KSK COLLEGE OF ENGINEERING AND TECHNOLOGY

PUBLIC TRANSPORTATION OPTIMIZATION USING IOT

Real-Time Vehicle Tracking

Perhaps one of the biggest complaints of public transit made by passengers is the inability to get real-time information about where the vehicle is or when it will arrive at a particular stop. Luckily, the Internet of Things technology allows districts to easily track the location of their vehicles. Districts can install GPS systems on their vehicles that are connected to the internet. The GPS data is transmitted back to a central command center. Once the GPS data is received by central command, the information can then be relayed to the passenger's internet-enabled mobile device or to an electronic sign at transit stops. Passengers can then know the exact time the vehicle will arrive at a particular stop.

The IoT Offers Many Benefits To Public Transport Passengers

Public transit whether it is buses, trains, or ferries can be particularly frustrating for passengers. Although public transit is typically cheaper and greener than traveling by a private vehicle, public transit may not be as comfortable, convenient, or as quick as a private vehicle, passengers will have to plan their schedules around the public transit timetables, and unforeseen circumstances may disrupt public transit operations.

However, the drawbacks of public transportation are slowly being eliminated; public transit is starting to become more comfortable, districts are offering more amenities for passengers such as internet access, and districts are starting to improve service by offering more trips and express service. Further, the Internet of Things technology is now becoming more commonplace in public transit too. Smart connected public transportation systems will offer many benefits to passengers. This technology will further improve the passenger's experience on public transit by offering real-time vehicle tracking, notifications in case of an unexpected event, and personalized travel news to passengers.

Need for Transforming Public Transportation

points

Traditional public transportation systems are not very efficient and professionally managed. People must wait at the bus stop for hours and often find their desired buses fully occupied. Due to the increased population and limited public transport, people consider traveling on public transport a nightmare. Despite waiting and traveling in a crowded bus, they reach their destination late.

opportunities

Considering these issues, transportation authorities of different countries are working. They now rely on smart technology such as IoT and 5G to provide a robust public transportation system.

Conclusion

The Internet of Things technology will continue to improve the passenger experience for public transportation by offering real-time vehicle tracking, improved responses in the event of an unexpected event, and personalized travel information. As cities become more congested and as more people look for ways to go green, public transit will become a very attractive option for people looking to forgo using their personal vehicles. IoT technology will only improve public transit and as public transit improves, there will be converts left and right.