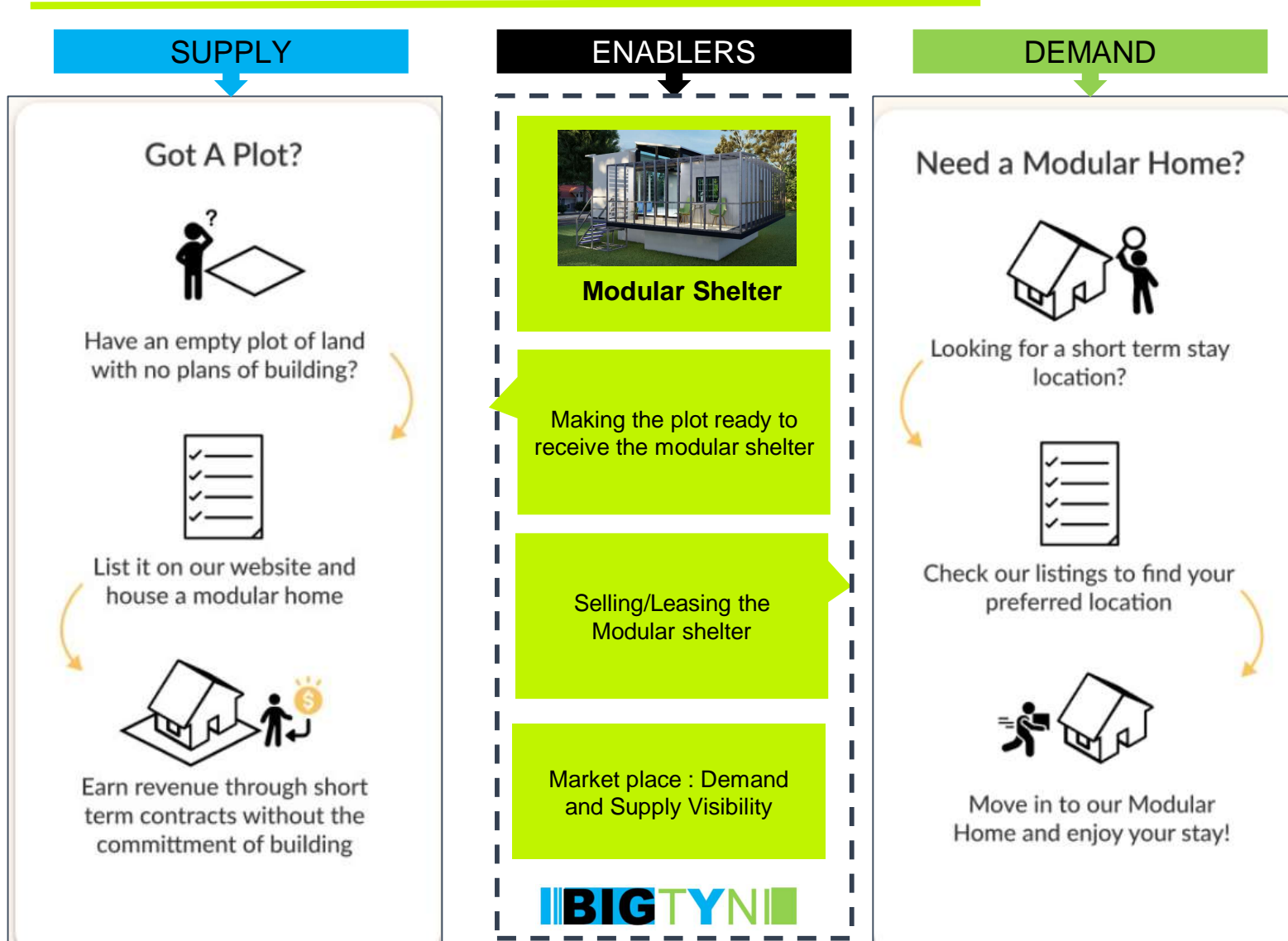
Access to services from below the floor

Raised platforms that are accessible from below, makes possible distribution of services from below the floor, making It more compact and efficient



Business Model

A Win-Win value chain



Phase1 (MVP) Plan

Objective : On site performance stability / Market acceptance/ Technological buzz

- Target tourism sector/ first 100 product sales
- Enable homestays in potential /offbeat hubs
- Use popular platforms like Airbnb

Intermediate Plan

Production scaleup / Cost Optimization / Consolidation in Tourism Vertical / Go to Market plan firm up

Long term Plan

Mass adoption / Penetration marketing plan/ Sustainability Impact leverage / cost of ownership/ Bylaws / Global Expansion

Revenue Model



Product Commercialization



**Upselling
Peripherals**



**Supply and
Demand
Facilitation**

Outright Sale

In India

Exports (in Phase 2)

Leasing

Interiors

Gadgets

Third Party Integration
(aggregators and OEMs)

Platform commercialization: Commissions and
Advertisements

Site Enabling /Logistics charges

Anticipated Revenue share : Product Comm (70%), Upselling Peripherals (20%), Supply and demand Facilitation (10%)

Revenue Forecast

	# Units Sold	Price Per Unit (INR Lakhs)	Sales (INR Lakhs)	Margin
Year 1	100	20	2000	50%
Year 2	1000	20	20000	50%
Year 3	2000	20	40000	50%

This is a conservative estimate restrained due to a) New technology b)
Production Capacity / CAPEX requirements

Project Milestones

	Objective	Desired Result	Parameters check
Milestone 1	Ready for Market – Viable Product	1 Prototype : Fully functional Prototype that is performing as per design	<ul style="list-style-type: none">• Working as per specifications• Ease of Transportation/ Assembly and relocation
Milestone 2	Customer Validation and acceptance	10 sales : Real product sales with positive user feedback	<ul style="list-style-type: none">• Technical acceptance• Price discovery• Cost Optimization• Production Plan

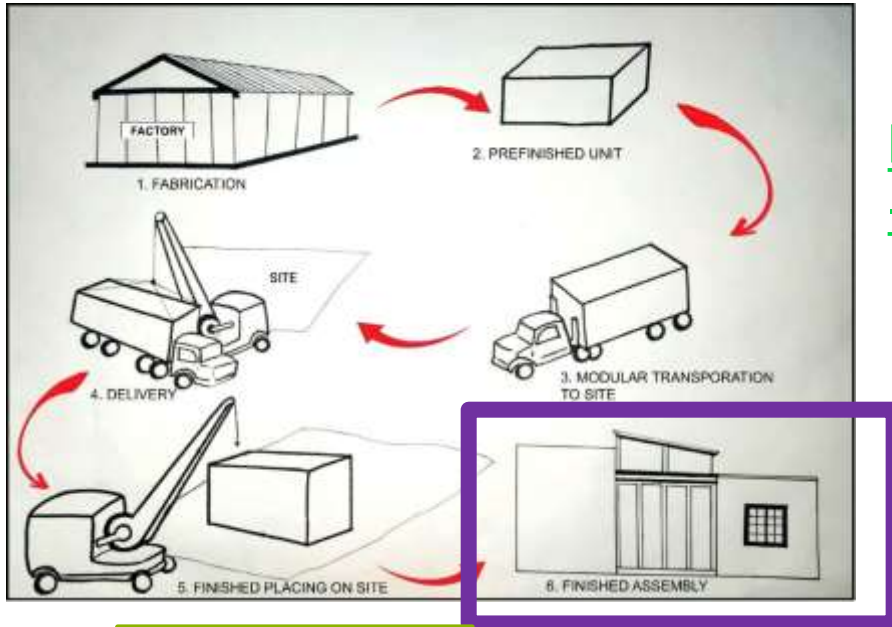
Budget/Support required

S.No	Type	Expense Bucket	Expense Amount (INR)
1	Operating Expenses	Salary Expenses	2400000
2	Operating Expenses	Office and Stationary	400000
3	Operating Expenses	Consultancy chrges	500000
4	Operating Expenses	Marketing Expenses	1000000
5	CAPEX	Hardware Purchase	4000000
6	CAPEX	Manufacturing Expenses	2000000
7	CAPEX	Trials and Research	1000000
			11300000



THANK YOU

About Value Proposition of the Product



Product Video URL:
<https://youtu.be/6LL-UMXn5Jc>



Product Features:

- Sturdy design: Built for safety, rugged, long life
- Flexible: can be folded ,transported ,reassembled
- Self-sufficient : Solar powered, pre fitted plumbing and electrical
- No groundwork needed. Self-levelling
- Factory finished shell and interiors. Low wastage. Precision specification
- 100% Salvageable/relocatable

Technology Enablers:

- 3D Volumetric /precast concrete
- **Self levelling mechanism**
 - **Sensors : Gyroscope/laser/proximity**
 - **Hydraulics / solenoid valve/Mech locking**
- Solar Technology
- **Plumbing , electrical modules**
- **Volume extrusion technology**

patent applied | patent planned

Trends/Advantage/Benefits

- Sustainability consciousness
- Social Impact, Accessible housing
- Gen X Preferences/ Population Mobility
- Tech Advancements: Concrete /sensors/ solar
- New business models : logistics /distribution
- Indian talent pool

Case Study : Boxabl (USA)

BOXABL | USA | 2017

- Las Vegas based Tiny Home Startup – 2017
- Base model is called Casita, a 375-square foot model that folds like a suitcase and costs about \$60,000 apiece
- 1,60,000 pre booked orders
- They have set up 2 large factories
- Valued at USD 3 Billion

Highlights :

- Factory finished
- Affordable (from US standards)
- Comes fitted with Gadgets etc


Lowlights :

- Needs a base to be erected
- Not very sturdy (Aluminium sandwich panel walls)



BUSINESS INSIDER INDIA

\$50K unfolds in 1-hour
/UNBOXING



Boxabl co-founders Paolo and Galiano Tiramani with one of their startup's tiny homes on the bed of a truck at a SpaceX site. Boxabl

- Tiny-home startup Boxabl amassed a 160,000-person wait list since Elon Musk was linked to a Casita.
- Many people made down payments months or years ago, but Boxabl has only built 400 homes in a year.

Ideation Video and Website

<https://youtu.be/6LL-UMXn5Jc>

<https://bigtyni.com/>