



Smart Cities – How they can make you smarter, faster and better post-COVID-19

A cross-sector look at how Smart Cities are evolving faster than ever just like the technology they rely on.

In the midst of the Internet of Things (IOT), our lives have steadily become more streamlined in search of a smarter, faster, better quality of life. “Smart” can mean any number of things to different people, often with a regional, national or cultural bias. Originally to do with regulation and greater central control but with the focus now shifting to collaboration and building communities who want to free themselves from the shackles of inefficient and environmentally damaging behaviour.

However, while there is still no consensus as to the meaning of a Smart City, as a result of the pandemic we are gaining a more complete understanding of how smart cities and infrastructure could look and function for the benefit of society as a whole.

As a direct result of lockdown enforced by the COVID-19 pandemic we have all spent and will, in the future, be spending more time in our homes with many people’s lives having been moved online. We have seen a shift to online learning, remote working, e-health services, e-government services, rises in e-commerce and, not forgetting, online socialising and the Zoom Quiz. Connectivity, therefore, will now be a determining factor in terms of where we live and how we live.



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When we are outside our homes, we will use apps to give us back our freedoms, helping us avoid the infected, shape our commute and access buildings without touching contaminated surfaces. The introduction of real time dashboards and mobile apps to record and share data and increase public awareness on the spread and management of COVID-19 is just the start. The rise of track and trace apps encourage citizens to self-monitor and report where and when they began to show symptoms after visiting certain infection points. Repurposing of existing technology like CCTV and thermal imaging cameras now help monitor the hot spots where social distancing is successful or proving difficult. This provides authorities with a valuable platform for tracing infection and acting on such information. In terms of the way we travel and what is meant by Smart Mobility, COVID-19 has made us question the role of public transport and the development of more integrated public transport systems with the challenges it places on social distancing. For those that choose or have to use public transport, technology will help ease overcrowding with apps informing us of when public transport is busy and to use the least congested means of transport to avoid those personal space invaders.

Data gathering as a concept is something that we will continue to see utilised to assist authorities in identifying problems, creating solutions and gauging needs and demands of citizens to shape our future.

However, as well as introducing new technology, COVID-19 has resulted in a noticeable acceleration in existing smart city technology. The decisions taken by cities around the world have been reactive and, at times, improvisational to overcome the challenges presented in recent months, demonstrating just how flexible and adaptable technology can be in the threat of a global pandemic.

Voice controlled technology will grow significantly over the next few years (“Alexa, stop!”) as well as AI and home robotic technology all providing key elements to the future of smart living. As a result of the effect of the pandemic these technologies are set to expand more rapidly and rise to the forefront of our living requirements.



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The higher bandwidth, lower latency, faster browsing speeds and more stable connections of 5G will be of great benefit to the development of smart cities: it will ensure faster and more efficient home life and working practices, but will also enable cities to offer smarter vehicles, processing and manufacturing.

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Expected ahead of schedule because of the pandemic, delivery vehicles will communicate with one another in order to dictate the most efficient journey with block chain technology validating the number of miles travelled in green air zones. The ongoing move towards more sustainable powertrains – perhaps the slightly maligned (in this country at least) hydrogen fuel cell – will gain traction albeit with more advanced infrastructures.

While most people's cars have done three months to the gallon recently, people have questioned for many years their own carbon footprint and as we revert to the safety of our cars it's expected that people will do so in a more environmentally friendly form.

A resurgence in localism – people supporting those local businesses that have had to re-define their business models in order to survive and, in many cases, thrive – has meant that people have become less reliant on the car and the freedom of our daily exercise has seen walking and cycling booming. London has a planned Bike Tube network above underground lines as it plans for a possible ten-fold increase in cycling and five-fold increase in walking.

The ongoing move away from car ownership is likely to continue, with on demand models set to gain market share, especially if providers can implement measures that give consumers confidence that COVID-19 health concerns are adequately addressed. Driverless electric vehicles will soon be commonplace which will help arrange the frequent socially distanced visit to your favourite establishment to order your favourite beverage (via app of course).

Conclusion

In all, one (of the many) positives that has come out of COVID-19 is a better understanding of what we need our smart cities to deliver to benefit society as a whole giving us all a renewed focus. We have all more or less agreed to relinquish the habits and, in the face of a common, global, indiscriminate enemy, started to adopt smarter behaviours, which might, if extrapolated, as we move out of the shadow, finally give meaning to Smart Cities.

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