• BIOTECH •

Cyborg Technology: a Medical Revolution

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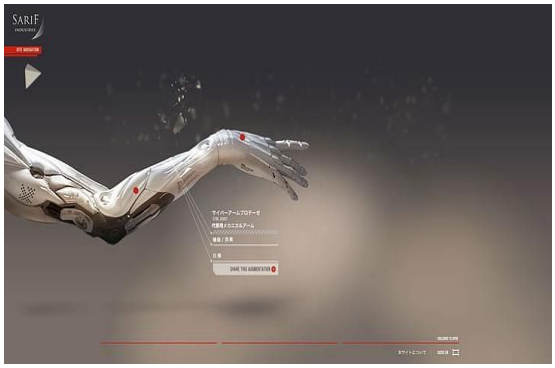
Humans with robot parts! Can you believe it ? Compounded with superheroes from DC and Marvel, Generation Z has grown up exposed to prosthetics.

Neil Harbisson, the world's first cyborg, equipped with an antenna that allows him to perceive colours in the form of audio frequencies.

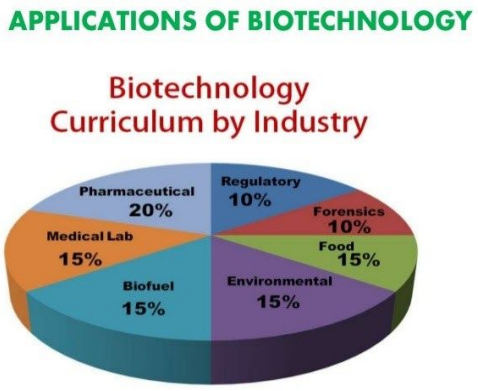
Biotechnology has deleted the prefix "Im" from the word *impossible*. The development of prosthetics began around 2000 BC when Egyptians used wood and leather to modify arms and feet. They ultimately gave birth to an invention that changed the history of medicine.

The idea of losing your arms and legs is horrifying, but the introduction of prosthetics has cushioned the effect of this loss. Although in past centuries the use of prosthetics was rudimentary, nowadays prosthetics are characterized by its applicability.

The change is not just in its usability but also in its structure. While past prosthetic structures made use of wood and leather, modern biology has made use of acrylic resin, carbon fiber, thermoplastics, silicone, aluminum, and titanium, synthetic polymers, etc.



Many may believe that armed with prosthetics, the person is capable of performing all kinds of maneuvers. Maximum prosthetics are still sensitive to moisture so are better kept away from water.

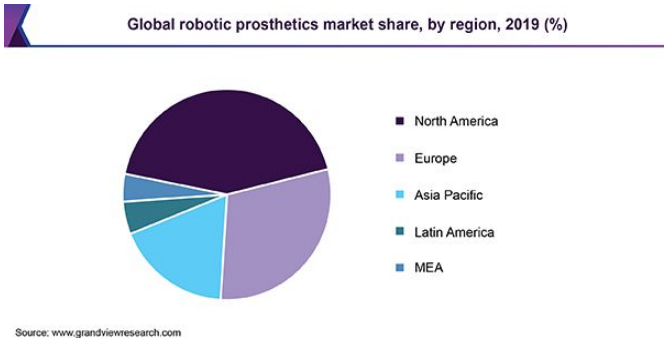


Industrial Use

Prostheses not only complement dysfunctional limbs, but they also lend themselves to a wide range of medical applications, including hearing aid and reading glasses. Modern prosthetics have been extended to artificially supplant heart valves, arteries, teeth. These artificial organs have changed many lives by either replacing a metabolic function or improving mental health.

Speaking of mental health, the prevalence of psychiatric disorders is soaring globally amongst 32% to 84% of amputees (IPJ, Anamika Sahu, Rajesh Sagar, Siddharth Sarkar, and Sushma Sagar) What's more, the need for prosthetics is increasing with the number of accidents.

In all truth, the medical field needs more young, global minds like us to develop advanced applications as biology is not solely the study of living organisms, but also the study of implementing this knowledge to assist the handicapped.



Global Use

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