

# Making smart choices at every level

From the cities we live in to the homes we reside in, every aspect is being transformed by this concept



The world in the present day is encompassed within the word 'smart' with smart phones, smart televisions, smart watch, smart cities and smart homes. People's awareness towards new ideas and technology in every field and their acceptance of it is what drives a lot of industries today.

Smart cities, is a concept taken up by the government of India to achieve a developed India tomorrow. What is a smart city? Good transportation, better roads, public parks? The definition of a smart city may vary from city to city and country to country, however, fundamentally it is an urban development vision that entails a wish list of infrastructure and services that describes an individual's level of aspirations.

## Management

The smart city concept integrates multiple information and communication technology (ICT) and Internet of Things (IoT) solutions in a secure fashion to manage a city's assets - the city's assets include, but are not limited to, local departments' information systems, schools, libraries, transportation systems, hospitals, power plants, water supply networks, waste management, law enforcement, and other community services. The goal of building a smart city is to improve quality of life by using urban informatics and technology to improve the efficiency of services and meet residents' needs.

## Drivers

What a cell is to a body is what a dwelling unit is to a city. Smart homes ⇌ smart cities. So what is driving the acceptance of smart homes? The primary driver for the acceptance of smart homes amongst the urban Indian customer is 'security'. Of all customers who want to opt for smart homes, about half of them are driven by the security assurance that comes with smart homes. The top motivators driving acceptance of smart homes



are security, convenience and energy efficiency.

## Security

Nearly all smart homes have internet connectivity. It doesn't stop there: security cameras, door locks, smoke detectors, burglar alarm systems or information on any other potential dangers are all connecting to the Wi-Fi network and our smart phones.

Conventional security systems keep homeowners, and their property, safe from intruders. A smart home security system, however, offers many more benefits. Home automation technology notifies homeowners of any problems, so that they can investigate. Artificial intelligence programs keep track of the homeowner's habits, and other important information, and notify emergency personnel when necessary.

## Convenience

With the touch of a button, the home environment adapts to what residents are doing such as dining, watching movies, entertaining, sleeping etc. Smart homes control lighting and appliances to create the right mood and save energy, when possible.

Besides, the residents can manage their homes when they are away or

travelling. Curtains and fans can also be set as per the day's sun pattern. Smart homes truly enrich the lives of the people residing in them.

## Efficient

Smart homes are already widely adopted globally, with strong growth expected in most countries, but most particularly in the developing world. The findings reveal that smart building is a global trend, with nearly universal importance placed on energy conservation.

**Lighting:** The lights in a smart home can be turned on and off automatically based on occupancy sensor. For example, when a person enters a room in the day time, the system will open the drapes instead of turning on the lights, but at night it would make sure the lights came on and turned off when no one is in the room hence waste of energy can be curbed.

**Temperature:** An appropriate placement of temperature sensors and the use of heating and cooling timers can reduce the energy used and hence saving money and also the

house can set to turn off air conditionings when no one is in the room.

**Appliances:** Smart homes can even go further in energy management by keeping track of the energy usage of each and every appliance in the house. Smart home owners can schedule the operation of heavy power consuming appliances (such as dishwashers and electric water heaters) to take maximum advantage.

In the midst of massive urbanization taking place on a global level, smart buildings or smart homes have become a significant prerequisite.

