

Connected Stadium

Experiences delivered smarter
- with a digital twin.

Powered by:

VAULT
3D SPATIAL INTELLIGENCE



Game changing technology

Imagine being able to fly through your virtual 3D stadium.

See stadium 'built information' modelled and represented spatially with crisp graphics.

Peel back stadium seating to reveal foundations or pipes underneath. Fly under the stands, explore the tunnels or bars and restaurants...

Add IoT, Artificial Intelligence and Machine Learning into the mix and you can monitor patronage patterns and physical environments in real time.

Get live data feeds such as food and beverage EFTPOS spend mapped spatially to your digital twin.

Count people, monitor density and velocity data live on a digital dashboard for safer people management.

Improve fan experiences with live mobile data, like queue times for bars or toilets.

We make it easy to create a digital twin of a stadium (a spatial model) which:

- Provides live insights
- Improves fan experiences
- Connects all stakeholders to ONE digital source of data certainty
- Builds a platform for next generation intelligent technologies
- Delivers visual performance in real-time
- Reduces operational expenses



 CAMERA SENSOR #46532
Live Feed Activated
ACTIVITY STATUS: Normal

 ATTENDANCE CURRENT: 64,501
ATTENDANCE FORECAST: 78,887
 82% OF FORECASTED ATTENDANCE

 SE STAND ENTRANCE 2
VELOCITY ENTRY 20 / 5 MINS
VELOCITY EXIT 4 / 5 MINS


 SW STAND SNACK BAR \$3450.90
 EFTPOS TRANSACTIONS 295
AVERAGE SPEND \$12.41
 QUEUE TIME 3.67 MINS

What is a Connected Stadium?

Every aspect of the physical infrastructure is digitised to deploy a digital twin of your stadium. The resulting 3D spatial data model then becomes a platform for IoT connectivity.

Why do it?

Elevate customer experiences, digitally. Turn your stadium into a living, learning and communicative asset. Connect with fans in new ways; before, during and after games.

PEOPLE

- Spatially illustrate gate movements, crowd density and velocity to understand patronage patterns and optimise security and safety protocols
- Optimise disaster management and recovery including first responder plans and simulations on a digital twin
- Optimise stock levels and delivery for smoother operation
- Drive optimal customer experiences such as reduced wait times and queuing using IoT and the power of AI.

ECONOMIC

- Allow analysis of pre/actual and post-event data – spatially
- See powerful visualisations of EFTPOS spending mapped geographically and in real time
- Understand operational expenditure spatially for greater granular and bigger picture insights
- Connect all stakeholders to the ONE digital ecosystem for greater operational efficiencies over time.

ENVIRONMENT

- Manage assets and environments with greater live visibility
- Connect environmental monitoring technologies e.g. CO₂ sensors, humidity, electricity consumption to a spatial model for powerful visualisation and analysis.

VAULT

3D Spatial Intelligence Platform

asBuilt can work with facilities management to model, capture and integrate stadium data into a common data environment.

Administration teams, facilities teams, event marketers, suppliers and contractors can then connect together in ONE ecosystem to access spatial intelligence in new and exciting ways.

Powered by Microsoft Azure, Vault is a simple-to-use platform built as the Stadium's digital twin.

Connect all stakeholders to the ONE digital ecosystem for greater operational efficiencies over time.

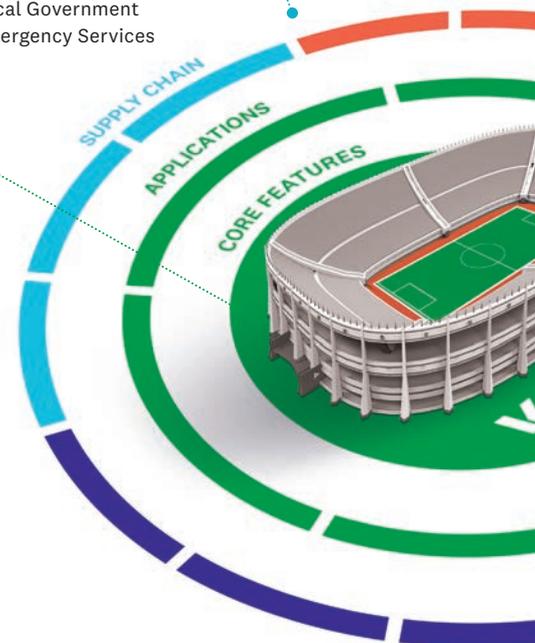
SUPPLY CHAIN

- **Stadium**
 - Staff
 - Visitors/fans
 - Members
- **Facilities & Administration**
 - Facilities Management
 - Administration Personnel
 - C/Suite
- **Construction**
 - Main Contractor
 - Designers/Architects
 - Quantity Surveyor
 - Project Manager
- **Stakeholders**
 - Facilities Boards
 - Local Government
 - Emergency Services

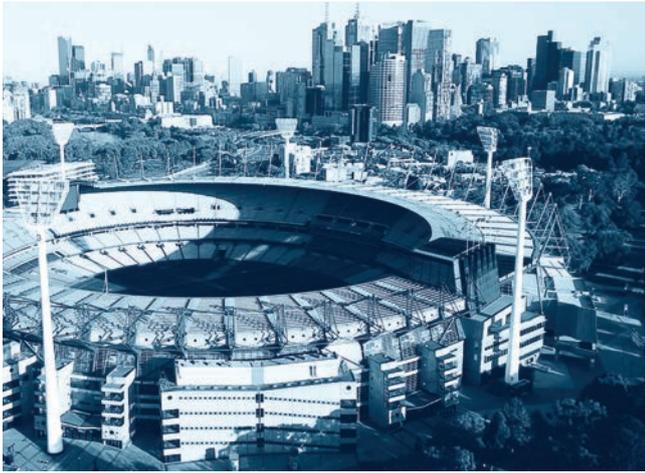
VAULT CORE FEATURES

Visualisation + Storage + Apps

- Multi user viewer
- Real time spatial intelligence tool
- 3D model viewer with data mapped spatially
- 360 degree photo viewer
- Point Cloud manager
- Drone viewer
- File manager
- Microsoft Teams integration



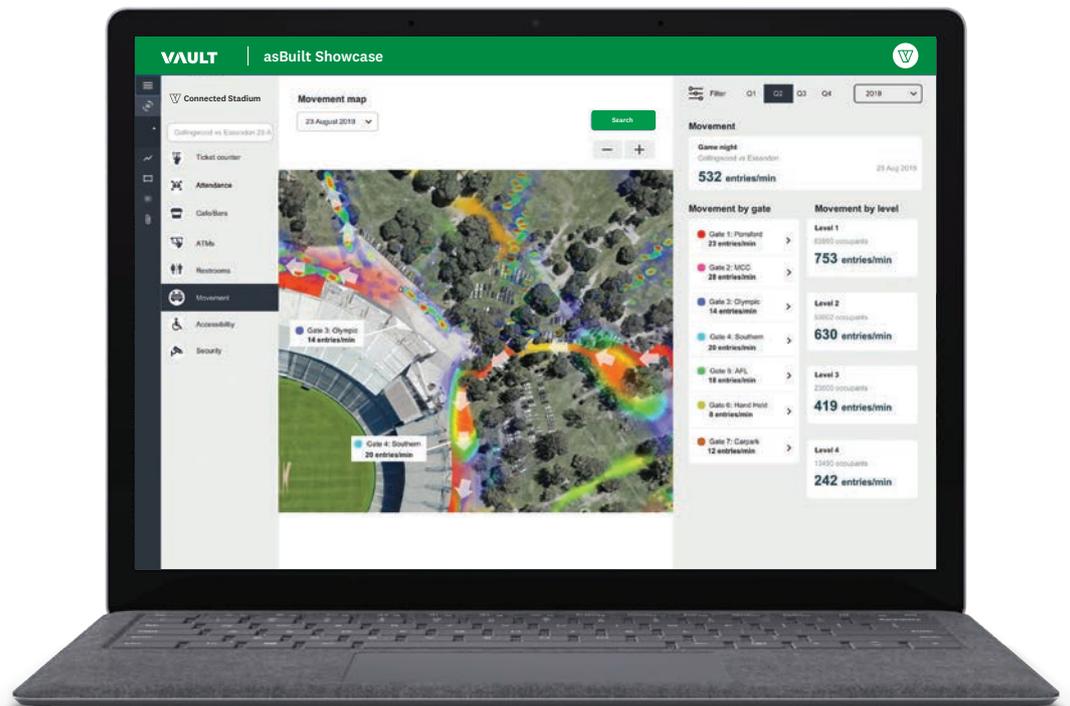
Vault provides a robust, **cloud-enabled solution** for a Connected Stadium. Core **spatial intelligence** and **customisable applications** connect the whole supply chain.



Digitising an iconic stadium – for a smarter future

The illustrious Melbourne Cricket Ground (MCC) is a 181 year old non-for-profit organisation. It's 100,024 person capacity is utilised by a mix of AFL fans, cricket enthusiasts and concert goers, who contribute to an MCG economy worth around \$1 billion a year. This includes spending in it's 300+ snack outlets, bars, restaurant and corporate suites.

The MCG are working with asBUILT to take the power of IoT driven data insight - spatial. This connected approach will enable the MCG to link IoT data sources that have historically been siloed, to ONE powerful ecosystem and a single source of three dimensional truth.



The Future of Connected Experiences

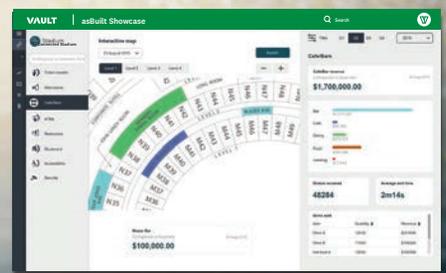
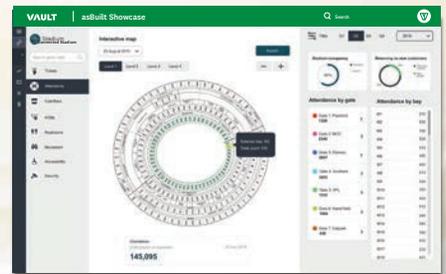
asBuilt has a goal to help stadium operators leverage spatial intelligence to elevate customer experience – while driving operational efficiencies in ongoing asset management.

Connected Fan Experiences

As IoT connectivity becomes more sophisticated, the potential ways and means to improve customer experience before, during and post event is mind boggling:

- Use real time eftpos spend to alert patrons to deals at slower food or beverage outlets
- Dispatch food and beverage orders using autonomous robots or drone technology
- Reroute fans to undersubscribed parking spots for optimal people flow
- Control wait and queue times
- Use facial recognition sensors to assess gender and present tailored merchandise offers
- Use IoT and AI to simulate the ultimate, safest evacuation procedures for variable scenarios
- Use consumption data to present sales and ticket offers for smarter marketing

The first step to a smart stadium starts with digitisation ...



“We’re excited about a future where we can see real-time data mapped spatially across our entire MCG facility and gain deeper, faster insights from a true digital twin.”

James Aiken, Business Intelligence Manager, MCG

We're passionate about creating a smarter built world, digitally.

asBuilt are digital engineering experts and software developers with proven solutions to improve the design, construction and management of built assets. Our ultimate goal is to improve the way people interact with the built world.

We engineer clever solutions that reduce the impact of construction, while connecting people to their built assets and importantly, each other.



asBuilt Connected Stadium

We provide a continuum of digital twin technologies and services to allow stadium operators to improve the operation of their stadium and facilities, at every stage of the lifecycle.

DESIGN & CAPTURE

Digital survey and capture workflows provide the platform for accurate 3D modelling of every facet of the stadium, from the bleachers to the bars and bathrooms.

CONNECT & ENABLE

Smart stadiums can integrate a host of digital transformation technologies to optimise performance and customer experience including IoT, Artificial Intelligence and Machine Learning.

MANAGE & OPERATE

88% of the cost of a built asset is in its ongoing maintenance and operation. Spatial intelligence enables myriad opportunities to achieve operational efficiencies.

Call us or email us today at info@asBuiltdigital.com to speak to one of our connected stadium specialists.

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