Making the Smart move

Graphics: Karthik

While daily life has come to require the assistance of technology for many a chore, there are options available to make the modern-day home, the epitome of single device control, finds out Bindu Gopal Rao

Imagine being able to control your home with the click of a button. If you think that sounds far-fetched, read on to discover how homes today, have evolved from four walls. Homes today, can do much more than you ever imagined, all thanks to new age technology. Welcome to the Smart Home.

And if you are wondering what a smart home is all about, here goes. This is a home where there is security through authorised entry of vehicles, through scanning of number plates, restricted entry for smart card holders to the premises, television monitoring for any intrusions, smoke detectors to send warning signals in case of fire, monitoring visitors to house from office PC, and message alerts for gas leakage, water leakage or other programmed faults in the absence of owners. As far as energy savings are concerned, a smart home helps control the inside temperature of the room, depending on the ambient temperature, switching on the lights using censors, only when a person is present in the house and switching off electrical appliances, depending upon the usage and requirement.

Entertainment controls play a big part as well. A completely integrated home automation system can change many aspects of the home environment, by pressing a single switch. "Today, you can buy a system that unites your TV, DVD and your sound system, as well as your curtains and lights. A fully integrated system can, at the touch of the button, set the scene for a viewing experience. Hit a pre-programmed switch on your wall or remote control, and it will route the DVD to your TV and sound system, tweak your surround sound speakers, dim the lights, and lower your curtains/blinds so you can enjoy the movie of your choice, in a full theatre environment," says D Vasudevan, CEO, Chintels India. The PC can now act as a home entertainment hub — a 'media centre' — that is hooked up to a TV and speakers, with the computer replacing many of the old components.

Technology first

Says Chandrashekar Hariharan, CEO, BCIL, " The installing of motion and temperature sensors in all common corridors to ensure that most lights shut down when no one is treading the corridors, with only some that are on for night vigil, is a good example. Pumps that draw ground water from shallow aquifers (no deep borewells), with timers that ensure activation only when there is a critical water level, is another such example. BCIL has employed technology for residents to activate lights or microwave ovens in their homes from anywhere else, with just access to a cell phone and a ten-digit protocol. "You can, for instance, be 20 minutes away from home, and activate the AC well before you reach home. You can have lights come on at home at 7 pm,

even if you are out of town for a long spell," adds Hariharan. Today, every automated house is filled with various electronic equipment for our entertainment needs, which means there is always a clutter of numerous remote controls on our coffee tables. One For All, the universal brand of Universal Electronics Inc, has brought out Kameleon - 8, a sleek and stylish remote control that can control upto eight devices like your multiple TV sets, DVD, music system, set-top boxes, PVR, and also your air conditioner!

At Tata Housing's Xylem project, the Smart Building Management System combines state-of-the-art infrastructure and so-

lutions to integrate, monitor and control different systems during daily functioning of the building.

The Indoor Air Quality system integrates the indoor environment management and other external sensors, to monitor air quality and energy consumption at various sections of the building. The Crisis Management system monitors and activates alarms, shuts down air conditioners, and transmits information to a central console for quicker evacuation in case of a fire. CCTV cameras are positioned at every entry and exit point to the build-

ing. The Traffic Management system monitors the status of the six passenger and two service elevators from a central control, allowing the management team to direct users accordingly. The digital home offered in Residenza offering of Ozonegroup, accords multiple levels of digital security. "People are making homes more and more engineered and synchronised with entertainment and utility gadgets.

The move is to reduce many of the

mundane and routine activities, and optimise energy consumption. Most of the new trends are aimed at optimizing energy consumption whilst providing added comfort. IP controlled or managed solutions are being tested and will proliferate in the near term," says Sudarshan K S, Chief Operating Officer (COO), Ozonegroup.

Looking ahead

The future will see increasing intelligence in the appliances that are present in a Smart Home. These appliances will be connected to sophisticated home networks that will raise the intelligence of the home, by allowing the appliances to coordinate their activities without needing our intervention. Standards like DLNA, uPnP, WiFi and broadband Internet, have created the platform for this ultra-networked environment and allow all kinds of devices to be set up.

The next generation of such automation will look at how you can control or welcome natural light into your home with intelligent louvers, sunshades and skylights. The most popular trend today is the adoption of centralised home entertainment (using media servers). "While almost every Smart Home that we have been asked to design, has a dedicated media room with high quality video projectors, high-gain screens, touch screen control systems, automation of lighting and blinds — this is not all. People want to be able to access various forms of entertainment in any room of the house that they may be in.

Getting better

A centralised media server, combined with a structured network, helps set up a personal broadcasting service in the home, which allows sharing of almost any kind of entertainment content – movies, music, Internet and games," says Abhimanyu Gupta, Director, Actis Technologies. Agrees Palash Nandy, Deputy General Manager - Marketing, Legrand India. "The trend is moving towards a convergence of entertainment, web and electricals. Shortly, we would be able to manage our homes through the Internet. Moreover, we would also be able to have audio and video distribution throughout our home. Imagine that a CD is playing in the home theatre in your living room and you are enjoying the music in your bedroom, while others in the living room are watching TV."

Some deterrents like the cost factor (Rs 75,000 to Rs 1,25,000), reliability issues and lack of standardisation notwithstanding, the smart devices would become plug-and-play to the smart home setup, making customisation simpler and swifter.

Intelligent homes are no longer a dream and will mark the beginning of a new standard of living in India.