

TWO BIRDS WITH ONE STONE:

STREAMLINE HANDOVER AND CREATE A DIGITAL TWIN FOR OPERATIONS

WHAT IS A DIGITAL TWIN?

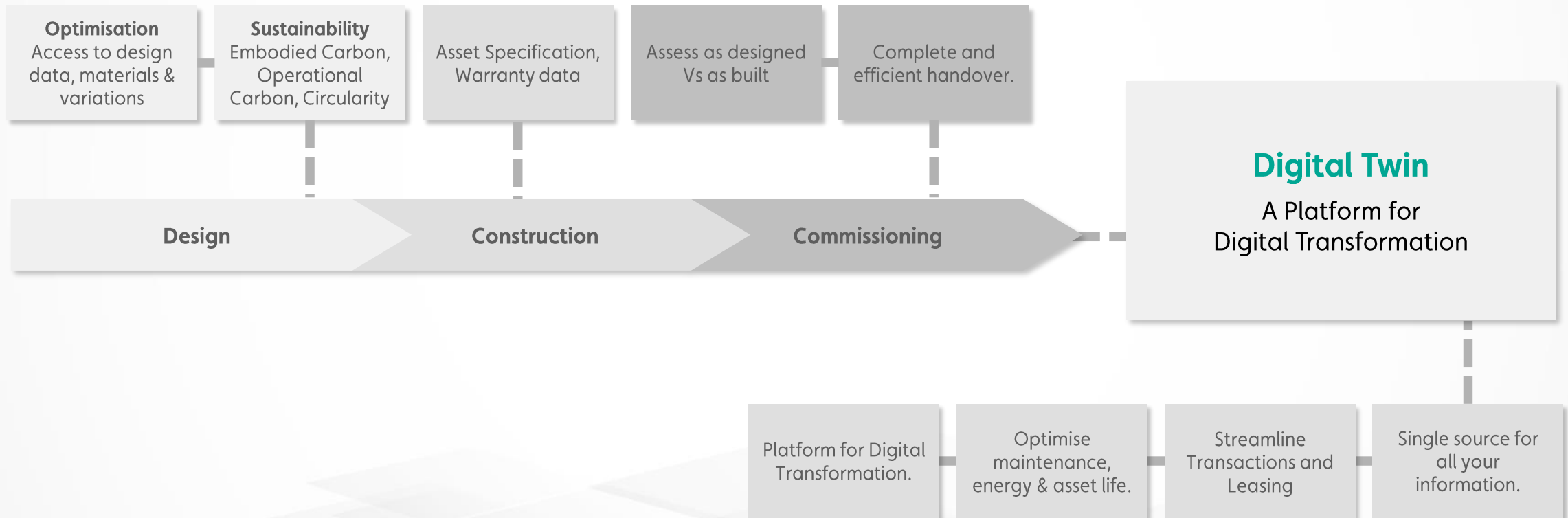
An **Invicara Digital Twin** optimizes building performance and profitability by:

- Creating a rich information model about the building.
- Integrating building information with business systems.
- Supporting the development of custom solutions.

It is not a “product”, but a set of solutions built on the flexible, extensible Invicara platform to meet your business requirements.



WHY YOU NEED A DIGITAL TWIN



DIGITAL TWIN MATURITY LEVELS

INFORMATION STRATEGY

Strategy & Goals



Information Requirements



01

Digital Twin Strategy: Business outcomes clearly defined with well-structured owner information requirements for the full building lifecycle: design, construction, commissioning, and operations.

DIGITAL TWIN MATURITY LEVELS

PLANNING PLATFORM

02

Project Twin: Model data management processes and system implemented to get data relating to building elements to drive design optimisation and sustainability.

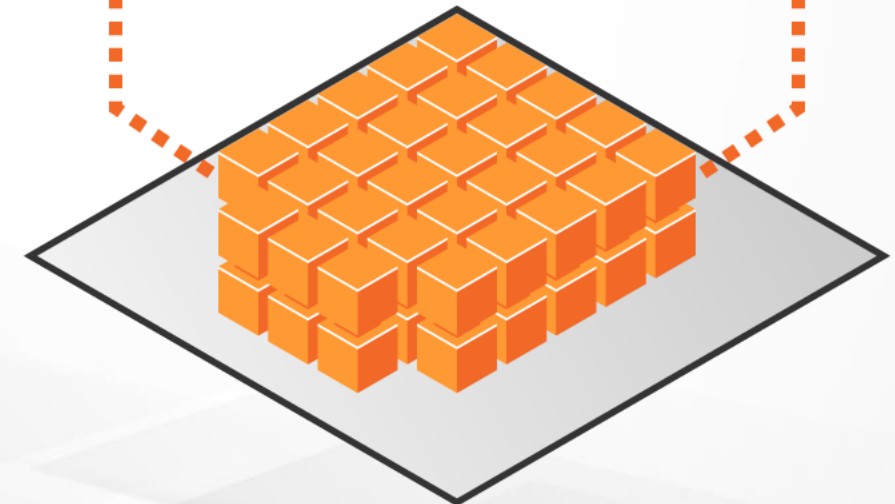
01

Digital Twin Strategy: Business outcomes clearly defined with well-structured owner information requirements for the full building lifecycle: design, construction, commissioning, and operations.

Optimization



Sustainability



DIGITAL TWIN MATURITY LEVELS

DIGITAL BUILDING MANUAL

03

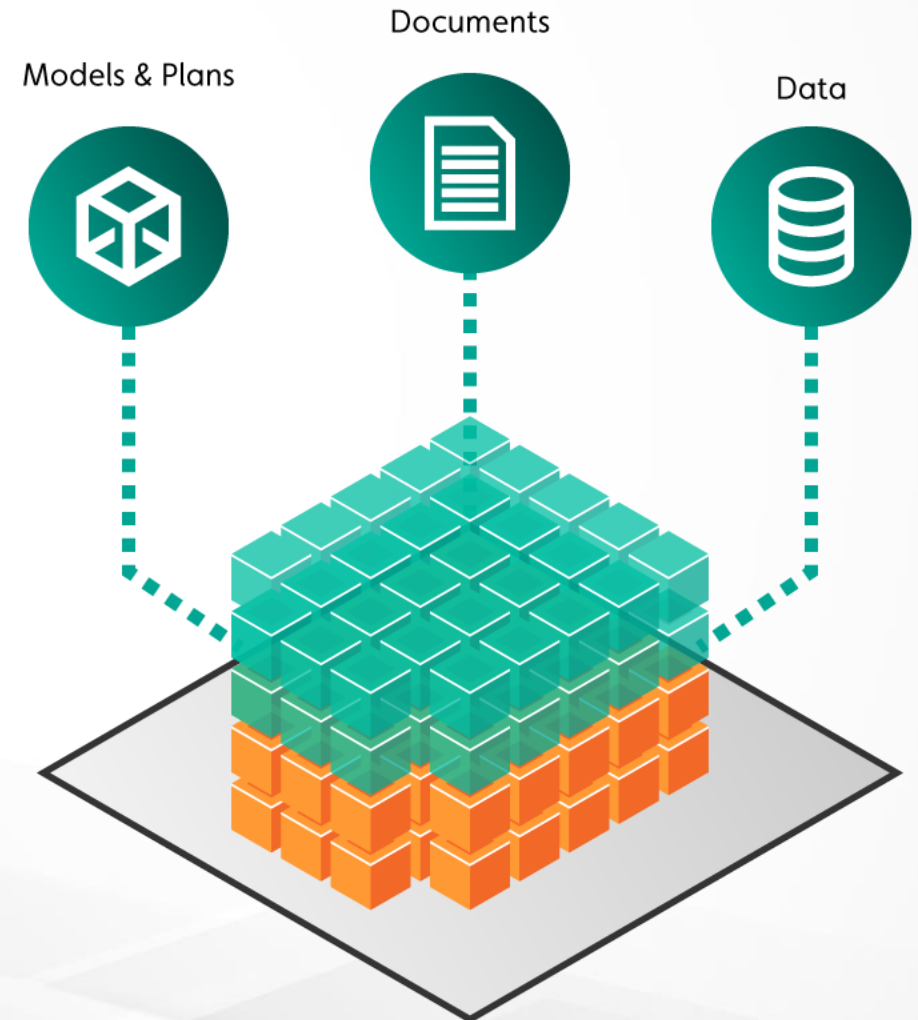
Asset Twin: Asset information management processes and system implemented to bring together building graphics, data, documents, to create a unified and living Asset Information Model.

02

Project Twin: Model data management processes and system implemented to get data relating to building elements to drive design optimisation and sustainability.

01

Digital Twin Strategy: Business outcomes clearly defined with well-structured owner information requirements for the full building lifecycle: design, construction, commissioning, and operations.



DIGITAL TWIN MATURITY LEVELS

DATA HUB

04

Performance Twin: Asset Twin integrated with Maintenance Management, Building Automation and IoT systems to join data across adjacent processes, to generate Business Intelligence and insights.

03

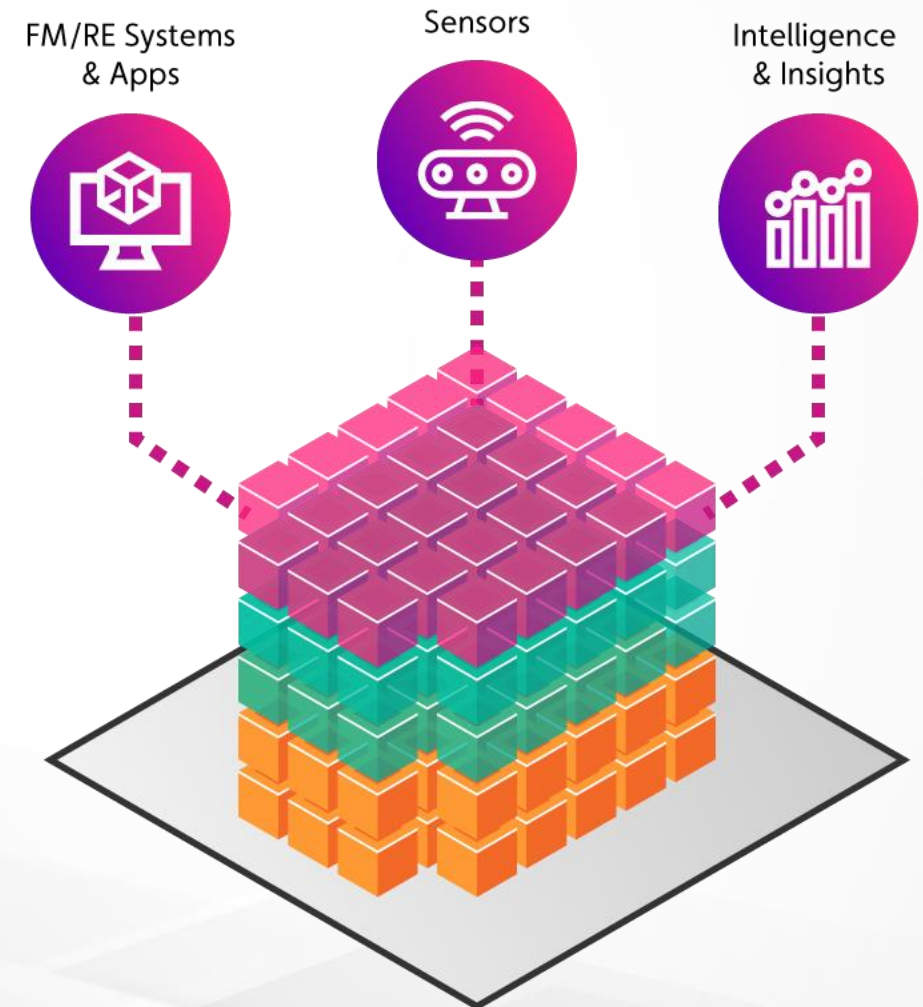
Asset Twin: Asset information management processes and system implemented to bring together building graphics, data, documents, to create a unified and living Asset Information Model.

02

Project Twin: Model data management processes and system implemented to get data relating to building elements to drive design optimisation and sustainability.

01

Digital Twin Strategy: Business outcomes clearly defined with well-structured owner information requirements for the full building lifecycle: design, construction, commissioning, and operations.



DIGITAL TWIN MATURITY LEVELS

DIGITAL TRANSFORMATION

05

A Platform for Continuous Improvement: Automate existing and new processes involving asset, operations or performance data for a building or an entire portfolio. Continually optimize building performance and real estate business operations.

04

Performance Twin: Asset Twin integrated with Maintenance Management, Building Automation and IoT systems to join data across adjacent processes, to generate Business Intelligence and insights.

03

Asset Twin: Asset information management processes and system implemented to bring together building graphics, data, documents, to create a unified and living Asset Information Model.

02

Project Twin: Model data management processes and system implemented to get data relating to building elements to drive design optimisation and sustainability.

01

Digital Twin Strategy: Business outcomes clearly defined with well-structured owner information requirements for the full building lifecycle: design, construction, commissioning, and operations.



MATURITY LEVELS AND INVICARA SOLUTIONS

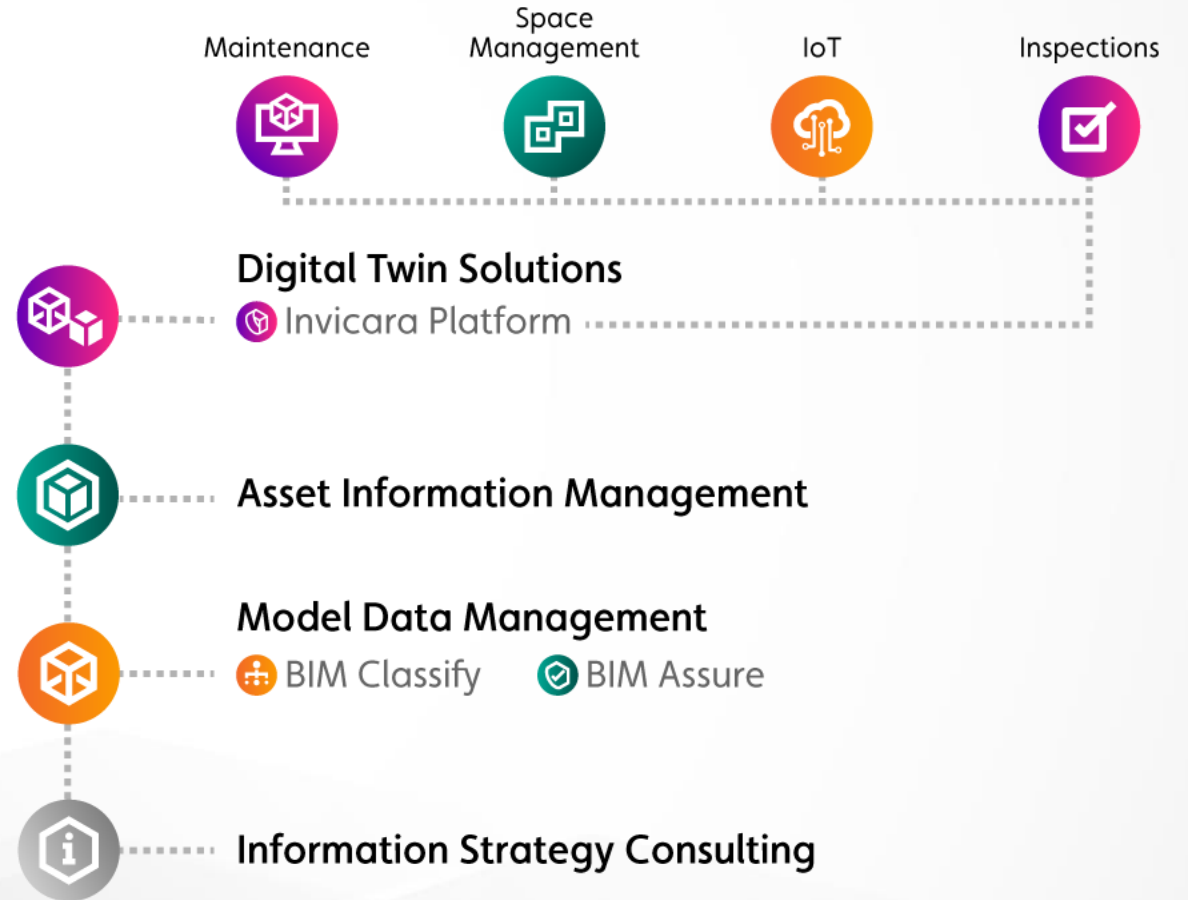
05 A Platform for Continuous Improvement

04 Performance Twin

03 Asset Twin

02 Project Twin

01 Digital Twin Strategy



THE BUSINESS VALUE OF A DIGITAL TWIN

- **Design:** Performance optimisation and sustainability
- **Construction:** Improved procurement, planning, and complete, efficient handovers
- **Operations:** Streamline transactions, efficient maintenance and operations, bespoke solutions



WHY INVICARA?

We provide **end-to-end information management solutions** that help developers and owners improve project outcomes, streamline handover, and optimize operations.

We deliver results by bringing a unique combination of **Strategic Consulting**, **Flexible Technology** and **Skilled Information Managers**.

We provide a platform for Building Information Management – **not a product**. This enables our clients to customise the solutions they need.

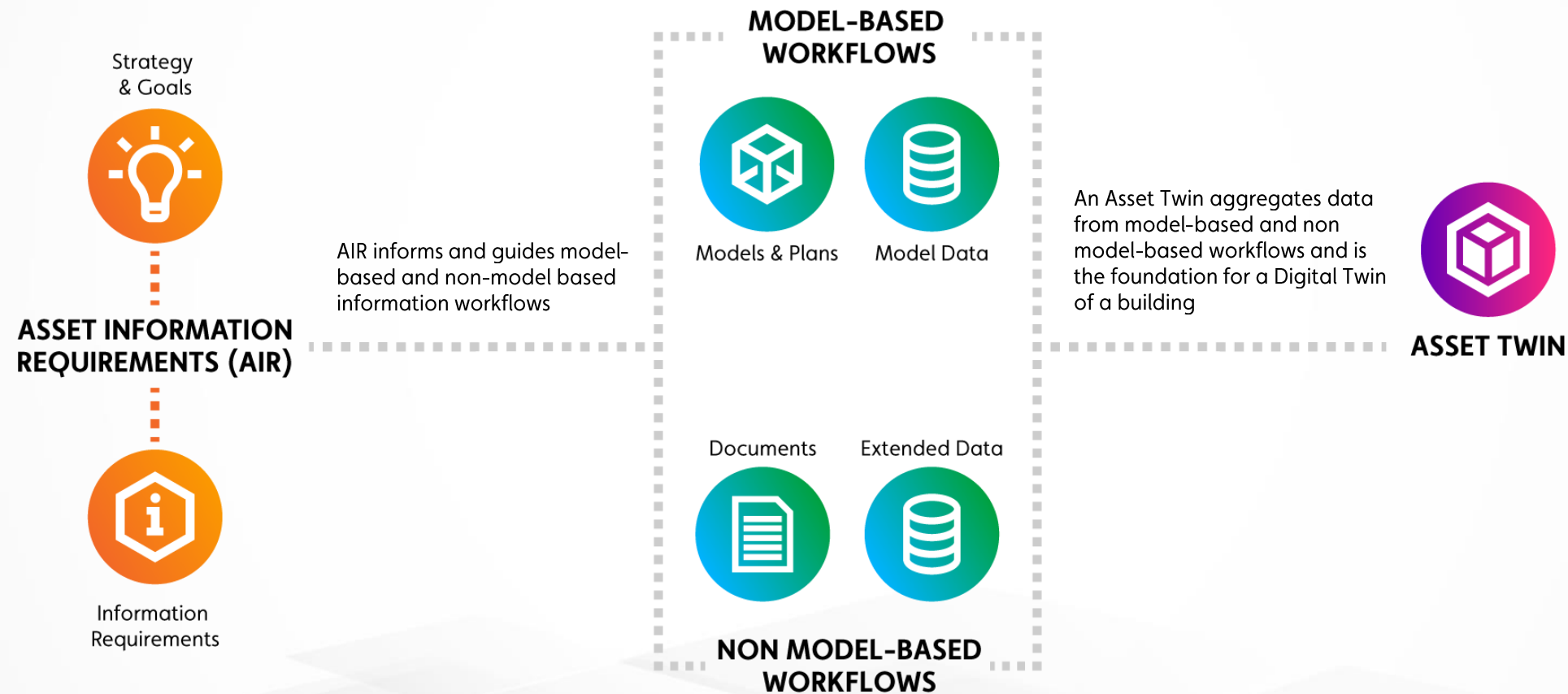


STRATEGY

TECHNOLOGY

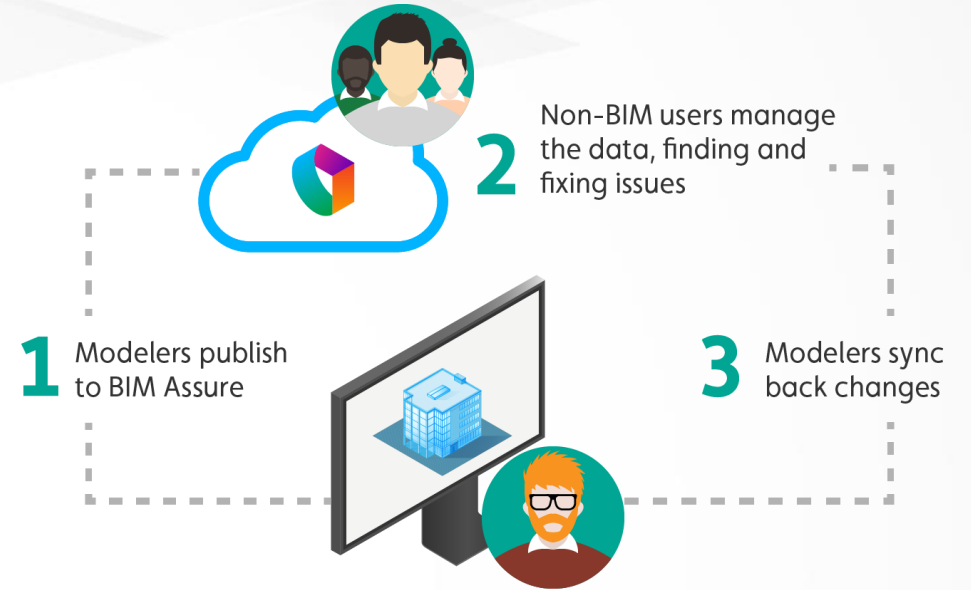
EXECUTION

PRODUCING AN ASSET TWIN



MODEL DATA MANAGEMENT

- **Unlock BIM:** Frees building data from expensive, complex design tools. Provides web-based access to models and data.
- **Improve Project Team Efficiency:** Allows designers to decouple data workflows and geometry development. Makes data requirements clear and easy to follow.
- **Get Complete, Reliable Model Data:** Uses intelligent rules to help project teams and owners verify and validate design data.
- **Connect BIM Data to Downstream Workflows:** Classifies model content to make data available for downstream uses like estimating, procurement, and handover.



COMPREHENSIVE ASSET INFORMATION

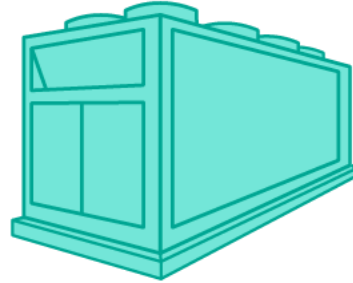


01 DESIGN: Design Data

Asset ID
Uniclass
Dimensions

Design Performance Data

Total Capacity
EER
Inlet Water Temp
Outlet Water Temp



02 CONSTRUCTION: Specifications Data

Model Number
Manufacturer
Description

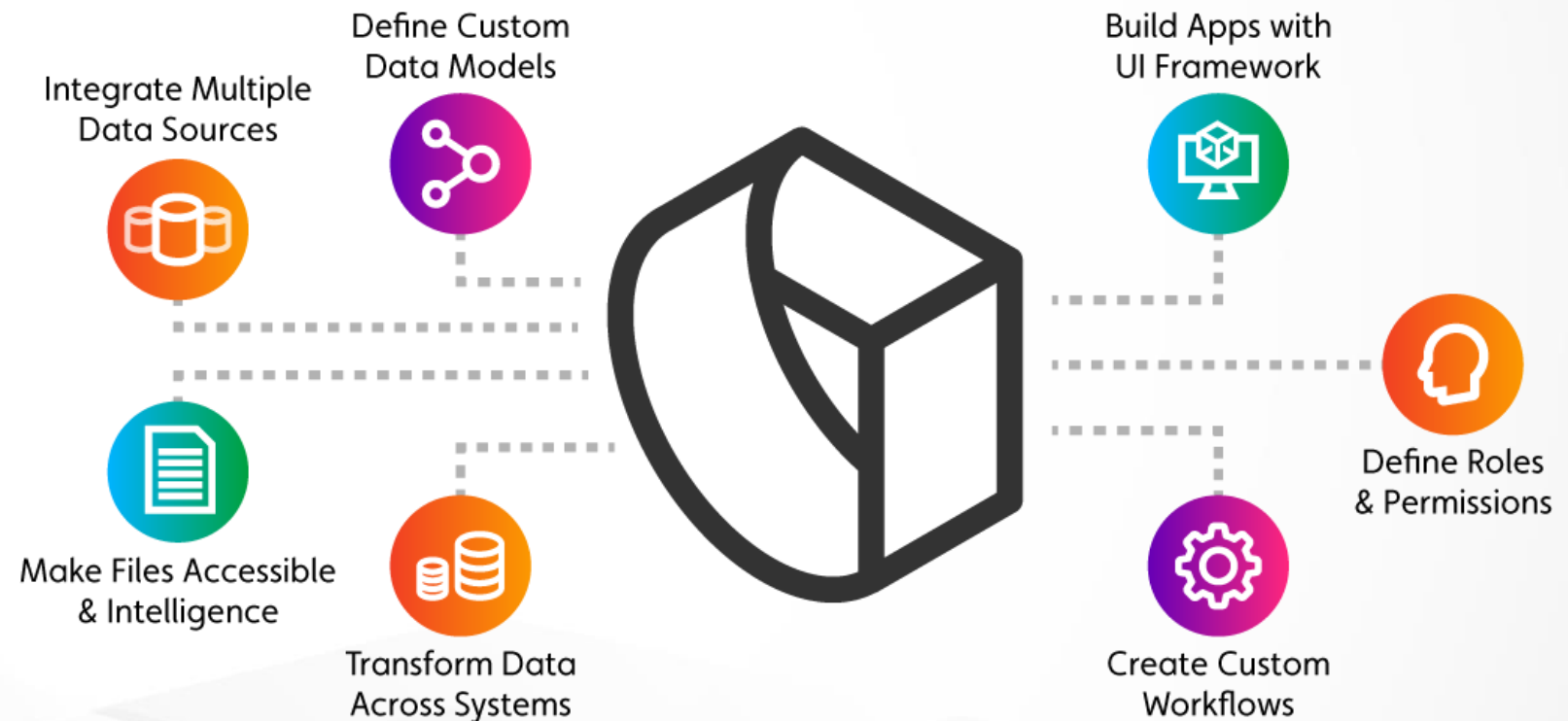


03 COMMISSIONING: Commissioning Data

Serial Number
Commissioning Date
Test Certificates

THE PLATFORM FOR DIGITAL BUILDINGS

- The Invicara platform enables **development of Digital Twin solutions** for capital programs and for operations of buildings & infrastructure.
- It is a schema-less, flexible platform to build **custom solutions** and to evolve with your changing business needs.
- It can receive data from **multiple external data sources** and pass on transformed data to **external data consumers**.
- The platform has **backend services** and an **application framework** to build light Apps.





THANK YOU
QUESTIONS?



Louise Kelly

Solutions Consultant, Invicara

louise.kelly@invicara.com