Digital Twins

Digital Twin technology allows for a digital representation of a physical object, process, or service. It is a digital replica in the physical world that is used to replicate processes in order to predict how they will perform.

At Methods, we use our knowledge and expertise in solution design to build organisations a Digital Twin solution that can improve organisations' supply chain operations, innovate with product design, or enhance the customer experience.

Service Offering

Methods understands that Digital Twins are dynamic, virtual models of the physical world, enhancing our ability to understand, learn, and reason from changes in the built environment.

Enabling Digital Twins, we facilitate the continuous capture of sensor data to optimise performance, predict failures, and simulate future scenarios. This concept is possible due to advances in IoT technology. Whether you're improving your supply chain operations, innovating with product design, or enhancing customer experience with new services, Methods professionals can help organisations realise their Digital Twin. Using our knowledge and expertise in solution design and builds, we can help start the organisation's journey towards a Digital Twin solution.

We can:

Encapsulate software object or models that mirror a unique physical object, process, organisation, person, or other abstraction.
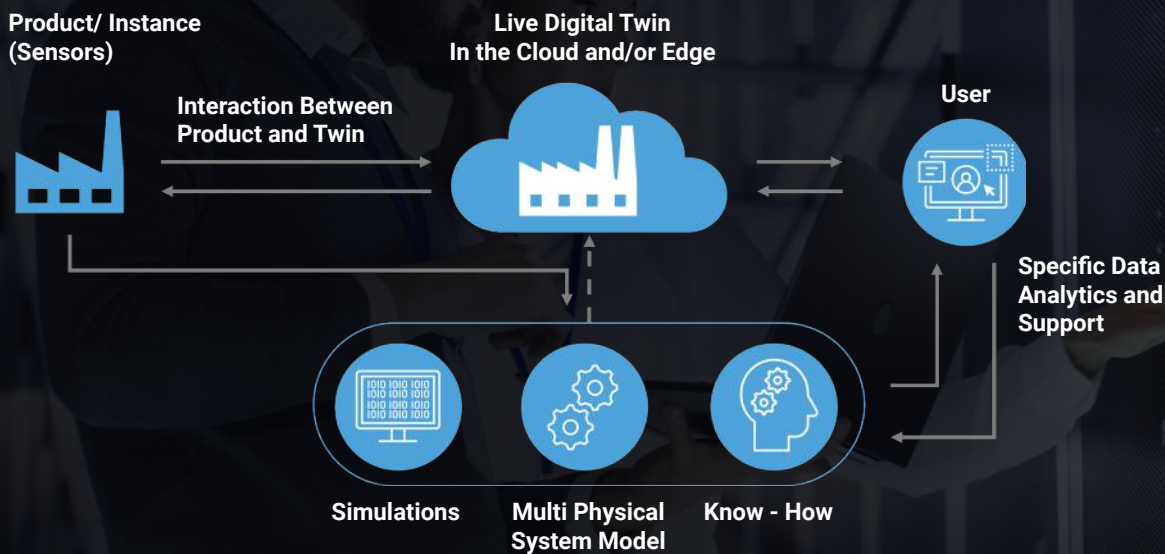
Take data from multiple Digital Twins' streams or in real-time from IoT devices, and aggregate for a composite view across a number of real-world entities, adopting industry best practices and methodologies.

We are vendor neutral and work across all public cloud platforms. Methods also partners with BOXARR and our analysts are fully versed in the use of BOXARR products. BOXARR enables us to build a Digital Twin to map complex models for highly engineered products and services. Models can be built and maintained from existing data sources and can exploit the collaborative participation of numerous stakeholders.

We are experienced in developing a digital representation of a real-world entity or system.

Digital Twins

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Product/ Instance (Sensors)

Interaction Between Product and Twin

Live Digital Twin In the Cloud and/or Edge

User

Specific Data Analytics and Support

Simulations

Multi Physical System Model

Know - How

Our objective is to ensure organisations are provided industry best practice strategies by offering the following:

Key Service Features

- Solution strategy workshops, facilitating understanding of benefits and outcomes
- Understand implications of security vulnerabilities / mitigation
- Design a comprehensive Digital Twin solution architecture
- Incorporate vendor neutral risk and security requirements
- Develop a detailed design, deployment strategy, and cost benefits plan
- Encompass Cloud/Edge and IoT services
- Develop a PoC to demonstrate feasibility and VfM
- Production and ongoing maintenance of a full stack solution
- System / service modelling and analytics, including machine learning capabilities
- Ability to provide a managed service for ongoing support and development

Key Service Benefits

- Dynamic, virtual models of the physical world
- Ability to analyse and learn from the built environment
- Performance optimisation through the continuous capture of sensor data
- Ability to predict failures and simulate future scenarios
- The use of machine learning to predict outcomes based on historical data
- Utilise real-time inputs from multiple endpoint devices
- Mitigation of equipment failure allowing you to streamline your operations and processes
- Increase operational efficiency and perform enhanced product development
- Visibility of how products are used in the real-world
- Product optimisation and insights or predictive service capability