



THE FUTURE IS HERE

WITH HOME AUTOMATION, THE PROMISE OF A COMFORTABLE, CONVENIENT AND SAFE LIFE IS NO LONGER A FAR-FETCHED DREAM

BY CAROL FERRAO

Considered to be still in a nascent stage, the home automation market is expected to witness a surge in demand, according to the Home Automation Market Outlook 2021 – which predicts a growth with a CAGR of 23.63% in the coming six years. Sustainability and security could be considered driving factors, with automation ensuring a conscious use of lighting and HVAC, and intelligent security systems preventing mishaps. Security dominates this segment, which also constitutes lighting, audio/video and HVAC. With the Internet of Things (IoT) trending, smartphones can remote control electronic activity in built spaces. Mostly associated with high-end residential apartments and commercial buildings, automation is now also entering the upper mid-range homes category.

“The home automation market in India is in its burgeoning (about to mature) stage. The luxury and hospitality home automation market is stronger than it was a couple

of years back, and home automation for households is still evolving. The automation industry in India for homes is primarily popular only for lighting and motorised load controls clubbed with safety and security features like door phones, CCTV and burglar alarms,” states Sameer Saxena, vice president, Marketing & Sales, Legrand India.

Saxena also notes that while there is steady demand in different sectors of home automation, there is also steady growth possibility. According to a recent market study on home automation, the industry is expected to grow in the next five years, with applications such as security, lighting controls and entertainment playing an important role in achieving this significant growth rate. When technology and design begin to come together in the residential space, home owners will associate home automation as a must-have and an indisputable part of the home makeover.

“With the rapidly increasing purchasing power clubbed with the exposures to technology and lifestyle experiences,

1. Anchor's Ave Domina Plus is equipped with feather-touch interface and enhanced aesthetics.



Indians (HNI, upper middle class) are increasingly experimenting with various available forms of home automation – standalone, integrated or mixed. The experience is not only aimed at enthralling guests but also [for the home owner] to enjoy convenience and comfort. The trend is encouraging even for tier II cities such as Jaipur, Surat, Kochi, Coimbatore and Indore,” adds Saxena.

With the general masses becoming increasingly tech-savvy and extremely dependent on their smartphones, home automation might slowly inch away from just being a luxury feature. There is also an increased preference among consumers for convenience, connectivity, safety and security. These aspects will drive the growth of this market, further augmented by the demand for energy-efficient and Green product solutions. “The growing awareness about wireless technologies and the various developments related to the integration of wired and wireless technologies are also expected to propel the home automation and control market in the future,” explains Kanny Leong, co-founder & executive director of Crestron Asia.

ALL IN ONE

Because home automation caters to different functional aspects, the market has varied solutions – some isolated and specific (say, security), and some comprehensive and integrating all necessary devices. But what is most preferred by consumers? “As per the trend, isolated sets catering to different components are preferred in homes. Large-scale commercial automation (for example, building automation), too, uses isolated sets with products befitting needs of the premises,” explains Ashok Gangar, director, Sales & Marketing, Anchor by Panasonic.

Those seeking a comprehensive and more advanced solution will trust the expertise of a home automation consultant who often combines the best devices the market has to offer, even clubbing different brands. “There are two kinds of companies in the home automation domain. The first kind offers point solutions with specific devices to address specific needs. The second kind, which includes companies like Silvan Innovation Labs, enable a comprehensive solution which addresses all the needs related to entrance manage-

FROM DRAB TO FAB

The evolution of the humble switchboard marks the transformation of a civilisation, from its one-dimensional past to its multi-dynamic approach to control. “The new switchboard is all powerful, intelligent and multi-tasking. Just a simple push can now switch on all the lights inside the home – some dimmed to suit the ambience, some switched on for convenience,” points out Legrand’s Saxena.

Mostly touch-enabled, switchboards are interactive with customised graphics and audio guide. Seamless in design, it does not intrude with the sophisticated interior design. Manufacturers even provide stunning plates to cover the boards, such that it adds to the overall elegance of the space. “Anchor unveiled the Uno range of distribution boards that are equipped with stylish colour, elegant curves and distinctive finish blending with all kinds of interiors. These boards are equipped with top and bottom removable gland plates with a number of knockouts. One can install them either flush or wall-mounted versus traditionally wall-mounted boards,” states Gangar.

Smartphone-enabled switchboards are the most-sought-after solutions in this segment; it offers better accessibility and even better energy control. But if an app-based solution is not what you are looking for, Basil systems’ has introduced PaperSwitch – which is a replacement of “boring conventional switches” and can be accessed through IR remote and is equipped with basic automation features. “The switchboard has traditionally been the same for many decades, except for minor design tweaks. CloverBoard and PaperSwitch are a revolution in this regard,” states Vivek Raj of Basil Systems. Although the range of an infrared controlled switch is limited, it is a functional alternative to inanimate switches and suited to low-automation and budget-friendly automation needs.

Bringing the Internet of Things concept to the switchboard, GM Modular has launched the i-Fi switches that can be operated with an existing Wi-Fi connection. “With GM i-Fi switches, you can control lights, fans and blinds, and turn other electronics on and off and monitor their behaviour with a Wi-Fi or 3G or 4G connection through the G-World Intelligent Gateway from wherever you are in the world. You can also control IR devices like TV, STB and other devices with a smart device,” explains Kumarpal Banda of GM Modular.

2. Anchor’s Ave Domina Plus enables scenario management through various controls.

3. Sameer Saxena, vice president, Marketing & Sales, Legrand India.

4. Kumarpal Banda, director, GM Modular.



5&6. Crestron's Pyng has a remote system monitoring feature that allows the company's dealers to track the system and improve device performance.

7. Kanny Leong, co-founder & executive director, Crestron Asia.

8. Ashok Gangar, director, Sales & Marketing, Anchor by Panasonic.

ment, safety and security, automated appliance control, energy management and value-added cloud-enabled services to handle the needs of the home owners as well as entire communities," highlights Avinash K Gautam, CEO, Silvan Innovation Labs.

The fact that it can be both isolated and comprehensive, adds to the advantages of home automation. It enables home owners to find a solution that best meets their requirements. Isolated systems might attract more consumers who might otherwise consider automation a luxury for the future. It could also pave the way for comprehensive solutions once home automation becomes a default feature in design briefs.

"When a customer approaches us for automation, we access his/her requirements and the budgets available. Based on those factors, we recommend an appropriate combination. Some customers only want security and surveillance features, while other customers may be looking for mood lighting and HVAC controls; so, the solutions are then customised accordingly to suit individual requirements," says Saxena. He adds that the challenge, however, is when consumers start buying components from different brands. "It becomes difficult to synchronise and connect all the products and bring them together under one interface."

SECURE AND SAFE

Automation is most sought after in the security segment, with homeowners seeking an intelligent way to protect their assets. "Technology has enabled home owners with different options for home security. Monitored burglar alarms can be linked to local or private emergency services. More consumers are open to installing some measure of security – from CCTV cameras that can be linked to mobile phones to Video Door Phones," states Ramesh Iyer, vice chairman, CEO (India), Topsgrup.

HOT IN THE MARKET

Crestron's Pyng technology was first launched in late 2014; it has more than 300 products, and the company plans to add more each month. In addition to lights, shades, audio distribution, touch screens and many other devices, integrators can use the iPad to quickly set up ONVIF cameras, RGB lighting controls and wireless fan controls. Pyng technology is now available in Cresnet and Ethernet wired devices, such as DIN-Rail, CLX modules, CAEN cabinets, shades, thermostats, dimmers and keypads. This technology allows Crestron dealers to deliver home systems faster than ever before with no compromises in performance or scalability. The technology also enables remote system monitoring and management via the MyCrestron Residential Monitoring Service. This cloud-based monitoring platform allows Crestron dealers to track system and device performance and provide a more proactive service.

Legrand had a variety of new launches in 2015 – for example, new dimming technology and new front-end control devices (the 10" multi-media touch-screen). The 10-inch wide MyHome touch screen allows control of all the systems with custom-made living scenarios. The company also introduced a new programme – Driver Manager for providing users with a stable platform for integration with all non-Legrand products. This solution allows easy integration between MyHome and systems developed by other manufacturers using the same interfaces already developed by Bticino/Legrand.

Anchor has introduced the world's first germ-free wire – Advance EFR that adheres to ASTM and JIS standards and provides protection by restricting growth of the bacteria. It has fire-fighting properties and higher oxygen & temperature index than normal PVC. It also has 101%++ conductivity causing reduced heat generation and saving considerable power, resulting in reduced electricity bills. With the Vision' series of switches and accessories, Panasonic has introduced screwless terminal range of switches for safer and faster wiring, with the comfort of soft touch along with silent switch operation. It can be accompanied with PIR sensor, thus enabling lighting control.

CloverBoard is a Wi-Fi enabled board that provides convenience, energy saving and security. It senses motion, observes usage pattern and behaviour, follows routine and learns to give intelligent control. With this board, appliances can be set in Auto mode by pressing the button for long. Once the green halo is activated, appliances switch on only when needed. It is capable of saving 10-15% in heating and cooling cost and around 30-40% in lighting. CB buttons are not hard coded and can be assigned functionalities via the app; for example, assign CloverBoard button in your bedroom to switch the staircase light.

Silvan's Cbell is a WiFi door bell that replaces existing calling bell without any extra wiring. When the calling bell is pressed, not only does the wireless indoor chime ring, but the home owner also gets a call on his/her cellphone. By answering the call, the home owner can see and talk to the visitor at his doorstep from anywhere. Silvan has also introduced Secure, a wireless app-enabled security system along with centralised monitoring system IPSM (Integrated Property Service Manager). It is a DIY (Do-It-Yourself) security system that secures the home against intrusions, gas leakages and fire.



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9. The 10-inch wide My Home touch screen by Legrand with custom-made settings.

10. Legrand switches in gold brass finish.

11. Avinash K Gautam, CEO, Silvan Innovation Labs.

12. Ramesh Iyer, vice chairman, CEO (India), Topsgrup.

In terms of security, video door phones have become a common feature in residences; burglar alarms are now being considered too. These alarms allow for vigilance and immediate response, even if the home owner is otherwise occupied. "Remote Monitoring Stations and systems can be alerted when these alarms are tripped, assuring immediate help. Green techniques are also employed with auto sensors and detectors to help regulate power consumption – lighting and air-conditioning, especially," explains Iyer.

SMARTER BY THE DAY

Home automation relies heavily on the Internet of Things, and this concept has been a catalyst to most of the recent developments in automation. "The current automation products connect a home's electrical devices to a central system and responds based on the user's input. For example, you push a button, then your shades go down or your lights turn on. When IoT is implemented in home automation, it relies on an essential medium – mainly sensors, to connect all the automation devices to a network. So, all the connected devices are able to complete tasks and communicate with each other to turn the automated home into a truly smart home," describes Crestron's Leong.

The sensor-collected data is transmitted and stored in a cloud-based hub, and the system makes proactive predictions after analysing user behaviour – hence, it automatically adapts to the best suitable settings for lights, temperature, shades and music. "Crestron unveiled PinPoint, which enables a smart home to be even more intelligent and personalised with location detection. For instance, when your home control system is integrated with your smart devices, the device identifies the room you're in and displays the controls applicable to that room. Walk into the kitchen, and

HOME AUTOMATION: AFFORDABLE OR LUXURY?

We asked experts to weigh in on whether automation has made its affordable mark, or is it still the prerogative of the few.

"Home Automation has not really entrenched the mass market, as people are largely unaware of products such as sensors, etc. Standalone lighting controls, however, are finding takers in the market – particularly with LED lighting products."

Ashok Gangar,
director, Sales & Marketing, Anchor by Panasonic

"Home automation is expected to grow continuously in the coming 5-6 years – not only because of the demand for energy-efficient solutions, but also because of the reduced price of automated products and popularity of smart devices. More smart devices targeted to huddle residential area may become a trend, so automation no longer is a privilege of the luxury segment."

Kanny Leong,
co-founder & executive director, Crestron Asia

"Robust, customisable and dependable home automation offers are still limited to premium and luxury real estate. With the increase in purchasing power and interest levels in metros and tier-II cities, the penetration of the market will expand to other proximal income groups as well."

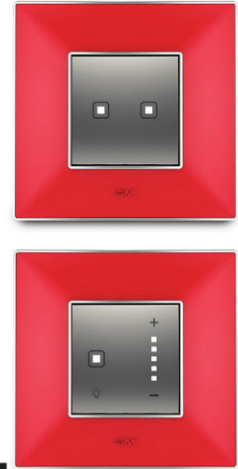
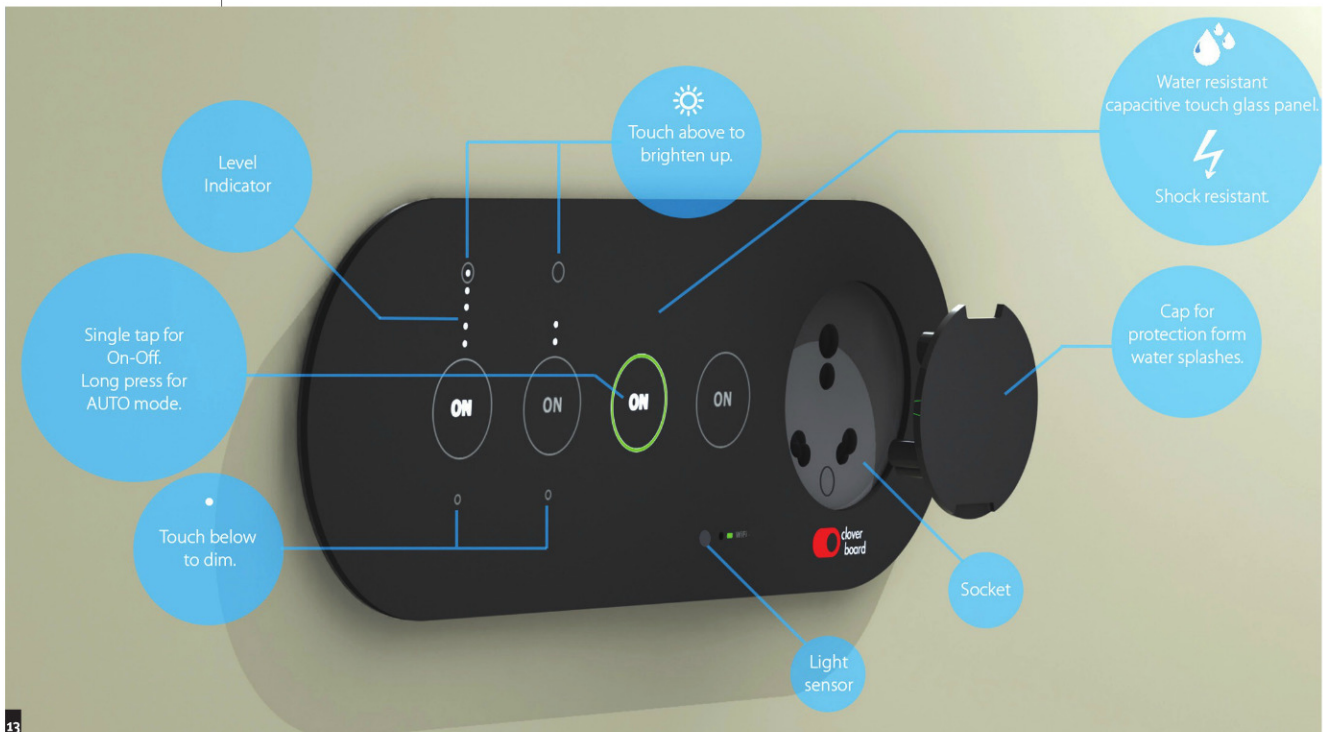
Sameer Saxena,
vice president, Marketing & Sales, Legrand India

"Automation still has to reach the masses. Although there is a requirement for it, the sparseness of resources has to be met with first. Even though technology is reaching places, it won't be inaccurate to say that, at present, automation is still the prerogative of the few."

Kumarpal Banda,
director, GM Modular

"Home automation is definitely more than just luxury. At its most basic nature, it is a combination of luxury, security and Green building techniques. On an average, home automation can be estimated to cost about 10-20% of the cost of a villa. When you look at this investment on a long-term basis, you realise it's a small price to pay for the safety and security of your family."

Ramesh Iyer,
vice chairman, CEO (India), Topsgrup



13. Cloverboard represents the massive transformation of the humble switchboard.

14. Secure by Silvan is a DIY wireless app-enabled security system.

15. Silvan's Cbell is a WiFi door bell which replaces the existing bell without any extra wiring.

16. GM Modular's i-Fi switches are Smart, sleek and unobtrusive.

you're automatically presented with lighting, audio and TV controls for that room. Move into the family room, and [you can] instantly start controlling the lighting, shades and home theatre system in that room," explains Leong.

Legrand's Saxena rightly point out that, even though the concept of smart homes has been on the horizon for a while, living in such a home might take a while. "The home automation and control systems market is an extremely diverse market, spread across different industries and assorted solutions. As a company, we are setting up a programme designed to speed the deployment of our connected devices and, thereby, facilitate the emergence of connected buildings under our Eliot (Electricity Internet of Things) programme. The present basket has limited integration with cloud-based solutions," he adds. Through this programme, Legrand wants to develop solutions that are most needed for the current lifestyle: greater energy efficiency, security, well-being and independent assisted living.

Home Automation can certainly be more than mere luxury. For many, the best way to tap into its advantages is by

starting off with standalone solutions. Gangar from Anchor states, "While very few manufacturers offer complete integrated systems (as the cost can go high), standalone systems – lighting control, security, etc – are being used by aspirational consumers. There is a rise in demand for standalone products such as PIR controlled lighting, shutter, motor, AC and fan control. Individual products such as video door phones, gas detectors, smoke & heat alarms, etc, are widely used in residential as well as commercial premises, making these spaces safer to inhabit."

The benefits of home automation should be reaching a wider audience in the coming years, not only to ensure a comfortable life – but a safe environment too. As Leong states, "Home automation systems help in reducing energy consumption and provides improved safety for homes. Also, automation systems effectively prevent criminal activities such as robbery or theft; by connecting to IP camera, users can monitor home status remotely through web-enabled browsers and mobile devices." Safe, Green and accessible homes will be the future; hopefully, an affordable future. **AS**