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10 COVER STORY

Wired. Wireless. Hybrid. Is This the Smart Home Revolution We've Been Waiting For?

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SWATI BALGI

FROM THE EDITOR

Smart Home Expo 2025 was more than just a showcase of the latest in automation — it was a reflection of where the industry is headed. From AI-driven devices to seamless integrations solutions, the event made one thing clear: the future of smart living is not just about innovation, but about intelligent balance.

This insight sets the stage for our Cover Story on Hybrid Automation, a concept that's quickly gaining traction as the most practical and future-ready approach in smart homes. In this issue, we examine how this evolving model not only addresses today's integration challenges but also lays the groundwork for more scalable, resilient, and user-friendly environments.

In the interview section, Shyam Motwani from Godrej introduces a game-changing Service CRM platform for smart locking; Sushil Motwani shares how Formovie is setting new standards in home entertainment in India; and Umesh Sharma reflects on merging sustainable design with smart technology in architecture.

In this issue, Bhavesh Doshi writes about how LogicMachine LM5 is revolutionizing building automation through unified integration.

And our case studies, including projects by Ar. Milind Pai and Nulty+ demonstrate how technology and design can co-exist beautifully in modern living spaces.

As we step into the next chapter of smart living, hybrid Automation might just be the bridge we need between what's possible today and what's imaginable tomorrow.

Enjoy reading and get back to us with your feedback.

TATA POWER
EZ HOME

TATA

Time Scheduling
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Modular Touch Panel

Voice Control

Energy Tracking
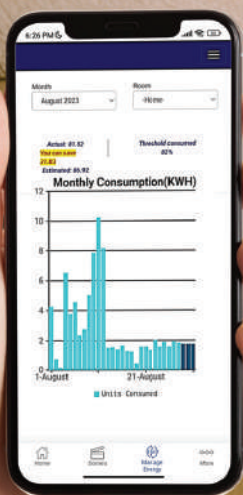
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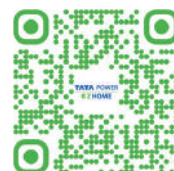
TO KNOW MORE

A SMARTER HOME FOR A SMARTER LIFE

How Tata Power EZ Home transformed the way I live, work, and save energy.

As a corporate professional, my day begins with back-to-back calls and ends with emails that never seem to stop. Amidst the hustle, I needed my home to be less of a responsibility and more of a support system. That's exactly what **Tata Power EZ Home** brought into my life—comfort, convenience, and control that fits perfectly into my demanding routine.

TIME SCHEDULING:

MY HOME, ON MY OWN TIME

I've automated my everyday comfort. My AC's temperature is set at 24°C before I walk in, the lights dim as I wind down, and I no longer worry about switching things off. With **EZ Home's Time Scheduling,** my appliances run on my schedule—saving me both time and energy.

VOICE CONTROL WITH ALEXA/ GOOGLE HOME:

EFFORTLESS LIVING

Hands full? Midway through a presentation? I simply say, **"Alexa, turn on the fan,"** and it's done. Voice control has removed the smallest frictions from my day, making multitasking easier and life a whole lot smoother.

ENERGY ANALYTICS:

POWER WITH INSIGHT

EZ Home's energy analytics feature gives a real-time view of energy consumption. We now understand where energy is being consumed and how we can use it more efficiently. It has helped us reduce wastage and align with our personal stability goals—all without lifting a finger.

EZ Home hasn't just made my house smarter; it has made my and my family's lifestyle smarter. Whether I'm at the office or on the move, I know my home is being managed exactly how we want it to be—securely, efficiently, and intelligently.

TATA POWER EZ HOME IS NOT JUST ABOUT AUTOMATION. IT'S ABOUT BRINGING BALANCE TO A BUSY LIFE.

Wired, Wireless, or Both—Is Hybrid the Game-Changer We've Been Waiting For?

Is Hybrid Automation emerging as the ideal middle ground between Wired and Wireless systems, offering the best of both worlds? Experts share their insights on how this might be the most reliable option in the coming years.

What's next? What's new? These were the questions echoing through the halls of Smart Home Expo 2025, where architects, interior designers, builders, and system integrators visited Smart Home Expo 2025 with one common goal: to explore the latest in Smart Home Automation and Smart Technology; and also learn what the future holds in this segment. With rapid advancements in both wired and wireless automation technologies, the industry is shifting its focus toward a hybrid approach—one that leverages the reliability of wired systems and the flexibility of wireless solutions.

"As the home automation industry continues to mature, the conversation is rapidly shifting toward hybrid systems—an innovative integration of both wired and wireless technologies that offers the best of both worlds," says Aditya Khambhati, Managing Partner, Trinity Synergy.
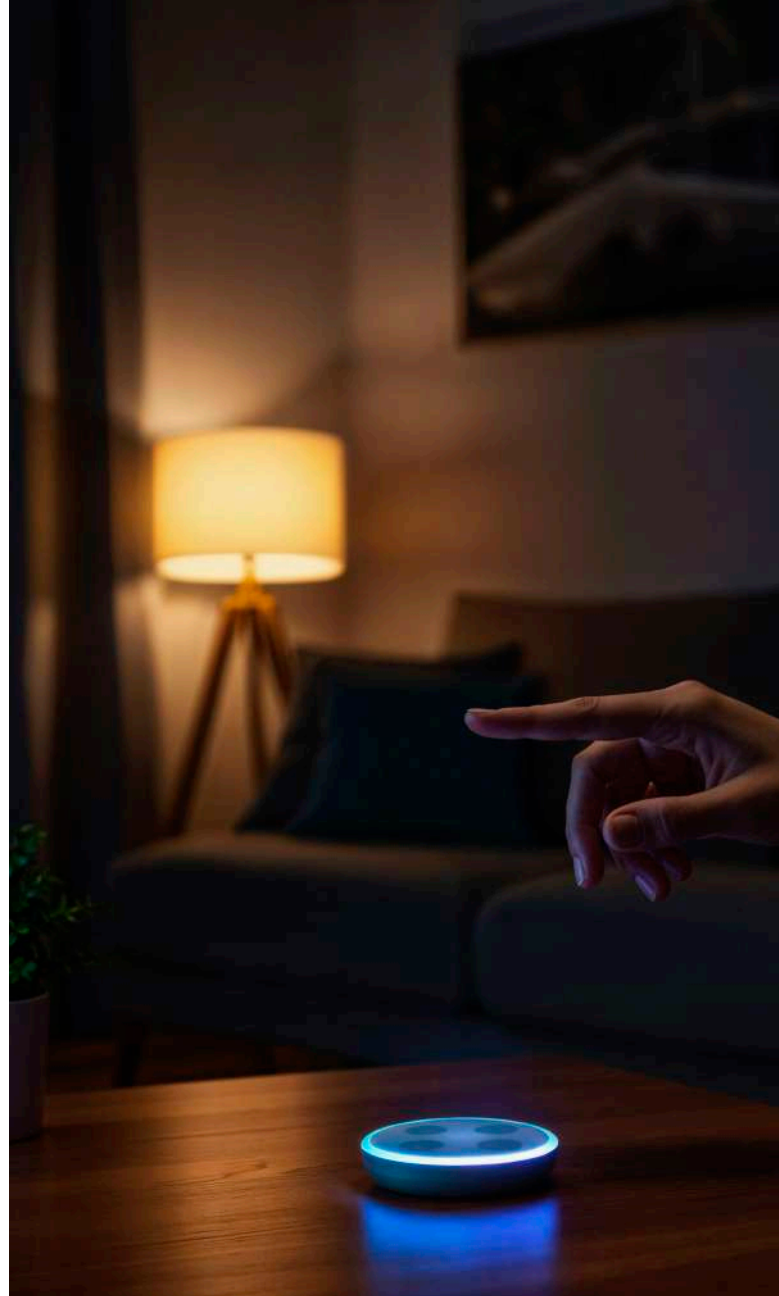
Advantages of Wired and Wireless

It has been known for years that traditionally, wired systems have been favoured for their reliability, speed, and long-term stability, particularly in new construction and large-scale residential or commercial projects. These systems, built on robust protocols like KNX, RS485, DALI, and Modbus, are ideal for core infrastructure—such as lighting, HVAC, and security—ensuring minimal latency and maximum uptime.

On the other hand, wireless systems have seen widespread adoption due to its flexibility, ease of installation, and retrofit-friendliness. Technologies like Zigbee, Z-Wave, Wi-Fi, and Bluetooth allow for intuitive control via smartphones, voice assistants, and app interfaces. This makes wireless solutions especially attractive for existing homes, small apartments, or projects where minimal structural change is desired.

Now, industry experts are rallying behind hybrid systems as the future of intelligent living. These systems leverage a wired backbone for mission-critical functions, while adding a wireless layer for modular upgrades, user personalization, and mobile control. A middleware or gateway device bridges the two technologies, allowing seamless integration and synchronization. This results in a smart home that is not only highly reliable but also scalable, adaptable, and user-centric.

The advantages of hybrid automation are significant. Installation becomes more cost-effective and phased, allowing homeowners and builders to prioritize critical infrastructure

upfront and add advanced features later. Reliability is maintained for core systems, while the flexibility of wireless allows for ongoing enhancements, even post-occupancy. Maintenance becomes easier too—wired systems require little intervention, while wireless components can be updated over-the-air.

At the Smart Home Expo 2025, this sentiment was echoed across panel discussions and product showcases. In particular, the session titled "Wired vs. Wireless: Choosing the Right Ecosystem for Indian Homes" highlighted how hybrid systems are no longer a trend but a strategic evolution in the way homes are designed and lived in.

Why Hybrid Is Gaining Momentum?

As the smart home industry continues to evolve, hybrid automation systems are quickly emerging as the next big leap. Experts across the board are recognizing hybrid as the most balanced approach—merging the robust performance of wired infrastructure with the flexibility and scalability of wireless technologies. This dual-layered model is ideal for tackling complex design requirements, optimizing installation costs, and enabling phased, future-ready upgrades.

"The hybrid approach offers the perfect middle ground," notes Aditya Khambhati, Managing Partner at Trinity Synergy. "It's well-suited to today's diverse project needs and tomorrow's evolving tech landscape." This sentiment was echoed at the Smart Home Expo 2025 during the panel discussion "Wired vs. Wireless? Choosing the Right Ecosystem for Indian Homes." As the discussion unfolded, one message became increasingly clear: hybrid automation is not just a passing trend—it's fast becoming the cornerstone of intelligent living, both in India and globally. By harnessing the strengths of both systems, hybrid solutions empower homeowners, designers, and integrators to craft smart spaces that are not only reliable and high-performing, but also scalable, personalized, and visually seamless.

From (L to R) Aditya Khambhati, Managing Partner, Trinity Synergy moderated the discussion and his co-panelists were Sameer Dass, Associate Vice President, Havells India; Marcel Gramann, Executive Board (Global Sales), MDT Technologies, Vikas Gowrisetty, Founder, Awicon Technologies LLP; Sreejith Nair, Consultant & Director (Automation & AV), Gadgeon Lifestyle and Jayaprakash Chinnamuthu, Director, Residential & Lighting, Crestron India.

Expert's Views

Sreejith Nair, Consultant & Director (Automation & AV), Gadgeon Lifestyle

"There's a lot to consider when weighing the pros and cons. Our priority is always to provide a reliable solution tailored to the client's specific needs and technology requirements. Having worked extensively with hybrid systems, I firmly believe that hybrid solutions offer the best balance."

Vikas Gowrisetty, Founder, Awicon Technologies LLP

"Wired and wireless systems each serve different needs. Wired solutions are ideal for professional setups requiring reliability and expert installation, while wireless offers flexibility and ease for smaller spaces or users seeking simpler options. As wireless technology evolves and standards become unified, integration will become much smoother. Both technologies will continue to coexist, complementing each other in creating effective automation systems."

Sameer Dass, Associate Vice President, Havells India

"To truly deliver effective automation, it's crucial to first understand what the customer needs and then tailor the solution accordingly. We're heading toward a unified platform where wired and wireless systems converge—each playing to its strengths. Wired setups will remain essential for high-speed, high-reliability applications like streaming and always-on devices, while wireless will offer unmatched flexibility and ease of integration.

In the near future, homes will feature seamlessly connected systems managed through a single, intuitive user interface. I believe we're just two to three years away from this becoming a standard reality. The future is undoubtedly hybrid."

Marcel Gramann, Executive Board Member (Global Sales), MDT

"It's clear that different systems come with different requirements—some demand physical infrastructure, while others operate through wireless communication protocols. Each has its advantages, depending on the application. However, the real power lies in combining the two.

A hybrid system integrates the reliability and performance of wired installations with the flexibility and scalability of wireless solutions. This approach not only adapts to the unique needs of each space but also ensures long-term efficiency and user convenience. I couldn't agree more with the sentiment shared earlier—hybrid is the future."

Jayaprakash Chinnamuthu - Director - Residential & Lighting, Crestron India

"When working on a greenfield project—building from scratch—I always recommend a wired system for most of the installation. Wired connections offer unmatched reliability, especially for fixed components like lighting and security.

However, for retrofits where wiring isn't feasible, wireless is the go-to solution. When it comes to smart home, there are multiple subsystems—lighting, security, audio, video—each with its own requirements and protocols. It's important to design these systems to communicate seamlessly and build a robust overall solution. I would vouch for a hybrid system."

While hybrid automation is gaining strong support and shows great promise, the smart home industry is still evolving rapidly. Whether this approach will become the definitive standard or give way to new innovations remains to be seen. As technologies continue to advance and user needs shift, the true future of smart home automation will unfold over time. For now, all eyes remain on how wired and wireless solutions will continue to blend—and only time will tell what comes next. Let's wait and watch.

(These quotes are excerpts of the Panel Discussion on "Wired vs. Wireless: Choosing the Right Ecosystem for Indian Homes at Smart Home Expo 2025)

Explore Next-Gen Smart Switches and Controls

Smart Switches, Control Panels, and Smart Keypads are revolutionizing the way we control our homes. For tech-savvy homeowners, architects, interior designers, and builders alike, one thing is certain: the future is programmable. Discover what leading brands have to offer.

In a world increasingly defined by seamless connectivity and automation, Indian homes are catching up—and fast. The rise of Smart Switches, Control Panels, and Smart Keypads are redefining how homeowners interact with their living spaces. It is not just about turning lights `On' or `Off'; these smart devices are now central hubs for controlling entire home ecosystems, from lighting and climate to security and energy use.

The Evolution and Market Size

The Indian smart home market is expected to cross ₹45,000 crore by 2026, and driving much of this growth is a new generation of intelligent electrical infrastructure. Plus, smart switches and panels have evolved into sleek, touchscreen-driven units with embedded connectivity, intuitive control logic, and modular design.

Additionally, they are also powered by IoT, AI, and Cloud Integration. These devices offer real-time control via smartphones, voice assistants, and even gesture recognition.

Latest Trends Shaping Indian Homes

Smart home controls are rapidly evolving

with capacitive interfaces which are now a common sight in living rooms, bedrooms, and kitchens, allowing users to control multiple appliances like lights, fans, air conditioners and even curtains—from a single, intuitive panel. Their minimalist, often customisable design makes them a seamless fit for modern Indian interiors. Alongside touch, voice and app-based controls are becoming standard, driven by widespread smartphone usage and the increasing presence of voice assistants that understand regional languages.

Another major trend is scene control and automation, which allows homeowners to pre-set moods and routines. Imagine waking up to soft lighting, automatic curtain movement, and your coffee machine kicking in—all without manual input. Such automation, previously a luxury, is now accessible and highly practical. For existing homes, especially in Tier 2 and Tier 3 cities, retrofit-friendly smart switches offer a game-changing solution.

These modular, wireless devices work with existing wiring, eliminating the need for expensive renovations. Additionally, several companies are tailoring products to the Indian market with localized design and multilingual interfaces, making smart home technology more inclusive and user-friendly.

On the technical front, significant advancements are driving these innovations forward. Many smart switches now support KNX, Zigbee, Z-Wave, and Wi-Fi protocols, ensuring reliable wireless communication and seamless integration with other IoT devices. Enhanced capacitive touch technology paired with haptic feedback improves the tactile experience and accessibility, particularly important for elderly users or those with disabilities. Energy monitoring and usage analytics have also become standard in many advanced panels, helping homeowners track consumption in real time and reduce electricity bills, especially in states with higher tariffs. Finally, AI-powered control logic is emerging in premium systems, using machine learning to understand usage patterns and automate actions accordingly, bringing intelligent, responsive control to everyday living.

We Feature The Latest Innovations From Top Smart Home Brands, Highlighting The Latest Products And Technologies Shaping Connected Living.

Havells India Ltd. has recently introduced Apogee, a premium modular switch range that seamlessly blends luxury with cutting-edge technology. Designed for those who appreciate the finer things in life, Apogee elevates the ordinary into the extraordinary, setting a new benchmark in home and commercial automation. In architectural design, beauty must be matched with reliability. The Apogee range prioritizes safety and durability, ensuring that its exquisite form is backed by superior function. Crafted from high-temperature fire-resistant materials,

Apogee switches and sockets offer a secure and long-lasting solution for modern interiors. The Apogee range is designed to deliver a tactile, high-quality experience through robust mechanical switches that are built to withstand the test of time. Suitable for both residential and commercial spaces, it seamlessly integrates into luxury homes, high-end hotels, and premium workspaces. With a strong emphasis on architectural harmony, Apogee's design elements complement a wide variety of interior styles, offering both visual elegance and functional excellence.

To cater to diverse aesthetic preferences,

the Apogee range features six distinct cover plate variants. The Ethnic variant pays tribute to cultural richness with intricate patterns inspired by traditional artistry. The Satin variant offers a smooth, lustrous finish that adds a touch of subtle elegance. The Metal variant combines industrial chic with modern sophistication through sleek metallic surfaces.

The Wood variant introduces the warmth of natural wood, creating a timeless and organic appeal. The Glass variant delivers a polished, contemporary look that enhances modern interiors. Lastly, the PC (Polycarbonate) variant offers a durable and versatile option that balances style with practicality. With a palette of 18 vibrant colour options, Apogee gives architects and designers the freedom to tailor their spaces precisely, ensuring seamless integration into any design language. Embracing the shift towards smart living, the Apogee range incorporates Smart Connected Technology, enabling intuitive control over key home and office functions such as lighting, dimming, fans, and air conditioning. Its wireless automation capability eliminates the need for extensive rewiring, making it ideal for both new constructions and retrofit projects. Mesh connectivity technology ensures a stable and efficient network for smooth smart home integration, while upgradeability ensures that the system can adapt to future technological advancements, keeping spaces modern and relevant.

Whether used in high-end residences, boutique hotels, or premium commercial environments, the Apogee range stands as a sophisticated blend of luxury, design versatility, and intelligent innovation. It offers a future-ready solution that enhances both aesthetics and functionality, meeting the evolving needs of modern architecture and smart living.

Schneider Electric's SpaceLogic KNX is a next-generation smart home solution engineered to elevate luxury living through intelligent automation, elegant design, and sustainable performance. Designed for discerning homeowners and visionary developers, SpaceLogic KNX brings together lighting, HVAC, security, and energy management into one cohesive, open-protocol-based ecosystem that's both scalable and future-ready.

Built for seamless integration, SpaceLogic KNX offers unmatched interoperability with third-party platforms such as Sonos, Apple HomeKit, Amazon Alexa, and Google Assistant, enabling effortless voice control and personalized experiences. The Wiser KNX App provides users with real-time access and control over home systems—from lighting and climate to energy usage and security—anytime, from anywhere. With features like smart scheduling, custom scenes, and live energy monitoring, daily living becomes not only more convenient but also more intelligent and energy-efficient.

Aesthetics meet innovation with SpaceLogic KNX's modern, minimalist design. Devices like the frameless 4" Touch Unit with customizable icons and screens and the premium Metal Range of Keypads are crafted to blend seamlessly into high-end interiors. Whether you're designing a new build or upgrading an existing space, the system's sleek and sophisticated components complement the most luxurious environments.

Security and adaptability are integral to the

SpaceLogic KNX platform. With KNX Secure encryption, users enjoy peace of mind knowing that their home automation network is protected against cyber threats. The modular architecture supports evolving needs, allowing for easy expansion or upgrades. Additional features such as EcoStruxure™ compatibility, hybrid KNX + Zigbee integration, and KNX + DALI + Lighting BBT support streamline installations and enhance system performance. Built-in logic and analytics capabilities also enable predictive maintenance and real-time energy optimization.

Although designed for premium homes, SpaceLogic KNX is equally suited to commercial and institutional environments.

Escala Tech distributor of Voice Controller **Citron** has a unique proposition of having an offline voice command assistant "Alise", the 8-button KNX keypad gives users the flexibility of being heard on being prompted and without worrying about privacy issues, which comes up with all cloud servers-based devices, the keypad can pick up voice commands from as far as 20 feet, and also acknowledges the command being heard and executed. Available in premium Metal finishes, the Voice Controller from Citron works on KNX and makes any other device redundant, which is only kept in the room to receive voice commands.

The **iX4** is equipped with a comprehensive range of features designed for advanced control and monitoring. It allows for the separate control of up to 128 functions and supports up to 20 function pages, each capable of managing various control operations. These include switching, toggling, dimming, shutter and blinds control, user-defined scenes, value functions for sending preset values, dual-channel control functions, step switching, music control, and thermostat extension capabilities. The device can also measure environmental parameters using integrated sensors for temperature, humidity, brightness, proximity, and air quality, depending on the model. External inputs on the iX4 are configurable and programmable as either analog or digital through ETS. Users can define and implement up to 64 different scenes upon request. Additionally, the device features dedicated pages for meter information, sensor data, and weather updates, allowing users to track up to 8 sensor values, 8 energy metering values, and view weekly weather information. Timer and alarm functions are also available, enabling users to set a timer that, upon completion, sends a communication object to the bus, or to set an alarm that plays a selected

tone when the specified time is reached. Both the timer and alarm features can be turned on or off via the device interface. For added security, a password screen is available, supporting up to four different passwords.

Osum Smart Innovations has recently launched Elevat8 is a revolutionary 8-button keypad, built upon the globally recognized KNX platform. This innovative product marks a significant leap forward in intuitive home and commercial automation, offering unparalleled control, flexibility, and a truly integrated smart living experience.

With eight elegantly designed, tactile buttons, users can effortlessly manage a myriad of functions – from adjusting lighting scenes and controlling climate to operating blinds and managing entertainment systems. The beauty of Elevat8 lies in its versatility. Beyond the physical keypad, users gain complete control through a dedicated mobile application, allowing for remote management and customization from anywhere in the world. Furthermore, embracing the future of smart interaction, Elevat8 integrates seamlessly

with leading voice control platforms, enabling users to simply speak their commands for an utterly hands-free experience.

The decision to develop Elevat8 on the KNX platform underscores Osum Smart Innovations' commitment to robust, future-proof, and interoperable solutions. KNX, a global standard for home and building control, ensures that Elevat8 can communicate flawlessly with a vast ecosystem of certified products from over 500 manufacturers worldwide.

This open standard liberates users from proprietary limitations, offering unmatched flexibility in expanding and customizing their smart installations. KNX also brings inherent benefits like enhanced security, remarkable energy efficiency through intelligent automation, and a decentralized architecture that ensures reliability even if one component falters.

Elevat8 embodies Osum Smart Innovations' vision to humanize innovation, transforming every living and working area into an intelligent, personalized space. This launch reinforces our dedication to providing cutting-edge solutions that prioritize user experience, convenience, and sustainable living. With Elevat8, Osum is not just launching a product; we are inviting you to experience the next level of smart automation, where control is always at your fingertips, voice, or even a simple glance at your phone.

Miantic AV Distribution official distributor of multiple brands, one of them **Black Nova**, offers **ARIA** and **ALBA** series keypads, having single, double, and triple frames that offer flexibility to combine different keypad layouts together or to equip your keypads with a socket. Reduce visual clutter and fulfil the needs of the most complex of projects. Customize Black Nova keypads have a unique interface by choosing icons from their library and adding custom text in the preferred language. They offer the option to personalize your keypad even more by selecting colour and intensity of each LED backlight from a 167 million colour palette. The backlights dim when the keypad is not in use to ensure user comfort during the night.

ARIA Collection elicits straight lines, pure shapes and completely smooth surfaces. The natural simplicity of these glass keypads can complement any modern interior. ARIA is minimalist in its essence. The ARIA Collection comes in 3*3 and 3*4 configurations with up to 12 touch-points and a thermostat version with built-in temperature and humidity sensors. The keypads are available in two colours of extra clear glass – Ice White and York Black.

ALBA Series has a distinct look and bold combinations of metals and glass transform a keypad into an interior accent piece that you want to showcase. ALBA Collection is available in 2, 4 and 8-button configurations with up to 12 touch points. The ABA multipurpose display can support the functionality of a thermostat, media or scenario control. The top and bottom buttons of the keypad can be equipped with 2 touch points each.

The Black Jack Collection represents the perfect blend of Italian innovation and advanced technology with the elegance and finest French savoir-faire. Its iconic design, unmatched craftsmanship, unparalleled smart features and user experience deliver an exquisite piece of modern art. Black Jack is available in 2, 4, 6, 8 push buttons and a multipurpose display, and offers broad and comprehensive range of features, including independent dimmer able RGB backlight, temperature and humidity sensors, providing the final user unmatched customization opportunities

Tyba offers **Turn 2™**, a room controller designed to adjust room parameters with a rotating outer ring. Turn 2 also features a touch screen used to switch between control functions. Turn 2™ can be used either stand-alone, powered by USB-C C or with one of the optional Bus Connectors. The Bus Connectors are designed to provide a mounting interface, power and optional system integration. The Turn 2™ ring is machined from a range of solid metals and is available in our beautiful hand-crafted finishes, Black, Silver, and Bronze.

Set light scenes and adjust individual lights. Adjust temperature, fan speed, modes, and humidity. Set shade scenes and adjust individual shades. Choose a source, adjust volume, play, pause and skip tracks. Also features Built in temperature and motion sensor. The Tyba app streamlines device setup, configuration and control, providing a powerful yet accessible interface to manage every Tyba product.

Turn 2™ is built for the future, including a powerful ARM processor, an ultra-secure

embedded operating system and jam-packed with technology. Smart home integration is enabled using wired proprietary communication and over IP using Ethernet or Wi-Fi.

Smato, a renowned distributor of the leading company with multiple brands under its portfolio, one of the brands, **Basalte**, offers Keypads that Work on the KNX, Creston, and Lutron (RS485) protocol. The **Sentido Keypad**: The light switch reinvented. The entire surface of Sentido is touch-sensitive, creating an innovative and unique user experience. Lights, shades, and scenes can be operated at the slightest touch. The unique multitouch function lets you easily dim the room to the right scene. Sentido's minimalist look and the use of high-grade materials result in a timeless design.

Basalte's another offering **Fibonacci Keypads** is Inspired by Fibonacci's golden ratio. These switches bring natural beauty to the heart of your home. Its avant-garde looks elevate even the most sophisticated interiors. When approaching Fibonacci, its backlit laser-engraved labels subtly light up to welcome
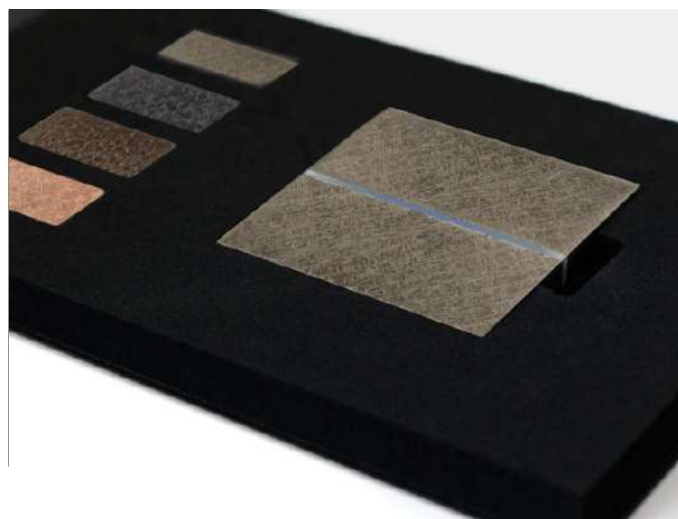
the user to their home. The icons and text labels can be customized as per the user's requirement. High-end finishes that match your home Fibonacci comes in all premium Basalte finishes to blend in with every interior or to stand out as a true design statement!

Deseo is a multifunctional design thermostat to intuitively control your home climate, lights, and even music at the slightest touch. This beauty combines innovative touch-sensitive technology with a 1.7" multi-color OLED display in an attractive and innovative design.

Chopin Keypad are unique in design. Controlling Chopin feels a bit like playing the piano. Push the levers up or down to intuitively dim the lights, close the curtains, and let your favourite music enter the room. Press and hold the levers for even more functions. Match up to Combine Chopin with our USB Sockets in a 2-gang configuration.

Ellie Control Panel is the most refined touch panel for the intelligent home. Compact and minimalist yet packed with a lot of power and convenience. This smart home wonder is your go-to point to control your Basalte Home: lights, shades, scenes, music, HVAC, door phones, and cameras are only a tap away. Ellie is a true beauty! She is available in the same luxury finishes as your keypads, sockets, and speakers to create visual consistency. Sleek, and thin, Ellie seems to be floating on the wall. The 5.5" OLED display in full HD guides you right where you need to be. For Ellie, you need the Basalte Core Server.

Lisa Control Panel is compact, powerful and convenient. Meet Lisa: Ellie's little sister. Smaller in size but equally as powerful, intuitive, and

convenient. Your intelligent home is only a swipe away! Control lights, shades, music, and scenes in one specific room. View security cameras, see who's at your doorstep, and use the in-house intercom function. Lisa is small, yet gives you access to everything you need. Perfect for bathrooms or smaller bedrooms. Lisa, you need the Basalte Core Server.

Basalte Core is the heart of your Basalte Home. This intelligent server is fast, reliable, and specifically designed for the needs of luxury homes worldwide. Basalte Core works with KNX, the global standard in home automation. Seamlessly control KNX lighting, AV Integration, and more in the intuitive Basalte Home app. This Basalte Home app combines an elegant user interface with optimal usability. Enjoy direct access to your most common functions around the house. Complete control of specific functions is only a tap away.

Miro is a remote for Basalte Home. Easily turn on the TV, fill the room with music, or dim the lights. Simply set the scene. With Miro, your Basalte Home is at your fingertips. Miro is the perfect addition to their collection of premium keypads, touch panels, and other controls.
This luxurious remote comes in a timeless brushed black and is precision machined from a single piece of aluminum. Its refined looks match perfectly with any interior!! Universal, intuitive, and elegant. It's the only remote you'll ever need! Super responsive, interactive 2" black touch display that instantly lights up to guide you right where you need to be! The laser-engraved aluminum buttons are placed with meticulous attention to user patterns, so the commands you are most likely to use are close to your fingertips. The ideal ratio of the touch display, buttons, and joystick. With our intuitive remote, life can't be any simpler! Holding Miro, you instantly notice the ergonomic feel and the slim design of the aluminum body. Perfectly balanced in the palm of your hand!

Goldmedal Electricals
Experience seamless control, energy efficiency, and intelligent automation — all with their home automation solution powered by Zigbee. Powering the solution is the Z-Hub, a gateway that provides Zigbee functionality within your home. The G-World, a user-friendly mobile app, connects the Z-Hub to the home automation devices, offering intuitive controls, real-time monitoring, and advanced automation. It offers custom schedules, set energy-saving routines, and receives usage insights to take charge of the home.

Using the Z-Hub via the G-World mobile app, one can add, configure, group devices, and control them manually, through voice commands, or via the mobile app. Whether it's lighting, appliances, or security systems, Zigbee-enabled connectivity offers advanced connectivity, unmatched versatility, and effortless integration into modern homes.

The Zigbee-enabled panels (scene switches, remotes) are available in wired and wireless variants, giving users the flexibility to adapt their smart home setup with ease. Available in different colour options and in different materials and finishes, the home automation panels do not just look futuristic; they also incorporate design elements that complement your interiors. The Aspire 30 Multifunction Buttons are also available in replaceable decorative frames. Along with multiple colour options for these frames, you can also combine these frames to create seamless, attractive 4 and 6-module panels.

The home automation panels are available in a range of configurations. You can choose from switches, dimmers, sensors, and multi-functional controllers. There are panels with an international socket with a switch and a USB port. Installing them is simple and quick. Just plug in the Zigbee-enabled panels into the existing wiring and you are ready to go. There is no rewiring required.
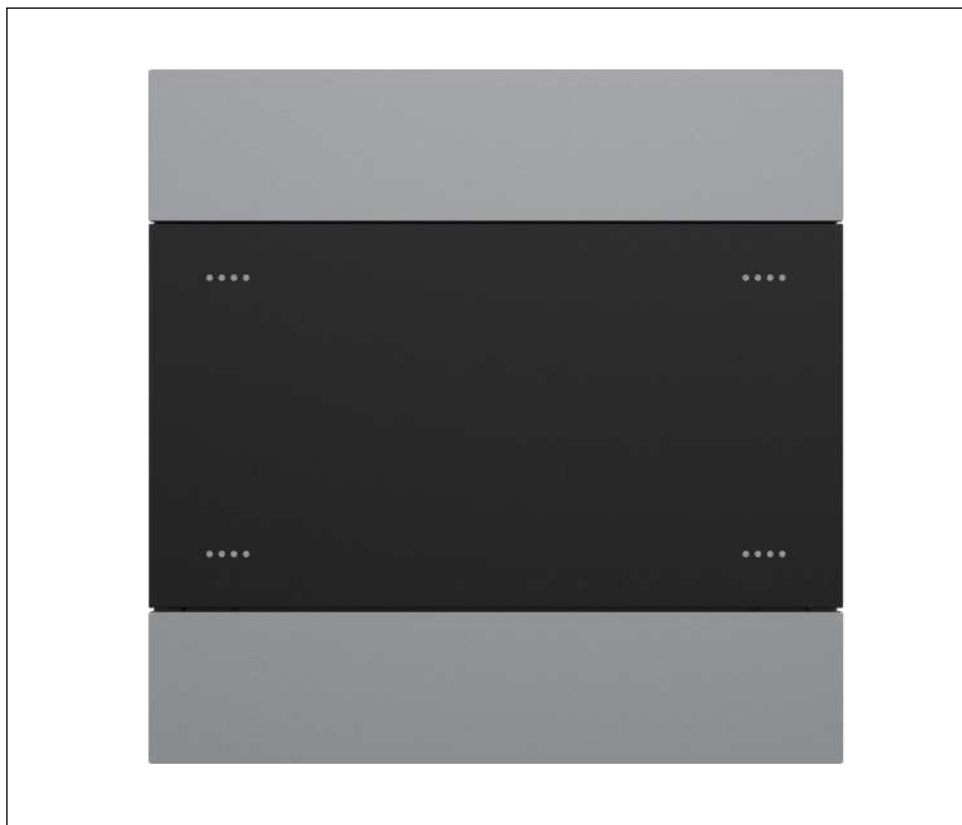
Apart from controlling individual devices, you can also group a series of lights or define "scenes" that can get activated manually or automatically. Sync it with motion sensors that detect the slightest of human presence - from a quiet breath to a brisk stride - and you ensure that the lights are turned on and the AC set to a particular temperature the moment you step into a room.

The Zigbee home automation solution is ideal for smart homes, offices, and hospitality environments. Built-in sensors enable responsive lighting and temperature adjustments, creating the perfect environment for comfort and efficiency.

Whether you are looking to automate a single room or your entire home, Zigbee-powered devices are the future-ready solutions that can transform your lifestyle with ease.

NUOS offers a premium range of Zigbee 3.0 Smart Touch Switches and Panels engineered to elevate modern living. Featuring Zigbee connectivity, NUOS switches & panels provide secure, seamless control of lights, fans, ACs, curtains, and appliances. They support DALI lighting control, offering advanced pro-lighting capabilities ideal for larger projects and commercial spaces. NUOS products are compatible with Alexa, Google Assistant, and Apple Watch, enabling intuitive voice control. Their sleek design includes Magnetic Snap-Fit glass panels with customizable finishes. The NUOS app offers scheduling, automation, scene control, and real-time energy monitoring. The platform is future-ready with OTA updates and integrates with smart home ecosystems. Unique USPs include Made-in-India excellence, fast retrofit installation with no wall chasing, robust build quality, and two granted patents backing NUOS technology.

Smart switches and panels are no longer an accessory—they're the interface layer of tomorrow's intelligent Indian home. As they continue to evolve, they promise not just smarter control, but smarter living.

"The Service CRM Brings Smart, Seamless Service to Match Our Intelligent Products."

SHYAM MOTWANI

Business Head of Locks & Architectural Solutions, Godrej Enterprises Group

Shyam Motwani, talks about the launch of the Godrej Service CRM — a major step toward redefining after-sales service in the smart home and locking solutions space. In this interview, he shares the vision behind the platform, its key features, and how it reflects Godrej's commitment to delivering seamless, tech-enabled customer experiences.

Congratulations on the launch of the Godrej Service CRM. Could you share the vision behind this new platform and what inspired its development?

Thank you! The vision behind the Service CRM by Locks & Architectural Solutions business of Godrej Enterprises Group is rooted in our deep commitment to building not just smart products, but smart customer experiences. As the demand for connected living grows in India, service expectations have also evolved. We realised that a true home safety solution does not end at the lock & it extends to after-sales support that is seamless, responsive, and tech-enabled. The Service CRM was developed to unify our entire service ecosystem across the country and to deliver unmatched convenience to our customers. We wanted a platform that reflects our belief: that our responsibility begins not ends at the point of purchase.

How does the Service CRM aim to revolutionize after-sales service, particularly in the smart home and locking solutions segment?

Smart home consumers today expect more than just a product; they expect prompt service, real-time updates, and proactive care. The Service CRM revolutionizes after-sales by offering a unified digital experience across more than 200 service centres, serving over 2 lakh customers in 6,500+ pin codes. Whether it's a traditional mechanical lock or an advanced IoT-based solution, the platform ensures consistent and efficient service. Through automation and data intelligence, it streamlines operations and allows us to deliver the kind of service modern homeowners expect quick, easy, and always accessible.

Could you elaborate on the key features like real-time tracking, faster turnaround, one-

touch complaint registration, etc.?

The Service CRM is built to enhance transparency and convenience. It enables one-touch complaint registration, ensuring that service requests can be logged quickly, without any friction. With a smarter allocation system, our turnaround time has significantly improved. In essence, it brings the same intelligence and responsiveness to service that customers have come to expect from our smart products.

What are the key advantages this platform offers for both customers and Godrej as a brand?

For customers, the key advantage lies in ease and reliability. Whether they're using a digital lock or a door closer, they will now experience consistent service across channels and regions. Real-time tracking, reduced wait times, and proactive communication are just a few of the benefits. For Godrej, this is a strategic move it helps us build long-term customer trust, increases retention, and strengthens brand equity. It also creates an infrastructure that can support our ambitious growth targets, aiming to double our revenue to ₹2,500 crore by FY28 from over ₹1,200 crore in FY25.

What role does AI, automation, or analytics play in this new service ecosystem?

Automation is at the heart of the Service CRM. The platform uses intelligent routing to assign service requests to the nearest available

technician, reducing response time. Predictive analytics will help us anticipate issues based on user behaviour and product data. In future phases, we plan to integrate more proactive service alerts and self-help diagnostics. This data-driven approach not only enhances efficiency but also allows us to personalise the service experience, creating meaningful customer touchpoints.

Can customers access it through mobile/ web or the Godrej apps? Any multi-language support planned, etc.?

Yes, the Service CRM will be integrated with our existing mobile and web platforms, making it accessible to all users. We are also working on enabling multi-language support to serve India's diverse consumer base more inclusively. The goal is to offer a frictionless experience, regardless of where a customer is located or what language they speak.

If there's anything additional you would like to share with our readers, we'd be happy to include that as well.

We would like to emphasise that this is not just a tech upgrade, it is a shift in philosophy. The Service CRM represents a bold new era where service is no longer reactive, but a part of the core brand experience. In an industry where products are becoming smarter, after-sales service must keep pace. With the Service CRM, we are delivering on our promise to make every Godrej Enterprises Group's interaction before and after purchase a reason to trust.

"Formovie Quickly Won Market Share by Offering What Conventional Projectors Couldn't."

SUSHIL MOTWANI

Founder, Aytexcel Pvt. Ltd. and Official India Representative for Formovie

In conversation with Mr. Sushil Motwani, Founder, Aytexcel Pvt. Ltd. and Official India Representative for Formovie, Smart Home World explores how Formovie is redefining home entertainment in India. With a strong focus on innovation, cutting-edge laser projection technology, and user-centric design, Formovie has swiftly positioned itself as a game-changer in the smart home ecosystem. Mr. Motwani shares insights into their journey, its unique offerings, and the brand's ambitious roadmap for the Indian market. (change in intro)

Can you tell us more about Formovie India's journey?

Formovie entered the Indian market in 2023 with a vision to redefine home entertainment through cutting-edge laser projection technology. The decision by Aytexcel Pvt. Ltd. to partner with Formovie as its official representative in India stems from our affinity for technologically advanced gadgets suited to Indian consumers. Among movie enthusiasts, gamers and even middle-income households, there was a rising demand for a widescreen experience, especially after the COVID-19 outbreak. We wanted to offer them a new product that could elevate their experience to new heights, something unique that existing projectors could not offer. That is why Formovie was introduced, and in no time, it succeeded in winning both minds and market share.

What makes Formovie India stand out in the home entertainment segment?

Formovie is India's first brand to offer ALPD® (Advanced Laser Phosphor Display) technology, which helps create crisp images with accurate colours and brightness. This state-of-the-art technology, developed by Appotronics, uses a blue laser diode as a light source to excite a phosphor wheel that generates green and red light, producing vivid visuals with an extended colour gamut and exceptional clarity. Projectors with ALPD technology also have a longer lifespan, often lasting up to 30,000 hours or more without the need for lamp replacements. Built on Google TV, Formovie projectors also provide direct access to popular streaming services, including Netflix, a feature often missing in many competing projectors.

How do Formovie projectors differ from conventional LED or LCD projectors in terms of quality and performance?

Not every viewer has the same requirements when buying a 4K projector, and Formovie understands this better than most manufacturers. Whether it's the unique ALPD® technology, built-in speakers, integrated apps, or MEMC, all the features in Formovie projectors are designed based on the diverse needs of consumers. Be it a movie buff, a gamer, or even the commercial sector, Formovie adapts easily to any scenario. On the performance side, the reviews from our happy customers are the real testimonies to the popularity Formovie is enjoying in the Indian market. Another major advantage is that Formovie offers products to suit a wide range of budgets. From an LCD projector like Xming Episode One to the premium Theater series, there's something that fits every user's pocket with ease.

What are the standout features of the new Formovie Theater Premium model?

Formovie Theater Premium truly justifies the 'premium' tag in its name. This 4K Ultra UHD projector can project a massive 150-inch screen from an incredible short throw ratio of 0.21:1. Dolby Vision ensures seamless compatibility with external devices. The 2,200 ISO Lumens provide brilliant brightness levels, while the built-in dual speakers from Bowers & Wilkins, supporting Dolby Atmos and DTS-X, eliminate the need for additional soundbars, delivering deep and powerful bass.

Theater Premium also offers a gentle, eye-friendly viewing experience. As today's consumers are more health-conscious and tend to spend hours in front of screens, the device is designed with special eye care features. The projected light is diffused before it reaches your eyes, minimising harmful blue light and allowing users to watch for extended periods without experiencing eye fatigue or dryness.

How does the built-in Bowers & Wilkins speaker system enhance the cinematic experience?

We all know that Bowers & Wilkins is widely regarded as one of the best speaker brands in the world, known for its ability to meet modern demands through technological innovation. Formovie has partnered with Bowers & Wilkins for its premium range of projectors to elevate the sound experience for users. The built-in speakers are expertly tuned by a professional team, offering a dynamic soundscape that enhances every moment, preserving classic tones and delivering audio in its purest, most captivating form. These speakers also integrate effortlessly with Dolby Atmos and DTS-X sound systems, especially in

the low-frequency range. The result is a more immersive 3D surround sound experience that brings every scene to life, whether in cinema, gaming or any other video.

Could you share more details about the Gaming Mode and its benefits for gamers?

The Formovie premium projectors are equipped with ALLM (Auto Low Latency Mode), which can be optimized for gaming at high frame rates. For instance, the Theater Premium features two HDMI 2.1 ports, offering three times the speed of HDMI 2.0. With ALLM (Auto Low Latency Mode), gamers can enjoy less than 18ms lag and 4K resolution, delivering an enhanced gaming experience. Meanwhile, the MEMC (Motion Estimation, Motion Compensation) technology ensures that fast-moving visuals remain smooth and sharp, making it an ideal choice for high-speed gaming on consoles like PlayStation and Xbox.

How has the integration with Google TV improved content accessibility for users?

Modern-day consumers prefer convenience over everything else. The integration of Google TV helps users avoid multiple devices while streaming their favourite content. With over 700,000 movies and TV episodes, live TV, and support for more than 10,000 apps, Google TV takes the streaming and live TV experience to the next level. For user convenience, it not only brings together all favourite entertainment content under one umbrella but also organizes it clearly and simply. The voice assistant feature allows users to just press a button on the remote and speak their command, whether it's playing music or accessing specific content from various apps.

What kind of feedback have you received from customers visiting the Formovie Experience Lounge in Mumbai?

The recent EY Future Consumer Index (FCI) revealed an interesting insight. While 61% of Indian consumers find AI-driven product recommendations highly useful, a strong preference for human interaction still persists. According to the report, 78% of consumers prefer online platforms that offer human customer service. This suggests that even in an increasingly automated world, people still value authentic and trustworthy human connections. That is exactly what the Formovie Experience Lounge aims to provide. We believe that the feature-rich UST projector range from

Formovie deserves to be experienced firsthand before making a decision. By visiting the lounge, customers can explore the products firsthand, understand their technical features, and experience their ease of use before making a purchase. This human interaction builds trust and transparency.

Moreover, the lounge plays a key role in building awareness around relatively new technologies like UST projectors, their advantages over traditional televisions, and their environmentally friendly aspects.

What is Formovie India's vision for the next 3–5 years in the Indian home entertainment market?

A study by the global management consulting firm IMARC Group valued India's home theatre market at US$ 457.88 million in 2024, with projections indicating it will reach US$ 2,181.37 million by 2033, growing at a CAGR of 18.94% between 2025 and 2033. The availability of 4K UHD and Dolby Atmos content, rising interest in artificial intelligence (AI)-powered features, and the rapid expansion of OTT platforms are contributing to increased demand for immersive audio systems and larger screens in India's home entertainment segment.

At present, Formovie offers a premium range that includes Theater, Theater Premium, C3, and Cinema Edge, alongside smart laser projectors such as X5, V10, and S5, and LCD projectors like Xming Episode One and Xming Page One. In addition to introducing more

products in alignment with global launches, we are planning to collaborate with retail partners to set up more experience lounges in major cities, making the Formovie range more accessible to prospective customers.

Are there any upcoming product launches or innovations Indian consumers can look forward to?

We already have the Formovie Cinema Edge, a premium projector equipped with all the state-of-the-art features that consumers look for. The projector can project a 150-inch screen from just 49 cm away from the wall, making it ideal for transforming even the smallest rooms into entertainment spaces. With its ultra-short throw capability and stylish design, it fits well into modern Indian smart homes.

Then there's the Theater Premium, which has become one of the best-selling models in its category. As Formovie continues to launch new models globally, we are committed to making these products available to Indian consumers promptly.

"To Integrate Smart Technology Effectively, Architects and Designers are Reimagining Layouts with a Focus on Sustainability and Enhanced Connectivity."

UMESH SHARMA
Founder of The Design Studio (TDS)

Umesh Sharma, shares his journey of transforming a modest design firm into one of the industry's most respected practices. With a strong foundation in residential and commercial architecture, TDS is known for its forward-thinking approach, seamless integration of smart technology, and commitment to creating user-centric, sustainable spaces. In this exclusive interaction, he delves into how smart design, automation, and evolving technologies are reshaping the future of architectural and interior design.

Tell us about your design journey and some of your trend-setting projects designed over the years.

We started The Design Studio (TDS) in a tiny office with a big vision—to offer complete design solutions in both architecture and interior design. From the beginning, our focus has been on residential and commercial spaces, and over time, we've expanded our scope to include a wide range of projects. Today, our portfolio includes everything from corporate offices and urban planning to group housing, high-rise luxury buildings, and private villas.

What began as a small design studio has grown into one of the preferred practices in the industry. Our strength lies in effective space planning, clutter-free design, and precision in time management—qualities that have become the hallmark of our work. With structured processes in place for every project, we've built a reputation for consistency, reliability, and quality that we're incredibly proud of.

We're always exploring the latest design trends and technologies to keep our work fresh and forward-thinking. From smart home integrations like intelligent locking systems to modular and personalized designs, Net Zero solutions, sustainable reuse, and biophilic elements, we aim to create spaces that are innovative, functional, and deeply connected to the people who use them.

How has Smart Technology influenced your approach to designing architectural/interior projects?

The ability to create more responsive, effective, and user-centric places has allowed smart technology to drastically change interior design and architecture. Technology is now smoothly incorporated into buildings, improving comfort and energy efficiency with features like smart appliances, integrated security, and controlled lighting and climate management. In order to integrate electronic infrastructure, architects and designers are rethinking layouts while giving sustainability and connectivity priority. Smarter homes and workplaces that adjust to users' requirements have resulted from this change, enhancing people's quality of life and fostering more user-friendly, interactive areas. Furthermore, amidst COVID, the entire scenario of using smart technology has evolved. However, it was there on the plate that people were more engaged towards smart technology and our approach towards safely living is very essential. So, the demand for smart technology is emerging day by day.

What are your views on the role of Building Automation System (BAS) in your projects? How do they enhance the functionality and efficiency of your designs?

In my opinion, Building Automation System (BAS) is essential for improving the efficiency, sustainability, and functionality of contemporary buildings. BAS makes it possible to centrally regulate systems like energy management, lighting, security, and HVAC, which contributes to the creation of smarter, more flexible spaces in our projects. BAS is viewed by TDS as a tool to enhance occupant comfort, promote sustainable design objectives, and maximize building performance over time. A more comprehensive and future-ready architectural solution is produced by including BAS early in the design process, which also guarantees a smooth integration of technology and aesthetics.

Building Automation Systems (BAS) enable intelligent and adaptive building operations, improving the functionality and efficiency of architecture in our designs. They automate and optimize key systems, including ventilation,

HVAC, lighting, and security, so that they cooperate according to occupancy, the time of day, or environmental factors. This increases indoor comfort, saves operating expenses, and wastes less energy. BAS gives architects the ability to create more adaptable and efficient environments with technology that enhances long-term sustainability and user enjoyment. Additionally, because systems may be subtly integrated without sacrificing aesthetics, it enables more intelligent space planning.

What are the advantages of Home Automation, Smart Technology, Smart Lighting, and Smart Security (Cameras and Digital Locks) provide to your projects?

By improving functionality, user experience, and energy efficiency, automation, smart technology, smart lighting, and smart security systems provide a variety of benefits for architectural and interior design projects. With the help of these technologies, places can adapt naturally to the demands of their users, automatically modifying the temperature, lighting, and access management for ease and comfort. Customizable for mood, task, or

daylight integration, smart lighting enhances sustainability and beauty. While preserving crisp, contemporary design lines, digital locks and security cameras improve safety. These systems give designers and architects additional creative options, allowing for streamlined, technologically advanced spaces that are both highly functional and future-ready.

and digital intelligence coexist seamlessly - as smart homes and buildings become more commonplace. It is anticipated that automation systems will advance beyond convenience to become predictive and adaptive, improving sustainability, energy efficiency, and occupant well-being. Designers foresee areas that naturally adapt to lifestyle trends, environmental factors, and human behavior. This change in technology promotes creativity in human interaction, materials, and spatial layout, which eventually results in settings that are more durable, customized, and prepared for the future.

Can you share a case study where you have opted for Automation, Smart Technology, and Smart Lighting?

For this project, Joy Grand, we have combined luxury with cutting-edge technology. Located in Mohali, this prestigious project is thoughtfully designed to cater to modern lifestyles, showcasing interiors that reflect opulence, elegance, and innovation.

Every residence at Joy Grand is equipped

What are the brands you prefer when it comes to Building Automation, Home Automation, Smart Lighting and Smart Security?

In India, several reputable brands offer advanced solutions in building automation, smart lighting, and smart security, catering to the evolving needs of architectural and interior design projects:

For Building Automation- BuildTrack, SASCO Smart Home, Schneider Electric (Wiser), etc. In Smart Lighting- Philips Hue, Wipro Smart, Syska Smart Home, etc. In Smart Security (Cameras and Digital Locks) - Qubo, Ozone Secutech, and Yale, to name a few.

How do you foresee advancements in technology shaping the future of architectural design and the use of automation systems?

According to TDS, Rapid technological improvements will likely be a major factor in how architectural design and automation system integration develop in the future. We are adopting a more comprehensive, tech-integrated approach - where design, function,

with state-of-the-art smart home automation systems, offering complete control over lighting, air-conditioning, fans, and curtains through voice commands or mobile apps. Residents can enjoy pre-set mood lighting scenes tailored for relaxation, work, or entertainment, thanks to dimmable LED fixtures and RGB strips. Climate control is made efficient with smart thermostats and automated HVAC systems, while safety is elevated through advanced security features such as facial recognition door locks, motion sensors, and 24/7 CCTV surveillance.

The interiors are a true embodiment of luxury. Select units feature double-height ceilings, Italian marble flooring, automated sheer and blackout curtains, and designer feature walls with integrated smart TVs and hidden speakers. Kitchens come equipped with modular layouts and built-in smart appliances like voice-activated chimneys, touch-free faucets, IoT-enabled ovens, and smart refrigerators. Bedrooms include warm wooden flooring, smart bedside panels for lighting and AC control, and integrated charging docks. Bathrooms offer a spa-like experience with sensor-based lighting, heated floors, digital showers with temperature presets, and LED touch panel mirrors.

Joy Grand also boasts distinctive architectural elements, including Slanting Eclipse Ceilings in the lobbies and common areas, enhanced by dynamic lighting that changes throughout the day. Interactive smart mirrors display real-time weather, time, and news updates, while each unit features a smart entertainment system that connects to your favorite content via voice or touch commands.

The amenities extend this intelligent living experience with AI-enabled concierge services, smart access controls for the clubhouse, gym, and co-working zones, and automated mood lighting in lounges—all thoughtfully designed to offer a seamless blend of comfort, convenience, and sophistication.

A Blend of Modern Design and Smart Tech

Designed by Milind Pai Architects and Interior Designers, with system integration by VHS Technologies, this Mumbai apartment features a fully customized smart home ecosystem that seamlessly blends aesthetic elegance with cutting-edge convenience.

Milind Pai Architects and Interior Designers has designed a luxurious 4BHK apartment, spread over an area of 2,369 sq. ft., that is integrated with state-of-the-art smart technology.

The home has a contemporary decor theme characterised by warm tones, Italian marble flooring, sleek lines and clean-lined furniture. This home has been meticulously designed to meet the client's desire for both style and functionality.

The entire home is segregated into living-cum-dining area, four spacious bedrooms, a modern kitchen, and a utility area, creating a fluid, expansive living experience. However, it's the smart home technology integrated into the apartment that truly elevates the living environment, making this project a seamless fusion of luxury, convenience and innovation.

Sharing his insight on the project, Milind Pai adds, "The client's vision for this luxury apartment was clear from the outset: to create an intuitive and seamless smart home experience that would provide complete control over lighting, climate, security, and audiovisual (AV) systems. The client wanted a centralised interface, accessible remotely, with the convenience of voice control. This would allow them to effortlessly manage their living environment with ease and sophistication. The

challenge was to integrate these advanced technologies in a way that felt natural and unobtrusive, complementing the apartment's refined design."

To meet the client's needs, a range of state-of-the-art smart technologies and automation systems were integrated into the apartment.

Smart Lighting: Philips Hue and Lutron systems were used to create adaptable lighting scenarios. Whether it's a soft, ambient glow for relaxation or bright, focused lighting for social gatherings, the lighting system can be adjusted to suit any mood or occasion.

HVAC Control: Daikin's HVAC system, integrated with Control4, provides precise climate control, ensuring the apartment stays comfortable year-round. The integration allows homeowners to adjust the temperature easily from their smartphone or through voice commands.

Multi-Zone Audio: A Sonos audio system was installed to provide high-quality sound throughout the apartment. The system allows for independent control of different audio zones, ensuring that each room offers the perfect soundtrack for any activity.

Surveillance and Security: Hikvision IP cameras, combined with Yale digital locks, offer top-tier surveillance and security. The Control4 integrated alarm system provides peace of mind, allowing homeowners to monitor their property remotely via smartphone, receive motion alerts, and control access with digital credentials. Biometric fingerprint access further secures the main entrance and master bedroom.

Home Theatre Automation: For the ultimate entertainment experience, a Bose Home Speaker 500 system was integrated into the home theatre setup, controlled seamlessly via Control4. The system delivers immersive audio, while the integration with the smart home system ensures easy control of all entertainment features.

Curtain and Blind Control: Automated curtains and blinds from Somfy provide convenience and privacy with the simple touch of a button

or voice command, contributing to the home's overall smart functionality.

Voice Assistants: Amazon Alexa voice assistants were deployed across key areas of the apartment, including the living room, master bedroom, and kitchen. This allows for hands-free control over various devices, from lighting to climate, ensuring a frictionless user experience.

Customizing the Smart Home Experience

Every aspect of the automation system was tailored to match the aesthetic and practical needs of the homeowners. The Control4 interface was customized to align with the apartment's design. Wall-mounted keypads were color-matched with the wall panels to maintain a seamless look. Custom lighting scenes were programmed to suit different moods, such as "Relax," "Movie Night," and "Entertain," while discreet in-ceiling speakers were installed to ensure that the audio setup didn't detract from the apartment's clean, modern aesthetic.

Comprehensive and Advanced Security Solutions

Security was a top priority in this luxury smart home project. A comprehensive security system was implemented using Hikvision IP cameras for both indoor and outdoor surveillance. Yale digital locks and the Control4 alarm system provide robust protection. The ability to monitor the property remotely, along with motion alerts and digital access control, ensures that homeowners can keep an eye on their home from anywhere. Additionally, biometric fingerprint access was added to enhance security for the main entrance and master bedroom, offering another layer of protection.

Ensuring Data Security and Privacy

"Data security is paramount when integrating smart technologies, and this project was designed with the highest standards of security in mind. Encrypted communication protocols, secure networking devices (Ubiquiti UniFi), and multi-factor authentication

for remote access ensure that all systems remain protected. Regular software updates and firewall protection are in place to guard against potential vulnerabilities, providing peace of mind for the homeowners regarding their data privacy," adds Milind.

Seamless Integration of Technologies

To ensure smooth integration, all systems are unified via Control4, which acts as the central hub for managing lighting, HVAC, AV, and security systems. A structured cabling backbone was installed, with CAT6 and fiber connections ensuring robust and reliable connectivity.

Wireless zones were optimized using UniFi access points to eliminate dead spots and ensure full coverage throughout the apartment. This integration strategy ensures that all devices communicate seamlessly, providing a cohesive and reliable smart home experience.

Scalability for the Future

In the world of technology, adaptability is key. This project was designed with future-proofing in mind. Modular hardware and upgradable software platforms were selected to ensure the system can easily adapt to future advancements. Control4's scalability makes it possible to add new devices or integrate third-party systems as technology evolves. The structured cabling and enterprise-grade network provide the foundation for any future upgrades, whether for new smart devices or AI-driven automation.

This apartment exemplifies how smart home technology can enhance modern living by seamlessly blending cutting-edge automation with sophisticated design. With an array of smart technologies integrated into every aspect of the home, from climate control to security, lighting, and entertainment, this apartment offers an elevated living experience that is both functional and luxurious.

TECH INSIGHTS

Developer: M4 Group.

Architect/Interior Designer: Ar. Milind pai

Systems Integrator: VHS Technologies

Automation System Used: Dali

Lighting: Changi

Security Cameras: Hikvision

Digital Locks: Yale YDM-60

Home Theatre: Bose Home Speaker 500

Projectors: Epson

Amplifiers: Denon and Onkyo

Speakers: Bose

Biometrics: Fingerprint scanners Suprema

Networking Devices Used: Routers Cisco, Switches Cisco, Firewalls Cisco And Access points Cisco

Smart Lighting and Seamless Design

Nulty+ brings a refined touch to Panchshil Avenue with smart lighting that subtly enhances its architecture and materials. The result is an elegant, immersive experience that blends seamlessly into Pune's urban landscape.

Gracefully fitting into Pune's dynamic urban landscape, Panchshil Avenue is more than a striking architectural structure; it's a multisensory experience shaped by material, form and smart lighting.

Panchshil, one of the well-known developers, appointed renowned lighting design studio Nulty+ to enhance and create a serene and immersive ambience. Nulty+' design philosophy is based on a simple yet profound idea: `light should enhance architecture without overpowering it.' For Panchshil Avenue, this meant a lighting strategy that delicately threads itself through the building's core, subtly amplifying its materials, geometry, and flow. "Our approach was to elevate a space with minimal interference. The boundary between light and architecture was blurred to make it feel seamless," adds Neha Doshi, Intermediate Lighting Designer, Nulty +.

That seamlessness is evident in the project's every detail. Fittings were integrated discreetly into the architecture, emphasising textures and finishes—be it the natural stone

or the rich grains of wood—without drawing attention to the fixtures themselves. Instead, light becomes an invisible sculptor, shaping the viewer's perception and deepening their emotional engagement with the space.

Inside the building, a layered lighting scheme orchestrates mood and movement. Ambient lighting softens the experience, creating a serene backdrop. Strong linear elements offer rhythm and direction, subtly guiding visitors through the space, creating the poetic illusion of walking down a light-lined avenue. Decorative accents punctuate this journey with quiet drama, injecting character while reinforcing the architect's spatial narrative.

The dialogue between interior and exterior is equally refined. On the façade, vertical fins are washed with warm light, while the crown of the building glows gently, marking Panchshil Avenue as a graceful beacon within Pune's urban fabric. This understated elegance continues at ground level, where landscape lighting plays a supporting role. Trees and greenery are softly lit, providing a tranquil

transition from outdoor to indoor, an extension of the calm, immersive ethos that defines the project.

Interior Lighting Design

The design brief called for calm, engaging spaces that seamlessly blend functionality with refined aesthetics. Nulty+ opted for a layered lighting scheme, carefully composed to support visual comfort, and subtly guide users through the space. Ambient lighting sets a soft, welcoming tone, while accent lighting draws attention to walls, textures, and materials. Task lighting was introduced where precision and practicality are key—such as at tables—while decorative lighting punctuates the interiors with moments of charm and character.

The Key approach was the principle of integration, explaining the details Neha adds, "Light fittings were thoughtfully concealed within architectural elements, creating a clean, minimal aesthetic that lets the natural finishes—stone, wood, and fabric shine. Lines of light were positioned to enrich the natural grain of timber and reveal the tactile quality of wall panels, columns, and seating areas, reinforcing the building's earthy, grounded identity

Smart Lighting Controls and Adaptive Environments

Lighting control plays a critical role in balancing atmosphere with efficiency. For this structure, Nulty+ developed a responsive control strategy tailored to both the building's daily rhythms and user needs. Taking advantage of the ample natural light provided by the glass façade, key areas were designed with alternate circuiting, allowing lighting levels to drop by 50% during non-peak hours. As day transitions to night, the system shifts the lighting gradually to full output, and later, scales it down again to a softer setting when occupancy diminishes.

"The glass façade allows plenty of natural light into the building during the day, so we incorporated alternate circuiting for the major zones to allow the lighting to be reduced by 50% during non-peak hours. As the space

transitions in the evening hours, the lights are then adjusted to 100% usage through a carefully layered approach. The system then transitions back to 50% in the later hours to maintain a minimum level of illumination when the building's occupancy reduces right down," adds Neha.

In communal zones like lounges and collaborative areas, localised control is offered through table and pendant lamps, enabling users to tailor their environment to personal preference. Meanwhile, in multi-functional rooms like the training centre, an automated scene-setting system allows different lighting scenarios based on activity, be it a presentation, workshop, or informal gathering.

Energy Efficiency Without Compromise

"Although the project was not bound by formal sustainability certifications such as LEED or WELL, energy efficiency remained a core pillar of the design. Nulty+ approached the lighting strategy with deliberate restraint, analysing footfall and usage patterns to determine where light was truly needed. The


layered approach ensured that task lights can be individually controlled and switched off when not in use," says Neha.

In the landscaped areas, efficiency extends outdoors with time-controlled systems that deactivate lights at midnight to reduce unnecessary energy consumption. Exterior fixtures are carefully shielded to direct light precisely, preventing sky glow and minimising light spill, in line with best practices for responsible exterior lighting.

Lighting to Standards, Designed for People

Meeting technical requirements was no less
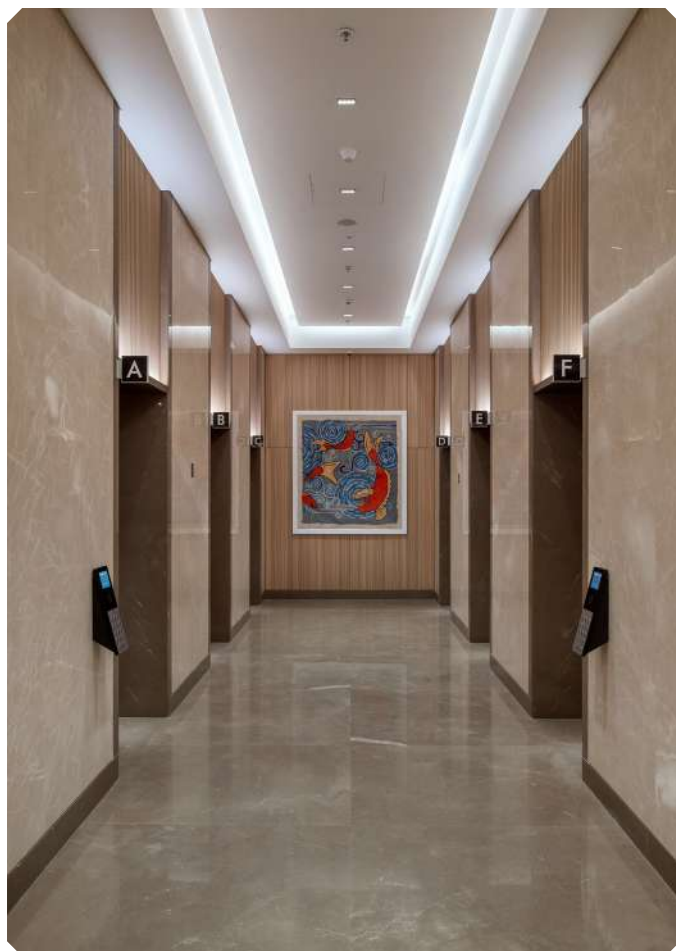
important. The design team adhered to the Bureau of Indian Standards (BIS) and the National Building Code (NBC), achieving an average of 200–300 lux in high-activity areas such as the main lobby and food court. But beyond compliance, the goal was to "light right, not bright." This meant taking a holistic approach—factoring in materials, spatial use, daylight exposure, and overall ambience.

Vertical surfaces received between 100–150 lux to ensure feature walls and textures are visually celebrated, and critical attention was paid to glare management, colour temperature (kept within 3000K–4000K), and colour rendering, with a CRI of 80 or higher throughout the building.

From signage to skylines, interiors to exteriors, the lighting at Panchshil Avenue isn't just functional—it's foundational. It frames the building's presence, guides its visitors, and breathes quiet life into every corner. Through thoughtful integration and a sensitive touch, Nulty+ has transformed light into an architectural language—one that speaks fluently of peace, presence, and place.

TECH INSIGHTS

Lighting Brands used Indoor: Forma Lighting, LED Linear

Lighting Brands used Outdoor: Luce and Light, Traxon, AEC

Common Area: All lighting control through MCB DB

Training Room: Lighting control through Casambi automation

Protocol Used: ON/OFF for common area and Casambi for Training Room

Control Devices used: Keypad and Casambi Interface

Gateway Used: Casambi Module

Driver Used: Osram

Cables Used: Polycab, KEI, RR

LOGIC MACHINE - LM5 Multi-Protocol Gateway: Revolutionizing Building Automation Through Unified Integration

Bhavesh Doshi, Founder, Entelechy Automation Private Ltd., writes about how LogicMachine LM5 stands out as a game-changing solution, streamlining integration across multiple protocols to deliver smarter, more efficient building systems.
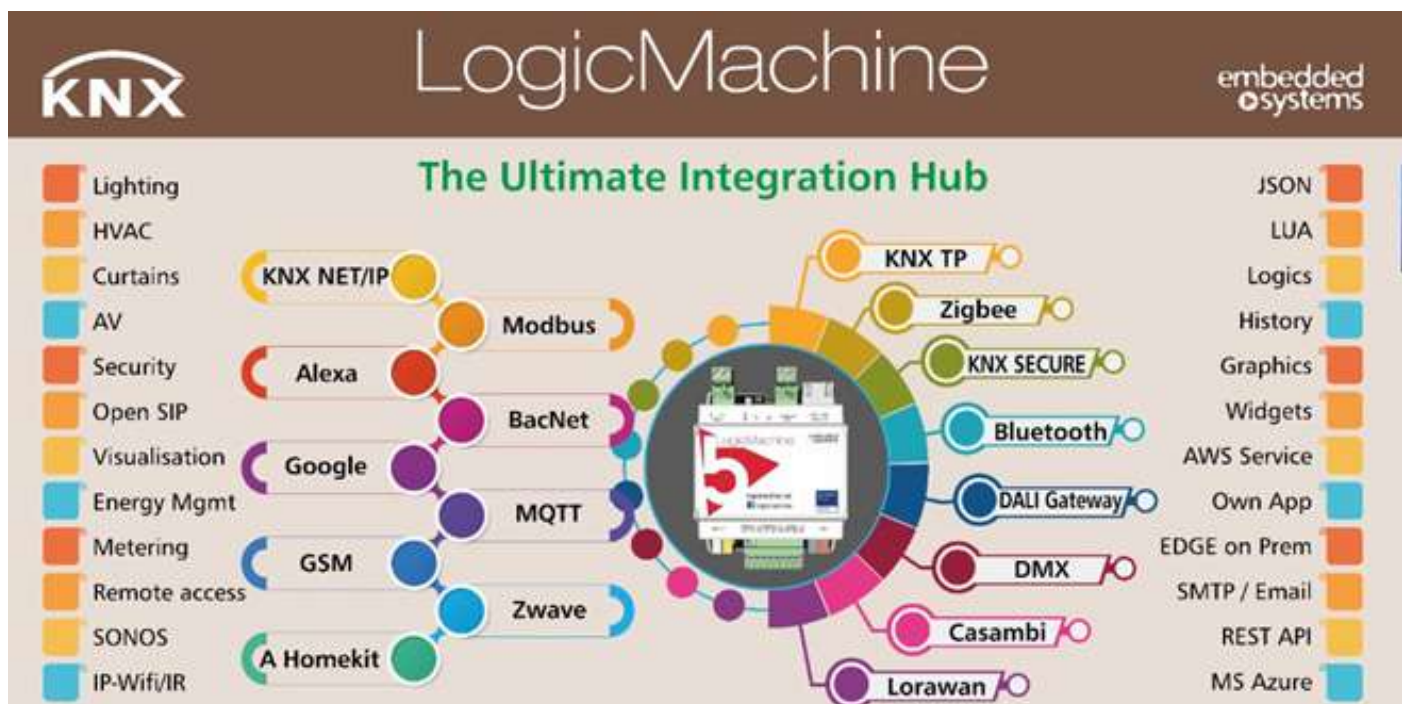
The complexity of modern building automation has reached a critical inflection point. As illustrated in the comprehensive infographic showing building systems integration, today's smart buildings require seamless coordination between dozens of subsystems including lighting, HVAC, security, energy management, fire safety, and communication networks. Traditional approaches using multiple specialized gateways have created fragmented, costly, and inefficient solutions.

The LogicMachine LM5 multi-protocol gateway emerges as the definitive solution, providing unified integration that transforms how buildings operate, dramatically reduces
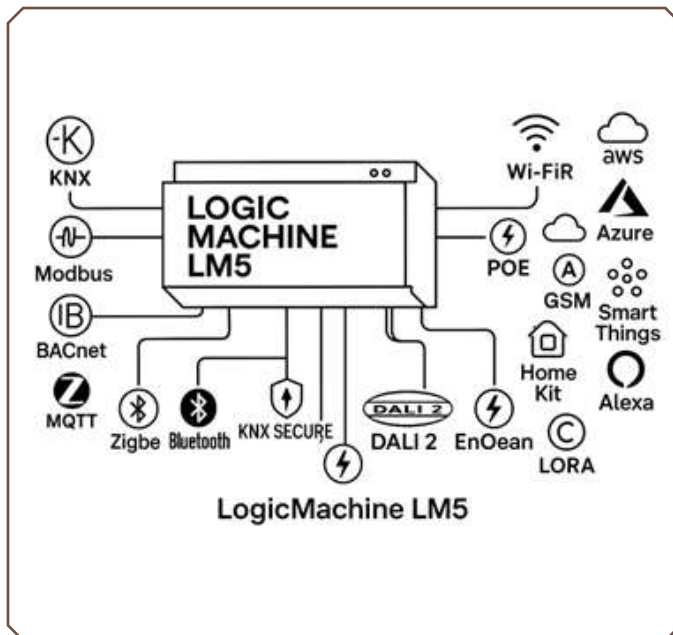
Smart Building Systems

costs, and delivers unprecedented operational efficiency.

LogicMachine was first introduced over a decade ago by OpenRB, Latvia, as an embedded, cross-standard gateway and logic controller for building automation. From its inception, LM was designed to unify complex building protocols—KNX, Modbus, BACnet, DALI, DMX, and more—into a single, flexible platform with a powerful logic engine, visualization, and cloud integration. In India, LogicMachine LM5 has been in active use for over a decade.,

The LogicMachine LM5 Multi-Protocol Gateway Architecture

LogicMachine LM5

An infographic illustrating various integrated smart building systems surrounding a central building cie-group

Universal Protocol Integration Capabilities

The LogicMachine LM5 serves as the central nervous system for modern building automation, supporting over 25 communication protocols through a single, unified platform. The system's architecture eliminates the traditional requirement for multiple protocol-specific gateways, instead providing seamless translation and communication between incompatible building systems.

The LM5's comprehensive protocol support encompasses:

Fieldbus Protocols: KNX/EIB TP, KNXnet/IP, Modbus RTU/TCP, BACnet IP for core building automation

Lighting Protocols: DALI (versions 1 & 2), DMX512, Philips Hue for advanced lighting control

Wireless Technologies: WiFi, Bluetooth 4.0, EnOcean, Zigbee, Z-Wave for IoT device integration

Industrial Protocols: M-Bus, SNMP, CAN Bus, Ethernet/IP for process control applications

Communication Standards: GSM, MQTT, HTTP/HTTPS, JSON, XML, SIP for connectivity and data exchange

Cloud Integration: Microsoft Azure, Amazon Web Services, AllJoyn for remote management and analytics

The Challenge with Traditional Automation

Modern buildings use a variety of subsystems—lighting, HVAC, AV, energy meters, security, and more. Each typically communicates via its own protocol (KNX, DALI, DMX, Modbus, BACnet, etc.). Integrating these requires:

Multiple gateways (KNX-DALI, KNX-DMX, KNX-Modbus, etc.)

Separate controllers for HVAC (Coolmaster/Intesis)

Dedicated IP routers for KNXnet/IP

Voice control bridges (Alexa/Google/Homekit)

Mobile app servers

GSM gateways for remote access

Zigbee, EnOcean, and other wireless gateways

Problems:

High hardware and installation costs

Increased DIN rail space and wiring

Complex commissioning and programming

Multiple points of failure and maintenance headaches

Difficult upgrades and scalability

The LogicMachine LM5 Solution

LogicMachine LM5 is a compact, DIN-rail-mounted controller that brings all major building protocols and IoT technologies together in one device. It supports:

KNX/KNX Secure (TP/IP)

DALI (1 & 2)

DMX512

Modbus (RTU/TCP)

BACnet (IP)

MQTT, REST API, Cloud Integration

GSM, WiFi, Bluetooth, Zigbee, EnOcean, LoRa

Smart home platforms (Alexa, Google, Homekit, SmartThings)

PoE (Power over Ethernet) support

Key Features:

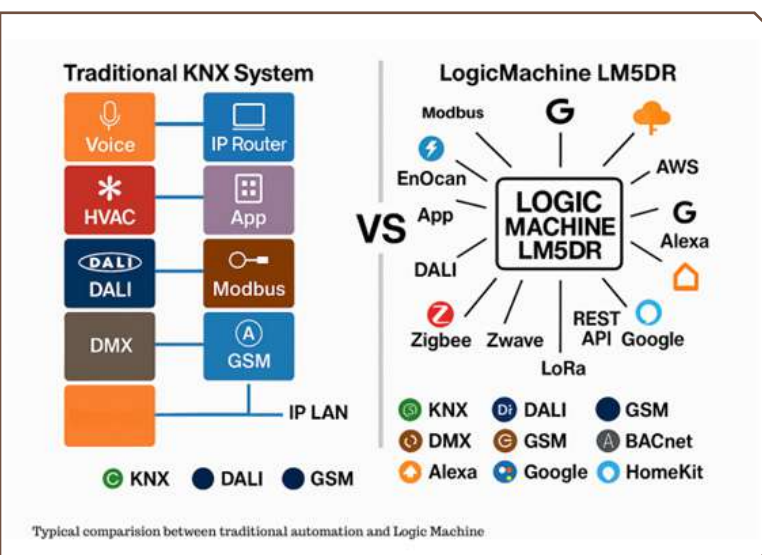One device replaces 7–12 traditional gateways/controllers

Unified logic engine for cross-protocol automation

Native mobile app and dashboard visualization

Integrated voice and cloud connectivity

Scalable and future-proof via software updates

Typical comparision between traditional automation and Logic Machine

Schematic: Single Line Diagram (SLD)

Typical savings:
60–80% hardware reduction
50–70% less labor
1/3 the maintenance effort

Integrated Monitoring and Analytics
All building systems are monitored through unified dashboards providing real-time status information, performance analytics, and predictive maintenance alerts. This comprehensive visibility enables proactive system optimization and rapid problem resolution.

Advantages for Stakeholders

System Integrators:
- Faster deployment, less risk
- Reduced inventory and training
- Simplified support and upgrades
- Competitive edge in retrofit and new projects

Owners/Users:
- Lower total cost
- Unified control and monitoring
- Future-ready and easily expandable

Consultants/Architects:
- Simplified design/specification
- Assured compatibility
- Support for green building and smart city initiatives

Facility Operations:
- Centralized monitoring
- Predictive maintenance
- Reduced downtime and troubleshooting

Conclusion
The LogicMachine LM5 is a game-changer for smart buildings and homes. By unifying all major protocols and IoT platforms in a single, scalable device, it drastically reduces costs, complexity, and maintenance—while delivering unmatched flexibility and future-proofing. With a proven track record in small to large, critical projects worldwide and across India—including metros, airports, ports, data centers, hospitals, hotels, and luxury homes—LM5 stands as the intelligent choice for next-generation automation.

Entelechy Systems is an exclusive partner for LogicMachine in India, providing comprehensive training and onsite support to ensure successful deployment and ongoing performance of LogicMachine products across all project scales.

Funktion-One Signs New Distribution Deal to Strengthen Presence in India

Funktion-One's distributor for the GCC, Em-Tec, has partnered with Audio & Beyond to deliver the brand's systems to the Indian market. Through the agreement, the Dubai-based distributor will handle all systems design, project oversight and management, while Audio & Beyond, an experienced AV solutions provider in the region, will leverage its strong local presence to deliver the brand's systems.

The move aims to formalise the company's presence in India and lay the foundation for growth, with a goal of establishing showcase Funktion-One venues across the country. With bases in Hyderabad and Delhi, Audio & Beyond offers local insight and reach and its skilled technicians will work closely with Em-Tec to gain hands-on experience with the audio manufacturer's products.

"We're thrilled to take this next step and strengthen our connection with the Indian market," said Andy Williams, owner of Em-Tec.

"There's a huge appetite for world-class sound, and with the support of Audio & Beyond, we're now in a strong position to deliver the Funktion-One experience across the country." Funktion-One's director of sales Andrew Low commented: "We're really excited that Em-Tec's experience and expertise with Funktion-One systems is being brought to India as our official distribution partner. We have no doubt that their passion for exceptional sound combined with Audio & Beyond's local presence and high service standards will make this a successful partnership."

The move into the Indian market follows the brand's successful project history in the country, including venues such as Big Bull in Hyderabad, The Nines in Mumbai, Epitome in Pune and Mumbai's Four Seasons. Funktion-One said that the expansion is well-timed and logical, aligning with the close cultural and commercial ties between Dubai and India, together with the rise of high-quality entertainment spaces in the country.

JBL Introduces Next-Gen Bar Series for Truly Immersive Entertainment

Transform your home cinema experience with the new JBL Bar Series, a lineup of soundbars that delivers detailed, rich, immersive sound for any home, fully compatible with any TV. Whether you're setting up your first surround sound system or elevating your space with true cinematic audio, with five new feature-packed soundbars to choose from, JBL has something for everyone.

The new Bar Series uses technology inspired by JBL's rich history and expertise in cinema sound to take you to the heart of the action. The full range features HARMAN's unique MultiBeamTM 3.0 technology to create a surround sound experience from a single soundbar. Combine this with Dolby Atmos®, DTS:X and detachable rear speakers, and film fans will experience a front-row movie theatre experience from the comfort of their home. JBL soundbars now feature SmartDetails, a new HARMAN technology engineered to reproduce even the subtlest audio nuance, from a soft footstep to the creak of a floorboard. Feel the deep, powerful bass of intense scenes without distortion, even at high volumes.

Hisense Launches Ultra-Portable 4K Laser Projector

Hisense, a global leader in consumer electronics and home appliances, unveils the latest innovation in its Laser TV lineup: the M2 Pro Laser Mini Projector. This compact yet powerful device redefines portable projection, offering a stunning 4K cinematic experience enhanced by cutting-edge technology—now available in a remarkably small and travel-friendly design.

The M2 Pro marks a breakthrough in portable home entertainment. By expertly integrating advanced laser and AI technology into its most compact form yet, Hisense delivers its smallest, lightest, and most versatile laser projector ever. Designed for effortless portability without compromising performance, the M2 Pro offers a premium, immersive viewing experience anytime, anywhere.

Next Gen Technology Miniaturized

At the heart of the M2 Pro is the advanced AI 4K Clarity technology, a sophisticated suite of algorithms working in harmony to deliver pristine images. This includes a powerful AI 4K Upscaler that intelligently transforms lower-resolution content into stunning 4K detail, an AI Noise Reduction feature ensuring a clean and clear picture, and an AI HDR Upscaler that meticulously optimizes contrast and highlights for a more dynamic viewing experience. With 2.07 million micromirrors powered by a precision DLP system, the M2 Pro projects detailed 4K visuals up to an expansive 200 inches, ensuring crystal-clear precision down to every pixel.

Sonodyne and Mahavir Sound Room Launch PRIVÉA

In a landmark collaboration poised to redefine the luxury home cinema landscape, legendary audio innovator Sonodyne has joined forces with Mahavir Sound Room (MSR) to launch PRIVÉA, a high-performance home cinema system designed for the discerning connoisseur.

Bringing together over five decades of audio excellence from Sonodyne and three decades of award-winning home cinema expertise from Mahavir Sound Room, PRIVÉA promises an immersive, theatre-like experience tailored for luxury home environments, without the prohibitive price tag.

Founded in 1970 by IIT alumnus Ashoke Mukherjee, Sonodyne has long been a pioneer in Indian audio innovation, well before 'Make in India' became a national movement. The brand's extensive R&D and manufacturing facilities in Mumbai and Kolkata continue to produce globally acclaimed audio solutions for both residential and professional spaces. Mahavir Sound Room, led by founder Jaleel Sabir, has earned a reputation for crafting world-class home cinemas for celebrities and

elite clients. A long-standing Premium CEDIA member, Sabir brings unparalleled design acumen and certification-rich expertise to the partnership.

At the heart of PRIVÉA lies a sophisticated blend of horn-loaded efficiency and dedicated DSP-based amplification, engineered to deliver

striking clarity, rich dynamics, and accurate detail. Each system features high-quality components for performance consistency and long-term reliability.

In an age of 4K streaming and studio-grade content, PRIVÉA answers the growing demand for cinema-quality experiences at home. With its balanced sonic signature—critically acclaimed by sound engineers worldwide—

PRIVÉA delivers content just as its creators intended.

This launch marks a bold new chapter in Sonodyne's 55-year journey, as the brand joins hands with Mahavir Sound Room to bring calibrated cinematic magic into living rooms across the country. PRIVÉA isn't just a system—it's a statement in sound.

Aqara Announces Global Availability of G410 Smart Doorbell

Aqara, a global leader in IoT innovation, has announced the global availability of its next-generation smart doorbell, the Doorbell Camera Hub G410. This advanced 2K video doorbell offers enhanced image quality, a built-in presence sensor, and on-device facial recognition. It also ensures seamless integration with smart home ecosystems. Additionally, the G410 functions as a multi-protocol Matter hub, providing a versatile solution for connecting and managing both indoor and outdoor smart devices.

Equipped with dual-band Wi-Fi (2.4GHz/5GHz), Thread, Zigbee, and Bluetooth connectivity, the Doorbell Camera Hub G410 is designed to be the cornerstone of a smart home. As a Matter Controller, Thread Border Router, and Aqara Zigbee hub, it not only connects an assortment of Aqara devices but also supports more than 50 types of third-party Matter-compatible devices. These include locks, sensors, switches, lights, and even newer connected products like robovacs, home appliances, and EV chargers.

The G410 captures every detail at the doorstep with its 2K lens, f/1.8 aperture, and 175° wide-angle field of view. It also packs a millimeter-wave (mmWave) sensor for more accurate presence detection while minimizing false alerts. Its on-device facial recognition capability can identify visitors and trigger notifications or automations, all without requiring a subscription. Additionally, with the new Advanced Matter Bridging feature, users can bridge facial recognition as an automation trigger to third-party Matter platforms such as Home Assistant, maximizing the doorbell's AI capability.

The Doorbell Camera Hub G410 can be seamlessly integrated into users' existing smart home setups. It works with Apple Home and supports HomeKit Secure Video, making it the ideal choice for iOS users, especially those seeking a battery-operated doorbell. It also streams to Alexa-, Google Home-, and SmartThings-compatible smart displays. Supporting RTSP protocol, the G410 can stream to third-party clients like Home Assistant over the local network and supports NVR software such as Frigate and Blue Iris.

Samsung SmartThings Update Adds Easy Automation, Faster Onboarding & Better Location Sharing

Samsung Electronics introduced updates to its global connected living platform SmartThings, bringing enhanced AI-driven automation tools, broader product onboarding support, and improved connectivity features to users worldwide. Designed to make connected living easier and more personalized, the latest updates simplify the smart home experience across both Android and iOS platforms. A key highlight of the update is the introduction of the Routine Creation Assistant, an AI-powered feature that allows users to build automations using natural language. By simply typing a phrase such as "Turn off all the lights when I leave the house," users can generate customised routines without needing to manually configure each device or setting.

Powered by large language model technology, the assistant lowers the barrier to smart home automation, making it approachable for beginners and efficient for experienced users alike.

Samsung is also expanding its Calm Onboarding program, designed to streamline the product setup journey from purchase to use. Once a user purchases an eligible Samsung product via Samsung.com or a Samsung Store, SmartThings can now automatically detect, register, and connect the product to the app.

With this update, support for Calm Onboarding has expanded from 14 to 58 countries and now includes Galaxy wearable devices like Galaxy Watch and Buds. Select partner devices purchased through Samsung.com in Korea and the UK are also eligible for onboarding, with further global expansion planned.

The update also enhances SmartThings Find4, Samsung's global location service with over 67 million users. Galaxy users can now share the location of SmartTags via URL, allowing friends and family, including iOS users, to track tagged items like bags, pets, or luggage more easily.

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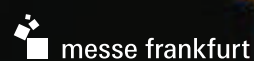SMART TECH EVENT
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