

# **VIDEOS TO WATCH & TEXTS TO READ & DISCUSS PROS & CONS OF SMART HOMES**

## **Text #1**

### **What is a Smart Home?**

A Smart Home is one that provides its home owners comfort, security, energy efficiency (low operating costs) and convenience at all times, regardless of whether anyone is home.

"Smart Home" is the term commonly used to define a residence that has appliances, lighting, heating, air conditioning, TVs, computers, entertainment audio & video systems, security, and camera systems that are capable of communicating with one another and can be controlled remotely by a time schedule, from any room in the home, as well as remotely from any location in the world by phone or internet.

Installation of smart products give the home and its occupants various benefits — the same benefits that technology and personal computing have brought to us over the past 30 years — convenience and savings of time, money and energy.

Most homes do not have these appliances and systems built into them, therefore the most common and affordable approach is for the home owner to retrofit smart products into their own finished home.

Most products are available in one of four protocols (the means of communication between themselves) and all of these are compatible with the internet, phone, and cell phones. These are the names for the four: X10, Z-Wave, UPB and EnOcean. Products that use the same protocol offer the ability to add products and hardware at the homeowners own pace and budget. The system can grow to meet the needs of a changing family as time goes on. All of these products can be selected from various manufacturers, preventing an expensive obsolescence or non-competitive pricing.

The products SmartHomeUSA offers are all DIY friendly and were created with retrofitting in mind (such as installation of smart lighting switches without needing to run any new wires). Our software offerings are homeowner friendly and can be installed on any existing PCs.

An emerging important feature of a smart home is conservation of the earth's limited resources. More and more people are becoming aware of the ability to make their homes truly smart — and green — by utilizing home controllers integrated with all home sub-systems to increase savings by controlling lighting, window coverings, HVAC, irrigation and by monitoring usage. Many home controllers have built-in monitoring systems whereby they calculate and log usage by all connected devices, giving the home owner heightened awareness and the knowledge to make changes as necessary. These systems can even be accessed over the Internet from anywhere in the world so the homeowner can adjust consumption any time, anywhere.

SmartHomeUSA offers phone and email product technical support to insure that you will always be successful in your installations and operation. We provide all our customers the information and personal guidance they may need to select the most appropriate products, taking into consideration budget, needs, and desired end-results.

## Video #1

**What is a Smart Home?** <https://www.youtube.com/watch?v=i73n-LTXPIM>

Please read some comments while preparing for the discussion.

## Text # 2

### **Clickatell: The Pros and Cons of Smart Homes**

*(the article taken from <https://www.clickatell.com/articles/technology/the-pros-and-cons-of-smarthomes/>)*

#### *How safe is home automation?*

Smart homes are often referred to as being safer than traditional homes. But the reality is that home automation can easily give hackers access to information about your space. Researchers at [Saarland University](#) found that these systems allow criminals to gain insight into the behavioral patterns of homeowners. The researchers were able to gain knowledge about the ventilation and heating of the homes as well as, more worryingly, the times when the homeowners were absent. The conclusion of the research was that more work needs to be done to make home automation more secure.

There are a number of measures homeowners can take to ensure their home automation system is safe. These include using secure internet access, changing passwords often and updating applications.

#### *How can home automation make your home safer?*

Home automation can however also make your home safer by providing you with the ability to view your home at all times. You can have cameras, motions detectors and locks installed which will allow you to control the doors of your home from wherever you might be. Some examples of when this is especially useful is being able to let in a contractor who you're expecting or "answering" the door and telling the person outside that you're not interested in what they're offering. This sends a strong message that someone is home, even when you're at your office many miles away.

#### *What are the other advantages and disadvantages of these systems?*

#### **Advantages**

- Convenience. All of your products will be programmed to your needs.
- Customization. You can include as many or as few of these products as you choose.
- Security. As mentioned above, smart homes are well-known for their improved security.
- Ease. It's quick and simple to install these systems.
- Environmentally friendly. Thermostats, air conditioning, and lighting can all be controlled for optimal energy efficiency.

## Disadvantages

- Cost. Some smart products can be fairly expensive.
- Learning. There may be some learning curve for non-tech savvy people.
- Reliability. Smart homes are reliant on your internet connection.

If you're interested in home automation and smart homes, read about how you can [integrate SMS with your project](#). The major advantage of SMS is that it can reach you anywhere in the world, even if your mobile data is switched off. Some of the most used and loved instances of using SMS in home automation include instructing your coffee pot or oven to switch on at certain times. That way you'll be greeted when you arrive home with the scent of freshly brewed coffee or your dinner.

## Text #3

### The Pros and Cons of Having a "Smart" Home

Frank Darras, 01/09/2015

(the article taken from: <https://www.linkedin.com/pulse/pros-cons-having-smart-home-frank-darras/>)

Back in 1999, if you heard the phrase "smart house," the Disney Channel original movie of the same title came to mind. Today, smart home technology is more than the stuff movies are made of.

According to a recent report by Coldwell Banker and CNET, more than 25% of Americans have smart home products and report they save an average of 30 minutes a day and \$1,000+ per year.

**But what exactly makes a home "smart"? Are the savings and the convenience worth the cost? In our latest podcast episode, we discussed what you need to know about this growing industry, what exactly constitutes a smart home, and what the pros and cons are of having one. Here's the biggest pro and biggest con of using smart devices in your home.**

#### **PRO: They can be a huge money-saver.**

Smart devices can help prevent and minimize damage, saving homeowners a substantial amount of money. For example, smart-leak detectors can shut off water if they detect moisture.

These devices also have the potential to incur lower energy bills and insurance discounts. Smart thermostats can create heating and cooling schedules, which are said to reduce energy consumption for heating and cooling by up to 30%.

Having a smart security system may also qualify you for insurance savings. In 2013, State Farm teamed up with ADT and Lowe's to provide smart home incentives. Their Home Alert discount provided savings to customers with connected home-monitoring equipment from those brands, such as alarm systems with door and window entry detection sensors.

As the smart device market grows, more insurance companies may provide similar discounts. According to one Forbes article, Allstate already offers a 25% premium discount for those who sign up for a home monitoring service.

## **CON: These devices have security flaws that make them hack-able.**

Because the smart device market is still developing, there are very real security issues with many of the products. Earlier this year, one tech company tested 16 home automation devices and found only one that its researchers couldn't easily break into.

These flaws may be due to several factors, including:

- Some companies that make these products don't have strong backgrounds in security.
- There are currently no industry standards for security on these devices.

In a process similar to casing a bank, cyber criminals can break into your home devices, use them to learn your behaviors and patterns, and take advantage of your vulnerabilities. This video by Tripwire explains exactly how smart homes are hacked:

### **Video #2:**

#### **Smart Home Invasion:**

**[https://www.youtube.com/watch?time\\_continue=37&v=VT1MxFQ5EAc](https://www.youtube.com/watch?time_continue=37&v=VT1MxFQ5EAc)**