

Hexagon releases first Autonomous Construction Tech Outlook

HEERBRUGG, SWITZERLAND, April 12, 2023 /EINPresswire.com/ -- Study shows construction firms embracing autonomous tech at unprecedented rates, however, a disconnect exists between their application of the technology and the operational challenges they face, presenting an opportunity for greater bottom-line impact

Eighty-four per cent of technology decision-makers at general contracting firms across North America, the United Kingdom, and Australia have adopted some form of autonomous technology in the last year to help address key business priorities and challenges.

Additionally, 79 per cent said they will be investing more in autonomous (or automated) technology, with 54 per cent planning to spend between \$5 and \$15M (\$7.1M on average) in the next three years. Yet despite the strong adoption and investment numbers, there is a significant disconnect in the industry's understanding of the technology, its application and benefits that will hinder optimisation if not addressed. These are key findings from [Hexagon's Autonomous Construction Tech Outlook](#), published today.

Based on input from more than 1,000 senior executives, [Hexagon's](#) study shows that construction firms are turning to technology to help mitigate and manage challenges, many of which have been exacerbated by the economic instability of the past few years. Notably, respondents cited operational issues including supply chain (39%), productivity/efficiency (36%) and labour shortages (35%) as the most pressing priorities near-term, while driving new business/growth (34%) and managing ESG regulations and programmes (34%) were ranked as top priorities over the next three to five years. And 81% of global respondents stated that their top three challenges represent a "moderate to significant" bottom-line impact on their business.



HEXAGON



The survey also shows the industry embracing autonomous technology as one of the most promising solutions. “Construction firms are turning to autonomous solutions to mitigate risks better and improve the effectiveness of operations, which are both key to overcoming the productivity, sustainability and profitability issues they face every day,” said [Thomas Harring](#), President of Hexagon's Geosystems division. “Progressive firms, which are adopting autonomous solutions at a faster rate and in more areas of their business than their competitors, know that this technology does a lot more than automate tasks. Autonomous tech makes jobsites safer, more efficient and less wasteful by closing the ‘data leverage gap’ – that ever-widening chasm that exists between the data created during the lifecycle of a project and the data actually used to produce meaningful insights, outcomes and opportunities for growth. And this is just the tip of the iceberg. Autonomous technology is transformative technology that will define the next era of construction. The key right now is to help the industry leverage technology in a way that ensures optimisation and lasting, scalable results.”

WIDE RANGE OF AUTONOMOUS TECH PROVIDES BENEFITS, BUT NOT ALWAYS ALIGNED WITH PAIN POINTS:

Survey results show the types of autonomous technology used among construction firms varies greatly — from software and tools to self-driving construction vehicles and robotics — as does the level of autonomy. Project management was cited as the most popular application (32%) followed closely by workplace safety (28%), quality control (26%), surveying (26%) and vehicle operation, document management and verification/project inspection (all at 25%). And among the autonomous technologies used, almost half are partially or conditionally autonomous (requiring human oversight and/or intervention to complete tasks), while the remaining 23% and 30% are split between limited autonomy and full autonomy, respectively.

Interestingly though, even with a wide variety of solutions available, firms appear to have trouble identifying the best autonomous or automated technology to solve their specific challenges and pain points. For instance, among survey respondents who stated that improving supply chain management is a top priority in the next 12-18 months, only 28% reported their companies had invested in autonomous monitoring technology, one of the top reported technologies that aid in this area. Additionally, 37% of respondents found fully autonomous robotics drove sustainability benefits, the leading priority in the next 3 to 5 years, yet only 17% of firms are investing in this type of technology. So while construction firms are reporting clear benefits across key business areas, their use of autonomous solutions is not always aligned to their most pressing challenges.

CONTINUED INVESTMENT CREATES MAJOR OPPORTUNITIES FOR BOTTOM-LINE IMPACT:

The disparity between technology selection and business priorities represents a significant opportunity to help firms better address specific challenges and pain points through more targeted autonomous technology adoption. A little over half the firms surveyed plan on investing

an average of \$7.1M in autonomy within the next three years — with 30% planning to invest over \$10 million. Perhaps unsurprisingly, the larger the firm, the larger the planned investment in autonomy.

These investments among many other priorities competing for resources, indicate that the industry sees value in autonomous technology in the long-term. In fact, the majority of respondents believe autonomy will be “very” to “extremely” impactful in supporting profitability (63%), sustainability (62%), market competitiveness (62%), and owner satisfaction (62%). So, the more aligned these solutions are with a firm’s growth strategies and pain points, the better the return on investment they will achieve in the future.

In conclusion, Thomas Haring adds, “The firms that will redefine this industry are no longer defining themselves as construction companies but rather as hybrid companies with technology, engineering and construction at their core — and autonomous technology will play a major role in this evolution. Companies are already seeing how autonomous technology can improve collaboration and streamline production, but the even greater value comes from its ability to help businesses accelerate innovation while maintaining business resiliency. At Hexagon, we’re focused on helping construction firms of all sizes realise those benefits.”

For a copy of Hexagon’s Autonomous Construction Technology Outlook white paper, “Achieving better project outcomes through autonomy”, visit hexagon.com/contechreport

#

About Hexagon

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon’s Geosystems division provides a comprehensive portfolio of digital solutions that capture, measure, and visualise the physical world and enable data-driven transformation across industry ecosystems. Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2bn EUR. Learn more at hexagon.com and follow us [@HexagonAB](https://twitter.com/HexagonAB).

Media Contact: Hexagongeosystems@wearetd.com

Millie Craker-Horton

Think Feel Do

[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/627492841>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.