Why smart home firms need a smarter pivot

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Bengaluru: Search for 'smart home' on Amazon. The scroll down the page appears never ending with Chinese, American and Indian products jostling for attention. Alexa smart speaker with LED display and Bluetooth; video door phone from Godrej; smart Wi-Fi retrofit switch from Arcnics; Un1que's wireless doorbell; Tapo smart door and window contact sensor; fan control module from iSpaze.

As individual products, they all appear reasonably priced. Something changes when they are brought together as a solution to make your home smarter than it is today. The bill inflates— so much so, home automation nearly feels like luxury.

Take the case of Rajeev Arora's apartment. Along with his wife Vartika, he founded Boho, a chain of bars and restaurants in Bengaluru. The couple bought a 6,000 sq. ft, five-bedroom apartment at Mantri Espana, a premium gated community in the city's Bellandur neighbourhood. A year and half back, they appointed an architect and interior designer to do up the home. An audio-video and smart home systems integrator, Eskay Theatres & Automation, was brought onboard—they wanted extensive and high-end automation. The budget? ₹20 lakh.

The curtains go down at 5pm everyday on their own and the lights turn on. The home theatre has a preset 'movie mode'. Press that button and the projector switches on, the speakers turn on, the lights dim. The 'theatre watching experience' is thereby linked to that single

button. All the gadgets in the house are controlled through a mobile app and voice assistants like Alexa.

"Vartika has programmed everything in the house. The automation system and cabling is so versatile that five years down the line, if we get an even more advanced system, it can be done easily," said Arora.

Since home automation solutions have largely been perceived to be luxury, its adoption has been rather patchy in India. Bonito Designs, an interior design company, says that only 15% of its customers ask for automation.

Arora's home is at the higher end of the spending spectrum. Estimates from Smarttron Automations, a company into residential automation, suggest that wireless automation for a two-bedroom home would cost about ₹1.5 lakh; a three-bedroom needs ₹1.5-2 lakh, while a four-bedroom could cost up to ₹2.5 lakh. Wired automation for a three-bedroom, on the other hand, is more expensive and can cost ₹6 lakh.

Wired automation is done at the construction stage whereas wireless automation is about retrofitting an older home.

The sluggishness in adoption may be changing—at least home automation companies believe so. From being luxury, the market may get more democratized because these companies, which include a host of startups, are trying to price it right. In some cases, capital expenditure, which is made upfront by homeowners, is being converted into an operational expense.

Piggybacking on such efforts, the market is expected to grow faster than it has in the past. According to Renub Research, a research and advisory company, India's home automation market may total \$25.64 billion in 2030 compared to \$4.83 billion in 2022. The company defines home automation as the integration of electronic and smart devices in a home, which allows remote control and management of lighting, heating, ventilation, air conditioning, security, entertainment, and appliances.

Statista has a more conservative estimate. It pegs the smart home market in India at \$6.5 billion this year and expects it to grow at a CAGR of 9.14% to total \$9.2 billion by 2028.

The new models



View Full Image Some multinationals and startups are trying to change the paradigm with new business models that make smart home solutions more affordable. A subscriptions-based model is one of them. (Pixabay)

When Anant Ohri and his five engineering batchmates at VIT Vellore founded Aliste Technologies in 2021, the idea was to create something that would make home automation affordable and accessible.

The Noida-based startup offers a subscription-based model for users where they automate a home, charging ₹1 per appliance per day. For a regular three-bedroom home, with an approximate 18 appliances, it would roughly convert to an expense of ₹500 a month, similar to a Netflix subscription.

The automation process here includes installing a credit card-sized device behind every existing switch board that connects to the home Wi-Fi. Switches that are operated manually can then be controlled in a smart manner and users can operate all appliances through the Aliste app or through Alexa or Google Home. The company also offers a universal remote module.

"Home automation, thus far, has been a luxury-driven push, something that you splurge on. As a result, a large part of the demographic was missing out," said Ohri. "We are offering cost conscious tech. Our consumers are 25-40 years of age, with some discretionary spending power. They want convenience but don't want to spend too much on automation— more so if they live in rented homes," he added.

Aliste claims to have automated around 2,500 properties so far, including homes, coliving spaces, offices and hotels. The company recently raised \$1 million in a funding round led by YourNest Venture Capital and Artha Venture Fund. Among the more established companies in India's home automation market are multinationals like Schneider Electric, Philips, Johnson Controls, Honeywell, ABB, L&T and <u>Wipro</u>. Schneider Electric, a company into energy management and automation, is looking at ways to make things affordable.

The company offers subscription models, too, and financing options. Its smart home products start at under ₹20,000 and customers can progressively upgrade based on individual requirements. "This allows you to build your smart home gradually, starting with what fits your budget and adding more as your needs and resources evolve," said Sumati Sahgal, vice president, retail, Schneider Electric, Greater India.

The company's products include smart thermostats (to control home temperature from anywhere), smart doorbells, dimmers, switches and bulbs that can be controlled wirelessly or with voice.

That piecemeal approach is appealing to people who view home automation more as a utility. When Shobhita and Varun Agarwal moved into their three-bedroom home in Bengaluru's Pai Layout area, in early 2021, they didn't have the budget to install highend automation products. Instead, they took the help of an interior designer to buy smart devices for convenience—Wi-Fi-enabled smart lights, fans, thermostat controllers for geysers and digital locks. In the first year, the couple spent about ₹1.5 lakh on automation, buying products from Amazon.

"Our initial concern was that when my husband and I were at work, our two children were at home alone. The geysers, air conditioners, etc., can be controlled by us remotely. Gradually, we added more features and devices," Shobhita said.

Over the next two years, the couple invested more, spending above ₹2 lakh in a smart home theatre setup and a video door phone for security.

Schneider Electric, meanwhile, is partnering with real estate developers. One of them is Gurugram-based Smartworld Developers. In its recently launched project, The Edition, in the city's Sector 66, where homes cost between ₹6-15 crore, the developer is offering smart solutions. Well, that's luxury again. But wait, even more affordable projects could integrate automation products, going ahead, Vivek Singhal, the chief executive officer (CEO) of Smartworld, believes.

"Adoption of technology is a mindset. Even if we do ₹1 crore homes, we will provide it. A decade ago, the technologies available were expensive and it was tough to integrate it into existing houses. But homes are more electronically driven today, and in the future, automation will become an essential commodity," he said. Last October, Reliance Jio Infocomm, India's largest telecom operator, said it has partnered with California-based Plume, a smart home technology company, to provide smart home and small business services to 200 million premises across India. Subscribers can avail features such as cybersecurity for connected gadgets, parental controls and WiFi-driven motion sensing among others, the companies announced.

Given Reliance's penchant for driving down prices—remember it disrupted the telecom market with free voice calls—it could well succeed in making home automation mainstream now.

Growth boosters



View Full Image Co-living companies did have rent payments, ticket resolutions, entry, exit and gym bookings on an app. Now, they are upping the ante to include more sophisticated offerings. (Stanza Living website)

We keep getting pitches from startups on different point solutions like smart kitchens or smart cleaning," says Ninad Karpe, partner and co-founder at venture capital firm 100X.VC, the first institutional investor in Aliste.

"Consumers have adopted smart appliances but they now want comprehensive solutions at a price they are willing to pay. Given that penetration in home automation is still low, there is a lot of headroom to grow. We expect future demand to come in from smaller cities," Karpe added. As the cost of devices fall—and they mostly do in electronics when volumes come into the picture and when there isn't a supply-chain disruption—smart home solutions are expected to gain traction in cities as diverse as Jaipur, Ludhiana, Pune, Hyderabad, Chandigarh, Cochin and Ahmedabad, experts say.

Cinerama-owned Cinebels, headquartered in Bengaluru, is a personalized home entertainment company—it can set up home theatres and promises to "fill every corner of your home with speakers that look, sound, and function great". The company says it is witnessing more demand for large, dedicated home cinemas from tier II and III cities. In larger metros, where space is at a premium, dedicated home theatres aren't that feasible. People nowadays use their living rooms to park their home theatre systems.

"With streaming, a lot of the audio/video infrastructure cost that used to go into a home has come down," Arjun Agarwal, CEO and a director at Cinerama, said.

"However, client budgets have continued to grow, so they can now spend that same money on better quality speakers and electronics."

Yet another trigger is co-living. More affordable solutions imply further adoption by this set of real estate players. We are already seeing examples of this. They have been quick to say they offer "smart living facilities".

Co-living companies did have rent payments, ticket resolutions, entry, exit and gym bookings on an app. Now, they are upping the ante to include more sophisticated offerings.

Boston Living, a four-year old startup, which runs a 555-bed shared living facility in Hyderabad's Kondapur neighbourhood, uses an access management software called Spintly. Residents can use the software to access a specific block or floor they live in and there are separate access to women-only floors. The startup is now piloting a voice-enabled ticketing system, where a ticket is raised for quick resolution through an Alexa device.

"We have Alexa devices in our premium rooms because they look cool and people like operating their TV or air-conditioners through them. We are constantly trying to introduce new automation features that will enhance convenience and offer value for residents," said Tauseef Hassan Ibrahim, business head, Boston Living.

The company charges ₹15,000 plus taxes per month for a triple sharing room and ₹55,000 plus taxes for a single room occupancy in a premium 2,000-2,500 sq ft apartment.

In 2022, Stanza Living, yet another co-living operator, acquired Singularity Automation, an enterprise Internet of Things (IoT) platform. Check out Singularity Automation's products and you know it fits into the smart living narrative. Its portfolio includes smart door locks, secure access controllers and smart energy meters.

Just over a year ago, another co-living service provider, Housr, which operates across cities in India, tied up with Aliste to use their app. "We are trying to integrate the CCTVs with the visitor management system using artificial intelligence (AI)," Deepak Anand, cofounder and CEO of the company, said. "It will throw up reports on people moving in and out, with face recognition systems. No biometric will be needed, and the censor sees your face and opens the door automatically. The AI feature can also study behaviour and body language of people," he added.

Light touch of tech



View Full Image With streaming, a lot of the audio/video infrastructure cost that buyers incurred has come down. (Pexels)

The definitive lesson on how to go about home automation, and keep expenses low, can only come from people who have seen and done this for many years.

Over a decade ago, Prasanto Kumar Roy, a policy consultant and a tech writer, had his ancestral home in Delhi's Chittaranjan Park redesigned. It was the country's first certified green individual home with a five star rating from TERI-GRIHA. (TERI is short for The Energy and Resources Institute). Alongside environment friendly features, Roy used automation technology to make his home more efficient. In the following years, however, he knocked off some of the excessive automation features he had. For instance, automated electric blinds and audio controls. He felt they were unnecessary.

In his current apartment in a Gurugram condominium, Roy has used automation that is more about convenience and energy efficiency, like motion sensing lights.

"Automation has become very commoditiszed and modularized. Too much automation is also a problem, leading to maintenance and higher account maintenance charges. My learning was to go with a lighter touch of tech that doesn't affect your green rating," Roy said.