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Editor's Desk

Dear friends,

A wonderful initiative, a first of its kind "Museum of Possibilities", an evolving place for assistive devices and solutions came into existence in Commissionerate for welfare of the Differently Abled, Chennai.

A dream of having all access solutions under one roof came true for people with disabilities. Feeling proud to be a part of the team behind setting up this exuberant place .The Museum of Possibilities will go a long way in "Breaking the shackles of limitations due to inaccessibility".

Regards

Bhavna Botta

http://www.connectspecial.in/

**The Museum of Possibilities,** a path breaking initiative started in Commissionerate for welfare of the differently Abled, Chennai, showcases a gamut of assistive devices .This vibrant place spread over 2500 sq ft with an accessible cafe in tow, has a range of simple solutions to day to day accessibility issues .

We meet up with primary consumers to understand their thoughts and aspirations on the Museum of Possibilities (MoP).Mr Satish is a banker while Ms Smitha Sadasivan, was an accessibility consultant for the Election Commission of India. Both of them use assistive devices extensively and can be seen whizzing off on their motorized wheelchairs .


Picture shows visitors viewing the assistive devices on show at Museum of Possibilities

*# Satish, why is it important to have a place like this?*

In my opinion, The Museum of Possibilities is very important because in our country most people don't have information or knowledge about access and assistive devices. The small percentage of people who have some knowledge of this are still grappling with how to procure it. This would be a one-stop place for all the simple solutions which would change their life.

There might also be people who are developing assistive devices or have brilliant ideas about some new technology but may not know how to reach out to the stakeholders -this is where Mop will be useful as the museum would be the platform to connect people and bridge this gap.

The need for MoP has been felt long back and it should have been started many years ago but nevertheless, I am happy that we have made the beginning for many like this across the country.


Picture shows Satish on his motorized wheelchair,reading the life changing events on the Impact wall in the Museum

*# What is unique about this place, can this be replicated and how does the model home in the museum influence the way we look at assistive devices.*

It is unique in many ways, I have not seen or heard about any other place being built exclusively for people with disabilities, it caters to all disabilities and is completely accessible. I feel this is unique and a pioneering one as the solutions and devices are applicable to independent living, work and leisure.

I like the model home as it demonstrates how independent living is possible with small adaptations and aids. The Museum of possibilities is a replicable model and has a great scope in creating awareness and changing the lives of people with disabilities whether urban or rural.

*# What is the impact on access and on the society, you are envisaging through this concept?*

The impact will be humungous. The mop is not only a must-visit place for people who have no information or knowledge about access but also for people who are already using assistive devices but may not know about the new developments in the field and how they could change their lives.

The new technologies and adaptations will change the quality of life and open up many opportunities in the area of employment, hobbies, sports, etc.

The workplace adaptations are simple and would lead to financial Independence. This will make them less dependent on others and become independent. This, over a period of time, will make society open up to an inclusive workforce.

*# What sort of convergence /development /networking scope does MoP have?*

I feel Mop will play a major role in making people realize how small changes can make many things possible and lead to a better quality of life. I also feel we need to spread the word about Mop not only in Tamil Nadu but across the country so more and more people will benefit.

A lot of work needs to be done to create awareness about Mop and also to build a network. New product demos on media, and conferences will make people know about Mop.

# As a primary end-user of assistive devices what else would you like to see at Mop?

The MoP should be able to display or reflect the innovations developed globally -only then it will evolve and sustain people's interest. Innovation and reaching the

the public should be a continuous process.

The MoP has a lot of scope in connecting the needs of people with disabilities to the developers -for example, I use a motorized wheelchair and I dream of driving a car that can be operated by a joystick. We don't have this technology in India and importing a car like that is beyond a common man's pocket.This is where I feel Mop can play a crucial role -identifying developers for individualized needs and making dreams come true!!

https://tnmop.in/

Now there is a model in place so govt can't be postponing the agenda of accessibility. Every public building, job establishment, and transport system should be accessible. If personal mobility on the ground at the micro-level can be made fully accessible, why not at the macro level.

The housing department should take inputs from the Museum of Possibilities and execute. Now we have a model for ensuring all housing programs are accessible which should be mandated by the government. It's time that penal provisions are enforced for accessibility non-compliance.

At a personal level, MOP gives an experience and feel of what accessibility can do to a person, how enabling it is, how much freedom it gives and how every aspect of life can be made easy with simple adaptations.-Smita Sadasivan

# TAKING BACK CONTROL: NEW 3D PRINTED BRACELET EMPOWERS THE HAND-IMPAIRED TO PLAY VIDEO GAMES

Originally featured at Access and Inclusion Through Technology

http://www.accessandinclusion.news/?edition_id=81f52d50-d425-11ec-9961-fa163e6ccaff
https://3dprintingindustry.com/news/taking-back-control-new-3d-printed-bracelet-empowers-the-hand-impaired-to-play-video-games-208904/

Researchers at the University of Sydney have developed a 3D printed sensor bracelet that allows those with hand impairments to more easily use computers and play video games.

By detecting vibrations in users' wrists as they move their fingers, the wearable is said to be capable of picking up inputs, before relaying these to a machine learning (ML) program that converts them into computational commands. Once they've perfected this process, the team intends to make the bracelet open-source, with the aim of improving smart device access for disabled people across the world.

Picture shows 3D printed sensor bracelet on a hand . Photo via the University of Sydney.

People with disabilities such as cerebral palsy often suffer from muscle stiffness and variations in muscle tone, which leave them vulnerable to jerky involuntary movements or give them exaggerated reflexes.

Given the intricacy of the inputs now required to operate computers, mobile phones and gaming pads, the hand-impaired are therefore faced with being frozen out of the modern world. To combat this, Professor Nadia Badawi, who supervised Lin on the bracelet project, says that the rapid development of advanced assistive technologies is vital, but they must be attainable enough to meet demand.

“We know that assistive technology holds the key to a brighter future for many children with cerebral palsy and similar disabilities, with the potential to transform communication, mobility,and participation in society,” adds Badawi.

“Cerebral palsy is the most common physical disability in childhood globally,meaning it is vital that these tech advancements are accessible, customizable and as widely available as possible.”

Lin and Badawi's solution to the technological barriers faced by hand impairment sufferers takes the shape of a unique, sensor-packed bracelet. 3D printed using an everyday Formlabs system, the device is designed to pick up subtle finger movements via vibrations in the carpal tunnel, a wrist area that contains the tendons which control the hand.

Once these inputs have been detected, they can be sent via blue tooth to a program the researchers have designed, which is capable of identifying patterns and communicating them with a given device.

As this process is carried out instantaneously, the bracelet enables wearers to input the commands needed to play games, something that ordinarily requires using a handheld controller.

Image shows PhD student Stephen Lin using the 3D printed bracelet to play a video game. Photo via the University of Sydney.

# Snippets

## Dining With Dignity

This elegant, patented design enables those with grip impairment due to spinal injury,arthritis, Parkinson's or other handicaps to grasp their fork, spoon or knife using a yoke attached to the handle.

https://diningwithdignity.com/

Picture shows spoon ,knife and fork with yokes for fingers to slide in

At **The Uffizi Gallery** in Florence, they have Versions of Paintings so that visitors with visual impairment can enjoy the Art

Picture shows a tactile version of the painting on a slant table next to the original painting hung on wall

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