

How the Construction Industry Can Optimize Its Approach to

Digital Engineering



Asite has launched a new research report examining how the construction industry can optimize its approach to digital engineering.

The report entitled 'Digital Engineering: Optimizing Construction's Digital Future,' provides recommendations for how the industry can overcome its fragmentation to ensure future prosperity. The report also recommends the steps the industry needs to take to set the foundations for the global advancement of digital engineering.

"For years, <u>Asite</u> has been at the forefront of digital integration across the AEC industry; we recognize the importance of digital adoption and believe the future of our industry lies in digital engineering", Nathan Doughty, Asite CEO, said. "To help enhance digital

adoption and ensure the future prosperity of our industry, this report provides recommendations for how we can optimize our use of digital engineering processes and create a more integrated and collaborative industry."

"As our industry continues to recover and rebuild in the wake of COVID-19, now is the right time to take the opportunity to build a digital ecosystem that works for everyone."

The report examines digital engineering from a number of different standpoints, including the benefits of digital engineering across the project lifecycle, innovative projects that are leading the way, the technologies set to be the most transformative, and global government initiatives to push the adoption of digital engineering techniques.

Finally, it arrives at a recommendation for how the construction industry can unlock greater value.

Holistic lifecycle approach

The report analyses the impact of digital engineering across the project lifecycle – from planning and design, to construction and operation. At each lifecycle phase, it sheds light on the challenges faced at that stage, how digital engineering can solve these challenges, and the barriers that need to be overcome for successful adoption.

The report also identifies the different technologies and techniques facilitating digital transformation at different stages. Accompanying these insights are accounts of different global projects utilizing digital engineering technologies to build better.

Ultimately, the report recognizes the need for a holistic approach to digital engineering across the asset lifecycle, allowing stakeholders to make informed decisions that streamline practices, ensure project fulfillment, and increase overall value.

Global push for digital engineering

The push for the adoption of digital engineering is a global one. The report notes the global government initiatives that are driving the adoption of these technologies and processes.

The United Kingdom, the European Union, India, Hong Kong, Australia, and the United States are mentioned as leaders in the push for adoption.

This showcases a cross-regional desire for a more uniform and integrated approach to the adoption of digital engineering.

A digital framework is the answer

The report concludes that the fragmentation of the industry needs to be addressed before it can move forward. To create fertile ground for digital engineering and innovation, we must first address the fragmented nature of the industry, which has led to a lack of knowledge-sharing, low incentives to adopt technologies, and poorly utilized data.

It proposes data and knowledge-sharing, combined with the development of an easily interpretable integrated global platform, as a means of safeguarding the industry's digital future. For digital engineering to truly transform the AEC sector and produce the desired outcomes,

technologies need to be deployed in an environment where they can thrive, and a global digital framework could facilitate this.

A digital framework can harness the benefits of sharing better quality information; how data is used, maintained, and planned will allow for a better understanding of the interdependencies between sectors and help break down silos.

To read the report in full please click here.

https://www.gim-international.com/content/news/how-the-construction-industry-can-optimize-its-approach-to-digital-engineering