Managing the Road Ahead

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It is no secret that the UAE has ambitious plans when it comes to smart mobility. The leadership has been focused on its mission to create a city that is the “happiness on Earth”, with a focus on how we can improve the quality of life for residents and visitors alike who enter through our doors. Of course, technology plays a huge role in that, and it is actually at the heart of the vision of Smart Dubai 2021.

When it comes to the systems that will work together to empower the city to achieve its collective aims, the role of creating an integrated transport system is, of course, mission critical. By its nature, Dubai is a commuter city; the average commute is around 45 minutes, so an integrated transport system is vital in enabling us to travel seamlessly.

Welsh increasingly mobile population and numerous events, such as Expo 2020, the city is set to see an influx of visitors. For this, Dubai is already planning, provisioning resources, and setting itself up so that it is ready to face the challenges that lie ahead for the future.

Keeping the city moving – and continuing to move at pace – is vital to our growth trajectory. With this in mind, technology is playing a vital role in offering sustainable solutions for our future mobility. Dubai is committed to the world-class digitisation of the city, and numerous implementations ranging from Internet of Things (IoT) systems, data analytics, blockchains, hyperloop projects, innovative 3D...
printing, autonomous vehicles and drones, robotics, and artificial intelligence applications, have all been developed and are in motion.

Empowering each of these is data. Harnessing data is helping us to move around the city quickly and efficiently. It is providing seamless, responsive, and unparalleled resident and visitor experiences and benefits, such as integrated Intelligent Transport Systems, Smart Traffic and Parking Management. Each of these are helping to improve our mobility to ensure there is a fast flow of movement with limited bottlenecks. Underpinning the use of data is digital transformation, and this is having a major impact in the transport sector. With Dubai’s autonomous transportation strategy targeting 12% of city trips to be through autonomous driverless systems by 2021, this can already be seen through intelligent mobility and how we move around the city.

The progression to Connected and Autonomous Vehicles, Electric Cars & Hybrid Cars is gaining traction, showing that the future of mobility is truly electric. The infrastructure is fast in motion, with charging points developing throughout the UAE, and the likes of DEWA extending its free charging incentive for non-commercial electric vehicle users who register for the EV Green Charger initiative until December 2021. Continuing the case of access to these charging points will be critical to providing a sustainable infrastructure when it comes to intelligent and greener transport options.

Aside from intelligent mobility, we also see technology driving impact when it comes to Journey Management. Take public transport for example. Mobility as a Service (MaaS) is set to help bring about huge commuting efficiencies. All services from the customer journey are integrated into one user friendly application which unites all types of transport service providers. Imagine being able to get live updates that help you switch to different modes of public transport when congestion on the roads is high; or being able to plan a journey from start to finish at the tap of a button.

From a city-wide perspective, the benefits are endless: improvements to traffic management, customer experiences, reduction in congestion and support for data-driven sciences, which provides information that can be used to improve efficiency and mobility services.

But whilst technology is powering future mobility in ways we have never seen before, we of course have to be mindful and act now to prepare for the challenges ahead. The protection of data from cyber security is always in front of mind, to ensure that our systems are safe from potential attacks. Policy and legislation also needs to have a consistency of approach from design through implementation because, ultimately, transport networks are particularly interlinked.

Essentially, as we move towards this new era of digitisation, technology is empowering our decision-making. Data is helping us maximise the economic life of assets and infrastructure whilst minimising costs. In addition, it is helping us to focus on the customer experience and enhancing it with real-time feedback, thus it is assisting in making improvements in our infrastructure hubs.

As we work towards the ambitions set out by our visionary leaders, and as we work towards the seamless movement of people across our city, it is the invisible infrastructure – our technology – which is keeping the city moving in ways like never before.