



Who is Willow?

Willow is a technology company that creates Digital Twins of real assets, either buildings or infrastructure. From the beginning of design, through to construction, handover and operations, Willow collects, validates and funnels information into a virtual replica of the built form.

With this powerful tool, Willow enables assets to be more connected, sustainable and intuitive, and enables users to better understand their investments, optimize operations and enhance the human experience.

Willow's capability is founded upon deep expertise in construction, architecture, Building Information Modelling (BIM) and Asset Management. The company has a long history in delivering complex construction projects and has leveraged this expertise as we deploy Digital Twins for the built world.

- Applicable to new and existing buildings
- Manage with greater efficiency
- Drive operational improvements at scale
- Provide occupants or users with an enhanced experience
- Built on Azure



Tap into your lost building data.

Currently the majority of information that is produced by buildings and infrastructure is going to waste, it's locked away in proprietary systems or siloed between project stages. This creates issues in information sharing, a problem that is only set to amplify as every hour millions of new IoT devices come online.

The challenge for owners of real estate, is that many of them are in the dark when it comes to their assets. They lack a clear line of sight to inside their operations and have no way to organise an ever-growing deluge of data. How can they be confident about the future of their buildings and infrastructure networks if this is the case?



Enter the Digital Twin

A Digital Twin synthesises otherwise siloed data sets such as geospatial data, asset data, maintenance data and occupant data into a virtual replica of the building, which is then further integrated with live information such as energy use, HVAC operation, alert systems, occupancy and other moving parts.

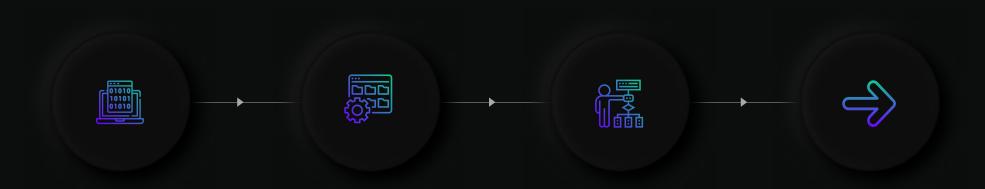
Willow sees that the Digital Twin is more than just a tool for data storage but rather as an integration layer to enable a fast and secure connection to 3rd party software providers and the ability to generate powerful, contextual insights.





How does it work?

Willow approaches the transformation of building data in four steps.



01. Centralise Your Data

Building data currently sits in many different systems and formats that are often incomplete, offline or inaccessible. Willow can capture all of this data via a number of integration methods using sophisticated software and industry expertise.

02. Structure Your Data

Once data is captured, there is very little you can do with it until it is validated and structured. Willow's data experts work in partnership with some of the world's leading data and cloud organisations to establish the best in global standards for real estate. Willow's technology in then able to apply these standards to live, static and spatial data.

03. Understand Your Data

Now that your data is structured in an intuitive way it is ready to be activated. Willow gives you the platform to investigate, analyse and generate insights from your data via a number of intuitive and user-friendly tools plus a wide variety of third-party applications through the Willow Marketplace.

04. Action Your Data

Insights are great, but unless you can action them and create real change, they remain academic and can quickly become redundant if not acted upon. Willow allows you to take these insights and other critical findings to be actioned in real time and enhance the way buildings are currently managed.

This method of preparing data and activating data is the foundation for performing countless use cases depending on the desired outcome. Anything from integrated maintenance workflows, to better procurement decision making, to KPI tracking across a portfolio, it all comes down to centralised, accurate and structured data with the most advanced technology tools to understand it and apply it.





SEE THE BUILT WORLD LIKE NEVER BEFORE

Willow provides a single pane of glass to view all building or portfolio data.



Who benefits from a Digital Twin – what are the benefits?

From the beginning of design, through to construction, handover and operations, Willow can benefit any stakeholder who can use information to drive value, whether it is to better understand their investments, better understand their occupants, optimize their operations or enhance the experience of users.



Executives

Willow enables Executives to better understand and manage their assets, in order to drive long-term performance, and adaptability. By providing succinct, powerful and contextual information to decision makers across the project lifecycle, Willow can help make your assets more appealing to all stakeholders, and enable Executives to better serve their occupants.



Asset Managers

Willow enables Asset Managers to better understand how their portfolios are performing, in order to drive long-term performance. By connecting once disparate solutions or data sets into a unified portfolio view, Willow equips Asset Managers to make accurate and strategic portfolio decisions. With Willow, portfolios will also be future ready – through a secure and safe integration point for new software solutions.



Facilities Managers

By using Willow, Facility Managers can gain a competitive advantage for their organisations, by improving operational efficiencies and cost control for your team whilst making the asset more desirable for current and future tenants. Willow makes it easier for FMs to implement initiatives to improve the value of the building whilst providing powerful insights to help them show and prove the impact.



Occupants

Having Willow in your building or workplace makes your assets more appealing to all stakeholders – by enabling you to better serve and reach your tenants/customers whilst helping your building(s) perform better from an operational/sustainability perspective. Willow also enables owners and occupants to get more out of their buildings. Through Willow, all aspects of an occupant's life, from access controls, to lifts and lockers, to local retail can be integrated into a seamless and enjoyable mobile experience.



Willow & Microsoft

Willow and Microsoft have been on a journey with Digital Twins, with Willow featured in the public preview of the Azure Digital Twins release in 2018. The relationship between Willow and Microsoft has been multi-faceted, touching product design, product development and co-marketing.

Willow is leveraging its own domain expertise in Real Estate and Infrastructure on top of Azure Digital Twins' flexible modeling, to build solutions that enable the owners and operators of real assets to reduce their costs, improve operational efficiency and better engage their occupants.

Through Azure Digital partners such as Willow can focus on what differentiates their business rather than having to worry about building and operating complex distributed systems architecture at scale. Azure provides a robust framework that developers can use to build and run domain-specific solutions based on their specific expertise: economically, reliably and securely.

Willow launched its latest iteration of its Digital Twin offering in May 2020, which will be deployed across a select number of Commercial and Corporate Real-Estate projects throughout 2021. The Willow infrastructure solution, WillowRail has been in market since 2019 and is now being deployed across railway lines in Europe and Australia.





Willow sees that 2021 is the year where Digital Twins become commonplace and are widely accepted as a fundamental technology solution for Smart Buildings.

As the virtual world and the physical world increasingly align, we are excited by the possibilities Digital Twin approaches offer. Like any innovation, it is a journey where the horizons are as limitless as technology itself.

For buildings and infrastructure, the benefits are already clear - increases operational efficiency, driving resource optimisation, improving asset management, delivering cost savings, improving productivity and boosting stakeholder engagement.

Want to find our more about how a Digital Twin can help your assets?

Find out more by <u>contacting us</u> or visit our website.

www.willowinc.com



FAQ

What is a rough guide on the Return on Investment (ROI) of a Digital Twin?

The brilliance of Willow's approach to Digital Twins and data is that it is highly customisable to address the priorities of different users.

From Real Estate Investment Trusts, Owner Occupiers, Corporate Real Estate and even Stadium and Airport Owners and Operators Willow are focussing their attention on operational cost reduction, capital expenditure management, capital value enhancement, revenue generation, shareholder investment, risk and compliance, sustainability and user experience, among others.

Willow's Digital Twin process when viewed over an asset's lifecycle can deliver ROI in many ways from the beginning of the design and construction period. Firstly, by investing in the design, data framework and digital project management process, there will be savings in terms of improved project efficiency, reduced clashes, defects and rework.

Throughout the construction and commissioning and handover phases, the digital process continues to deliver savings in project team time so owners can more quickly bring an asset to market and assist in attracting and securing tech-savvy tenants who are looking for a smart and future ready home for their business.

A fully compliant digital handover means the building is "operation ready" from day one as all the information (asset registers, manuals, spatial models etc.) is available immediately. This saves significant time and headache, improves the experience for the new tenants, and also greatly reduces the risk of lost information or errors from unvalidated data.

Does the building need to be new?

Definitely not. Willow's Digital Twin solution is applicable from the earliest point in construction, through to handover and into operations. Our solution has been designed to address the unique needs of each customer no matter what stage in the smart building or smart infrastructure journey they are.

What is the sweet spot?

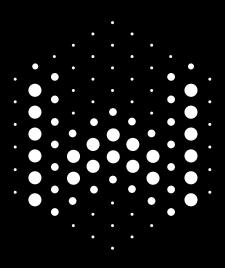
Digital Twins have application and use across all building and infrastructure types. However, at this stage in our journey, Willow's interest in focussed on Commercial Real Estate, and Infrastructure, i.e. Roads and Rail.

How do I engage Willow?

By reaching out to your preferred Microsoft Partner Seller Representative, Microsoft can organise a meeting with you and Willow.

Where is Willow based?

Willow is a global technology company, with offices in Sydney, Melbourne, New York, Seattle, London, Manila and Tel Aviv





WILLOWINC.COM