

IofT and Home Automation

Implications for the Smart Home

http://tiny.cc/OMUG_IofT



The Internet of Things (IoT) describes a state in which vast numbers of objects are interconnected over the Internet and can collect data and transmit and receive information.

The connection of physical things to the internet makes it possible to access remote sensor data and to control the physical world from distance.

How Does IoT Work?

There is underlying technology... the various wireless radios that allow the different objects to connect with each other over the internet. These standards include Wi-Fi, Bluetooth, NFC, RFID, ZigBee, Z-wave, et al.

How Does IoT Work?

There are things themselves...
bulbs, motion sensors, coffee
machines, tracker, etc. There is
central hub that allows each to
connect to one another.

How Does IoT Work?

There are cloud services which enable collection and analysis of data so that people can see what's going on and can take actions accordingly.

Gartner Group estimates that 6.4 billion connected things will be in use worldwide in 2016, growing to a whopping 25 billion by 2020.

IoT will also make up \$235 billion in services spending next year.

Home Automation Protocols

Powerline (it's hard-wired into your walls)

Radio Frequency

Technologies

Z-Wave ... RF/proprietary

Zigbee ... RF/non proprietary

X10 ... RF & Power line

Instion ... RF & Power line

Wi-Fi or Bluetooth

Apple, Samsung, Google...

What Do I Need to Get Started?

An Internet Connection with Wi-Fi

Smartphone

Hub

Controllers

Sensors



Do Not Inventory

Hub

The center of your smart home, connecting all of your smart devices.



CMR
Do Not Inventory

Sensors

Keep an eye on your home: Get alerts when something happens and remotely control your smart "things" with the SmartThings app. (hub required)



OWP
Do Not Inventory

Sensors

Keep an eye on your home: Get alerts when something happens and remotely control your smart "things" with the SmartThings app. (hub required)

CHAMBERLAIN.

MyQ Garage™

Universal Smartphone Garage Door Controller

Controlador universal de puertas de garaje por teléfono inteligente



Know when your garage door is open, and close it from anywhere.

Works with most garage door openers manufactured after 1993.

Sepe cuándo está abierta la puerta de su garaje y ciérrala desde cualquier lugar.

Funciona con la mayoría de los abre puertas de garaje fabricados después de 1993.

myq-00000

Free App
Aplicación gratuita



SmartCam

and eyes to your mo
SmartThings sensor

Why Automate Your Home

1. Make tasks more convenient
2. Save money on utilities
3. Increased home safety
4. Home security
5. Good for the environment
6. Peace of mind
7. Learning experience for children(spouse)
8. Something the whole family can enjoy

Keep Track of People and Things

Are you a care provider?

Know if someone is home or not

Get a call or text if they leave

Concerned about dangerous things in the house?

Get a call or text if they are disturbed

Take a picture of who did it

Want things to happen when you come & go

Turn on lights

Set temperature

Unlock the door

Open the garage, etc., etc., etc.

Great Service for Snow Birds

Picture checking your home while away

Monitor and/or change temperature

Turn lights on and off

Keep track of things

Protect valuables or dangerous things

Lock and unlock the house

Open and close the garage doors

5 Rules for Buying Smart Home Devices with No Regrets

1. Try the app first.

2. Do research on firmware updates (but don't always expect them).

3. Determine the level(s) of security and privacy.

4. Accept the smart device premium.

5. Make sure it works with your current (and future) smart devices.

Cost for my Home

Device	Why	Number	Cost
Hub Smarththings	Communicates with & controls all controllers & connects to the Internet	1	\$99.00
Z-wave Relays	Raises and Lowers Garage Doors	2	\$90.00
Motion/Tilt Sensors	Reports position of Garage Doors	2	\$90.00
Kwickset Door Locks	Remotely lock and Unlock doors	2	\$300.00
Motion Sensor	Monitor motion by Doorwalls	2	\$80.00
RCS Thermostat	Control and monitor HVAC	1	\$150.00
Z-wave Light Switches	Turn Hallway lights on and off	1 Pair	\$45.00
Z-wave Dimmer Switch	Control Great Room Lights	2	\$90.00
Total			\$954.00

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