

Dominating complexity (not only in business) with Digital Twin

In our White Paper, we explain how Digital Twin creates a digital copy of reality with which to simulate and obtain answers in a safe, risk-free environment.

Thanks to Digital Twin, a complex product development cycle is reduced by 25%, generating savings ranging from 10 to 15%: about half of the companies (48%) working on IoT-based projects are already using “digital twins”.

Driven by a growing use of innovative technologies such as IoT, Cloud and Artificial Intelligence, the Digital Twin market is expected to be worth almost 36 billion dollars in 2025 and probably more than 44 billion by 2027.

How does Digital Twin work?

What benefits does it bring to organisations and what challenges do they have to face, to take advantage of its potential?

The adoption of new digital technologies is changing processes and business models in all sectors, transforming existing competitive scenarios or creating new ones. The best way to study the impact of digital technologies is to use simulation tools, in order to first analyse and then monitor the decision-making choices and the related effects these technologies have on articulate and complex contexts.



Watch video



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The three pillars of Digital Twin



Connectivity



Digitalisation



Artificial Intelligence

Applications



Manufacture

Digital Twin has a significant impact on how products are designed, manufactured and maintained, thus making production more efficient and effective



Trasportation

Digital Twin can create virtual models of connected vehicles for the automotive sector: by capturing the vehicle's behavioural and operational data, it helps analyse and improve its overall performance.



Retail

The implementation of Digital Twin plays a key role in improving the customer experience, by creating virtual copies to test the effect of different campaigns. It also helps plan effective improvements to in-store activities, the implementation of security or the energy management of premises.



Healthcare

Thanks to the data generated by IoT, Digital Twin plays a key role in the healthcare sector: from cost savings to the provision of personalised health care services.



Smart Cities

Planning and implementing Augmented Cities with Digital Twin and IoT contributes to improving their economic development, to reaching an efficient resource management, to reducing the ecological footprint and increasing the general quality of life of citizens.



Industrial IoT

Thanks to Digital Twin, companies can digitally monitor and control their systems: in addition to operational data, digital twins acquire environmental data (position, configuration, financial models) that help predict possible anomalies and evaluate corrective actions in a risk-free environment.

Our Enabling Technologies



AI & Advanced Analytics



AR-MR-VR



Blockchain



Cloud



Cybersecurity



Digital Twin



IoT



Robotic Process Automation

The World WE LIVE IN

- Augmented City
- Smart Transportation
- Smart Energy & Utilities
- Digital Media & Communication

The World that LOOKS AFTER US

- Smart Government
- E-Health
- Digital Defense, Aerospace & Homeland Security

The World WE WORK IN

- Digital Industry
- Digital Finance
- Digital Retail & Fashion
- Smart Agriculture

