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## Smart Homes Will Improve Life

Most American homes are the same: made of wood, glass, vinyl, and other basic building materials. In the United Kingdom and other European countries, more and more houses are being built with "brains," literally having the ability to "think." These "smart houses" can perform any number of functions automatically to make life easier for everyone. Smart homes are being built in limited numbers in the United States, but the price of most systems is prohibitive for the average homeowner. As new technology comes out, older technology is getting cheaper, which will allow more smart homes to be built. Many experts argue that home automation technology is not user-friendly enough for widespread use. Other experts fail to see the point in these systems. Supporters, however, feel that the benefits outweigh the disadvantages and proper training combined with design that is more sensible can make the systems more user-friendly. More smart homes should be built in the United States because they help to save energy, improve safety and security, increase quality of life, and assist people with disabilities with everyday tasks.

Energy conservation is greatly enhanced with home automation. Heating and air conditioning becomes super efficient because when you leave in the morning the computer sets the thermostat back to the most effective temperature while conserving the most energy possible. The system can be set to change the temperature back to a more comfortable level either at a specified time or by phone with the entry of a few voice commands or keypad entries ("Smart

Homes: Your Wish"). This feature would help to conserve electricity, oil, and gas, which leads to a cleaner environment and lower utility costs for the homeowner.

Some of the biggest enhancements come in the form of increased safety and security. Many systems now include a small control unit that can be placed on your keychain, similar to what is used for keyless entry on many newer cars. When you leave the house, touching one button on this small keychain device will lock all outside doors, close all windows, arm the security system, close the curtains, and make the interior lights turn on and off so it looks like someone is still home. Pushing another button on the keychain when you return will unlock the door and turn on the entry lights for you. If someone rings the doorbell while you are gone, the system will contact you via your cellular phone or an instant messenger program. You will be able to see the person at the door through a web cam hidden outside. If it is a delivery person, you can remotely unlock the door so that they can leave the packages inside. Sensors inside the home will make sure that the delivery person stays in the entry area and will contact you and the police if the person goes any farther. Another system will protect your family from dangerous gas leaks by placing sensors around the house. If these detectors are set off by a leak, they will turn the gas off at the main, sound an alarm, and disable the light switches to prevent you from accidentally triggering an explosion. Likewise, there are smoke and heat detectors throughout the house to protect the inhabitants. If a fire is detected, the system will call the fire department, sound an alarm, unlock the doors, and turn on all of the lights in the house to help you find your way to safety ("What the House"). A system such as this does cost several thousand dollars to install, but it can easily help to save the lives of your family members.

Nearly any set of tasks that you perform routinely can be automated to make life easier and more worry-free. Home automation makes it possible to sit down at night to watch

television and push one button to dim the lights and close the curtains. Your alarm clock can be set so that when your alarm goes off in the morning it will gently turn up the lights in the bedroom and bathroom, start the shower or bath running, turn on the coffee pot, and set the television to your favorite channel. A refrigerator is currently under development that will sense the freshness of your milk and warn you when it has turned sour ("Smart Homes: Your Wish"). Home theater systems now make it possible to listen to the same CD in any room of the house. You can watch the same DVD on any television. If it is time for your child to go to sleep, just push one button and their bedroom television and stereo will be disabled for the night. With this technology, a homeowner can automate any number of regular tasks. This can free up time for other things such as a better, longer night of sleep, an extra game of catch with the children, or a longer walk in the evening.

Home automation can make living alone more manageable for an elderly person or someone with disabilities. A home can be programmed to recognize when a person has gotten out of bed in the middle of the night. If the person gets up during certain pre-set hours, the home can gently turn up the lights in the bedroom and bathroom to reduce the risk of falling. After the person returns to bed, the house will automatically dim the lights to the off position. However, if the resident does not leave the bathroom after a specified time, the system can send an alert to a relative or the authorities that there might be trouble ("Smart Home – What Is It"). Homes can also be programmed to assist those in wheelchairs by raising and lowering kitchen cabinets and sinks. This allows the furnishings to remain at standard heights for those individuals in the home not confined to a wheelchair ("What the House"). Through this technology, the smart house can also assist with the rehabilitation of individuals by giving voice prompts or showing visual cues on video displays around the home ("Smart Homes and Social Care"). This powerful system

could assist people with life on their own under circumstances that normally would prevent this from happening.

Critics of home automation point out that the controls of these systems can be daunting to the average user. As an example, many critics claim that many families with smart home technology cannot figure out how to work their automated window shades, so they leave them in the middle in an attempt to please everyone. They call into question the reasoning why appliances need to talk to each other and why we need the ability to control our house by phone (Iovine). Most supporters agree that until recently much of what has been developed has had little practical use. However, automation technology has come a long way in the past year and with the technology in place, there is a greater chance that more applications will be developed. Most critics of home automation are architects who are losing portions of their revenue to automation experts because they are not qualified to design these systems themselves. Improvements are made to these systems everyday. The controls will be made more user-friendly and the technology that currently has no valuable use will be perfected and implemented in ways that are sure to amaze us.

Home automation is a powerful concept that has not been well explored in the United States. There are millions of Americans living alone or with disabilities who could realize tremendous benefits from smart home technology. With decreasing prices and an increasing desire for safety, security, and energy efficiency, now is the time for us to begin a fuller implementation of the modern technology that is available to us. We owe it to our loved ones to make our homes as safe as possible. Explore the opportunities of home automation and help to make your household safer, more secure, more energy efficient, and easier to live in.