

Enabling a Smart Home

Home Automation Systems have made headway in the upmarket urban residential projects, with the integration of cost-effective IoT-based technologies, Indian brands are eyeing the untapped yet promising market in tier-II and III cities writes NISHA SHUKLA

“ Home automation is the next envelope pusher in interior design and although several entrenched hardware and/or software players have been developing their own solutions - it is going to be very hard for all of them to ‘talk’ to other platforms and devices without customisation ”



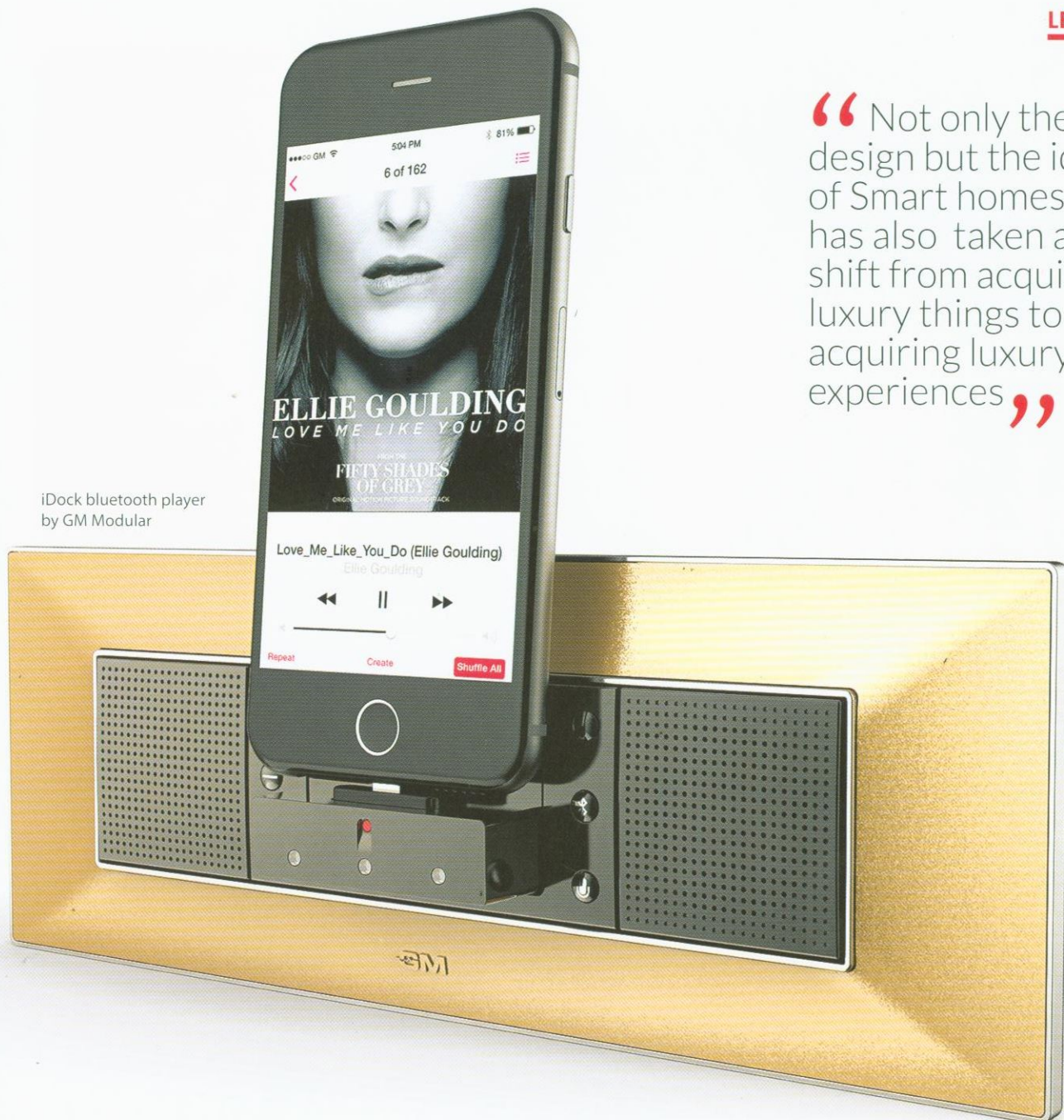
iSmart automation switch by GM Modular



GM Modular's iCam video door phone

“ Not only the design but the idea of Smart homes has also taken a shift from acquiring luxury things to acquiring luxury experiences ”

iDock bluetooth player by GM Modular



The concept of home automation has brought about a major revolution in the residential sector and has been largely driven by innovative technology and hi-tech gadgets. Launched a decade ago, home automation was introduced as a fire and security feature which was a value proposition for builders and the overall building segment. Later, it enveloped a wider ambit of solutions such as lights and HVAC. Currently the concept is evolving towards a converged offering with integration of comfort and convenience, safety and security, energy-efficiency and entertainment features. In terms of application, residential usage is the highest in the market and accounts for nearly

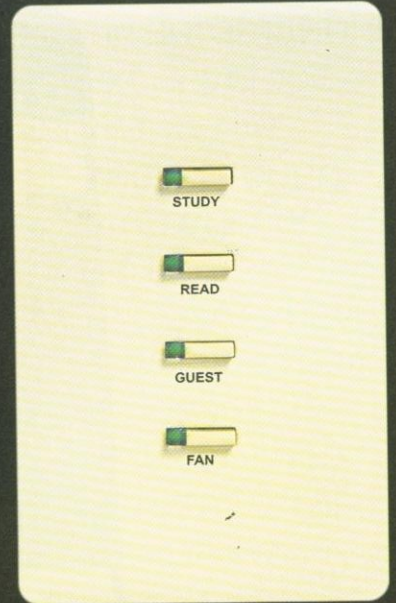
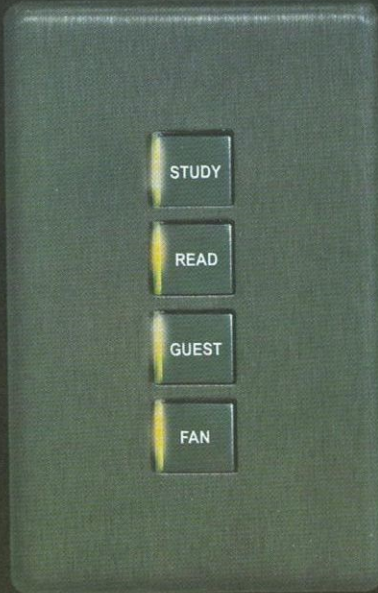
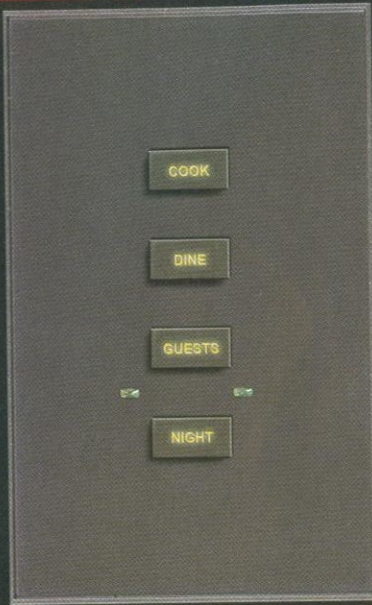
60 percent of the home automation industry followed by the commercial and hospitality segment.

Demand driving factors

Smart Homes is all about a blend of comfort with more aesthetics. The concept has not only brought about convenience, but has also brought about revolutionary change in its design aspect and practical use of the product. Right from switching and dimming to motion sensing, today we can operate switches with just a wave of our hand. Switches have changed forms from touch switches to Wi-Fi switches to home automation lately. “Not only the design but the idea of Smart homes has also taken a shift from acquiring luxury things to



Jayanth Jain



Vantage keypads by Legrand with RP touch, Square touch and Fine touch

“The demand for fine lighting, standalone dimming, collective dimming, and scenario control has increased”

acquiring luxury experiences,” notes Jayanth Jain, Managing Director, GM Modular.

Termining home automation as the game changer in the interior industry, Saket Sethi, Founder and CEO of Archilogics said, “Home automation is the next envelope pusher in interior design and although several entrenched hardware and/or software players have been developing their own solutions - it is going to be very hard for all of them to ‘talk’ to other platforms and devices without customisation.” He further said that the two big areas that will define the success of home automation on a large scale will be convergence and accessibility.

With regards to recent trends in the home automation segment, the demand for fine lighting, standalone dimming, collective dimming, and scenario control has increased. “With the rapidly increasing purchasing power clubbed with the exposures to technology and lifestyles experiences, Indians (HNI, rich and upper middle class) are increasingly experimenting with various forms of home automation-standalone or completely integrated mixed. The trends and the acceptance are encouraging even for Tier II cities like Jaipur, Surat, Kochi, Coimbatore, and Indore,” says Sameer Saxena, Director, Marketing, Legrand India.



Vantage System's Axolute wallplates by Legrand

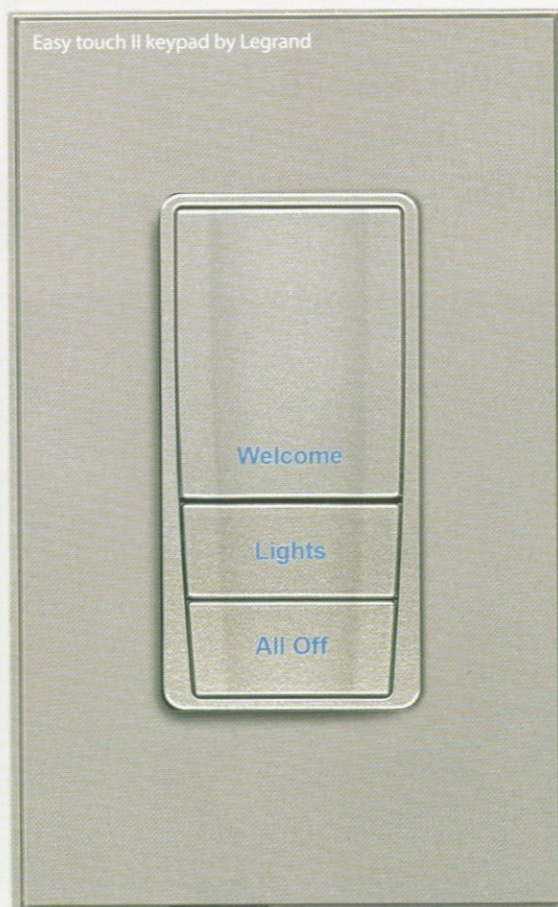
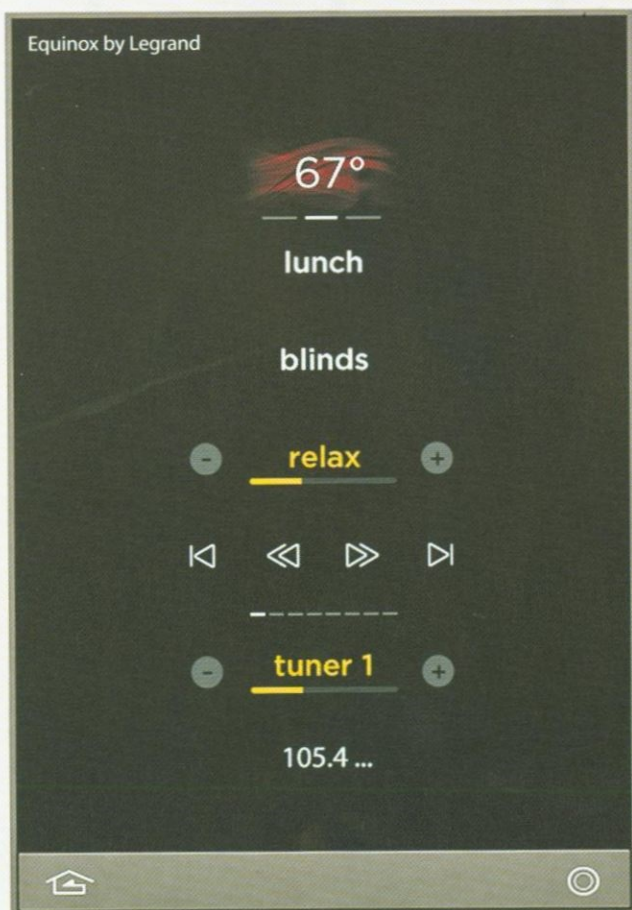
On being asked about the most popular automation solutions among end users, Ar. Vaibhav Shah, Principal Architect of Facilis said, "Clients come to us with various needs and desires, but only few are tech savvy. The clients who demand for high tech solutions go for C-Bus automation whereas the ones who have curiosity towards automation and are not very sure about the utility of it opt for Radio Frequency (RF) technology which enables them with all that home automation has to offer at a reasonable cost."

Elaborating further on C-Bus Solution, Shah said that it is one of the most reliable and flexible solution. This technology involves a good amount of wiring and Cat 6 wires are used for its wiring. On the other hand Radio frequency (RF) transmission technology gives users the luxury of wirelessly controlling any lighting switches with pre-programmed lighting scenes and is considered as a cost effective solution.

Talking about the most preferred solutions, Sethi said that most Indian clients are looking at solutions to regulate temperature and lighting which were previously not preferred due to issues with maintenance, servicing and ease of use. The most common automation criteria are media management- the ability to stream and manage movies and music across rooms is highly desired. Also there is an interesting trend to see Indian clients learning about automation even if they don't want to immediately implement it; they do look at creating the network and system backbone for later integration.

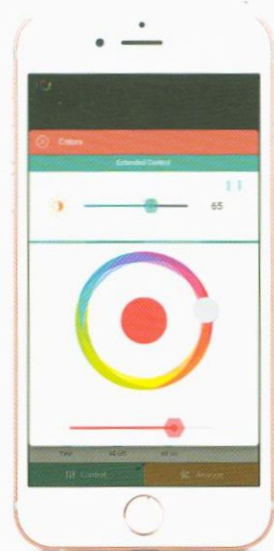
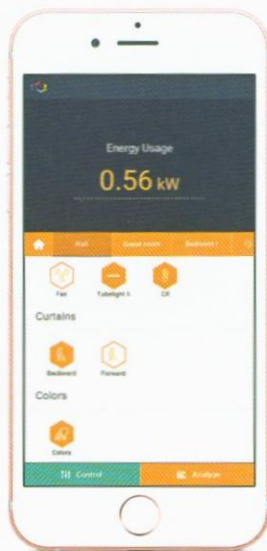
Powered by Technology

With the change in technology the way we communicate and connect has also changed. Talking on the lines of deployment of the home automation technologies, Saxena said that the market is categorised into technology types such as wired, power-line, wireless and computing networks.



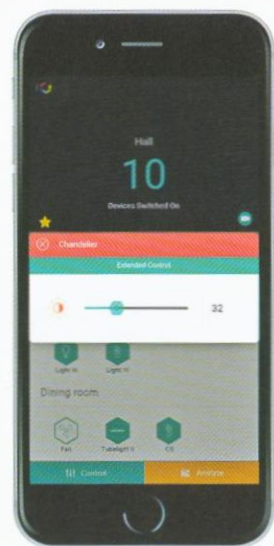
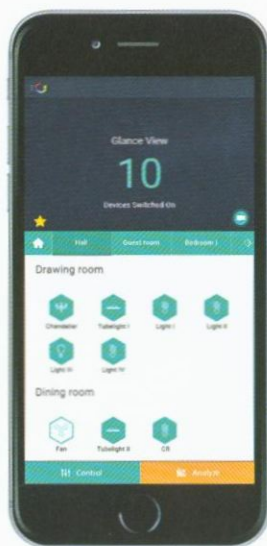


Cubical app analytics



Cubical Colour

“With smart phones being the doors to smart homes, the rise of more than 130 million smart phone users makes India a huge and unexplored market.”



Cubical app home screen



Rahul Bhatnagar

But wireless technology is expected to continue driving the market in future due to its low set-up cost. Among the available wireless ecosystems, Zigbee, Z-wave and KNX are driving the market.

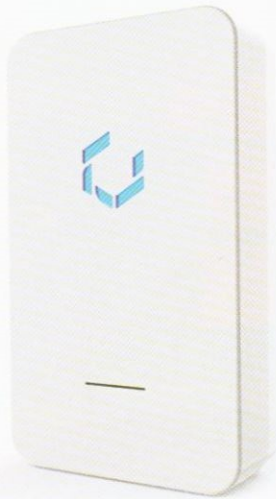
While there is huge demand for technologically advanced solutions, the need for cost-effective solutions has also increased. Highlighting the growing importance of Internet of Things (IoT), Rahul Bhatnagar, CTO of Cubical Labs – a Delhi-based home automation start-up said, "By 2017, we will have internet-based home devices, watches, fitness equipment, electronic appliances and even coffee

machines." He further stated that IoT based solutions are trending in the home automation market and is the most preferred choice for mostly start-ups. Citing the example of Cubical Lab products, he said that due to the technology today the company has managed to produce affordable IoT based switch modules that can even suit the budget of a middle-class home buyer.

The company has recently launched its two innovative products Cubical Aura and Cubical Colors. Cubical Aura is a high-tech intelligent device which helps the user to control Infrared (IR) devices, temperature and lighting



Cubical Mono switch



Cubical Master

and also gives the user convenience of switching off the device with just a swipe of hand. Besides, Cubical Colors is a fully customisable LED strip which allows users to control the brightness and choose from among 32 million colours, fully controlled by a mobile app. It can convert your home into a romantic palace, a crazy party house, a calm reading nook or whatever you wish it to be.

While a smart home functions on sensors and remote controls which leads to a lot consumption of energy. In order to deal with it, GM Modular has recently launched G-Bus Home automation which offers a broad range of options for optimum energy efficiency for every home. G-Bus Intelligent Home Control shows how much energy any electronic appliance is using just by using a wireless remote control extensions on IOS and Android devices etc.

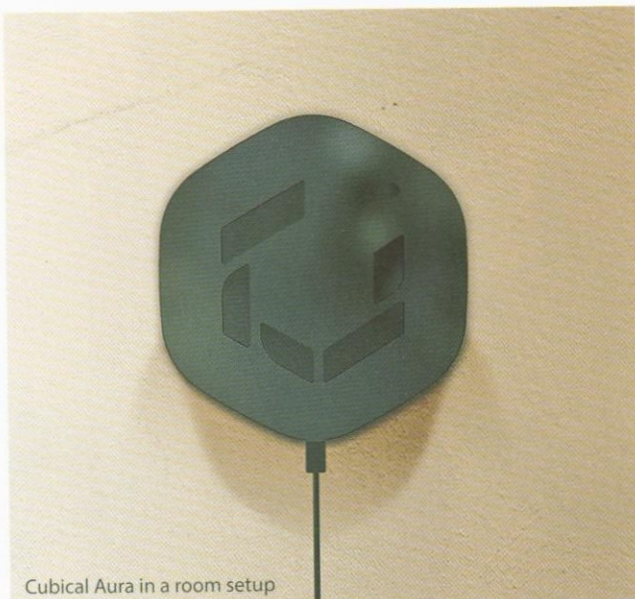
Catering to the demand of lighting and media solutions, Legrand's Vantage systems are designed to seamlessly combine aesthetics and technology and helps in creating beautiful lighting scenes to effortless comfort controls to thrilling home theatre installations. Besides, the system can be combined with industry leading software and the product can be extended and integrated with other sections of home.

Foreseeing the Future

Industry experts predict massive growth on the home automation front in the years to come. Citing a recent survey, Saxena said the market for home automation in India is currently expected to reach Rs.850 crore by 2017.

In consonance with Saxena's view, Bhatnagar states, "With smart phones being the doors to smart homes, the rise of more than 130 million smart phone users makes India a huge and unexplored market." He further said that with a demand for more than seven million units over the next five years in real estate, most of which is from high income group in the top tier cities, the home automation market scenario has never been better which potentially makes India an even bigger future market than most developed countries.

Adding further he point out major tech giants such as Google, Amazon and Apple are coming up with standardised platforms and products such as Google Home and Amazon Alexa which can be easily integrated with devices functioning in these domains to provide a full-fledged IOT based ecosystem. Hence, the possibilities are infinite to develop such standardised system for the likes and needs of the broader consumer segment in India.

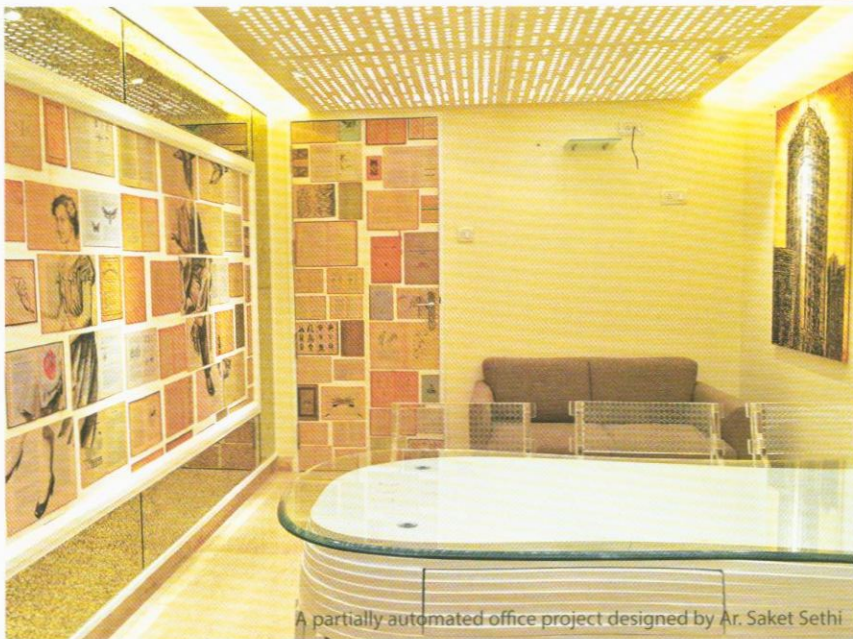


Cubical Aura in a room setup





Ar. Vaibhav Shah

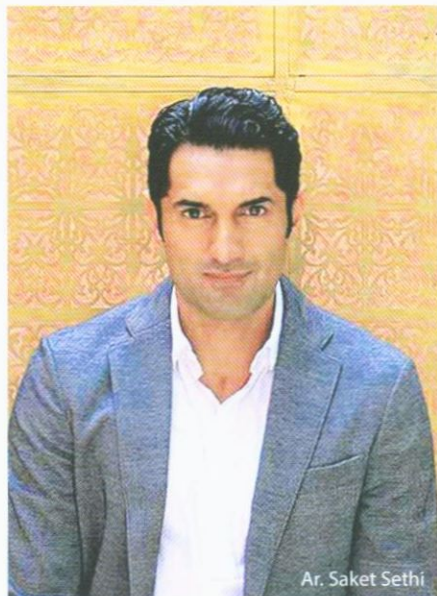


A partially automated office project designed by Ar. Saket Sethi

All in all, a wide array of services, with the launch of innovative, cost-effective and energy-efficient products flocking the market, makes the future of home automation a tad brighter in the country. But what can be seen as an icing on the cake is the surge in start-ups offering cost-effective technology solutions backed by IoT in order to reach out to the larger price-sensitive yet comfort-driven populace. Energy-efficiency will be seen as an added boon along with the comfort and security offered with these solutions. ◻



A residential project with automatic lighting control designed by Ar. Saket Sethi



Ar. Saket Sethi