

# UNVEILING THE HIDDEN VALUE: EXPLORING THE DIGITISATION OF PROPERTIES

## DIGITAL TWIN REVOLUTION

In today's rapidly advancing digital landscape, the digitisation of properties is revolutionising the housing sector. Traditional property assets are being transformed into digital representations, unlocking a world of hidden value and opportunities. In this blog post, we will delve into the concept of property digitisation, examining its potential benefits, challenges, and the impact it can have on various aspects of the housing sector.

Property digitisation using drones, mobile laser scanners, and reality capture devices involves capturing and creating digital representations of physical properties. Drones capture data from above, while ground based mobile laser scanners provide precise 3D measurements. Reality capture devices combine various technologies to create immersive 3D models and virtual representations of physical assets. This digitised data revolutionises property management, visualisation, and analysis, offering increased efficiency and accessibility for the housing sector.



**Initial outlay:** Implementing property digitisation requires an initial investment in technologies, equipment, and data management systems. However, this upfront expenditure brings long-term savings and benefits, which far outweigh initial investment. Digitising properties streamlines processes, enhances efficiency, and improves decision-making throughout the property's life cycle. It reduces the need for physical site visits, saving time and costs. Additionally, accurate data capture and analysis enable proactive maintenance, optimising operational efficiency and minimising future repair expenses. By embracing property digitisation, stakeholders can experience significant long-term savings, improved productivity, and enhanced overall property management.

**Improved Decision Making:** The detailed data obtained through digitisation and reality capture devices allows for in-depth property analysis and planning. The key to any successful project lies in having an accurate starting point, this is essential for setting the foundation and direction of a project. The digital property models provide a complete 360° view enabling visualisation and interaction, closing the gap between the physical and the digital world. Accurate measurements, visual representations, and 3D models enable stakeholders to make informed choices based on reliable data. Architects, developers, and planners can utilise the digital models to assess the feasibility of design ideas, simulate renovations, and plan projects more accurately.

**Reduced site visits:** Digital property models significantly reduce the need for physical site visits. This saves time, cuts costs, and increases efficiency in property assessment and decision-making, all while improving the tenants experience with removing unnecessary site visits. Stakeholders can access and review digital

models together, facilitating remote collaboration and streamlining the decision-making process all without the need to visit site. All done while contributing to environmental sustainability efforts, by reducing the number of site visits. Less travel means fewer carbon emissions and a smaller ecological footprint.

**Remote Property Management:** Property owners and managers can leverage digitised representations to remotely monitor and manage their properties. This includes conducting virtual inspections, identifying maintenance needs, and tracking property changes, saving time and resources. Property digitisation unlocks life cycle planning by facilitating design, construction, facility management, renovation, and end-of-life considerations. Digital models enable accurate decision-making, optimisation, and proactive maintenance, leading to efficient and cost-effective property management throughout its life cycle.

**Preservation and Documentation:** Digitising properties preserves their current state in a digital format. This is particularly valuable as the digital documentation serves as a valuable record for future reference, research, and conservation purposes. The Golden Thread in housing emphasises the importance of maintaining accurate information throughout a building's life cycle. It ensures safety, compliance, and effective maintenance by creating a traceable flow of information. This approach improves transparency and accountability in the housing sector.

**Accurate measurements:** Dimensional data serves as the core foundation of most projects. Accurate dimensions and a single source of truth drive cost savings and efficiency in construction and housing projects. They minimise errors, optimise resource allocation, and enhance collaboration. Precise measurements streamline planning, design, and procurement processes, while a centralised data repository improves communication and decision-making. Digital models contain the required dimensional data for accurate lifecycle costing, no need to revisit site to produce tenders or forecast budgets. By leveraging these factors, project teams can achieve greater efficiency, reduce expenses, and increase overall project success.



**Efficiency:** Property digitisation drives efficiency through streamlined documentation and access, remote property exploration, enhanced communication and collaboration, data-driven decision-making, efficient maintenance and facilities management, improved resource allocation, and faster compliance and reporting. By leveraging digital tools and data, property managers can optimise processes, reduce administrative burdens, make informed decisions, and enhance operational effectiveness, resulting in improved productivity and cost savings.

**Risk mitigation:** a digital reality model serves as one version of the truth, minimising disputes, and mitigating risks by providing an accurate representation, facilitating clear communication, supporting evidence-based decision-making, identifying, and mitigating risks, offering documentation and audit trails, and aiding in legal and regulatory compliance. By utilising this shared reference point, stakeholders can prevent conflicts and navigate projects with increased transparency and efficiency.

## The Rundown

In conclusion, the digitisation of properties holds immense value and potential for the housing sector. It offers benefits such as improved decision-making, reduced site visits, remote property management, preservation of digital documentation, accurate measurements, increased efficiency, and risk mitigation. By embracing property digitisation, stakeholders can optimise processes, save costs, enhance collaboration, make informed choices, and improve overall property management. The digital transformation of properties is a game-changer, unlocking hidden value and paving the way for a more efficient and sustainable future in the housing industry.