Smart home gives independence back to the disabled

According to the UN, more than one billion people in the world live with some form of disability [1]. Only in South Korea there are over 2 million (2,683,400) persons with disabilities. People with physical disability represent approximately 50% of the entire population with disability [2]. Over a quarter of disabled people say that they do not frequently have choice and control over their daily lives [3]. In order to solve the problem of daily life for the disabled, smart home can maintain and empower their lives and provide them with independence and freedom from many things. It makes a really big difference for them to be able to live independently and not needing assistance at home when they are able to do those things on their own.

First, the disabled can control all aspects of their house easily by using smartphone or voice now [4]. The position of the ordinary switch is designed according to the height of a normal person, it's a daily problem that people with disabilities are often troubled. Now the house's lights at the tip of fingers. With smart home products like MicroBot Push, the disabled can easily turn a manual switch into automatically turn on and off the connected lights. Setting it up is easy and makes so many things practical. The disabled can be able to control the lights from the bed, or anywhere. It's easy for the disabled to give a better deal and sense of control over their traditional light switches [5]. And not only that, the disabled can control their home by using voice. Many smart speaker like Amazon Echo or Google home provides not only informational services but also voice control over systems in the house when it connected to other smart home devices. It is really helpful for people who are bound to a wheelchair or with limited movement to have the ability to control their lives start with control the household devices of their surroundings.

Second, smart home can be used by the disabled to make sure the safety of house and property. According to NCVS report, the number of household burglary for persons with disabilities is 6.2 times that of persons without disabilities [6]. Furthermore, some people with disability have support workers visiting every day to assist their lives. They may have to give their support workers a key for the front door or leave the door unlocked overnight. Smart locks give people with disability more security, as they can control who they let into their house and when [7]. Also the smart home security camera can be set to identify and catch burglars, or provide daily monitoring to give their loved ones a peace of mind in case that the disabled get into trouble at home.

Third, the cost of smart home product is much cheaper than which designed especially for the disabled. Some people with disability may even be able to get smart home technology funded through the National Disability Insurance Scheme to make their homes more accessible in Australia [8]. In addition, smart home product is more available than ever before. In general, setting up an entire home to be completely automated for the disabled will cost a pretty penny. However, smart home allows the disabled start by choosing the area of most concern and tackling that issue and then add upon it [9]. If mobility is the biggest obstacle in life of a person with disabilities, installing smart lighting so lights can be turned on

and off remotely is a great place to start. To using a smartphone to set up voice-activated requests and tasks using either Android's Ok Google or iPhone's Siri is a great solution for the mobility-handicapped persons. Smart home with assistive technologies are coming to market, such as wearables, improved text-to-speech programs, improved magnification software and assistive apps. These products or technology emerging in the mainstream that does not exclude those with a disability, such as products of Apple, are already coming to market with accessibility features built in from the start [10]. These products and services weren't created specifically for people with disabilities, but this demographic stands to benefit most from their development.

Smart home with assistive technology allows for the disabled to maintain control over their environment and daily activities and offer a more positive quality of life by allowing them to maintain their dignity. These smart home and assistive technology possibilities empower the lives of the disabled. With all of the physical and emotional stress they have had to endure, a smart home gives independence back to them and helps give them strength and hope for the future.

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