Home Automation

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From lights, fans, thermostats, and even door entry systems, the use of home automation systems has become more convenient than ever before. What was only imagined before is now available in many houses around the world. Even though it is convenient, the tough side is the risks that home automation can also pose to one’s belongings and family. Home automation is a neat invention because of the freedom that it gives a homeowner. People can easily control the lights, door locks, etc. with a simple click of their smartphone. Now there can be an easy way to check if all the lights are on or whether the doors are locked without having to return to the house. Despite the convenience there is also the risk factor. With everything being technologically controlled, a hacker can gain access to your whole home by just gaining access to your phone or Wi-Fi router. How can we keep the convenience of Home Automation but still be able to keep our homes secure at the same time? In order to keep the security, software must constantly be updated, home owners need to be educated on how to still keep the systems secure, as well as anyone caught hacking into a home automation system should be charged with breaking and entering if not worse.

Looking through history the earliest forms of home automation can be seen at around 1901 – 1920. Even though they have turned into a common normal aspect of a home, the use of home appliances was a groundbreaking invention (History of Smart Homes). Even though they wouldn’t be considered a “Smart” appliance they serve their purpose of simplifying a household. Cooking food on a stove instead of a fire or even vacuuming instead of sweeping helped many households. It was a start, but the real breakthroughs didn’t start coming till the late 1990s to the early 2000s (History of Smart Homes). They started from simple improvements such as a wireless tv remote, into appliances such as automated thermostats, scheduled appliances, etc. But even when people thought that was the peak, technology moved further to now even being able to remotely control your door lock, lighting, garage doors, all from a completely different location.

The invention of home automation has made life for many much simpler, but along with the simplicities there also came many risks. Because home automation is technology based, a small bug in the software can give an experienced hacker simple access to your whole home (Security Risks of Home Automation). As with other software’s, the companies designing the technology constantly keep watch for any possible threats or openings. In order to still ensure the security, it is important to not only have the company keep watch, but also to educate the users how to keep their home secure with the devices from their end (Security Risks of Home Automation). This could be done by including video courses that the customers would have to go through before being able to activate the technology. This will play a major role in helping the public to keep the systems secure from their end.

Along with the possible security risk, there should also be legal action included for anyone breaching the systems. For safety purposes, anyone caught hacking Home Automation Technology should be treated the same as any physical burglar. If the results of the attack are worse than harsher punishments should be considered. With certain legal standards being set, it will be helpful to keep homes secure while still enjoying the luxuries that Home Automation brings to homes.

Home Automation is always at a work for progress. Having the advancements that Home Automation brings is amazing but in order to get the luxuries while also maintaining security in homes it is important to understand the purposes of home automation, educate the customers on how they can keep their systems secure, and implementing a legal system for any possible breaks in the systems. With technology advancing, there will never be systems completely prone to attacks, but if the updates, and education are always kept up to date, people will be able to enjoy their Smart Homes while still being sure that they can still be kept safe.

Works Cited

Hendrick, Drew. “The History of Smart Homes.” IOT Evolutioni. 27 April 2014. 3 Oct 2018. https://www.iotevolutionworld.com/m2m/articles/376816-history-smart-homes.htm

Frizzel, Bradley. “Security Risks of Home Automation”. 10 Dec 2015. 3 Oct 2018

https://www.cs.tufts.edu/comp/116/archive/fall2015/bfrizzell.pdf