2025 BENTLEY INFRASTRUCTURE AI FORUM

AI REPORT HIGHLIGHTS

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INTRODUCTION

The built environment stands on the cusp of a technological revolution the likes of which have never been seen before.

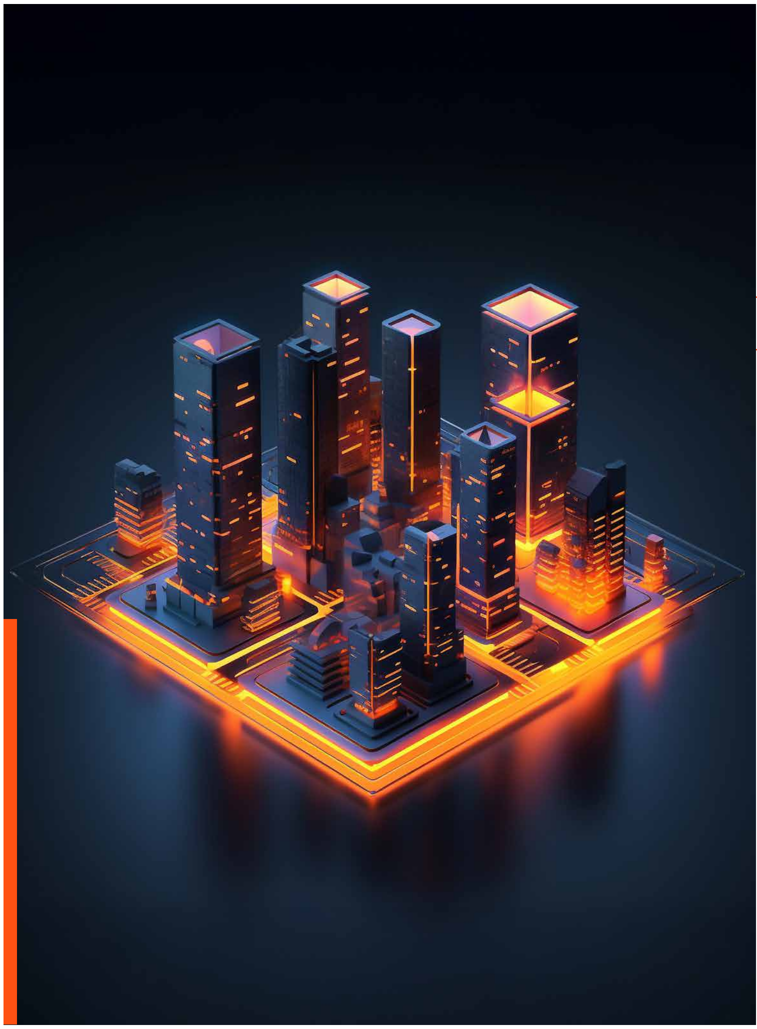
Artificial Intelligence (AI) is changing the way we work, design, construct, invest in, and operate infrastructure and real estate assets.

It has also arrived at a pivotal point for the sector with global construction spending set to grow from around USD$10 trillion a year to USD$16.1 trillion by 2030 at a time when industry productivity has remained sluggish for decades.

But do we stand poised and ready to capitalize on this new world of opportunity? Or are we hesitant, hindered by regulation and trying to cover up risks and vulnerabilities we face within our talent pools, supply chain, and business models?

To find out more, we partnered with Turner & Townsend, Mott MacDonald, and Pinsent Masons to carry out a global survey of sector leaders who are developing, designing, building, financing, operating, and analyzing infrastructure assets across Asia, America, Africa, and Europe.

Below are some of the highlights.



READINESS

Infrastructure organizations are doing more than just discussing AI — adoption is well underway.

Almost half (48%) of organizations said they are either trialling AI in selected areas or have implemented it in daily operations with plans to expand further.

This represents significant progress for a traditionally conservative industry.

Furthermore, leaders are now anticipating rapid scale-up and deployment of AI.

Within three years, approximately one-third of leaders expect more than half their organization's projects to leverage AI significantly in design, engineering, and construction.

This represents a significant acceleration from current usage levels in a short space of time. It also suggests the industry is preparing for widespread transformation.

However, while the industry is doing more than discussing AI, for now it appears most are still experimenting and working through conversations about how to deepen and broaden the deployment of AI.

RISK

This is further demonstrated by survey results showing organizational governance frameworks for AI are lagging behind adoption.

The nascent nature of usage is highlighted by the fact that more than a third (34%) of respondents said their employer doesn't currently have an organizational policy for AI.

Meanwhile, almost a quarter (24%) of those surveyed said while they do have a policy, they do not yet have specific AI strategies or governance.

Only a fifth (20%) have an AI policy that includes guidelines for use, governance, ethical implications, safety measures, and related aspects.

Finally, more than a third (37%) of organizations currently have limited or no project controls to manage risk where AI is used for design and construction.

RETURNS

Given the expectation that AI will deliver transformational change for many organizations, the current lack of policies and controls highlights a critical governance gap that needs action.

Of the leaders we surveyed, two-fifths (40%) anticipate AI will have a significant impact on their current business model. A further quarter (24%) say they are taking active steps to adapt their business model for significant future disruption from AI.

These findings show an industry in transition - actively experimenting with AI while grappling with the governance, security, and business model implications of widespread adoption.

How are organizations planning to invest to boost the use of AI over the next three years?

Many respondents told us they will be investing in their technical capabilities, people and workforce skills, and capability to train and use AI (62 responses).

This was followed by developing standardized data and processes (51) and leadership and management in the age of AI (39).

This shows leaders feel further investment needs to be made to unlock the potential AI offers.

WHAT'S NEXT?

The varying pace and approaches industry leaders are taking to roll out AI in their organizations is a fascinating topic we want to explore further during the Infrastructure AI Forum.

While our survey proves genuine belief in the potential of AI, it has also revealed several challenges organizations face with AI adoption, including technical readiness, workforce and leadership readiness, risk management, governance, and transformation.

How we navigate these issues is going to be critical for helping the industry to unlock efficiencies, lower costs, trim timelines, improve safety, and embed sustainability.

We hope these highlights from our report and our Infrastructure AI Forum sparks new insights, raises fresh questions, and opens new conversations about how we can work together to take advantage of this opportunity. Some questions to ask yourself as you read through the highlights and our other pre-read materials:

Where are you on your AI journey?

What investments are you going to make to enable AI?

What policies are you piloting?

What questions do you have for our speakers at the Infrastructure AI Forum?

Please submit any questions you have to us through the form provided in the email from Bentleyevents@bentley.com.

We look forward to seeing you in Amsterdam.