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Vectorworks Report Reveals the Technologies Transforming the AEC Industry in 2025 and Beyond

New Report Shares What Industry Professionals Think About BIM, AI, AR, VR, and Sustainable Design Analysis.

Columbia, MD (January 29, 2025) – Global design and BIM software provider [Vectorworks, Inc.](#) has released its latest report, offering insights from hundreds of professionals into what the future has in store for the AEC industry. The “[Digital Technology Trends in the AEC Industry](#)” report highlights the ongoing development of Building Information Modeling (BIM), artificial intelligence (AI), augmented reality and virtual reality (AR/VR), and

sustainable design analysis tools.

To produce the report, over 500 current AEC professionals were surveyed on their opinions of technology trends in the industry. [Since firms of fewer than 50 employees make up 90% of the industry](#), gathering insights from these practitioners allowed Vectorworks to create a more accurate picture of the prevailing perceptions of technology trends.

The largest group of respondents were architects, with additional responses from interior designers, structural engineers, space planners, and mechanical/electrical/plumbing (M/E/P) engineers.

Some of the report's key findings concerning [BIM](#), AI, VR, AR, and sustainable design analysis include:

- AEC professionals rated BIM as the most prevalent digital technology in the industry today.
- Practitioners are aware that AI needs to evolve and become more bespoke before it reaches the same prevalence as BIM.
- A lack of training is the most significant barrier to the adoption of every digital trend (except AR and VR).
- Respondents expect every trend to be more widespread in the industry over the next decade.

Excitingly, 62.5% of respondents also said they planned to adopt at least one of these trends in the next five years.

BIM Isn't Going Anywhere

BIM is expected to only grow in popularity and importance over the next 10 years, according to the report. This is likely because of a high return on investment (ROI) and a significant client interest.

“BIM is the cornerstone of modern AEC innovation, transforming how we design, build, and collaborate,” said Vectorworks Senior Product Marketing Director Rubina Siddiqui, Assoc. AIA. “Centralizing data and fostering seamless communication empowers teams to create smarter, more efficient,

and sustainable projects, making it the most essential technology in our industry today.”

Survey results indicate that 68% of respondents have already adopted BIM, with 65% of those adopters reporting that BIM was currently delivering the most ROI. Among non-BIM adopters, 38% plan to [adopt BIM](#) within five years. Additionally, 35% of respondents noted that clients have specifically asked about incorporating BIM into their projects.

The Continuing Rise of Artificial Intelligence (AI)

AI has seen a meteoric rise in adoption recently, and most professionals think its significance will only continue to grow.

With a low barrier to entry, design professionals can take advantage of AI solutions like [Vectorworks AI Visualizer](#) without dedicating significant time or other resources to reap their benefits.

Just over 50% of survey respondents felt that AI is moderately to extremely prevalent in the industry today. In contrast, 34.8% viewed it as slightly prevalent, and only 14.2% considered it not prevalent at all. However, when asked about AI's anticipated prevalence in 10 years, 86.2% predicted it would be moderately to extremely prevalent, with only 9.8% expecting slight prevalence and 4% predicting no prevalence.

Adopting Augmented Reality (AR) and Virtual Reality (VR)

Unlike AI, AR/VR adopters reported that embracing the technology was relatively resource-intensive, often requiring new software, hardware, and training to unlock its benefits.

Survey results revealed that of adopters, 57% required new software for their adoption process, 50% required employee training, 50% required new hardware, and 40% required a change in their project requirements. Some, 11%, noted that additional resources or changes were necessary for successful adoption.

An Expected Rise in Sustainable Design Analysis

Lastly, there's the matter of sustainability, which is on the minds of many. Sustainable design analysis technology, like [Vectorworks' Embodied Carbon Calculator \(VECC\)](#), aims to help the world reach its sustainability targets.

As deadlines for climate strategies such as the [AIA 2030 Commitment](#) approach and the [RIBA 2030 Climate Challenge](#), it's encouraging to see that almost half of all respondents who haven't already adopted sustainable design analysis technology plan to do so within the next five years—the highest percentage of any trend highlighted in the report.

Why These Trends Matter

These trends offer a crucial glimpse into the future for architects, interior designers, and more. From the continued dominance of BIM to the rise of AI, AR/VR, and sustainable design analysis, the AEC industry is evolving rapidly to meet the demands of clients, projects, and the planet.

While hurdles like training and resources may slow adoption for some, the overwhelming eagerness to embrace these technologies underscores a commitment to innovation and progress. By staying up to date with these trends, professionals can position themselves and their firms to deliver cutting-edge solutions that exceed expectations.

“As you'll read in this report, we're approaching a point where adopting new technology is non-negotiable,” said Vectorworks CEO Dr. Biplab Sarkar. “This is a complex challenge. How do you embrace new technology when implementing it comes at the cost of daily billable work? This challenge influences every step of our development process at Vectorworks – we strive to deliver effective digital technology solutions that meet the needs of today while ensuring these solutions easily fit right into day-to-day work.”

To learn more about what's in store for the AEC industry, access the full report [here](#). To learn more about Vectorworks and the tools and resources it can offer to enhance workflows rather than limit or redefine them, visit vectorworks.net.

About Vectorworks, Inc.

Vectorworks, Inc. is an award-winning design and BIM software provider serving the architecture, landscape architecture and design, and entertainment industries in 85 countries. Professionals worldwide are using Vectorworks on Mac and Windows to create, connect, and influence the next generation of design. Built with designers in mind since 1985, Vectorworks software offers you the freedom to follow your imagination wherever it leads you. Headquartered in Columbia, Maryland, with offices in the UK, Canada, Australia, and Japan, Vectorworks is a part of the [Nemetschek Group](#). Learn how you can design without limits at vectorworks.net or follow @Vectorworks.

About the Nemetschek Group

The Nemetschek Group is a globally leading provider of software for digital transformation in the AEC/O and media industries. Its intelligent software solutions cover the entire life cycle of construction and infrastructure projects and allow creatives to optimize their workflows. Customers can plan, construct, and manage buildings and infrastructure more efficiently and sustainably, and develop digital content such as visualizations, films, and computer games in a creative way. The software company drives new technologies and approaches such as artificial intelligence, digital twins, and open standards (OPEN BIM) in the AEC/O industries to increase productivity and sustainability. We are continuously expanding our portfolio, including through investments in disruptive start-ups. More than 7 million users are currently designing the world with the customer-focused solutions of our four segments. Founded by Professor Georg Nemetschek in 1963, the Nemetschek Group today employs around 4,000 experts.

The company, which has been listed in the MDAX and TecDAX since 1999, achieved a revenue of EUR 851.6 million and an EBITDA of EUR 257.7 million in 2023.

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