



Pemberdayaan masyarakat sensitif disabilitas dalam era revolusi industri 4.0

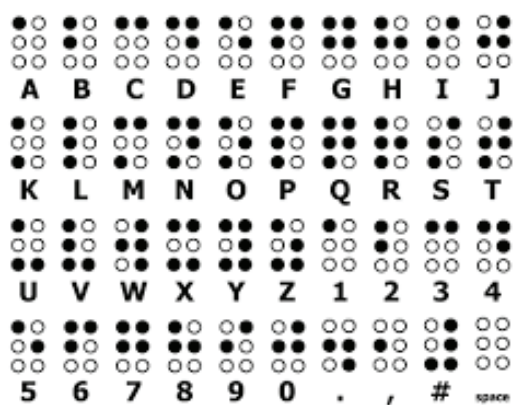
eSight, NuEyes and Aira







UNIVERSITAS KATOLIK INDONESIA
ATMA JAYA
Tepercaya Kualitas Lulusannya



www.boxentriq.com



Self-propelled chair

- Paraplegic watchmaker, Stephen Farfler (1655) built his own chair at 22 yrs of age



https://www.wheelchairnet.org/WCN_WCU/SlideLectures/Sawatzky/WC_history.html



Mobility



<https://www.dezeen.com/2016/05/03/go-wheelchair-layer-benjamin-hubert-3d-printing-clerkenwell-design-week/>





robotic exoskeleton



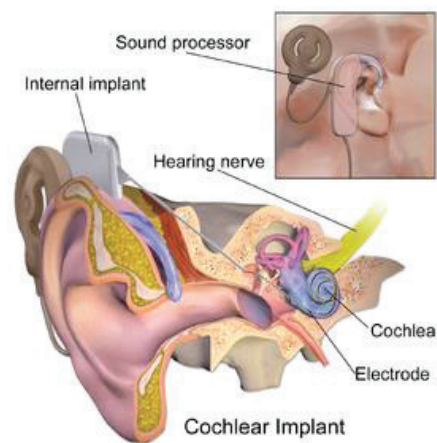
<https://www.cbsnews.com/news/robotic-exoskeletons-helping-paraplegics-walk-again/>



communication

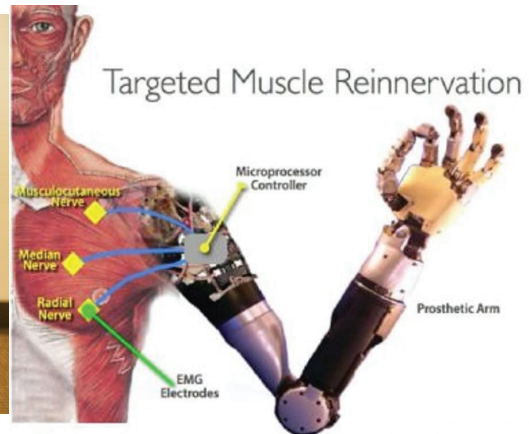


18th century drawing of ear trumpets

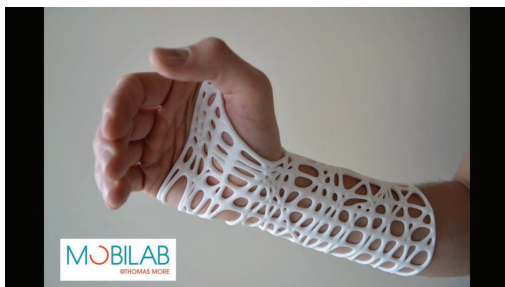


surgically implanted neuroprosthetic device that provides a sense of sound to a person with moderate to profound sensorineural hearing loss.





3 D printing





4th industrial revolution

- This is bringing together digital, physical and biological systems
- One of the features of the industrial revolution 4.0: it does not change what we are doing, it changes us



Technology exists, but

How to get it to the people and to implement it

On the scale we need and we can afford

How to make most of the opportunities



Industrial revolution 4.0 and disability

- Technology to improve functions like seeing, hearing, walking, communication
- Opportunities for work at home



Data



Image: CBM





Definition of disability

The CRPD adopts a [social model of disability](#), but does not offer a specific definition.

The Convention's preamble (e) explains that the Convention recognises:

- ...that disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others
- Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.



Disability inclusion is good business

- Disability inclusion comes from the head and from the heart
- Multiple studies have shown that disability inclusion in the workplace results in higher revenue, net income and profit margins, while the cost of disability exclusion in OECD countries is an estimated 7%.





Disability inclusion in education

- Number of students with disabilities at your universities
- Universal design in education
- Accessible website
- Information for students with disabilities



Disabled persons and industrial revolution 4.0

Exiting opportunities

But, how to ensure people with disabilities have equal access to education, jobs, leisure?





Image: Reuters

