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Inventions characterising global assistive technology market

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The global market is catalyzed by increasing the number of persons with disabilities and the ageing population



Specially-abled people can find it challenging to live an independent life. Similarly, seniors find it hard to perform some duties due to wear and tear. Therefore, the medical field has been committed to developing assistive equipment to help people live more independent lives. The 21st century saw tremendous development in assistive technology. Assistive technology has gained roots in most parts of Europe and some developing countries globally.

Assistive technology helps specially-abled people and seniors conduct their daily activities and independently improve their functionality. This has contributed to the global growth and spread of the assistive technology market. According to World Health Organization, due to the rise in the aging group and the increase in infectious diseases, by 2030, over two billion people globally will require to use at least one of the assistive technology devices to aid them in their everyday activities.

Why the assistive market is growing globally?

With the high number of orthopedic and neurological disorders, the demand for assistive technology devices has progressively increased globally. This has catalyzed the growth of the assistive technology market, leading to incredible inventions and innovations. According to the neurological alliance, 1 out of 6 lives with a neurological disorder leading to epilepsy and learning disabilities. Hence, they require assistive technology devices to help them live independently and function usually.

However, the price has hindered the development of assistive technology due to the high costs, making them unaffordable to many.

In addition, lack of awareness has also played a significant role in hindering the development of the assistive technology market. Some people who may need assistive technology devices lack the necessary knowledge of these devices' importance, functionality, and accessibility, which blocks the market's growth. Also, developing countries may lack access to these devices due to their high prices.

Globally, the assistive technology market can be divided into product type, region, and end-user. Let's zoom in upon each of the market segments.

The assistive technology devices by product types can be categorized into;

Mobility aids devices

Mobility aids include prosthetic devices, orthotic devices, walkers, scooters, wheelchairs, canes, and crutches. The mobility aids are meant to aid the individual with walking disabilities to move freely and independently without any support from other people. The device is modified to help individuals with mobility problems; an example is a medical scooter. A **medical scooter** is battery-powered with three or four wheels and a steering arrangement used for controls. It is modified to allow individuals with mobility problems to move freely, such as individuals with a systematic or whole-body disabling condition.

Hearing aids devices

Assistive technology devices to aid the deaf to hear or hear more clearly. These devices include in-the-ear hearing aids, worn in the ear canal, and behind-the-ear hearing aids, usually placed behind or on top of the outer ear. The hearing aid devices should be used according to professional instruction.

Cognitive aids devices

The cognitive aids are modified to assist individuals with memory problems and other challenges involving thinking and attention. The cognitive aids devices are either computerized or electrical assistive devices.

Sensory aids devices

Assistive technology has developed screen enlargement applications, recognition programs, and screen readers to assist individuals with mobility and sensory impairment, which help them operate communication devices.

Learning aids devices

Assistive technology has also advanced the education field by developing devices and tools such as book holders, adapted pencils, and page-turners that enable persons with disabilities to participate in all educational activities.

Captioning aids devices

There are assistive technology devices developed to help an individual with a hearing problem watch movies and other television programs. These devices are known as closed captioning.

Physical modification

Assistive technology has also engaged in physical modifications in the built environment to allow persons with disabilities to access buildings and workplaces. Such changes include ramps, grab bars, and wider doorways.

Other assistive devices include high-performance mobility devices, adaptive switches, and utensils.

The assistive technology market globally has been categorized into hospitalized and home care settings. Hospitalized assistive technology devices are modified to be used in the hospital context only—for example, therapeutic intervention devices and diagnostic equipment. The hospitalized assistive technology devices are meant to help the patient undergo the daily activities in the hospital.

In addition, these hospitalized devices are also used by health care providers to identify and diagnose diseases. Home care settings devices are primarily used by people with disabilities at home to help them do their daily activities independently.

Regional market distributions

Regional market distribution assistive technology is categorized into developed countries and developing countries. Developed countries such as North America have a vast market for assistive technology devices due to a high number of age groups and persons with disabilities.

The US Bureau of statistics recorded 19.3% of specially-abled persons who were employed. Factors such as the rising demand for assistive devices have led to the growth of the assistive technology market.

In summary, the assistive technology market is progressively growing. High levels of inventions characterize it. Most regions adopt the technology and strive to advance it through technological innovations. The global market is catalyzed by increasing the number of persons with disabilities and the ageing population.

Other possible reasons include healthcare providers outside hospitals that have been increasing and technological advancement to improve productivity and reduce ancillary cost.

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