BEYOND SMART CITIES

LEARN.BEYONDSMARTCITIES.IN

CERTIFIED SMART CITIES SPECIALIST CSCS

WELCOME TO

SMART CITIES & THE INTERNET OF THINGS
IOT - TECHNOLOGY

ONLINE TRAINING

KRISHNAJI PAWAR - CEO & FOUNDER

BEYOND
SMART CITIES

Online Course

BEYOND SMART CITIES & THE INTERNET OF THINGS (IOT) TECHNOLOGY

LEARN.BEYONDSMARTCITIES.IN

@BEYONDSMARTCITY

06

IOT Technology Solutions to Reduce and Alleviate Overpopulated Cities’ Stresses

SECTION - IOT AND SMART CITIES

IOT Technology Solutions to Reduce and Alleviate Overpopulated Cities' Stresses

06.

WHAT YOU WILL LEARN

- "Smart alert system for garbage clearance by providing an alert signal to the municipal web server for instant cleaning of a dustbin with proper verification depending on the degree of waste filling" can be created using IoT.
- By eliminating waste-related risks and odours, the IoT could improve public health and sanitation.
- IOT technology can keep the garbage disposal working effectively, preventing the above issues.

LEARN.BEYONDSMARTCITIES.IN

The Architecture Industry

- Research into the Internet of Things enables policymakers to conduct cost-benefit analyses and determine the monetary value of IOT technologies.
- A wide range of factors, such as "savings on the public budget, a higher quality of life for the citizens, and the city's wealth," are driving this technology.
- Smart cities also have ways to ensure not only the growth of cities as a whole but also their economic, social, and environmental health.
- Architecture can help reduce overpopulation in a number of ways, including by doing statistical research on demographics and trends in how people move around.
- By comparing the results of these two systems, the technology of the Internet of Things can then make this system more effective.
- The functional block diagram of the embedded system is shown in figure 1.limitations posed by cities' geography and available space to their populations and, eventually, to the number of homes that can be built.
- The Internet of Things (IoT) has the potential to limit transportation, which is another way it can have an effect on overpopulation.

The Architecture Industry +

- Internet of Things technology can find problems and limits in the infrastructures of smart cities.
- One example of this is when overcrowding leads to an increase in the number of people and cars driving around, which messes up the transportation system.
- The technology of the internet of things can be used to provide real-time updates not just on traffic caused by cars but also on traffic caused by people and on places that are over-trafficked.
- The Internet of Things (IOT) can help the architecture industry because it will make it easier to share data, which will lead to better decisions about housing, development, and keeping public areas in good shape.
- This is done by making it easier to collect data so that it can be used to guide what happens next.
- The Internet of Things (IoT) technology will help people make better decisions, which will have a positive effect on sustainability.
- This will lead to better designs for housing and transportation, faster construction, and healthier lifestyles in cities.

Agricultural Sector

- First, the agricultural sector can reduce city congestion by geotagging food waste sites. Second, the agriculture sector recognises that overcrowding increases food waste per square metre. This can minimise overpopulation in cities. By ticketing wasteful regions, the agriculture business may reduce food waste. Interventions target waste-heavy locations. Food waste prevention and identification can help people remedy mistakes, lowering the population and relieving pressure on highly populated places.
- The agricultural sector can use geotagged zip codes, states, and cities to track food production and waste with IOT technologies. By tracking food waste, storage, and shortages by region, the agriculture sector can establish accountability. Overpopulation stresses can be alleviated by allocating enough resources to environmentally sustainable farming. Finally, the agriculture business can assess food as a strategic and quantitative asset. The Internet of Things could reduce food waste, improve agricultural fertility, resource distribution, and plant yields.
- Farmers can use their resources better with the Internet of Things.
- It could boost agricultural production and management. .

Safety & Surveillance Sector

- IOT technology can help the security and surveillance business cope with highly inhabited areas.
- . One way surveillance can reduce overpopulation in cities is by tracking human development and growth. Spatial modelling, satellite imaging, and other geophysical factors allow IoT monitoring to track human expansion. As IoT technology detects rising population demands, it can solve overpopulation. Internet of Things (IoT) technology can monitor or cut housing prices and increase housing resources, improving the economy's social benefit.
- The Internet of Things (IoT) could help safety and surveillance sectors identify problems and their perpetrators. Surveillance promotes accountability and reduces safety risks. It can also detect dangerous situations, inadequate security measures, and inaccessible or vulnerable sites. Responsibility, openness, and the development of non-human safety abilities can make this industry more viable. It can create sustainability by identifying issues earlier and expanding security alternatives. Both are crucial for sustainability. .

Health & Sanitation Sector

- IOT technology can help the security and surveillance business cope with highly inhabited areas.
- . One way surveillance can reduce overpopulation in cities is by tracking human development and growth. Spatial modelling, satellite imaging, and other geophysical factors allow IoT monitoring to track human expansion. As IoT technology detects rising population demands, it can solve overpopulation. Internet of Things (IoT) technology can monitor or cut housing prices and increase housing resources, improving the economy's social benefit.

Health & Sanitation Sector

- The difficulty in disposing of dead corpses is one factor that contributes to the impact of the health and sanitation sector on population increase.
- waste removal and disposal Increased bacteria, animal infestation, and garbage liquid waste that impacts water quality are some of the health hazards that are posed by waste and waste treatment in densely populated places. These dangers can also harm the air quality, human repository systems, and sanitation systems. Garbage and waste that accumulates too quickly might discourage population growth, but effective waste management can encourage the health and happiness of a population while simultaneously reducing the stress that it experiences.
- In addition, the IOT technology can build a system of accountability for waste and consumption, which is another measure that can be taken to prevent overpopulation. IoT technology can then measure healthy standards of garbage disposal and bodyweight per household and place these standards across a standard mean of deviation. This is because each individual consumes at a level that is contingent upon the income of the household, the size of the body, and the bodyweight of the individual. In general, the Internet of Things (IoT) technology has the potential to ease the strains that are caused by a growing population while also spreading a system of stringent accountability on individuals who live in crowded places.

Health & Sanitation Sector

The application of IOT technology can be beneficial to the health industry in a number of ways, including limiting the spread of health risks, enhancing clean-up and sanitation procedures, and developing a framework for organising and delegating responsibilities. It is possible for it to speed up trash disposal.
The following are some potential avenues to investigate:
(a) increased movement of waste to recycle or compost facilites near one's home through in-home transport machines
(b) machines, at home or in the workplace, that repurpose materials instantly or carry waste directly to the city's disposal and compost sites
(c) and (a) early detection of waste overflow (d) This procedure contributes to sustainability by lowering the amount of garbage produced and pollution released into the air.

The utilisation of IOT technology inadvertently alleviates the strains of health care systems by minimising environment-related health concerns and dangers. This is accomplished by lowering the amount of toxic waste that is exposed to humans. IoT has the potential to accelerate societal processes, lessen adverse effects on the environment, offer a more organised framework to society, and encourage labor-saving solutions.

SMART CITY QUOTE

“A smart city is an intelligent town that provides enormous possibilities for human growth through art, culture, social, architectural, economic, political, environmental, and scientific flowering with the optimal mix of nature, technology, humanity, and arts.”

Amit Ray

THANK YOU

Online professional courses led by the world’s top specialists

LEARN.BEYONDSMARTCITIES.IN