**Applications**

Smart home

IoT devices are a part of the larger concept of home automation, also known as domotics.

One can guide his or her connected device at home even from far away. If one for example leaves the office, it is possible to tell a connected air conditioner device via smart phone to cool down the house to a certain temperature.

Another example would be to use smart devices as for examples Amazon`s Alexa to get the most recent and most important news of the day while cutting the vegetables for the meal you are cooking at the moment. In general, Smart Home devices make life easier at home and give us the possibility to make several things at the same time.

health

IoT devices can be used to enable remote health monitoring and emergency notification systems. These health monitoring devices can range from blood pressure and heart rate monitors to advanced devices capable of monitoring specialized implants. Some hospitals have begun implementing "smart beds" that can detect when they are occupied and when a patient is attempting to get up.

Specialized sensors can also be equipped within living spaces to monitor the health and general well-being of senior citizens, while also ensuring that proper treatment is being administered and assisting people.

Transport

Application of the IoT extends to all aspects of transportation systems (i.e. the vehicle, the infrastructure, and the driver or user). Dynamic interaction between these components of a transport system enables inter and intra vehicular communication, smart traffic control, smart parking, electronic toll collection systems, logistic and fleet management, vehicle control, and safety and road assistance.

Many cities have begun smart transportation initiatives to optimize their public transportation routes, create safer roads, reduce infrastructure costs, and alleviate traffic congestion as more people move into cities. Paris, for example, launched an electric-car sharing program called Autolib

In the last few years, connected cars or smart cars have surged in popularity thanks to the IoT. Today, car companies are connecting their vehicles in two manners: embedded and tethered. Embedded cars employ a built-in antenna and chipset, while tethered connections make use of hardware to let drivers connect to their cars through their smartphones.

Critism and controversies

Concerns have been raised that the Internet of things is being developed rapidly without appropriate consideration of the profound security challenges involved and the regulatory changes that might be necessary

Most of the technical security issues are similar to those of conventional servers, workstations and smartphones, but the firewall, security update and anti-malware systems used for those are generally unsuitable for the much smaller, less capable.