



URBANTECH BYTES

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**URBAN
LIVEABILITY
FORUM**

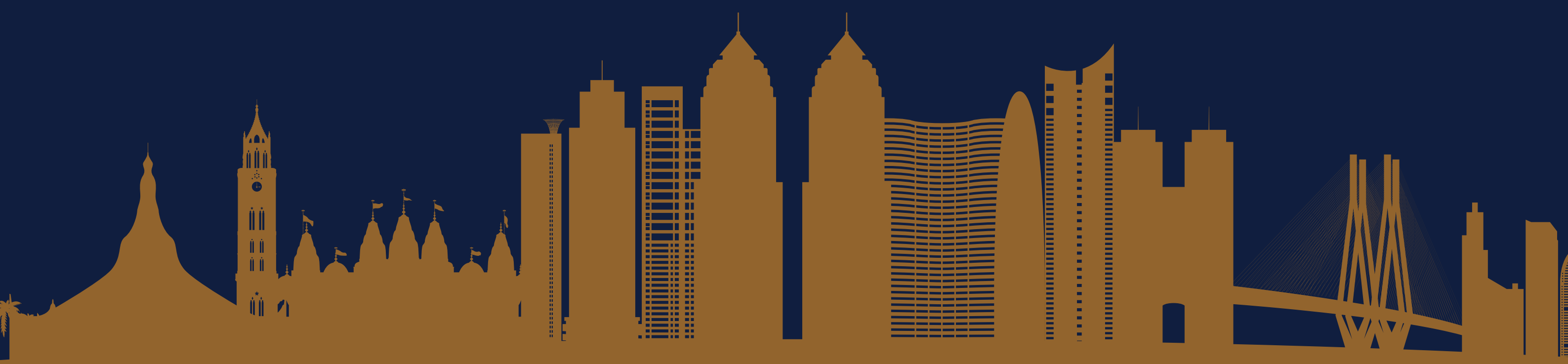
10 INDIAN URBANTECH STARTUPS

Technology Startups Leading The
Urban Digital Transformation Journey

Knowledge Partner



Urban Digital Technology Initiative



10 Indian UrbanTech Startups

Technology is shaping our world in ways we've never imagined before. What seemed like a remote possibility is a reality today. More than 50% of the world population lives in urban areas. As per National Commission on Population estimates, India's urban population will increase from 377 million in 2011 to 594 million in 2036 – a growth of 57%. Our cities are the epicenter of this transformation journey.

Urbanization is not just about migration of people. It is marked by economic opportunities, quality infrastructure and technological advancements that transform our cities into better places to live and work.

UrbanTech is an emerging ecosystem of urban innovation. It uses technology as a means to address the needs and wants of the growing urban population. There are numerous UrbanTech examples that continue to change lives. There are some which stand out. Not just for their relevance, but also for their scalability and replicability. Prominent among these are some Indian startups that are helping to build a more resilient economy. How? By improving the quality of living in cities that contribute more than 60% of India's GDP.

We take a close look at how UrbanTech is changing the way Indian cities work. How dormant civic problems are being solved with technology? How intuitive ideas coupled with smart application of tech have changed user experience for better urban living?

We present examples of 10 Indian technology startups. Solving urban problems related to mobility, water, environment, energy, communities, and real estate.



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1 FALCONBRICK

Are you concerned about the delays in your construction project? Are cost-escalation and poor construction quality worrying you? You are not able to control leakages and losses. You find it difficult to track the progress of the project. The construction industry is messy and unorganized. And, it is becoming your nightmare to manage a construction site.

FalconBrick provides a construction management solution on a software-as-a-service model. It addresses the end-to-end construction lifecycle. Its plug-and-play solution brings all stakeholders to a common platform. This collaborative tool helps report and track project activities and milestones in real-time. Contractor performance is easier to review. Audits are much simpler. Deviations generate alerts. Analytics can predict root-cause and cascading effects.


Cities create an ecosystem for efficient construction management. It reduces losses. It helps avoid delays. It improves monitoring, evaluation, and learning on construction projects. It improves performance.



Have you been in a situation when you want to go somewhere and you don't have a vehicle? You're wondering whether to book a taxi or take public transport. How do you check your options? Time, cost, comfort, carbon footprint.

Yulu provides you a fast, convenient, clean, and affordable micro-mobility solution. It offers first and last-mile connectivity using a technology platform. You can use your mobile app to find, book, and rent a cycle or an electric bike. You can reach your nearest Yulu zone and unlock the vehicle using a QR code on your mobile. The Yulu zones have charging facilities and battery swapping facilities. The platform works on a pay-per-use model. The app offers an option for digital payments.

Cities get the micro-mobility solution for on-demand mobility services to the citizens. It reduces the cost of travel, congestion, and air pollution. It saves fossil fuel, and burns calories. It shifts urban modal share to more sustainable modes of transport. It encourages a healthy lifestyle and sustainable mobility.



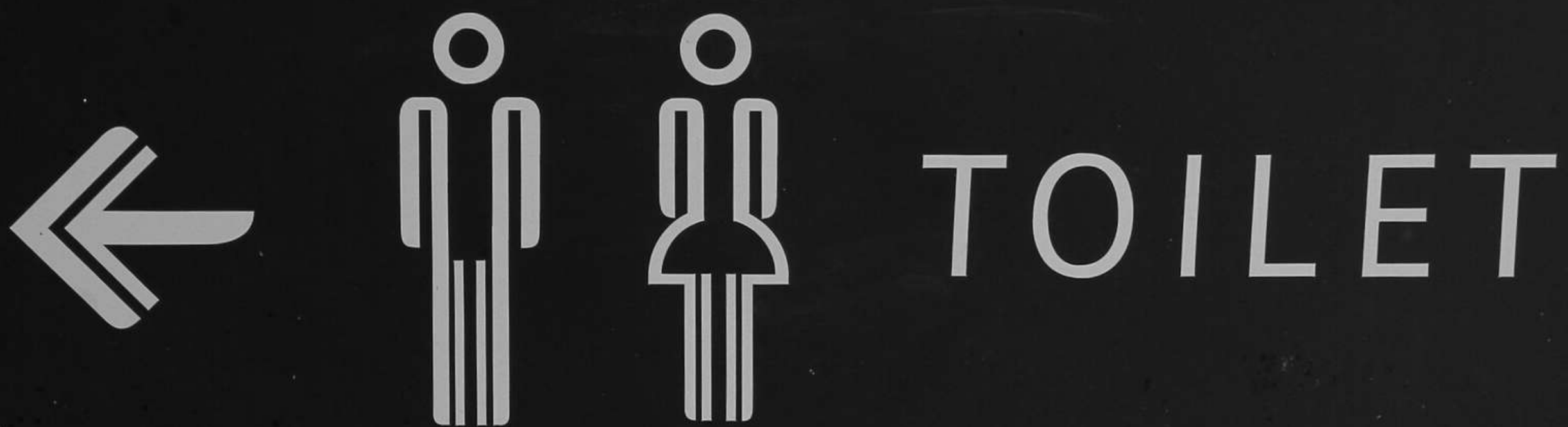
“Yulu's vision is to provide a shared, smart, and sustainable urban e-mobility solution which is seamlessly integrated with public transport with an objective to drastically reduce congestion and pollution and improve economic productivity. Yulu actively engages with various stakeholders including city, state, and central governments to propose and facilitate the public policy formulation towards shared and sustainable mobility such as Public Bike Sharing (PBS) and Electric Mobility. These policies have lead to the creation of Non-Motorized Transport (NMT) and vehicle charging infrastructure.”

- Amit Gupta, Co-founder & CEO

Is your neighbourhood located in an upcoming locality away from the main habitation? Is it lacking access to the city sewerage system? You're concerned about the upkeep and maintenance of traditional septic tanks. You don't know when your township will get a sewerage connection.

Indra water provides decentralized wastewater treatment solutions. The treatment plant works on a plug-and-play model. It is modular, scalable, and has a small footprint. It has a smart monitoring system, an automation system, and an analytics platform. It has low energy requirements. It uses chemical-free treatment and produces less sludge. It recovers more than 95% of water which can be re-used for non-potable uses like gardening.

Cities create wastewater treatment infrastructure in a decentralized manner. It serves the needs of un-served areas and remote localities. It increases water sustainability through wastewater reuse. It reduces water demand for non-potable uses. It saves huge capital investments especially for frog-leap developments and unauthorized developments.



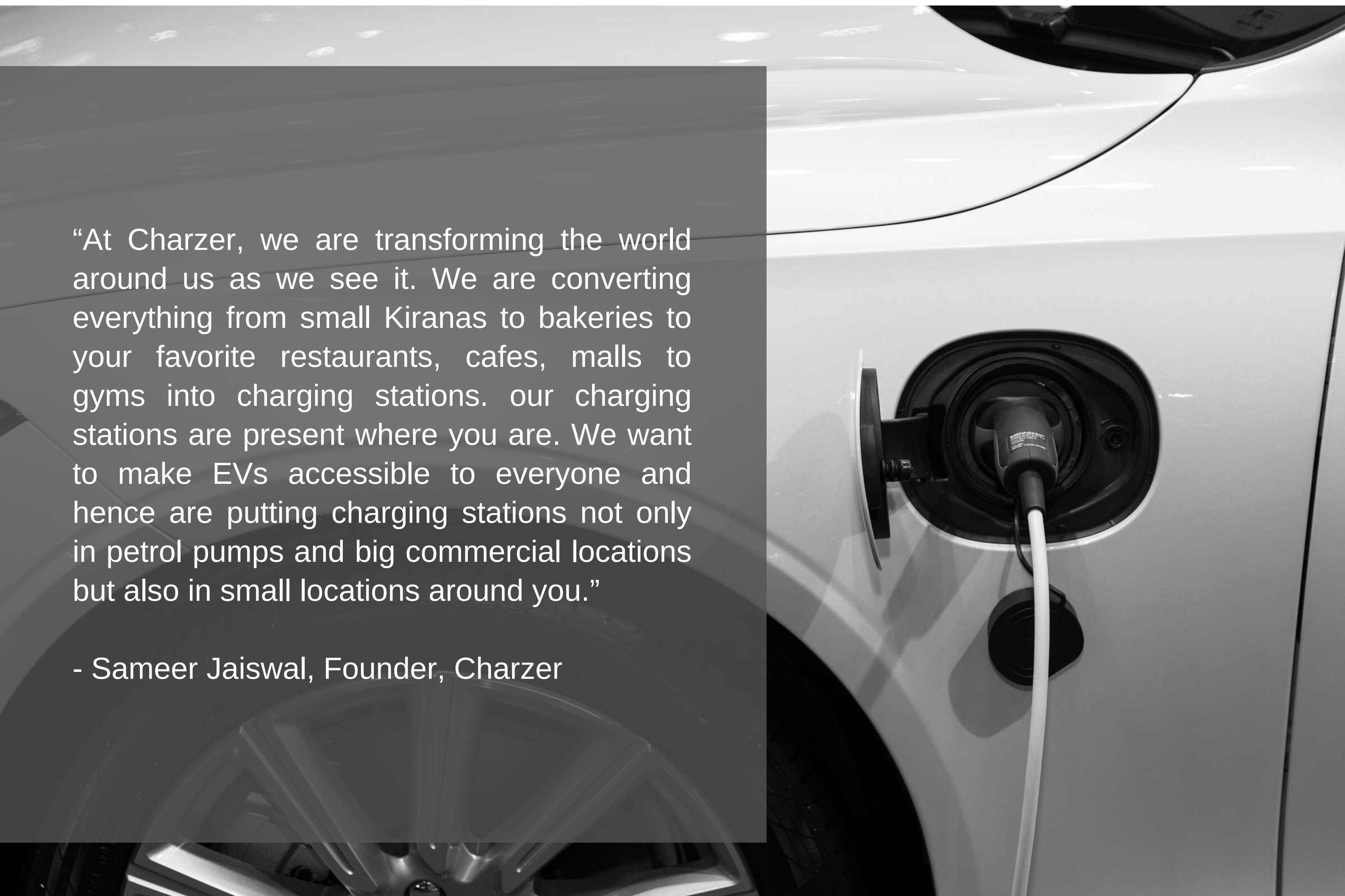
Have you heard about the benefits of electric vehicles? Low running costs. Environment-friendly mobility. You're excited to buy one. But, you're postponing your buy. You're concerned about the availability of electric charging infrastructure in your city. Why? Range anxiety.

Charzer brings a solution to help you charge your vehicle at your convenience. It converts stores, restaurants, malls, and even tea shops into EV charging stations. You can use the app to find a nearby charging station. You can check availability, pricing, and pre-book a slot. You can pay for EV charging, and monitor energy usage for your electric bike or car. Local businesses can install Charzer EV charging stations at their premises. It is low-cost and compact. It has a smart meter and IoT-based platform. Businesses can track usage, receive payments, and control chargers using the app.

Cities establish city-wide EV charging infrastructure using crowdsourcing retail networks. It reduces the need for heavy spending on public EV charging infrastructure. Cities don't need to identify public land for setting up charging stations. It improves levels of customer service and creates economic opportunities for local businesses.

"At Charzer, we are transforming the world around us as we see it. We are converting everything from small Kiranas to bakeries to your favorite restaurants, cafes, malls to gyms into charging stations. our charging stations are present where you are. We want to make EVs accessible to everyone and hence are putting charging stations not only in petrol pumps and big commercial locations but also in small locations around you."

- Sameer Jaiswal, Founder, Charzer



Is the hefty energy bill causing worry to you? Are you wondering how to bring down the bills? You've heard about energy-efficient appliances, but you don't want to spend more right now. You're stuck in a vicious cycle. High energy bills. Low capacity to invest in energy efficiency. High energy consumption. Leading to high energy bills and so on.

Smart Joules offers energy-efficiency-as-a-service. It reduces energy consumption and offers guaranteed energy savings. The users do not need to invest anything. All you need to do is enter into an energy-savings agreement with Smart Joules. Their team assesses baseline consumption and designs retrofitting measures. They finance, procure, install and commission the energy efficiency retrofitting equipment. Both parties share the revenue earned from the energy savings. The IoT-based energy management system monitors and verifies the energy savings. At the end of the project lifecycle, they transfer the asset ownership to the user. It works on a pay-as-you-save model.


Cities create a built environment that is energy-efficient and climate-friendly. It reduces the energy demand of the city. It takes off the load from public energy infrastructure. It reduces greenhouse emissions. It saves energy for the users.



Have you ever given directions to a visitor to reach your address? How was the experience? Was it cumbersome? Time-consuming? Difficult? Well, situations can be more complex when you're reaching out for ambulance or fire services. Every second counts.

Zippr provides a location intelligence service called 'Digital Door Number (DDN)'. DDN is a unique alpha-numeric address ID for your building. You can use DDN for locating and navigating addresses. This modern addressing system can handle the demands of growing cities. The addition of new localities. The division and amalgamation of plots. The conversion of plots into new high-rise apartment buildings, and so on. It is scalable and futureproof. It's like aadhar for buildings. You can use it for property tax management, food delivery, or an ambulance. You can carry out geospatial analytics and much more.

Cities create a dynamic building and street naming system. It can help identify missing and duplicate buildings in property tax records. It can enhance property tax revenues. It can improve the navigation experience. It can improve emergency services. It saves time, money, and lives.



“Addressing is a basic infrastructure especially to the next billion people who are unserved or underserved in non metro areas, due to a lack of clean addresses, be it emergency services or private sector services like e-commerce and food delivery. Addresses are inconsistent and don't have a record of truth, our objective is to make this possible by giving every street and door in the country an address that will last a lifetime.”

- Parkshith Reddy, Co-founder, Zippr

7 THE KABADIWALA

Are unused corners and cupboards in your house becoming a mess? Showpieces, figurines, crockery, bottles, and much more? You want to get rid of them. But, your local scrap dealers are unreliable, and never come when you need them. Your heart sinks when you see those documentaries showing waste-led environmental hazards.

The Kabadiwala provides a sustainable waste management solution at your doorstep. It makes selling your scrap as easy as buying something online. You can schedule an appointment on the phone or website. Handover your sorted waste to a collection agent at your convenience. And, get paid for waste at a pre-defined fair market rate. Collection agents use accurate and reliable electronic weighing scales. They collect almost everything, be it paper, glass, plastic, or metal. The logistics operation is technology-enabled. They have developed a recycling network to recycle and dispose of waste scientifically.

Cities can create a circular economy and aim towards zero-waste cities. It diverts the recyclable waste into recycling networks. It reduces greenhouse gas (GHG) emissions. The waste-to-wealth model reduces public expenditure on the enabling infrastructure. It creates livelihood opportunities in the organized sector. It reduces environmental hazards.



Have you ever faced a situation when you've moved to a new place and there's no drinking water in the house? Or when your office or club runs out of drinking water? Or when your maid is late as she has to get safe drinking water for her family?

Paani Lao solves your drinking water needs at your convenience. It is a drinking water logistics company using a technology platform. It provides you safe drinking water at your doorstep. All you need to do is log on to the app, select the product (brand, can size, and quantity), and place an order. You can order a popular drinking water brand or RO purified water (which is more affordable) as you prefer. You can place immediate delivery or schedule delivery at your convenience. Also, you can place bulk orders for your gatherings. You can use easy payment options and customer support for a seamless experience.

Cities can build an organized sector water logistics chain. It increases user convenience. It provides access to safe drinking water to the poor and remote communities. It saves time and money.

"In Urban areas, a sizable population is dependent on can/processed water for daily needs. Paani Lao ensures a guaranteed, safe and authentic water-can delivery to the residents of Hyderabad. It simplifies the entire process via an easy-to-use mobile app, strong logistic network, and authentic water sources. This makes the lives of urban dwellers hassle-free to get both branded and non-branded water delivered at the doorstep in a click."

- Obaidullah Mohammed, Founder & CEO, Paani Lao



Have you struggled in finding a parking spot? Going in circles, around a mall, a market, or a hospital. Isn't it frustrating? Waste of time and money?

Otopark solves your parking problem. It provides shared parking services by connecting guests and hosts. It works on a parking-as-a-service model built on a technology platform. Every parking owner in the city can share their parking with others using Otopark platform. Guests can find the parking on the app, pre-book or drive to the parking slot, park safely, rate the experience. Hosts can tag their parking, describe its features, accept or decline parking requests, and get paid digitally. All users are pre-verified for a safe, secure and reliable experience.

Cities can create more supply of parking spaces by just bringing idle parking spaces in use, without much investment. It optimizes parking utilization in the city. It creates economic opportunities for individual and institutional parking owners. It adds convenience to parking users. It saves time and fuel, and reduces congestion.



Is your society secure and well-managed? Do you know what happened to the complaint you registered with your society? Have you missed the society notice for maintenance payment recently? Such problems are a thing of the past now.

Apna Complex is a community management app. It simplifies your community living. It provides you a digital ecosystem for your community needs. It can manage visitors, deliveries, accounts, and complaints. Now, your society management and residents can be better connected. You can use the app to deny or approve visitors. You can track and define rules for the entry and exit of your kids, vehicles and visitors. You can keep a digital record of water tankers. You can track your society notices and maintenance payments. You can even pay society dues on using digital payment gateways. Your society can manage, maintain and service all assets like parking, pumps, street light etc. using the app. You can set security alarm triggers, and much more.

Cities can create empowered communities, secure neighbourhoods and improve the quality of living. It adds convenience to the residents and society management. It increases accountability and transparency. It creates livelihood opportunities for domestic help.

"The Society Management Platforms like ApnaComplex enable an Apartment Society to conduct all their operations digitally with proper audit trail across all the aspects of a Society Management like Budgeting, Expense tracking, Security, Communication, Inventory, Facility, and Staff Management. ApnaComplex significantly reduces the time taken by Management Committee members to manage their Society by automating routine processes. For example, ApnaComplex's Billing & Accounting module reduces the workload of a Society treasurer by 80%."

- Praveen G P,
Head of Marketing, ApnaComplex



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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.

Managed 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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