

### Introduction

The term "smart" implies intelligence with decision-making capabilities. A smart device and application can analyze incoming data and make a decision to control or activate a device without human intervention.

In the context of the home, "smart" refers to a network of sensors in the house that measures and monitors the environment. The network senses who is in the home, where they are in the home, and what the "normal" activity is in the home at that particular day and time.

Source: <http://www.mwrf.com/systems/how-smart-homes-can-deliver-sustainability-service>

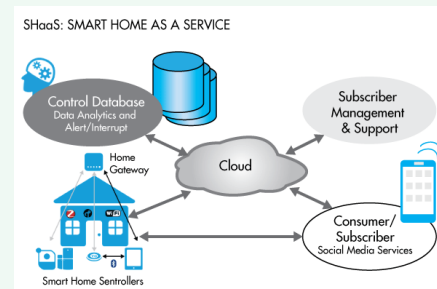
### Smart Home as a Service (SHaaS)

Smart Home as a Service (SHaaS) is a collection of services that analyzes input from the smart home's sensors, learns how the family lives and how the home is used, and can make intelligent decisions to make homes more comfortable, safe, and energy-efficient. Instead of a consumer having to decide which hardware and software options or which wireless technology to implement in their home, they can simply leave it up to the providers of services they already use (e.g., internet access, security, and entertainment). By opting for SHaaS, consumers don't have to be technologically savvy or care about the underlying wireless technology. Having one provider responsible for installation, setup, and management of the network makes it much faster to implement services, add new services, and ensure that controls and user interfaces are unified.

### Four Basic Components of SHaaS

- 1. A network of sensors** in the home provides a general indication of when and where movement occurs in the home and whether the home is secure, what the environmental conditions are, and whether there are any issues (a leak, for example).
- 2. The information derived from sensors** is wirelessly collected by a local hub (gateway, set-top box, etc.) and securely transmitted to an intelligent cloud service that collects and analyzes the data, and sends alerts to family members when it detects changes.
- 3. A central management app** enables the consumer to manage the network via a smartphone or any web-connected device in a single user interface.
- 4. The service provider** is able to easily handle customer support, billing, and subscriber management, as well as software and service upgrades and changes.

### Smart Home as a Service



### Summary

New technology, composed of sensors and analytics, is empowering smart-home solutions that learn from the people who live there. These systems use this knowledge to make predictions about future behaviors and take actions that enhance comfort and convenience, save money, and reduce environmental impacts. Smart Home as a Service enables consumers to practice sustainability and help ensure a cleaner future simply by exerting greater control over the way resources are used in their homes.