



ENTERPRISE DIGITAL TWIN

See Your Operations as a Living Digital Twin

Connect GIS, IoT, RFID, RTLS, enterprise systems and AI in one spatial operational view for smart buildings, warehouses, infrastructure and cities.

Enterprise Digital Twin Solutions for the UAE & GCC

DEFINITION

Digital Twin vs BIM and 3D Models

A 3D model is not a digital twin

What is an enterprise digital twin?

An enterprise digital twin is a continuously updated digital representation of a building, facility, infrastructure network or city. It combines spatial geometry with live operational data from IoT sensors, RFID, RTLS and enterprise systems to reflect the current state of the physical operation.

BIM / 3D model

- Design intent
- Geometry and construction information
- Accurate at handover
- Primarily static thereafter

Operational digital twin

- Live operational state
- Sensor data and asset identity
- Live location and enterprise context
- Queryable and actionable

Both describe the same building. Only one of them tells you what is happening in it today. A BIM model is accurate on the day it is handed over and drifts from reality every day after; attach live inputs to the same geometry and it stays current, which is what makes it usable for operating an asset rather than documenting it.

THE DISTINCTION THAT MATTERS

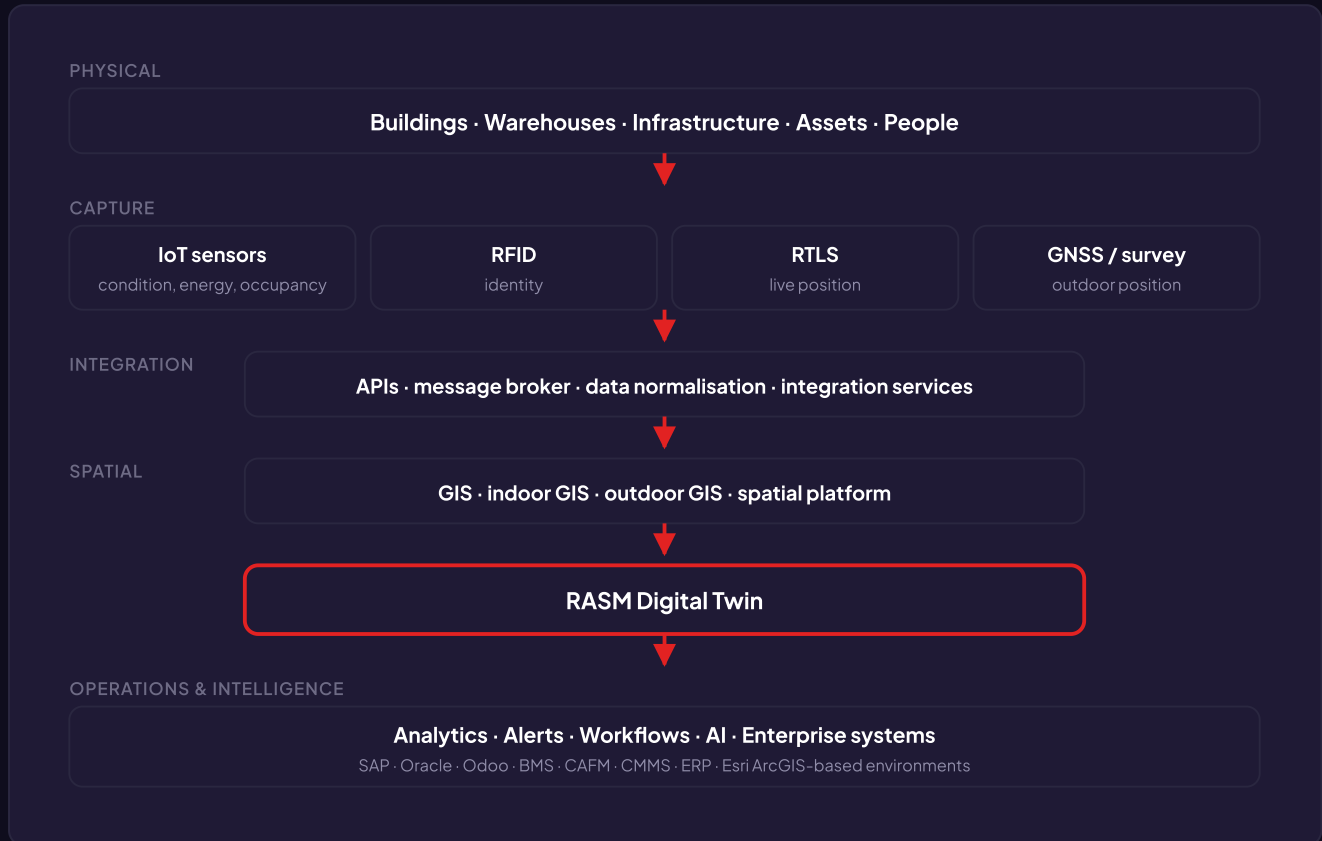
The difference is not fidelity. It is currency.

A very detailed model that is six months out of date is still a model. Remove any one live input from a digital twin and it becomes a model again.

HOW IT IS ASSEMBLED

Digital twin architecture

The spatial platform is one part of the solution. The larger challenge is connecting reliable identity, location, condition and enterprise data — and turning it into operational decisions.



RASM Digital Twin by Swedish Technology

An enterprise spatial integration framework connecting GIS, IoT, RFID, RTLS, AI and enterprise systems into one operational view.

Product and platform names describe supported integration targets and technical compatibility, and do not imply partnership or endorsement.

THREE ENVIRONMENTS

Smart buildings, warehouses and infrastructure



Smart building digital twin

Asset location, equipment condition, energy, occupancy, maintenance and facilities management against the real floor plan.

Offices · Hospitals · Campuses · Commercial buildings



Warehouse digital twin

RFID inventory, equipment location, movement history, congestion, utilisation and inventory reconciliation.

Logistics · Distribution · Manufacturing · Inventory operations



Infrastructure digital twin

Infrastructure assets, IoT monitoring, incident location, roads, utilities and spatial coordination across departments.

Municipalities · Utilities · Roads · Smart city operations

Warehouse digital twin example

Challenge. Inventory and equipment exist in ERP, but the business does not continuously know their physical location or movement.

Connected technologies. RFID + RTLS + indoor GIS + IoT + ERP + AI.

Operational capabilities. Real-time asset visibility, inventory reconciliation, movement history, exception alerts, equipment utilisation, operational dashboards, natural-language queries, and predictive analysis where sufficient historical data exists.

Scope the data capture first

A digital twin cannot improve data that is not being collected. It will not produce a condition reading from a sensor that was never installed, or a location for an asset that was never tagged.

Decide what must be captured before deciding what to visualise.

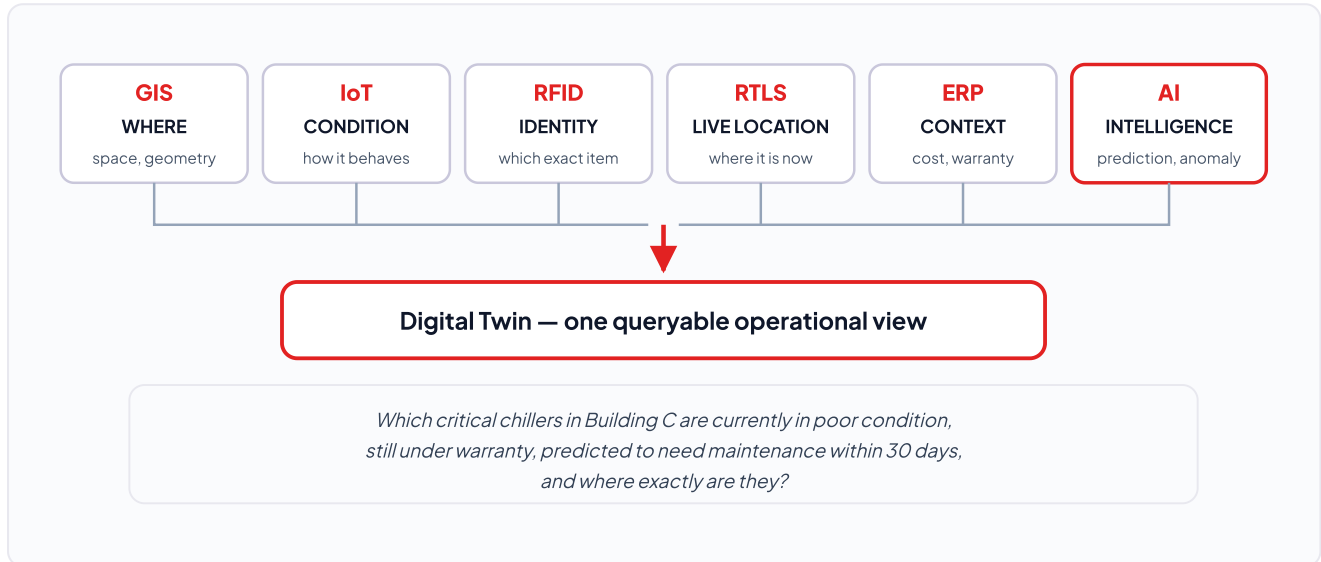
WHERE THESE PROGRAMMES STALL

A twin of everything, built at once

WHY THE LAYERS COMBINE

Each technology answers a different question

GIS + IoT + RFID + RTLS + ERP + AI. None is a digital twin on its own; AI does not replace the layers beneath it. The value appears when one question can be answered across all six at once.



Layer	Answers	Typical technology	Without it you cannot
GIS	Where it is	Indoor and outdoor spatial platform, floor plans	Place anything in context
IoT	What condition it is in	Temperature, vibration, energy, occupancy	Know whether it is healthy
RFID	Which exact item it is	Passive tags, handheld and fixed readers	Tell two identical assets apart
RTLS	Where it is right now	UWB, BLE or Wi-Fi anchors and tags	Find something that moves
ERP	What it costs and who owns it	SAP, Oracle, Odoo, CAFM, CMMS	Know the warranty or the budget
AI	What is likely to happen next	Anomaly detection, forecasting, computer vision	Prioritise before something fails

THE POINT OF THE MODEL

Six layers, one question, one answer

FREQUENTLY ASKED QUESTIONS

Enterprise digital twins, answered

What is an enterprise digital twin?

A continuously updated digital representation of a physical operation that combines spatial information with operational data from sensors, assets, location systems and enterprise applications.

What is the difference between BIM and a digital twin?

BIM primarily describes design and construction information. An operational digital twin continuously connects the spatial model to current operational data.

Can RFID and RTLS be used in a digital twin?

RFID provides physical asset identity while RTLS provides continuously updated location. With GIS they allow assets to be represented and located within the operational spatial model.

Can a digital twin integrate with SAP, Oracle or Odoo?

Yes. Digital twin platforms can exchange asset, maintenance, cost and operational information with ERP, CAFM and CMMS environments through documented interfaces and APIs, subject to project scope and system access.

Can AI be integrated into a digital twin?

Yes. AI can support anomaly detection, predictive maintenance, computer vision, forecasting and natural-language interaction when suitable operational data is available.

Where does Swedish Technology deliver this?

Enterprise digital twin solutions across the UAE and wider GCC, implemented and supported from Dubai.

Request a Digital Twin Discovery Workshop

Define one operational use case, identify the required GIS, IoT, RFID, RTLS, AI and enterprise data sources, and establish a practical Phase 1 implementation roadmap.

[Request a Digital Twin Discovery Workshop](#)

[Request a demo](#) · [Discuss your use case](#)

RELATED SOLUTIONS

RASM Digital Twin
Mowqie RTLS
Octopus WMS & RFID
Facility management
ERP system integration
AI products



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