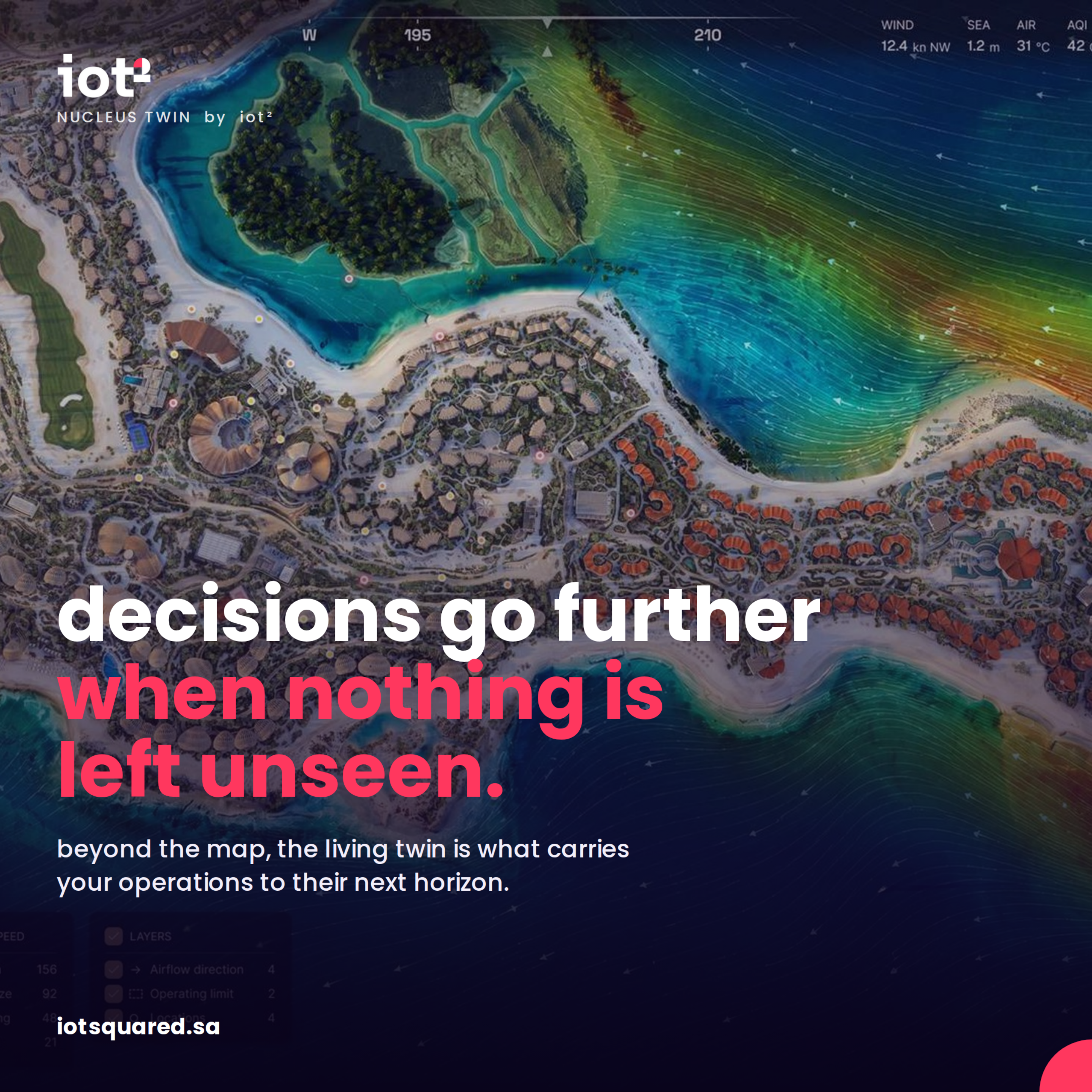


An aerial photograph of a coastal resort, likely Dubai, featuring a large artificial island with a winding canal, a golf course, and a dense cluster of buildings. A digital overlay is applied to the image, showing wind direction and speed as colored streamlines (blue, green, yellow, orange, red) flowing from the top right towards the island. The overlay includes various data points and labels.

iot²

NUCLEUS TWIN by iot²

decisions go further when nothing is left unseen.

beyond the map, the living twin is what carries
your operations to their next horizon.

W 195 210

WIND 12.4 kn NW SEA 1.2 m AIR 31 °C AQI 42

PEED 156 92 48 21

size ze ng

☒ LAYERS

☒ → Airflow direction 4

☒ [] Operating limit 2

☒ Locations 4

iotsquared.sa

what is nucleus twin

**a living digital twin,
always in sync with reality.**

Nucleus Twin fuses satellite imagery, IoT signals and live operational data into one continuously updated 3D model, a living replica of your asset, destination or city that you can monitor, simulate and act on.

nucleus twin

the spatial layer.

see everything, exactly as built.

nucleus ioc

the decision layer.

act on everything, in real time.

built in Saudi, proven at national scale.

nucleus twin

every façade stays true. every twin stays current.

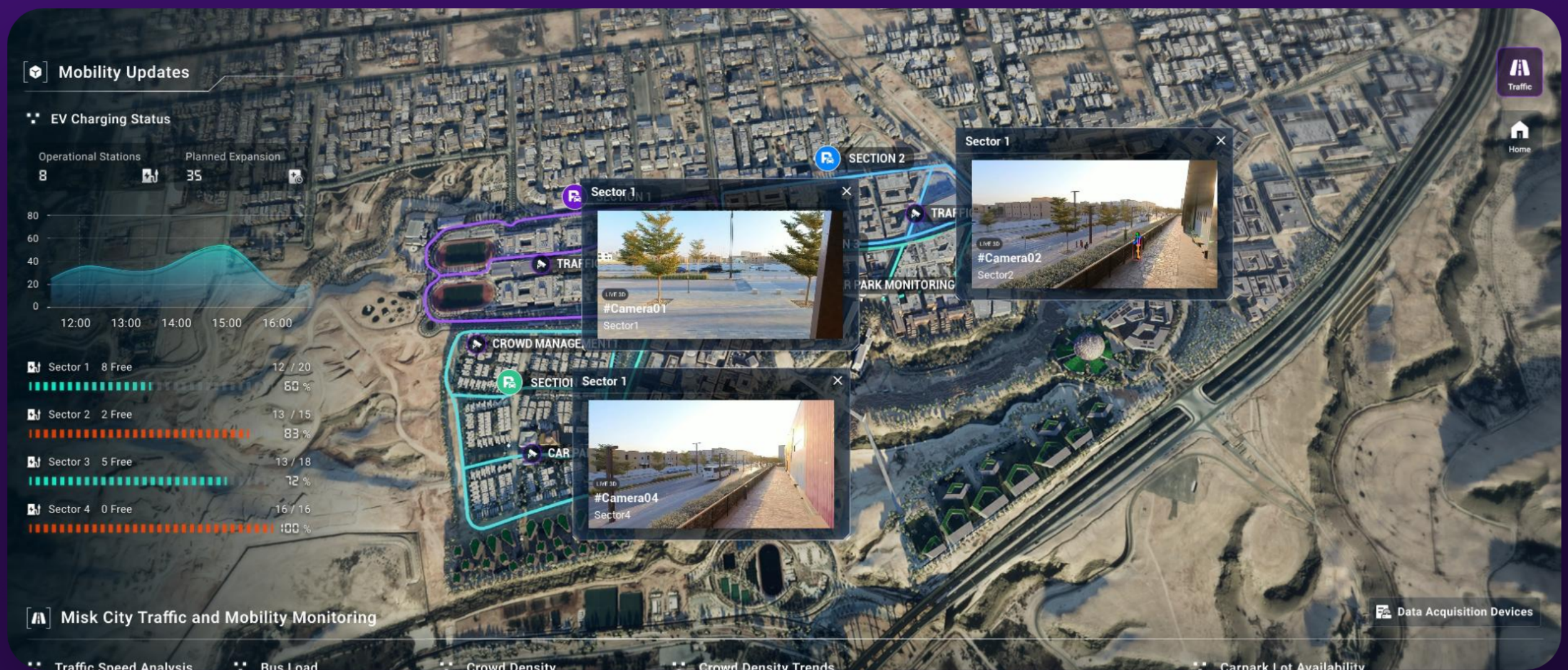
reconstructed straight from very high resolution satellite imagery, real rooftops,
real streets, real identity. refreshed on demand, never flown again.



nucleus ioc

operations become the view that moves you forward.

unified command across every asset, every signal and every persona, from live visibility to prescriptive action.





built for nationwide coverage.

one spatial model, from a single asset to an entire nation.



72 km²

of navigable 3D digital environment, Red Sea Global



10 km²

of richly detailed Shura Island visualization



days

not months, from satellite imagery to a living twin



4 operational personas



3 live scenarios



real time wind, sea & air quality monitoring



AI powered recommendations

one twin. every scale, segment and operation.

1 EVERY SCALE



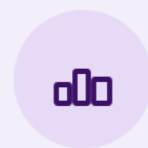
Asset



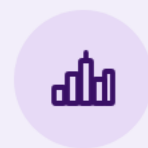
Building



Campus



District



City



National

2 EVERY SEGMENT



Cities & municipalities



Destinations & giga projects



Compounds & communities



Industrial complexes



Commercial complexes

3 EVERY OPERATION



Mobility & traffic



Security & safety



Environment & sustainability



Guest & citizen experience



Energy & utilities



Emergency response

built on the infrastructure Saudi's giga projects trust.

engineered under stc's national cloud, security and data residency standards, deployed where the stakes are highest.

proven in operation, not just in demos.



Red Sea Global

destination scale digital twin & IOC pilot



MISK City

citywide operations & sustainability monitoring



Saudia Technic

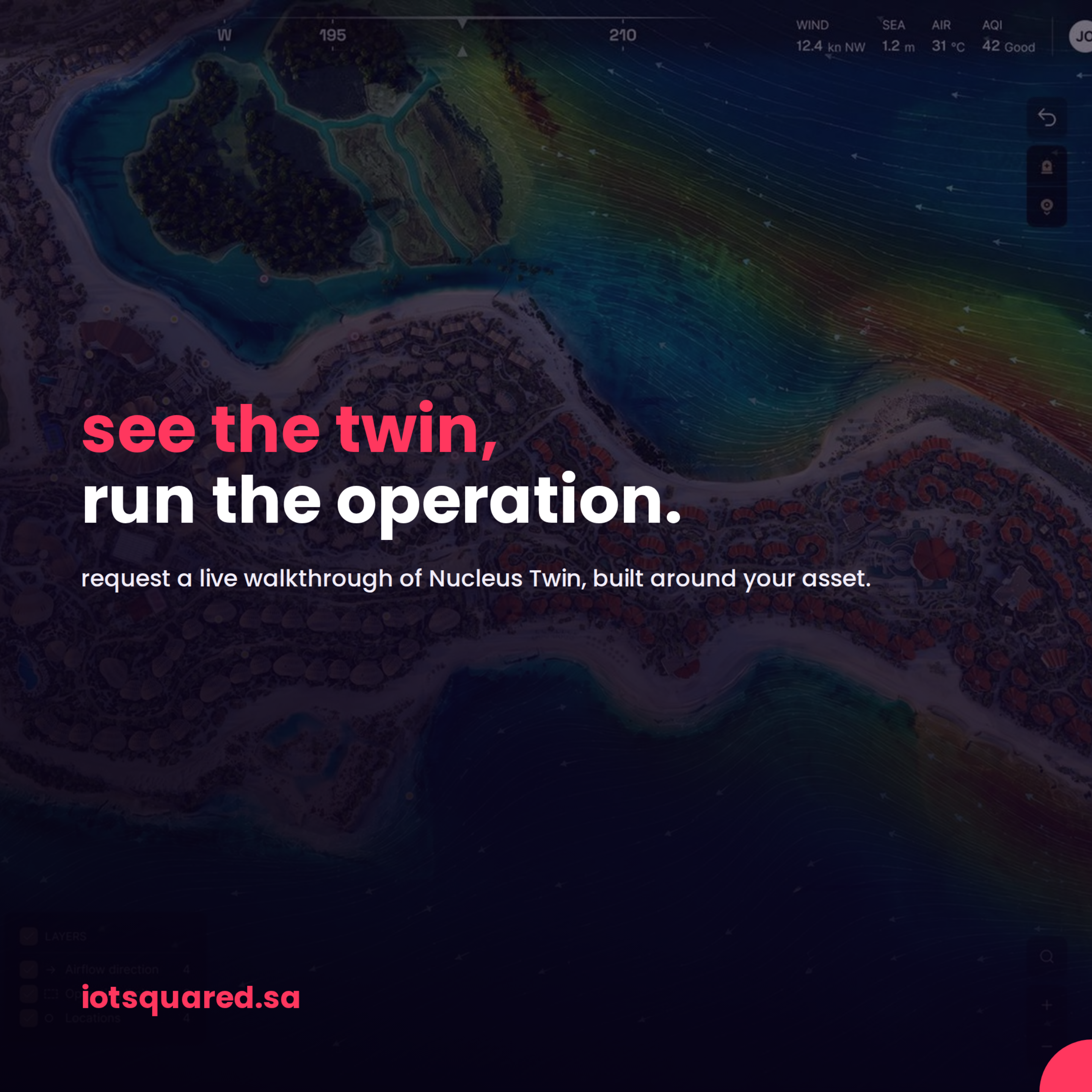
aviation MRO digital twin & hangar operations

a Saudi team that builds with you.

the twin is yours, and so are the people behind it. Saudi engineers who plan, build and operate it, aligned to your goals and local regulations.

- giga project deployments with zero repeat flights, run by certified spatial AI engineers.
- integration frameworks built for Saudi operations, covering IoT, BMS, security and beyond.





see the twin, run the operation.

request a live walkthrough of Nucleus Twin, built around your asset.

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