

***"Inclusion is about all of us. It's about society valuing our differences and respecting our rights."  
- Diane Richles***

Technology has transformed the lives of people with disabilities, opening up new possibilities and breaking down barriers that once limited their full participation in society. Over the years, there has been a remarkable evolution in the development of technologies designed to enhance the independence, accessibility, and overall well-being of individuals with disabilities. Advancements in robotics, artificial intelligence, and wearable devices have paved the way for even more relative solutions.

As technology evolves, the focus remains on creating inclusive and decent solutions that empower people with disabilities to lead independent lives, pursue education and employment opportunities, and engage fully in their communities.

Here are two interesting recent inventions:

AI-powered applications that are life-changing for a person with a disability.

### **Open Sesame**

**'Nod your head' and the application will do the rest.**

Ben Dov, a graduate of IIT (Israel Institute of Technology), created this hands-free solution to enable people with disabilities to interact with smartphones and tablets in December 2019. Just by "nodding your heads" this application lets one control their phone. Similarly, voice control is integrated to provide hands-free experience for accessibility, "Open Sesame" will wake up the phone and start tracking the user. This has since helped many people with disabilities during the Covid-19 pandemic with their work and education.



### **Other Features**

- **Touch-Free Control:** Gesture recognition understands small head movements, eliminating the need for touching the device.
- **Integrated Voice Control:** Voice recognition ensures turn on/off operation on the phone or switching between applications
- **Lightweight Mobile Design:** The Sesame smartphone uses Google Nexus 5 for the hardware
- **Affordable & Elegant:** No external hardware is required.

### **Domestic Robots - Ori Hime Robot**

Through advanced technology and artificial intelligence, domestic robots for people with disabilities aim to create a more inclusive and accessible living environment for all. These robots can be of highly constructive use for working professionals, students, people with Spinal Cord injury (SCI), and ALS. Whether it's helping with daily tasks, enhancing accessibility, or offering companionship, these robots are designed to empower people with disabilities and promote greater independence and quality of life. Currently, in Japan, they use domestic robots to serve in cafes where these robots are controlled by people with disabilities. With the help of AI technology, these robots are interactive and customers come back just to meet people working behind these bots.

