

EXECUTIVE INSIGHTS

The Dynamic Evolution of Construction Management: Why Platform Solutions Are Becoming the Industry Standard

Construction management software (CMS) has been around in one form or another for several years. At its most basic, CMS is a suite of tools that helps contractors manage part or all of a construction project. As projects become increasingly complicated, with materials, labor and other aspects of the business environment in flux, CMS can help building and construction companies increase productivity and bring greater control to the construction process.

A construction project starts with concept planning and development of a detailed design. Next is the preconstruction phase, which involves budget and timeline development and site preparation. After that, bids are solicited, prepared and awarded. Once construction begins, so does the management of materials, labor, project milestones and finances. Upon completion, and after inspection and commissioning, ongoing building operations processes begin, with maintenance and repair occurring as needed (see Figure 1).



Figure 1

Simplified construction project stages for residential and commercial projects

		I	Building and construc	tion management		
	Concept/ planning and design	Preconstruction	Bid: Solicit, prepare, award	Construction	Inspection and commissioning	Asset management
Key activities*	 Set project goals and outcomes Define scope/spec analysis Develop business case and feasibility Create schematic design Develop drawings and specifications Contract 	 Prepare site for construction Project the financials and finalize budget Develop project schedule and timeline 	 Solicit subcontractors and/or material bids Translate designs into sub-project costs and bids; create estimates Select subcontractors Procure equipment and materials 	 Project-manage and execute plans Manage subcontractors; monitor quality and safety Track, document and report costs and timeline Manage resources and financials Manage change orders and other logistics 	 Complete punch list; close out project Ensure project is to spec and consistent with codes, through internal or third-party inspections Issue/receive payments 	 Operate new or refurbished facility Conduct maintenance and repairs as needed
		Communicate with	other stakeholders	on project status and	costs/finances	

*These steps may be simplified or eliminated in a simple residential project Source: L.E.K. research and analysis

The presence of many stakeholders throughout these phases adds to the complexity of the construction process (see Figure 2).

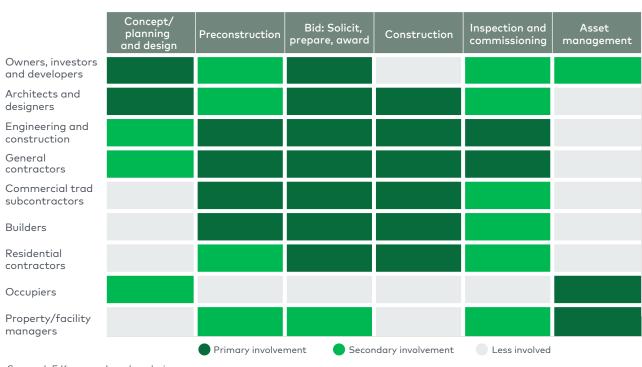


Figure 2

Stakeholder involvement at each stage of the building and construction management process

Source: L.E.K. research and analysis

CMS is used primarily during the construction phase to manage the execution of the project. It is centered on the organization, coordination and oversight of the construction process, and in addition to generating insights, it includes project timeline management, scheduling, budgeting and financial management, resource allocation, communication, and the supervision of activities on the construction site (see Figure 3a).



CMS is distinct from building information modeling (BIM) and other construction-related software, which employ a digital approach that represents the physical and functional characteristics of a building, combining 3D modeling and data management for the design, construction and facility management phases. BIM is more design- and planning-centric, focusing on the building itself from the early stages of design and continuing throughout the building life cycle, whereas CMS is oriented toward the administrative and operational aspects of the construction process (see Figure 3b).

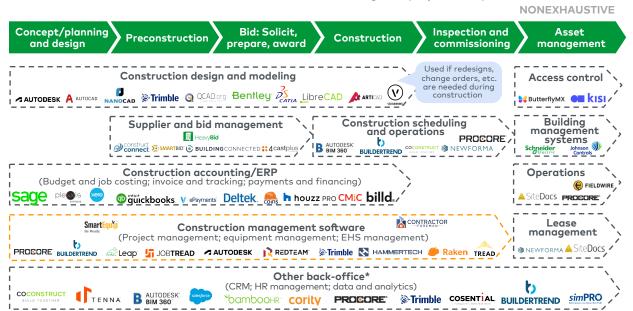


Figure 3b Construction software solutions throughout project life cycle

Note: ERP=enterprise resource planning; EHS=environmental, health and safety; CRM=customer relationship management; HR=human resources *Some logos are not construction-specific (e.g., BambooHR, Salesforce, Microsoft) but are still heavily used and adopted in the construction industry Source: L.E.K. research and analysis The construction industry has historically been one of the slowest to adopt advances in technology. A 2023 Yooz study on technology in the workplace ranked construction at the bottom of 10 surveyed sectors¹ for overall technology proficiency among workers. Manual processes are prone to errors, and lack of integration stifles efficiency, complicating communication and planning at all stages of the construction process. However, consolidation, standardization and digitalization throughout the market have driven an uptick in CMS, signaling the growing relevance and importance of acclimating to the evolving construction technology sphere.

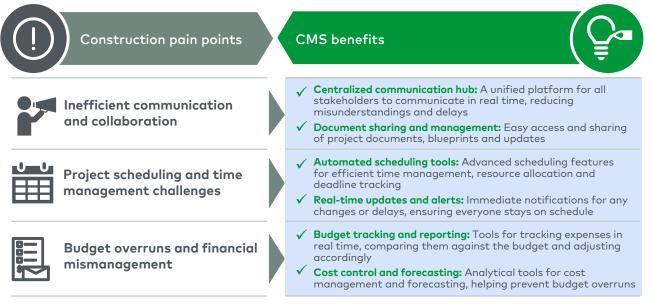
Construction has inherent network effects; with multiple stakeholders involved at each project stage, the management platform increases in value with more users, which leads to more data sharing and collaboration, standardization of processes, and a positive feedback loop for further development. A number of work site technologies are also increasing digital data capture on the job site,² including digital ticketing versus paper ticketing (e.g., deliveries), measurement technologies (e.g., drones) and digitizing aspects of site management (e.g., ruggedized tablets for information capture). Half of contractors are now using ruggedized tablets, and most of that group are using them frequently.

As a result of these technology shifts, adoption of CMS and adjacent solutions is going up. For instance, 65% of U.S. respondents in a recent RICS study report increased use of digital technologies in the past year.³ At the same time, the increasing number of CMS solutions is intensifying competition. We identified over 30 CMS suites, and that's on top of numerous smaller and point solutions.

CMS is a growing staple throughout the construction industry, breaking down barriers of hesitant tech adopters with its key benefits: It streamlines project management processes, enhances collaboration and communication among stakeholders, and increases efficiency and accuracy in project planning and execution (see Figure 4). CMS facilitates real-time data access and sharing, which is crucial for timely decision-making. It improves resource allocation, budget management and compliance with safety and quality standards. CMS also supports sustainability efforts by enabling paperless operations and efficient resource utilization, contributing to eco-friendly construction practices.

Figure 4

Enhancing construction management: Addressing key pain points with CMS solutions



Note: CMS=construction management software Source: L.E.K. research and analysis

Drivers of CMS adoption

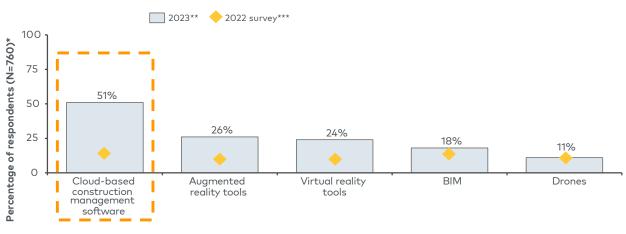
In the dynamic realm of construction, companies navigate a landscape marked by rapid technological advancements and evolving project complexities. The adoption of CMS has become a focal point in this transformative era, propelled by the following three primary drivers.

Increasing construction complexity. Construction professionals increasingly reported that their projects are becoming more complex. The growing complexity of construction projects, marked by intricate designs and sophisticated requirements, necessitates advanced management tools, and CMS provides comprehensive solutions to handle this complexity, ensuring projects stay on track and within budget.

Digitization. The shift toward digital processes in the construction industry has been a major driver for CMS adoption. Digitization streamlines operations, enhances data accuracy and provides real-time insights, making CMS an essential tool for modern construction management.

Next generation of workers. Though the average age in the construction industry is slightly above the typical worker in the national labor force,⁴ the presence of younger labor, including young architects, engineers and contractors who are tech-savvy and prefer digital solutions, has accelerated the adoption of CMS. This younger generation is more inclined to use technology for efficiency, collaboration and project management, aligning well with the capabilities of CMS. Younger construction workers consequently propel technology adoption quicker than older individuals in the industry, especially as rates of retirement rise among baby boomers.⁵

The adoption of construction management software has seen a remarkable surge, outpacing other technological solutions in the contracting industry within a brief period. According to L.E.K. Consulting's 2023 contractor survey, adoption of cloud-based construction management software among contractors has grown significantly, from 14% in 2022 to 51% in 2023 — a growth rate more than double that of any other type of technology in the field (see Figure 5). This rising adoption rate creates opportunities for both CMS providers and investors, but also creates the potential for increased competition.





Importance of technology (percentage ranking "6" or "7" - very important

87% 70%

*Survey questions: Which technologies have you recently adopted to help assist with your construction projects and/or business management? Which ones do you expect to adopt over the next three years (2026)? How important are each of the following technologies to your company's competitive advantage today? Please use a 1 to 7 scale, where 1 means "not at all important" and 7 means "very important" (please select one response per technology)

**2023 and 2026 data from 2023 Contractor Survey

***2022 results from 2022 Contractor Survey (data shown for response options included in prior year's survey)

Note: BIM=building information modeling

Source: L.E.K. 2022 and 2023 Contractor Surveys

Evolving CMS trends

The rise of cloud-based solutions

The growing demand for cloud services is a significant factor propelling the migration to CMS. This not only streamlines operations but also drives reductions in operational costs, boosts productivity and enhances customer satisfaction across the sector. The appeal of cloud-based solutions is rooted in their ability to provide a more efficient, scalable and cost-effective alternative to traditional on-premises systems. Recent years have witnessed a growing trend toward cloud-based CMS solutions because they offer cost-effectiveness, ease of integration and scalability.

Key benefits of cloud-based platforms in CMS:

Cost-effective deployment and maintenance. Cloud-based CMS eliminates high upfront costs, requires no physical hardware or software licensing, and offers flexible pricing models, making it ideal for construction firms of all sizes.

Seamless integration capabilities. These systems easily integrate with constructionspecific applications like computer-aided design (CAD) tools, improving project planning and enhancing data flow between on-site and off-site operations. Other examples include integration with project management tools (Asana, Trello) and document management tools (Dropbox, Google Drive), compatibility with financial software (QuickBooks, Xero), and interoperability with Internet of Things (IoT) devices (sensors and GPS trackers).

Enhanced collaboration and data sharing. Cloud-based CMS allows for real-time collaboration and document access across all project stakeholders, improving coordination among dispersed teams. For example, data sharing between design software such as AutoCAD or Revit and project scheduling and resource procurement tools can streamline information sharing if redesigns or order changes are needed during construction.

Accessibility and mobility. Cloud-based CMS provides on-the-go access to project data for site managers and field workers, leading to better on-site decision-making and a reduced need for physical documents.

Scalability. The software scales effortlessly with the size of the project and adapts to changing team sizes, ensuring efficiency across various project scales.

Data security. Cloud-based CMS systems ensure the security and backup of sensitive project data, protecting against data loss from on-site accidents or hardware issues. Procore, Autodesk, Sage and Buildertrend, for example, all employ multiple data security measures in their CMS product offerings — including SOC 2 Type II, ISO 27001 and HIPAA compliance certifications; single sign-on and dual-factor authentication for login security and access control; threat detection and prevention systems; secure cloud-hosting options like Microsoft Azure; data encryption at rest and in transit; role-based permissions and access restrictions; regular security audits and penetration testing; and so forth.

Real-time updates and project tracking. Finally, cloud-based CMS systems offer immediate updates on project progress and facilitate quick adjustments to plans in response to changing site conditions.

Moreover, the advancement of cloud technology is revolutionizing CMS by integrating a broader spectrum of features and capabilities, such as artificial intelligence (AI), big data analytics and the IoT. Various service models like infrastructure as a service, platform as a service and software as a service are being leveraged to cater to diverse CMS requirements. This migration to the cloud is not just a technological upgrade; it's a strategic move that equips CMS with cutting-edge tools and technologies, thereby enhancing performance and quality. Simultaneously, it fosters innovation and enables companies to explore new markets and business models, offering differentiated services that provide a competitive edge in the rapidly evolving construction sector.

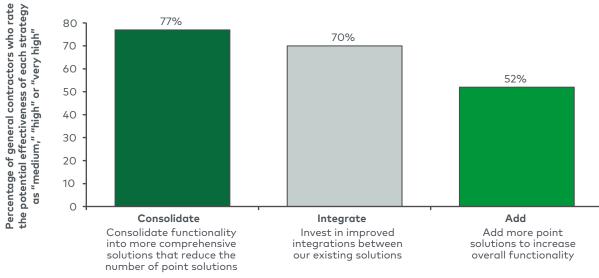
The construction industry's inclination toward cloud services mirrors the broader global trend, enhancing operational efficiency and fostering innovation. Companies are recognizing the myriad benefits of cloud-based CMS solutions, making them essential tools for modern construction management and likely driving future growth in this segment.

Industry migration from CMS point solutions to integrated CMS platforms

The construction technology landscape, historically characterized by specialized point solutions for specific construction life cycle stages, is now undergoing a significant transformation in a shift toward integrated platforms. A 2023 Associated Builders and Contractors report⁶ revealed that 77% of respondents identified a consolidation strategy as a more effective way to improve their tech stack than adding more point solutions. This evolution addresses the growing need for comprehensive, user-friendly systems that streamline the entire construction process (see Figure 6).

Figure 6

Strategies identified to significantly improve the value of technology for contractors (2023)



Source: ABC 2023 Tech Report

The adoption of integrated platforms is driven by considerable investment in the construction sector and the industry's move toward standardization and integration. R&D investment in the CMS space has escalated in the past few years; while there were fewer than 10 patent applications from 2019 through 2021, 2023 alone saw more than double that number.⁷ This shift is motivated by the demand for more cohesive and user-friendly systems that reduce the complexity of managing multiple point solutions. Additionally, the industry is moving from being project-based and fragmented to being more standardized and consolidated, reflecting a broader trend toward integrated software platforms. This change streamlines processes and enhances efficiency across various construction stages.

This shift is exemplified by the added functionality and changing focuses of major CMS players. Nemetscheck Group's Bluebeam offering⁸ is one example of the many powerful CMS tools that deploy innovative technology solutions for building professionals worldwide; the software solution caters to professionals across project categories (e.g., airports, commercial buildings, educational facilities), business segments (e.g., architecture, engineering, construction, management, media/entertainment) and professions (e.g., asset owners, BIM and CAD managers, civil engineers, contractors, landscape planners). Buildertrend⁹ has also expanded its lines of service to help construction teams manage finances, including online payments, expense management, lending and insurance. Similarly, Procore has added project financials¹⁰ to its management software for workers to track budgets, course correct, meet deadlines, reduce exposures and control labor costs.

While Procore and others have broadened capabilities, some — like JobProgress¹¹ (now LEAP) and ServiceTitan — have broadened addressability. Historically, JobProgress specialized in roofing projects, but now it provides solutions for multiple subsectors within construction. ServiceTitan¹² has developed numerous customized trade solutions within roofing (e.g., tracking of roof marketing return on investment, customizable reporting, call recording and scripts, field mobile app, estimating, invoicing, accounting services). Fieldwire and Autodesk Construction Cloud also offer expanding functionalities (e.g., safety and quality management, design reviews, model coordination and clash management, scope analysis and version control, offline mode, bid and risk management, subcontractor qualification).

A push for vertical integration throughout the construction project life cycle from general contractors, subcontractors, engineers, designers, and architects alike, across the value chain, is also driving the integration of digital twins and BIM with CMS platforms. These technologies enable a unified and accurate project visualization, aligning all parties to a single source of truth.

Overall, providers that offer CMS platforms are likely to be advantaged relative to their CMS point solution peers, which can increasingly become acquisition targets as CMS platforms further broaden their capabilities and customer base.

Harnessing generative AI in CMS

Another notable trend is the incorporation of generative AI in CMS. AI technologies are revolutionizing construction management by enhancing risk mitigation, optimizing project planning and facilitating predictive maintenance. Advanced AI tools, such as computer vision systems and AI-powered chatbots, are increasingly being integrated into CMS platforms to improve efficiency, safety and communication. CMS performance and efficacy are enhanced by several AI use cases, including the following.

Project planning and resource management. Al's role in precast construction technology management includes 3D site scanning, predictive scheduling and reinforcement learning; these tools optimize project paths, predict delays and maintain project progress, improving overall management efficiency. The rollout of Procore Copilot¹³ is a great example of how CMS platforms are introducing Al features that run in the background within the platform to assist with information and resource management.

Post-construction maintenance. Al-powered algorithms analyze performance data to schedule preventive maintenance, improving the longevity and safety of structures. Predictive maintenance systems can also anticipate equipment failures, ensuring operational reliability.

Safety systems for work sites. Al technologies track interactions on construction sites, enhancing safety by alerting supervisors to potential hazards and streamlining emergency responses. One example is Autodesk's ConstructionIQ¹⁴ — an Al tool powered to predict, prevent and manage risks to cost, schedule, quality and safety conditions on-site, a significant benefit identified by 24% of businesses.¹⁵

Document management and communication. Al automates document management and enhances communication with features like Al-powered chatbots, facilitating easier access to project information and routine communication tasks. Trimble's Viewpoint Spectrum and Viewpoint Vista now include Al-powered automatic invoicing,¹⁶ using Azure Al Document Intelligence to turn paper and PDF invoices into validated invoice entries, which streamlines workflows and reduces errors.

Overall, major construction firms are also increasingly pivoting toward AI development. Bechtel,¹⁷ for instance, established its Big Data and Analytics Center of Excellence to bolster AI capabilities, with initiatives like photo recognition for work site images, natural language processing for document management and HR task automation. Similarly, Kiewit Corporation¹⁸ is advancing its AI efforts by acquiring InEight and integrating SAP's enterprise resource planning technologies for data tracking. This data forms the foundation for InEight's cutting-edge technology development, underscoring Kiewit's commitment to AI innovation in construction.

Incorporating generative AI into CMS solutions is key for providers to differentiate and win in the CMS space. Providers that seek out ways to leverage generative AI will be able to better serve their construction customers and become more attractive targets for investors.

Evolution of sustainability-promoting and sustainability-tracking features

With the construction industry responsible for about 40% of global carbon dioxide (CO2) emissions,¹⁹ sustainability has emerged as a key focus in CMS development. Modern CMS platforms are equipped with features that promote eco-friendly practices, such as digital documentation, resource optimization and real-time sustainability tracking. The integration of telematics for monitoring equipment usage with analytical tools for assessing the environmental impact of projects highlights the industry's commitment to sustainable construction practices.

A suggested collection of sustainability-promoting features for CMS providers to prioritize is listed below.

Direct sustainability enablers (features that inherently contribute to sustainability through their primary functions):

- Paperless operations and digital documentation. CMS minimizes paper usage by digitizing documents, enhancing eco-friendliness and streamlining project management. For example, Raken²⁰ offers a digital construction reporting app that enables contractors to shift to paperless operations, reducing their carbon footprint.
- 2. Efficient procurement and material management. CMS improves procurement efficiency and promotes sustainable building practices by managing eco-friendly materials and reducing material waste. Steers'²¹ CMS includes modules for equipment and materials purchasing, helping in the selection and management of sustainable building materials.
- **3. Life cycle assessment and carbon footprint tracking.** CMS features can assess and track the environmental impact and carbon footprint of projects throughout their life cycle.

Indirect sustainability supporters (features that indirectly support sustainability goals by improving operational efficiencies and decision-making):

- Real-time monitoring and reporting. Cloud-based CMS platforms offer real-time sustainability metric tracking and comprehensive reporting so projects can adhere to green construction standards. In a 2023 study on digitalization in construction, RICS reported that over 50% of construction workers agreed that net-zero carbon initiatives could benefit from the use of digitalization²² in carbon footprint calculation, benchmarking and reporting.
- **2. Resource optimization and waste management.** These systems track and manage material usage, supporting eco-efficient construction practices by optimizing resources and reducing waste.
- 3. Telematics for equipment monitoring. Integrating telematics, CMS monitors machinery fuel consumption and operational data, aiding in efficient fuel use and emission reduction. In the same RICS study mentioned above, 57% of respondents agreed that implementing whole-life and whole-asset thinking could be supported and improved by digital tools²³ (e.g., CMS, BIM, digital twins) that measure and monitor equipment.
- 4. Collaboration and communication tools. These CMS features enhance collaboration on sustainability goals and streamline communication regarding sustainable practices among project stakeholders.

5. Sustainability dashboard and analytics. Eco-focused dashboards and analytics provide ease of use in tracking environmental, health and safety (EHS) metrics and executing strategic planning. One example is HammerTech's Inspect²⁴ offering, which includes EHS compliance monitoring to ensure projects meet regulated standards.

In response to growing concern about the construction industry's contributions to global pollution, CMS platforms should offer a robust selection of features to promote eco-friendly practices, both directly and indirectly, that will promote efficient resource management and comprehensive sustainability tracking, both of which are increasingly important to investors as well.

M&A

M&A activity in the construction software space is shaping the future of CMS. With 16 CMS transactions in the past two years and a total of around 50 in the past five years, the landscape is witnessing a dynamic shift. Leading companies like Bentley, Autodesk and Trimble are at the forefront of these acquisitions, indicating a strategic push toward consolidating and expanding CMS capabilities (see Figure 7).





Source: Company websites; S&P Capital IQ; L.E.K. research and analysis

Other notable acquisitions are shown below (see Figure 8).

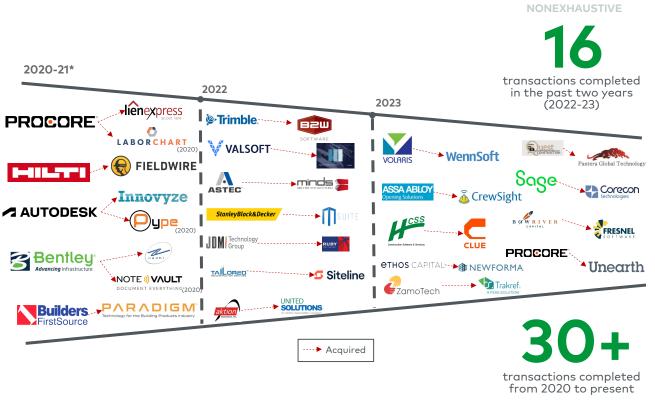


Figure 8 Construction management software M&A activity

*Only notable acquisitions by market leaders or acquisitions above \$100M (disclosed) are included; the list is not exhaustive or inclusive of those over \$100M that were undisclosed Source: Company websites; S&P Capital IQ; L.E.K. research and analysis

This rising acquisition activity is expected to continue as larger players buy up the innovative technologies of smaller, more agile CMS startups. The trends outlined above inherently incentivize consolidation in the CMS space, as platform solutions integrate point solutions into comprehensive management suites to enhance project collaboration across the value chain.

Calls to action

Product development and other strategic priorities for CMS providers

Embrace integrated platform solutions with advanced functionalities. To capitalize on the evolving construction landscape, CMS providers should focus on building out their unique construction management suites in one integrated platform solution. This involves expanding beyond niche offerings to include a comprehensive set of tools that address various aspects of the construction process, from project planning to resource management and sustainability

tracking. Incorporating advanced technologies like AI, digital twins and cloud-based systems will enhance the value proposition of these platforms.

Develop and improve sustainability-tracking features. Given the construction industry's impact on CO2 emissions, CMS providers should prioritize sustainability-promoting features in their product development efforts; this includes integrating digital documentation, resource optimization, real-time monitoring and telematics for equipment monitoring into their platforms. By doing so, they can appeal to the growing market segment that values eco-friendly practices and help construction firms meet their sustainability goals.

Investment opportunities for investors in the construction management space

Identify and support trend-aligned innovations. Investors should focus on CMS providers that align with key industry trends — those transitioning toward cloud-based integrated platforms, utilizing generative AI and emphasizing sustainability. Investing in companies that demonstrate a clear understanding of these trends and possess the capacity to innovate can drive competitive advantages as CMS adoption rises throughout the construction industry. Monitoring the market for emerging technologies and user demands will be crucial to making informed investment decisions.

By staying ahead of these trends, both CMS providers and investors can play a pivotal role in shaping the future of the construction industry, ensuring it becomes more efficient, sustainable and technologically advanced.

For more information, please contact industrials@lek.com.

About L.E.K. Consulting

We're L.E.K. Consulting, a global strategy consultancy working with business leaders to seize competitive advantage and amplify growth. Our insights are catalysts that reshape the trajectory of our clients' businesses, uncovering opportunities and empowering them to master their moments of truth. Since 1983, our worldwide practice — spanning the Americas, Asia-Pacific and Europe — has guided leaders across all industries, from global corporations to emerging entrepreneurial businesses and private equity investors. Looking for more? Visit **www.lek.com**.

L.E.K. Consulting is a registered trademark of L.E.K. Consulting LLC. All other products and brands mentioned in this document are properties of their respective owners. © 2024 L.E.K. Consulting LLC

Endnotes

¹Constructiondive.com, "Workers give construction's slow tech adoption a thumbs down." <u>https://www.constructiondive.com/news/workers-give-construction-a-thumbs-down-for-tech/649625/</u>

²Construction.com, "The Civil Quarterly Exploring Digital Project Delivery in the Construction Industry." <u>https://www.construction.com/</u> resource/exploring-digital-project-delivery-in-the-construction-industry/

³RICS.org, "Digitalisation in construction report 2023." https://www.rics.org/news-insights/digitalisation-in-construction-report

⁴NAHB.org, "Is the Construction Workforce Older than Other Industries?" https://www.nahb.org/blog/2023/06/age-of-construction-workforce

⁵Pewresearch.org, "The pace of Boomer retirements has accelerated in the past year." <u>https://www.pewresearch.org/short-reads/2020/11/09/</u> the-pace-of-boomer-retirements-has-accelerated-in-the-past-year/

⁶ABC.org, "ABC 2023 TECH REPORT." <u>https://www.abc.org/Portals/1/ABC_2023_TechReport_web.pdf</u>

⁷USPTO search for construction management software patent applications.

⁸Nemetschek.com, "Construction: More precise, efficient, and sustainable construction." <u>https://www.nemetschek.com/en/solutions/</u> construction

[°]Buildertrend.com, "Buildertrend redefines how construction teams manage finances with an expanded line of services." <u>https://buildertrend.</u> com/press-releases/redefining-construction-finance-management/

¹⁰Procore.com, "CONSTRUCTION PROJECT FINANCIAL MANAGEMENT SOFTWARE." https://www.procore.com/project-financials

¹¹Jobprogress.com, "The 'Must Have' Business Productivity Platform for ALL Home Improvement Contractors." https://www.jobprogress.com/

¹²Servicetitan.com, "ROOFING SOFTWARE: Drive efficiency, satisfaction, and revenue with the all in-one roofing software." <u>https://www.</u>servicetitan.com/go/roofing

¹³Investors.procore.com, "Procore Revolutionizes Construction Workflows with Innovative AI-Powered Copilot." <u>https://investors.procore.com/</u> news/news-details/2023/Procore-Revolutionizes-Construction-Workflows-with-Innovative-AI-Powered-Copilot/default.aspx

¹⁴Construction.autodesk.com, "Identify and prioritize construction project risk with Construction IQ." <u>https://construction.autodesk.com/tools/</u> construction-iq/

¹⁵A study by Autodesk and Deloitte found that improving safety conditions on-site using improved data and AI was a significant benefit for businesses.

¹⁶Rockproducts.com, "Trimble Introduces AI-Powered Automatic Invoicing Capability." <u>https://rockproducts.com/2023/12/12/trimble-introduces-ai-powered-automatic-invoicing-capability/</u>

¹⁷Forbes.com, "Building A Home For AI In Construction." <u>https://www.forbes.com/sites/forbestechcouncil/2019/07/02/building-a-home-for-ai-</u> in-construction/?sh=3a8740846868_

¹⁸Ibid.

¹⁹Upmetrics.co, "Construction Industry Statistics (2024)." https://upmetrics.co/blog/construction-industry-statistics

²⁰Rakenapp.com, "Construction Management Software: Field management made easy." https://www.rakenapp.com/

²¹Steerplatform.com, "Grow Your Business Fast Without Losing Control." <u>https://www.steerplatform.com/</u>

²²RICS.org, "Digitalisation in construction report."

²³Ibid.

²⁴Hammertech.com, "Inspections: Make Sure the Job is Done Right." <u>https://www.hammertech.com/en-us/solutions/site-operations/safety-inspections</u>

About the Authors



Paul Bromfield

Paul Bromfield is a Managing Director and Partner in L.E.K. Consulting's New York office and is focused on the building & construction and industrial distribution sectors within the firm's Industrials practice. Paul has more than 20 years of experience, with a strong record of helping companies across the value chain accelerate growth, including service innovation, multichannel strategy and M&A. He brings particular expertise in commercial sectors, exterior products, organizational implementation and how companies can adapt to sustainability.



Harsha Madannavar

Harsha Madannavar is a Managing Director and Partner as well as L.E.K. Consulting's San Francisco Office Head. Harsha also heads L.E.K.'s Technology Infrastructure practice globally, advising U.S. and global corporations and private equity and hedge funds on a range of shareholder value issues including growth strategy, business model transformation, technology disruptions, product development, pricing and M&A. His expertise also spans impacting industry verticals including industrials, healthcare and life sciences.



Neil Menzies

Neil Menzies is a Managing Director and Partner in L.E.K. Consulting's San Francisco office and a member of the firm's Technology, Media and Telecom (TMT) and Travel & Transport practices. Neil works with businesses and investors across a number of technology-enabled horizontal and vertical markets, including freight and logistics; government technology (govtech); human capital; legal, risk and compliance; and real estate/property technology. His expertise includes growth strategy development, customer segmentation, M&A support, strategic planning and go-to-market strategy.



Gavin McGrath

Gavin McGrath is a Managing Director and Partner based in L.E.K. Consulting's Boston office and a leader in the firm's Industrial Digital practice in the Americas region. Gavin's experience includes digital products and business models, digital customer experience and ecommerce, the Internet of Things and Industry 4.0, digital ways of working, and digital readiness. He has a particular focus on building products, residential and commercial construction, and the built environment ecosystem.



Corey Highfield

Corey Highfield is a Managing Director and Partner in L.E.K. Consulting's Boston office and a member of the firm's Industrials practice, as well as a collaborator with the firm's Digital practice. With a focus on the building and construction industry, Corey supports corporate and private equity clients across projects focused on growth strategy, market assessments, M&A and digital strategy.