

URBANTECH BYTES

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**URBAN
LIVEABILITY
FORUM**



10 INDIAN URBANTECH STARTUPS REAL ESTATE AND CONSTRUCTION

Technology Startups Leading The
Urban Digital Transformation Journey

Knowledge Partner



Urban Digital Technology Initiative



10 Indian UrbanTech Startups

Real Estate and Construction

Real estate and construction industry is one of the key pillars of the economy. It has a multiplier effect on investments and job creation. And, cities are the real estate and construction industry hubs. With increasing urbanization, real estate markets and construction industry is likely to undergo multi-fold increase over the next few decades.

With immense opportunity, challenges are overwhelming too. Construction and real estate industry in India is highly unorganised and lacks a professional approach. The scope for building technology solutions to improve economy and efficiency is largely untapped.

In recent years, many Indian startups have challenged the status-quo. They've developed innovative solutions that can transform the industry. Technology, data science and artificial intelligence are changing the way industry operates. It has made life simpler for developers, contractors, end-users and many other players in the ecosystem.

We take a close look at how the use of technology can help us advance the real estate and construction industry. How can we make construction activities more economical, fast and sustainable? How can we make real estate services more user-friendly and transparent? How can we help our cities manage real estate markets better?

We present examples of 10 Indian technology startups that solve real estate and construction problems in cities.



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Do you know that on-site workforce constitutes 95% of the total employee base in a construction company? The traditional methods used for communication and reporting leads to delays in decision making. Ultimately, it leads to time and cost overruns. Do you wish you could get real-time information and analytics on how to control time and cost overrun of your construction projects?

QwikSpec provides an end-to-end real-estate site operations platform that aggregates data from different stakeholders on a construction project site and provides insights that lower cost, save time and improve quality. It can save up to 40% of the costs associated with rework and 33% of the costs associated with project management. It can accurately analyze and predict time and cost overrun risks. It provides real-time reports on project progress. Thus, reduces delays in decision making. It saves 25% of an engineer's time that is spent on filling up paperwork. It makes the process flow paperless and digital. It helps in automating repetitive processes and escalations. It helps in ensuring legal compliance. It provides consumer updates and brings in transparency. It provides a digital audit trail of construction activities.

Cities can save money, shorten construction timelines and improve construction quality with help of QwikSpec. They can access real-time reports and analytics on construction activities to avoid time and cost overruns. It will make construction projects more efficient and economical.



Do you know that the building materials industry in India is worth more than USD 125 billion? The industry uses a large variety of construction materials ranging from cement, steel, wood, bricks, electricals, flooring, plumbing, walls, to hardwares amongst others. Most of the supply-chain players including manufacturers, wholesalers, retailers and transporters are yet to transform their businesses digitally. Thus, the existing supply chain system remains complex.

Yojak provides a B2B marketplace for the building materials sector. They've digitised the supply chain to bring together the industry players. They provide full stack solutions related to procurement, sales, logistics, operations and financing. Sellers can host, sell and deliver products through the platform. Buyers can browse, compare, visualize and place orders for the materials. All orders, deliveries and financial transactions can be tracked. The platform offers billing support for greater outreach in different tier cities.

Cities can use the tool for procurement and rate analysis of building materials. It provides competitive rates and timely deliveries for controlling the project costs and timelines.

The online platform creates transparency, trust by organising the building materials industry. It offers larger markets for buyers and sellers and improves business margins.



COVID19 has changed the way tertiary sector workers operate in India. Most companies switched to work-from-home during the pandemic and are now contemplating returning to normal. With uncertainty in work culture and business scenario, it is difficult for businesses to predict consistent demand for office space. It is a significant cost centre and under-utilization may have financial implications. At the same time, scale-up is difficult and an administrative hassle.

Awfis provides managed co-working spaces at 75 locations in 11 cities with more than 40,000 seats. It is focused on redefining the workspaces in the current business environment, by providing an ecosystem of inspiring workspaces for the innovative freelancers, entrepreneurs and corporates for their changing business needs. It's members can access custom-sized spaces on a flexible tenor. It has evolved to a fully tech-enabled workspace solutions platform that provides products across the spectrum of work requirements including flex workspaces, enterprise workspace, design & build solutions, integrated facility management, remote working solutions and work from home solutions.

Cities benefit from decentralized work places. It reduces the commute time to work. Businesses can operate and scale more flexibly. It fosters entrepreneurship culture and networking opportunities for businesses.



Have you ever felt the need for an affordable and decent living space in a large metro city? With the increasing number of youth moving out of their hometowns for studies or work, the concept of co-living is gaining popularity in India. It provides decent and cost-effective accommodation options at convenient locations.

Colive provides fully managed and technologically equipped rental co-living spaces, to make living comfortable, safe and affordable. It offers ready to move-in co-living spaces, which are near IT parks and business hubs given target customers are single professionals and young couples who prefer living in a social community of like-minded people. These homes are equipped with modern tech-enabled safety features. Besides, all homes are fully serviced and professionally managed, and offer flexible and affordable options suitable for urban living.

Cities can transform rental housing markets in India. It can assure quality urban living and user experience through Colive. It will help in reducing commute time to work places and improving quality of living. The leasing services can be simplified for a better rental housing experience.



5 ENLITE RESEARCH

Imagine walking into your work building. A contactless access control device detects your presence from 10 meters away, while an app on your smartphone marks your entrance time and attendance. Sensory detectors track your movement and turn on the lights and the air conditioning for you. The air quality and even sound levels are refreshed every 15 minutes. As more people start pouring in, the sensory devices automatically adjust temperatures to optimal levels.

EnLite Research provides wireless building management solutions. It enables safer workplaces by providing touch less building wide access control and attendance solutions. The contact less technology makes accessing and visiting workplaces hygienic and safe. It uses facial recognition, location based attendance, wireless technology, touchless access and occupancy management. It eliminates the need of biometrics or manual entries. It provides real-time data on occupancy. It is scalable and easy to manage. It can be easily integrated with other apps like Aarogya Setu. It uses AI and IOT applications for building management solutions.

Cities can use such solutions for facility management, access control and attendance management for its staff and visitors. It can enhance user experience and increase safety. It can reduce the cost of operations and save energy costs.



Building a house is a priority for almost everyone. But there is no way to know how the dream house will actually turn out. The house delivered varies from the designs and plans many times. Would you want to visualise how your house will look like even before the physical construction begins?

Ghar360 is a cloud based 3D augmented reality platform that works towards enabling users to design and visualize their potential future home. It helps people articulate the exact design of their house. It focuses on providing IT solutions for the architecture and interior design industry. It digitizes the floor plan into an interactive walkable space and is changing the way consumers do their interior shopping by integrating actual products into the platform. This gives every house owner indispensable helpful access to their floor plan. Also, the platform caters users who are looking for home renovation solutions and home products online.

Cities can deploy solutions like Ghar360 to develop VR models of building projects. It can help in visualizing spaces even before the construction stage. Level of detailing at the design stage can be significantly enhanced. It can help in reducing costs by making design changes early-on. Need for rework can be eliminated to a large extent. User experience of potential customers of housing projects can be improved significantly.



Do you know buildings contribute nearly 40% of GHG emissions globally? Main contributing factors include materials, forms and uses of the building. Do you wish you could develop buildings which are eco-friendly?

Architude aims to help foster sustainability and reduce the construction industry's carbon footprint by providing green solutions. It has developed an intelligent virtual green building product that helps in planning green buildings faster and at affordable prices. It has developed an AI product called 'knowyourbuild'. It suggests lists of suitable and sustainable materials tagged with time, cost, energy efficiency, and maintenance information. The virtual prototype models built using Architude products behave exactly like the real buildings. The cost of the construction, time schedules, energy efficiency of the building and the data needed to maintain the building can all be extracted from these models. The product helps save up to 30 percent project construction time, cost, and savings during occupancy.

Cities can use BIM modeling tools to create the digital models of buildings. It can help in stimulating changes in materials and forms and its impact on sustainability and project costs. It can help project owners reduce carbon footprints using green building technologies.



Do you know that three out of five construction projects are completed late? And a delay causes a dip in client satisfaction by almost 60%? Does getting compensated for late delivery along with quality construction sound appealing to you?

Brick & Bolt's construction services platform connects contractors and architects to customers, enables transparent pricing and also levies penalties on the service provider in case of delays. Its AI-based engine predicts work schedules and manages quality and progress of ongoing projects. Brick & Bolt provides end-to-end services including home construction, construction for businesses, and building materials. It also connects architects and contractors with people building or looking to build their homes.

Cities can use services like Brick & Bolt to avoid delays in construction projects along with avoiding the huge amount of monetary loss it causes. It would also ensure quality construction with transparency and the best pricing available.



It is not easy to manage a property especially when you are sitting miles away. There are numerous things to be done; repairs and maintenance, collection of bills, finding a tenant, getting the paperwork done, and so on. What if you had access to a single point contact who could handle each aspect of property management for you?

Propdial has created a platform for a Property Management Package (PMS) for customers, which includes end-to-end service for property management. Their services include agreement and documentation, repairs and renovation, apartment handover to tenant, timely rent payment, inspection on demand, handling tenant queries, handling tenant termination and tenant security deposit refunds. Propdial leverages technology to make the process of property management very smooth and efficient, with minimal effort required by the property owners.

Cities can leverage such services to maintain and rent properties whose owners stay miles away. It also provides high levels of transparency; every step of the property management from tenant onboarding to property inspection and maintenance is documented and updated online immediately.



Driven by rapid urbanization, migration to cities and the rising cost of home ownership, rental housing in India is likely to see a boom in the next two years. As per the 2011 census, urban households on rent stood at over 21 million, which is around 20% of the total number of houses in urban India. This creates a market for rental property management solutions.

Azuro offers rental and property management solutions, taking care of the logistical and tactical pain points involved with finding a tenant, background checks, automated rent collection, property maintenance, and tenant exits. Azuro's technology allows accurate pricing of properties, faster tenant finding and providing services to customers throughout the property ownership lifecycle.

Cities can use such solutions for rentals and property management sector; synergising the current value chain. With the impending roll out of the Model Tenancy Act, 2019, there are bright chances for the rental housing market to not only get regulated but also ripe for disruption through the use of technology.



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About Urban Digital Technology Initiative

Urban Digital Technology Initiative is aimed at developing knowledge products, networking events and community-focused programs in areas on urban digital technology.

Initiative By : Urban Liveability Forum

Urban Liveability Forum (ULF) is a platform - by and for the experts – to transform urban spaces through Knowledge, Networking and enabling communities. Our aim is to strike the right balance between the physical, social and cultural dimensions to enhance urban liveability. How will we do this ? By offering smart solutions and sustainable practices on urban development in a form of knowledge articles , unmatched networking platform to meet and collaborate and by being a catalyst to enable communities.

We believe that every urban stakeholder - government, municipalities, city planners, corporate, civil society group and citizens - will have to play an active role to transform our cities from viable, liveable to loveable.

Knowledge Partner : Urban Innovation Lab

Urban Innovation Lab (UIL) is an urban innovation company. We develop ideas, knowledge products, and technology solutions to influence the urban stakeholders for a better future of cities. We partner and collaborate with students, professionals, researchers and organizations to solve urban problems. Our Mission is to 'Innovate Urban'.

CityX is our platform for carrying out experiments in the city ecosystem. We identify urban problems, test hypotheses and carry out experiments to validate the results.

GrowU is our platform to incubate and accelerate UrbanTech startups. We provide an ecosystem for startups on their journey from idea to implementation.

For any enquiries related to partnership, association or any other matter, please feel free to reach out to us at below mentioned contacts. We'll be happy to talk to you.

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