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SMART TECHNOLOGIES

Technologies are no longer only functional devices of everyday life they have evolved into integral tools of future changes and new experience. Recent advances in the field of technology have led to the emergence of innovative technological smart solutions providing unprecedented opportunities for application in all spheres of our life. Scientists try to explore their potential not only to optimize existing processes but also facilitate the creation of more meaningful and personalized services and experiences.

All people agree that technology is only getting smarter, but most don't realize just how smart. Educational robots, intelligent implants, brain chips are no longer parts of a science fiction show. In reality, smart technology is around us every day. From surveillance cameras to clothing, today's smart technology is watching us, helping us, and getting smarter because of us.

Here are some examples of the most impressive smart technologies, which have already become indispensable parts of our life:

- Smart Clothing. As progress in science and engineering research advances, the gap between designers and scientists narrows and the area of smart clothing is likely to keep on expanding for the foreseeable future. Fabrics that enable digital components (including small computers), and electronics to be embedded in them to create fashionable, functional, comfortable solutions to meet everyday needs; whether it's in sports & fitness, outdoor & leisure, home care & health care. Leading companies in this sphere are AiQ, CrunchWear.

- Smart Pills. Health care systems across the world are facing massive challenges too. However, smart technology including wearable devices and patient monitoring systems can help to build a society in which everyone can live in good health, safety and security [3]. A revolutionary ingestible capsule that measures pressure, pH and temperature as it travels through the gastrointestinal tract to assess GI motility.

- Smart Bionic Limbs. Bionic limbs with machines intelligence that can sense their environment and predict a user`s intentions. Smart robotics will enhance the powers of the able-bodied, too.

- Smart Earbuds. They feature a built-in optical sensor that monitors your heart rat without straps, wires, or batteries. It measures changes in blood flow through the capillaries for accurate heart rate detections.

- Smart Glasses. A wearable computer that adds information to what the wearer sees. Smart glasses devices have all the features of a smartphone with a wide range of healthcare and industrial applications.

- Smart Refrigerator. A refrigerator which has been programmed to sense what kinds of products are being stored inside it and keep a track of the stock through barcode or RFID scanning. It is equipped to determine itself whenever a food item needs to be replenished.

- Smart Watches. A computerized wristwatch with functionality that is enhanced beyond timekeeping. Modern run a mobile operating system and function as portable media players, offering playback of FM radio, audio, and video files to the user via a Bluetooth headset.

- Smart Vehicles. Driverless robotic vehicles that could someday communicate with each other to reduce traffic accidents. The current autonomous vehicles sense their surroundings with such techniques as radar, GPS, and computer vision [1].

These gadgets are just a few of the many amazing products on the market right now. The greatest thing about technology is that it's always improving through innovation and creativity.

But there are always concerns how far we can trust such systems. Performance failure is raised as frequent fear whenever smart technology is involved, especially when we are looking at self-driving vehicles and other sectors where human life could be directly affected by smart machines. New technologies mean new opportunities for attacks. Information in smart TVs could be the hacker's next source of personally identifiable information. New gaming consoles can inspire cybercriminals to create threats focused on gamers and gaming services. Self-driving cars may be hacked into and tampered, which could endanger passengers. People are afraid of losing their jobs or even intelligence with time.

In my opinion it is important to be aware of these threats, but remember that once there were similar fears heading into the industrial revolution. The main focus is for smart machines to enable us to be more productive and flexible. By using them we can make more efficient, sustainable use of our resources. We must be ready for smart technology to become a much bigger part of your life. It offers unbounded potential to improve our lives and enhance sustainability from all spheres - home, health, manufacturing, work, transport, energy and leisure. But we also need to address issues such as IT security, skills and labour market problems.

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