



Driving you towards the future through Digital Twin Technology

rta.ae

RTA, in partnership with du, is taking advantage of innovative telecommunications, IoT and extended reality technologies to demonstrate a next-gen approach to digital twinning in the age of the metaverse.

Application of Digital Twin Technology has been restricted. However, du's 5G Private Mobile Network by virtue of its low latency and high speeds has helped enable this reality in the UAE.

The data-rich digital twin is capable of supplying network operators with real-time analysis, predictive insights, and maintenance information at the point of need for all key assets in the Dubai Transport Network. RTA and du are empowering a fully embedded, fixed mobile telecommunications system across Dubai's transportation network with the initial phase of the project focusing on the Dubai metro.

By utilizing bespoke sensor equipment, The Digital Twin detects faults, allows data to be read from any asset in the cloud, and analyze – all in real-time. Physical assets such as escalators, screen doors and point machines can be monitored using the sensors connected directly to the private 5G network where faults and predicted data anomalies are detected in real-time using AI.

The instructions allow the field worker to fix the fault correctly in the safest and most efficient manner possible. This enables RTA to deliver a first-class hassle-free experience long into the future.