



AEC
INSPIRE
REPORT

2022-2023

The Ascent of the Tech-Forward AEC Firm

Findings from Unanet's **annual benchmarking survey** of 395 AEC leaders offer a revealing look at AEC industry trends and a yardstick for firms to measure themselves against their peers.



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INSPIRED INSIGHTS

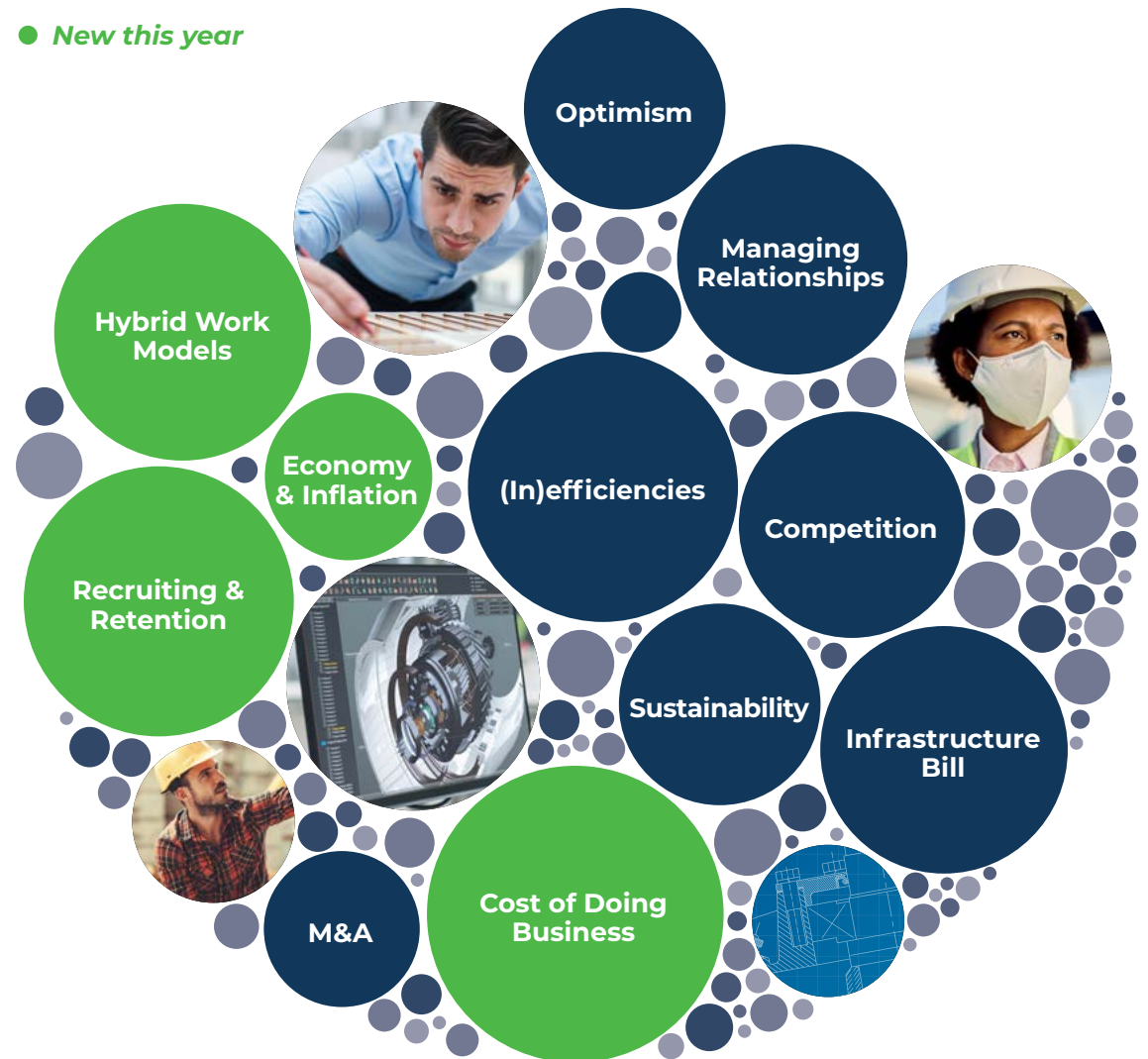
Watch for our “Inspired Insights” callouts identifying key takeaways and predictions.



State of the Industry

A snapshot of AEC market dynamics in 2022-2023

● *New this year*



Executive Summary

As accustomed as architecture, engineering and construction (AEC) firms are to doing business in volatile market conditions, the circumstances they're having to navigate today present unprecedented challenges — and unprecedented opportunities.

For many AEC firms, project pipelines are full and new work is plentiful, with more likely coming as a result of pent-up demand from the pandemic and a coming surge in government infrastructure spending. But that good news is tempered by rising interest rates, inflation, ongoing supply chain issues, labor shortages and other uncertainties that could cause the economy to weaken.

Especially in turbulent times like these, benchmarking provides AEC execs like you with the perspective, grounding, and context you must have to focus on what really matters to the success of your firm going forward. As part of Unanet's mission to empower AEC firms to run their projects and their businesses more profitably and sustainably, we're putting that measuring stick in your hands with the *2022-2023 AEC Inspire Report*. Drawing from the insights and data shared by close to 400 of your counterparts across the AEC business (via a survey conducted by the research firm KS&R), the findings in this report will help you understand exactly where your firm stands competitively, culturally, and financially compared to its peers.



Lucas Hayden
Director, AEC
Strategy
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Unanet

What are firms doing to attract and retain talent, deliver superior project outcomes, and grow their revenue in the face of increasing economic uncertainty? What are their strategic and operational priorities now and over the longer term? What issues keep AEC execs awake at night, and where do they see the greatest opportunities to grow? And how are they using technology to innovate, capture efficiencies and grow their business?

The answers to these and many other important questions can be found in the pages that follow. The AEC industry is brimming with fresh ideas, forward thinking and creative problem-solving. Here's a golden opportunity to leverage them all for your own firm as you go about the vital work of shaping communities, environments and the future of our world. If the AEC Inspire Report proves valuable to you in that work, then our work here at Unanet will have been worthwhile.

The Ascent of the Tech-Forward Firm

Our survey results suggest there's an important and much broader story about the distinction between tech-forward and tech-static organizations and the impact on overall performance of a firm's reliance on modern, integrated systems, data-driven insights, the Cloud, and mobile tools.

In this edition of the *AEC Inspire Report*, we invite you to benchmark your firm against your "Tech Forward" and "Status Quo" peers. Regardless of where you are on that scale, we'll have plenty of suggestions and tools throughout this report to inspire growth for your firm.



Research Specifications

Survey Respondents

Survey respondents include senior decision-makers across the architecture, engineering, and construction (AEC) industry. Respondents fall into three broad categories based on number of employees (10-99, 100-500 and greater than 500) and annual revenue. For more about our survey respondents and the firms that comprise our survey community, see [page 7](#).



Unbiased

Market research was conducted, vetted, and compiled from 395 independent respondents from July through September 2022. Contributors were recruited from multiple sources and supplemented by a nonproprietary business panel.



Authoritative

All participating AEC respondents were screened to confirm their decision-making responsibilities and involvement across their area of the organization (Finance, Project Management, Sales & Marketing, BI/ Analytics Purchasing Technology Solutions, HR, etc.).



Extensive

Survey sessions averaged 15-20 minutes and drew definitive data from close-ended questions.

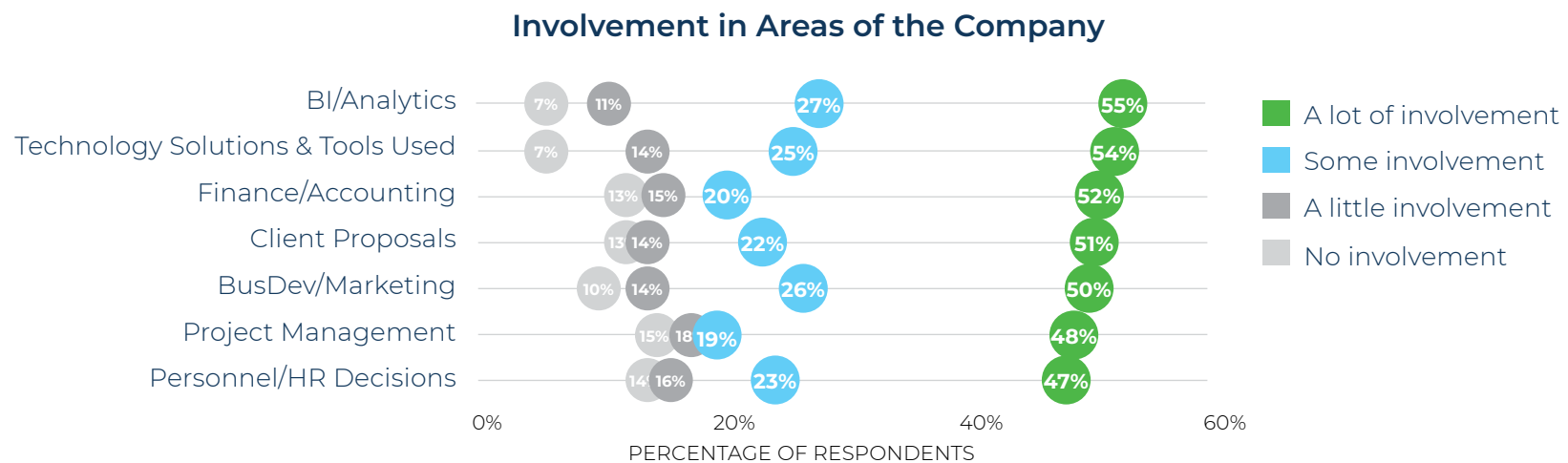
Standards

Three basic principles guided our survey methodology: Generating findings that are unbiased, authoritative and comprehensive, so you can trust the data and the results.

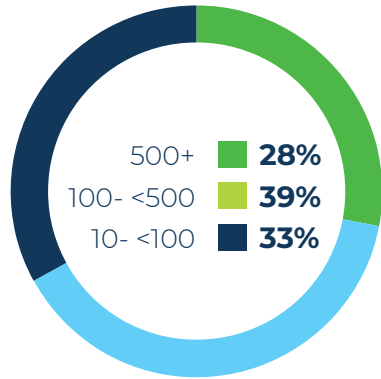
Survey Respondents

Findings in the 2022-2023 *AEC Inspire Report* from Unanet are based on online survey responses gathered from 395 contributors between July and September 2022. The findings are based exclusively on responses submitted by senior decision-makers throughout the AEC industry, including owners/partners and executives/managers across sales, marketing, finance, HR and project management.

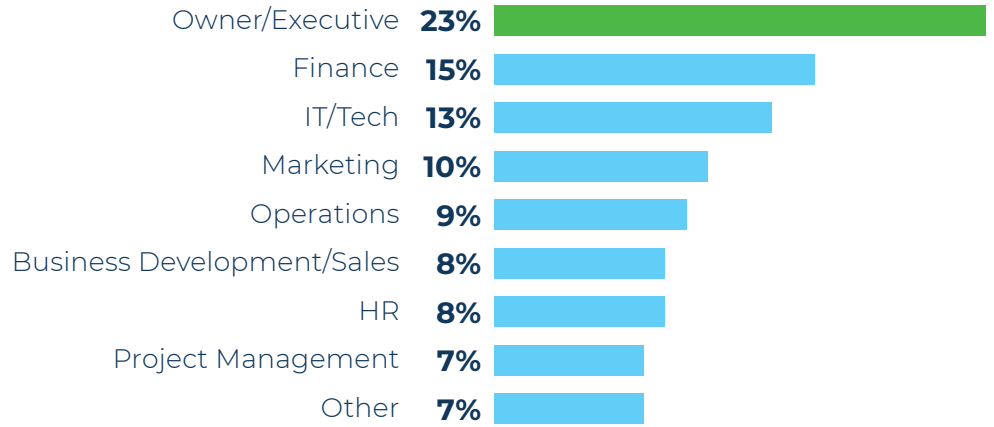
A broad cross-section of the AEC industry is represented, with findings based on responses from executives representing a range of revenue bands and employee workforce sizes, with an even spread across small/midsized businesses and large enterprise AEC firms. Respondents also represent a diverse range of responsibilities and strategic involvement within their organizations, all of which provides us with a high degree of statistical confidence in the report findings.



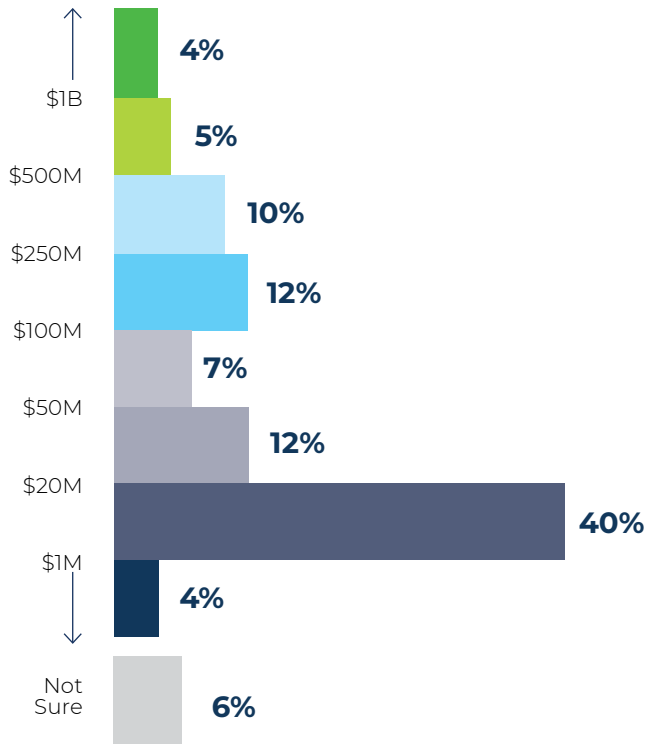
Respondents by Employee Size



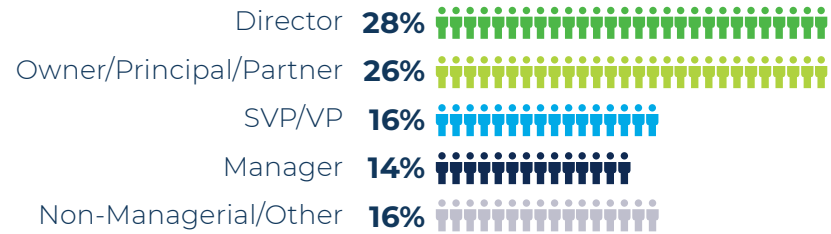
Respondents by Function



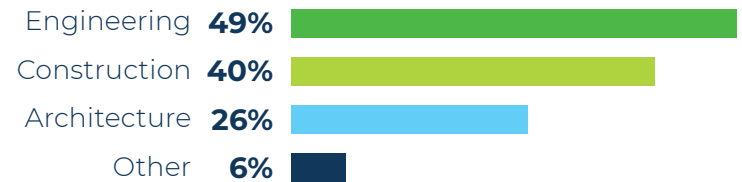
Respondents by Annual Revenue



Respondents by Role



Respondents by Industry (Select all that apply)



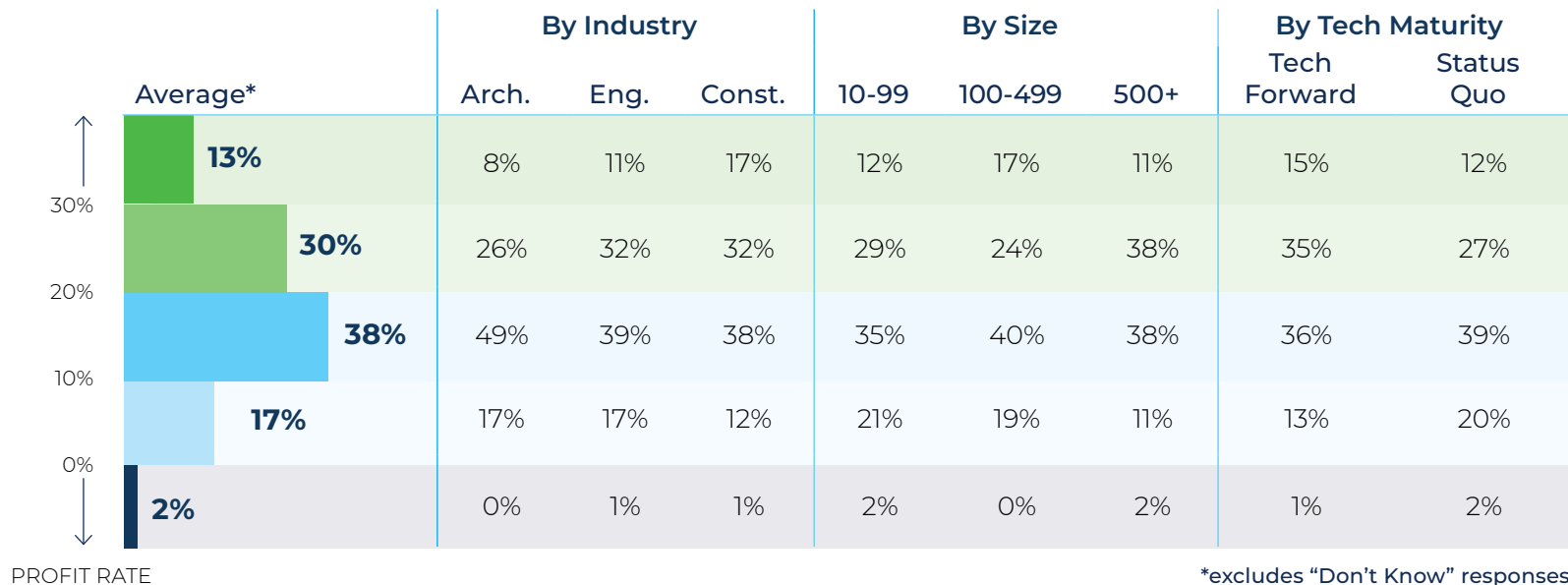
Report Highlights

Nothing fuels optimism quite like a decade of strong, sustained growth. As good as things have been for firms across the architecture, engineering and construction business since the last recession, on the whole they continue to share a decidedly positive business outlook, despite the well-documented pressures they have been

reckoning with lately, from supply chain disruption to talent shortages to the escalating cost of doing business, all against the backdrop of a lingering pandemic.

A significant segment of the close to 400 AEC execs we surveyed — 43% — reported that the past 12 months

Actual Profit Rate Over the Past 12 Months



have been highly profitable for their firms, with reported profits of more than 20%. And that prosperity apparently is fueling optimism for the next 12 months, as more than half of surveyed firms — 58% — expect profits to exceed 20% in the next year.

Large profit margins and lofty projections aside, AEC firms still face formidable challenges on the road to prosperity.

Among the most compelling storylines to emerge from our 2022-2023 findings is the connection between a firm’s embrace of technology, its performance today in key areas and its outlook for the future. Plain and simple, *it pays to be a tech-forward firm* (defined as one that

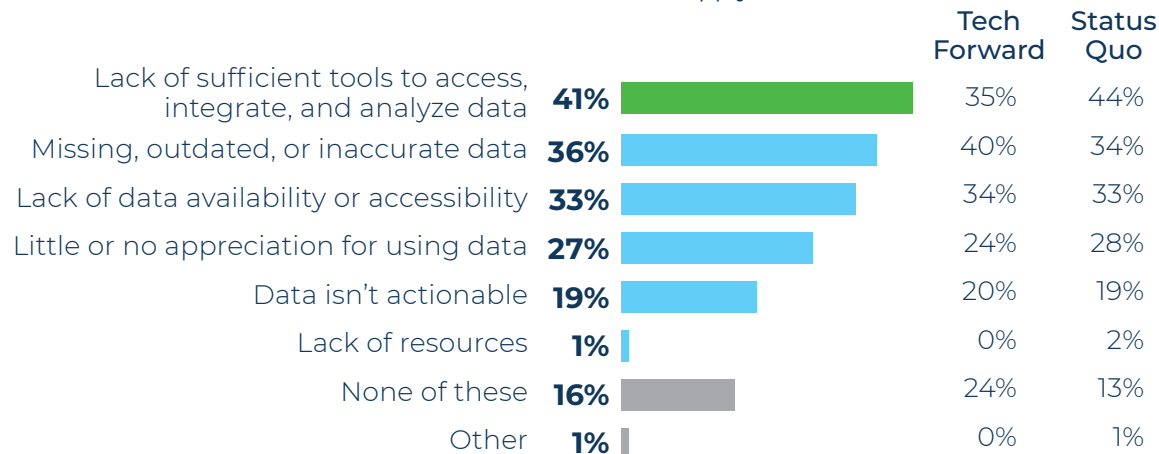
considers itself very data driven, has tech systems and applications that are fully or mostly integrated, is largely Cloud-enabled, and relies heavily on mobile capabilities; see [page 16](#) for a detailed profile of a tech-forward firm).

Case in point:

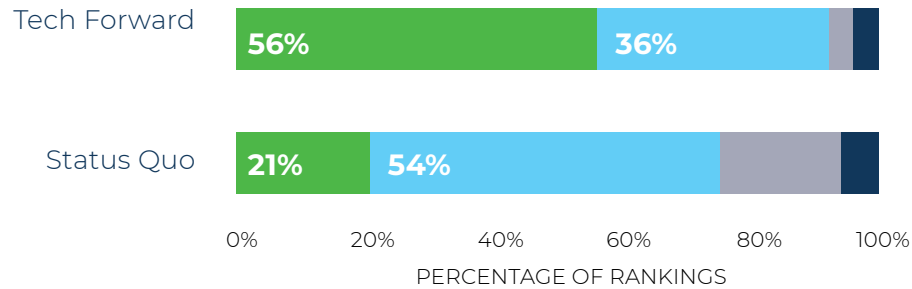
- About one-quarter (24%) of tech-forward firms reported having no issues leveraging data; for other, tech-static firms, leveraging data is a major challenge.
- Half of tech-forward AEC firms reported that recruiting and maintaining appropriate staffing levels actually have improved since the pandemic. Among tech-static firms, however, almost half (46%) indicated they have done worse in this area since the pandemic.

Factors that Hinder a Company’s Ability to Leverage Data

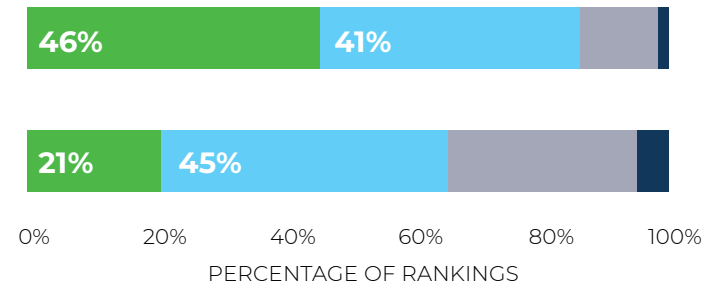
Select all that apply



Project Management Maturity



Resource Management Maturity



■ Very mature
 ■ Somewhat mature
 ■ Somewhat immature
 ■ Immature

- Profitability levels for the past 12 months and projected profitability for the next 12 months were both higher for tech-forward firms.
- Among tech-forward firms, about half consider their project-management and resource-management processes very mature, compared to just one-fifth of tech-static firms.

- More than one-third (34%) of tech-forward firms report a capture rate higher than 50%, compared to 21% of tech-static firms.

Look for these and many more tech-forward call outs in the pages that follow.

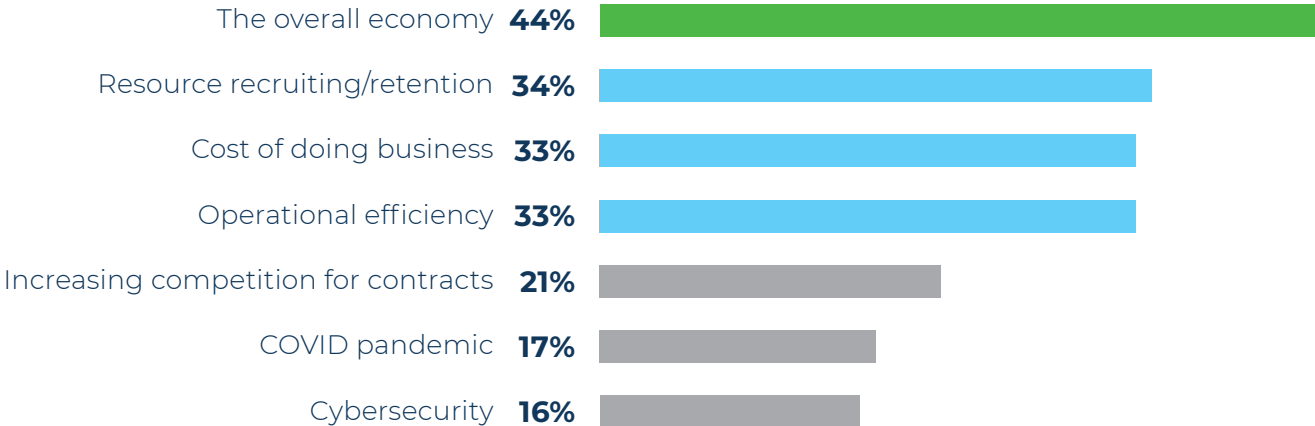
The 2022-2023 AEC Inspire Report continues to highlight the metrics that matter most to AEC firms.

On the accounting and finance side, profit, gross revenue, gross margin and overhead remain the most tracked metrics. Realization rate is the accounting/finance metric more firms wish they tracked but aren't currently. On the project management side, project revenue, percent of project complete and project profitability metrics are the most tracked. Burn rate tops the list of project management metrics firms want to track but currently aren't.

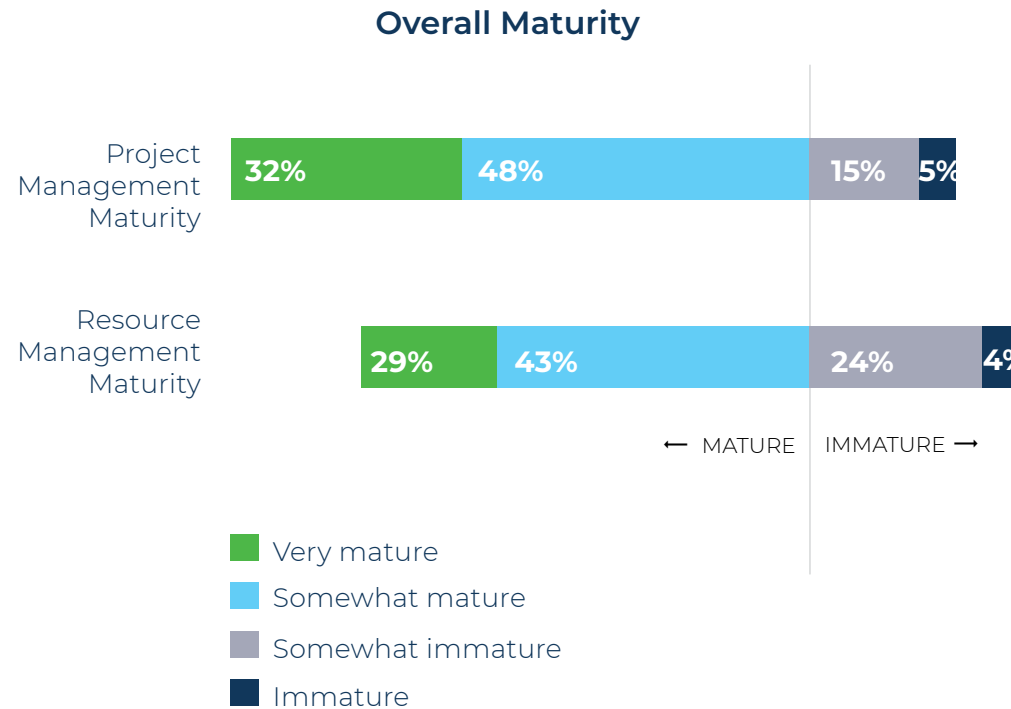
Employee certifications jumped into the top five most tracked business development metrics, as did the source of business (existing or new clients). Skill-set utilization was identified as the BD metric firms wished they tracked but currently aren't.

Hiring and retaining talent is an ongoing challenge for AEC execs. That issue lands second on their list of issues over which they lose the most sleep, topped only by the state of the economy. Overall, recruiting and maintaining appropriate staffing levels have suffered as a result of the pandemic, with many firms reporting that things have worsened in this area since the pandemic.

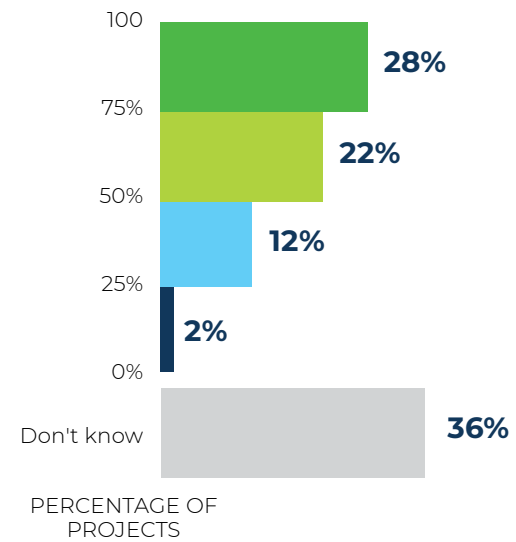
Issues That Keep You Up at Night



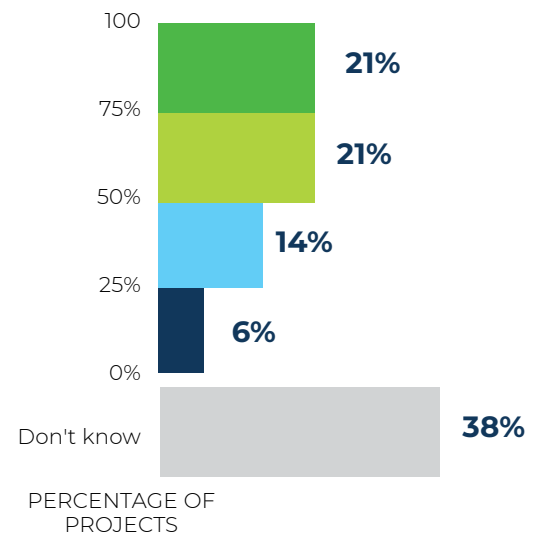
Projects are the lifeblood of the AEC business, yet only about one-third of firms consider their project-management and resource-management processes very mature. What's more, more than one-third of AEC firms indicated they don't know if their projects are completing on-time and on-budget, a major blind spot for the firms that lack that insight, and an important advantage for firms that have it.



Firms Reporting Projects as On Time or Sooner



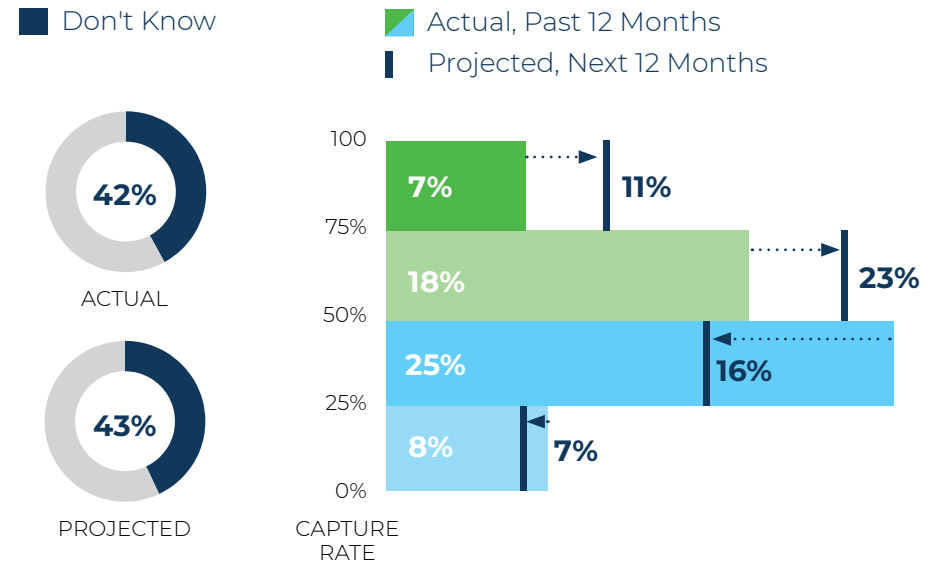
Firms Reporting Projects as Under Budget



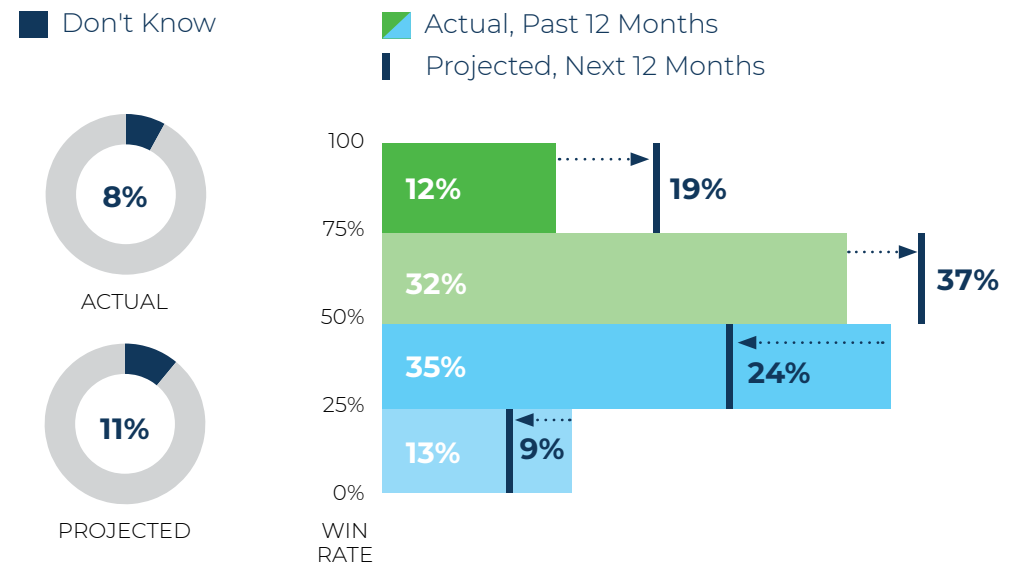
On the business development front, the vast majority of AEC firms actually know their win rate, a much smaller share are tracking **capture rate**, a metric that may actually provide a better indication of business sustainability.

For more on Capture Rate, see our Inspired Insights on [page 40](#).

Capture Rate, Actual vs. Projected



Proposal Win Rate, Actual vs. Projected





Be Inspired

Applying Report Findings in Your Firm

You've come to the "What's in this for me?" section of the report, where we help you read between the lines to find actionable steps your firm can take based on findings from the survey.

Hearken back for a moment to the spring of 2020, when the pandemic forced much of the world to abruptly shift to remote work, and organizations that already had a strong, flexible tech infrastructure in place were more adept at engineering such a move than those that didn't. Across industries, tech-forward businesses tended to fare better in terms of communications and collaboration than organizations that lacked the tech tools to easily transition to remote work, and eventually, to hybrid working arrangements.

Results of the 2022-2023 *AEC Inspire Report* suggest there's a much broader and important story to tell in the

AEC world about the distinction between tech-forward and tech-static organizations. Ultimately, our findings corroborate what many in our industry have long suspected: that there is a direct link between the extent to which a firm relies on integrated digital systems, data-driven insights, the Cloud, mobile tools and the like, and the firm's overall performance in terms of project outcomes, profitability, and other key indicators.

Profiling the Tech-Forward AEC Firm

What exactly does being a tech-forward, data-informed AEC firm look like in practice? At the core, it's a firm that uses data and technology to support, complement, enhance, and empower people to work more efficiently, collaboratively and productively, make better decisions, faster, and ultimately, to build a sustainably profitable business that consistently delivers superior outcomes to

its employees and clients. They also use technology to support their efforts to attract and retain talent, a major challenge in today's AEC business.

Less than one-third (32%) of the 395 AEC organizations represented in the survey thus qualify as "tech forward." And many of them, not coincidentally, outperform their peers in key areas.

Leveraging Today's Modern Tech Resources

The connection between technology and performance is clear. And the firms that are best at turning technology into better outcomes and higher performance tend to get things right in several key areas:

A mastery of their data. Data is among an AEC firm's most valuable (and in some cases, mostly untapped) resources. As more firms are discovering, data, and the tools to analyze that data, are critical to gleaning the actionable insights that enable an AEC business to do more efficiently and more profitably. The most data-savvy firms are using it to allocate resources more efficiently, manage projects more effectively and flexibly, maintain a better handle on the KPIs that fuel project and firm profitability, more closely monitor and manage the client and employee experience, and

What Makes a Tech-Forward Firm?

To qualify as a "tech-forward" firm, companies had to meet three of these four criteria:

- They consider themselves "very data driven." That applies to 58% of respondents.
- Their tech systems and applications are fully or mostly integrated; 28% said theirs are, up from 21% in 2021.
- They're Cloud-enabled; 56% of respondents said at least half of their software and business apps are cloud-based, while slightly more than one-quarter (26%) indicated that at least 75% of their software and business apps reside in the cloud, and 7% reported that all their software and apps are based in the Cloud.
- They rely heavily on mobile capabilities across the business. A large share (43%) of respondents said most or all of their tech tools are mobile-enabled, up from 36% in 2021.

32%

68%

Tech Forward

Status Quo

strategically plan more effectively over various time horizons. Inside these firms, data and the insight it yields flow unimpeded and multi-directionally. Many firms have yet to fully tap into that data resource, however. Among the factors that AEC firms identified as hindering their ability to leverage data, a lack of sufficient tools to access, integrate and analyze data was the primary culprit (named by 41% of participants), followed by missing, outdated or inaccurate data, and a lack of data accessibility or availability. Meanwhile, about one-quarter (24%) of tech-forward firms reported having no issues at all leveraging data.

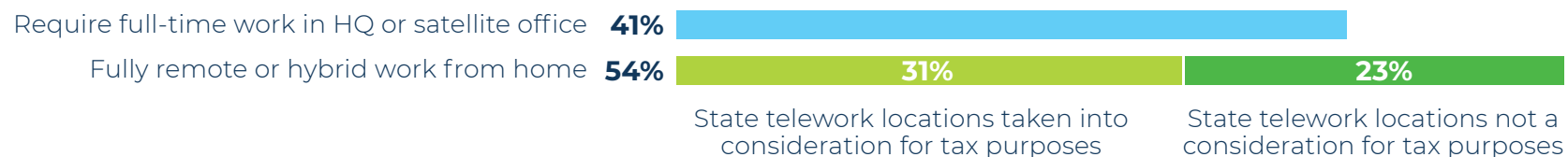
Big on integration. When employees at tech-forward firms come to work, they get to experience what it's like to have every facet of the organization synched and humming along like a well-oiled machine because they trust their data, they can readily collaborate and share insight within and across teams, they know exactly where individual projects stand and they are aligned

around KPIs. Usually these are firms whose digital infrastructure is fully integrated; their organizational “nervous system” runs on integrated apps and their people are empowered in their work by automation, information and streamlined processes.

Cloud-forward. More AEC firms are moving to a Cloud-based environment for key business applications for the scalability, efficiency, and security it offers relative to on-premise solutions. Unlike business in other industries, AEC firms worry less about cybersecurity, our survey found. But because the threat of cyberattack is omnipresent, and with hackers targeting businesses with vulnerable aging technology, it's important to take stock of the applications, software and hardware that comprise your firm's IT infrastructure, and address any vulnerabilities.

From-anywhere access to digital tools and data. Hybrid work environments appear to be here to stay for

Post Pandemic Work Location Policy (excludes "Don't Know" responses)



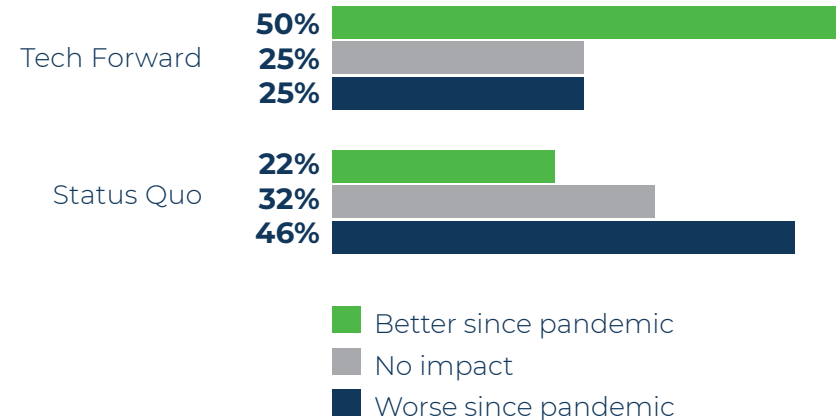
AEC firms, 54% of which said they have a policy that allows employees to work remotely at least some of the time. For people to be productive in hybrid work arrangements, it's essential that they have ready remote access to digital tools, systems and data. If they are working in the office at their desk, desktop access should be a premium. When working remotely, web-enabled apps should be along for the ride. And when completing on-the-go tasks such as time and expense management, managing customer relationships and pipeline, or accessing quick updates on active projects, employees should have the ability to do so right from their mobile device.

Enriching the AEC Workforce and Employee Experience

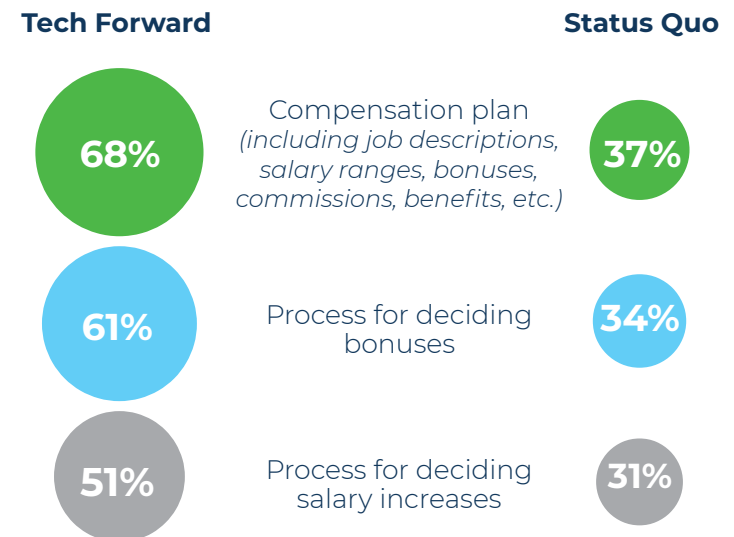
Why do some AEC firms excel at finding and keeping top talent? Which aspects of the employee experience are firms emphasizing? We've added a new workforce-related component to this edition of the report to help firms answer these and other pressing questions, and to better understand the factors that enable firms to harness their greatest resource: their people.

Hiring and retaining talent remains a massive challenge for AEC firms amid the greatest employee movement and attrition we've seen in the workforce in a long

Effect of Pandemic on Recruiting/Maintaining Appropriate Staffing Levels by Technology Maturity



Clear and Well-documented Compensation by Technology Maturity

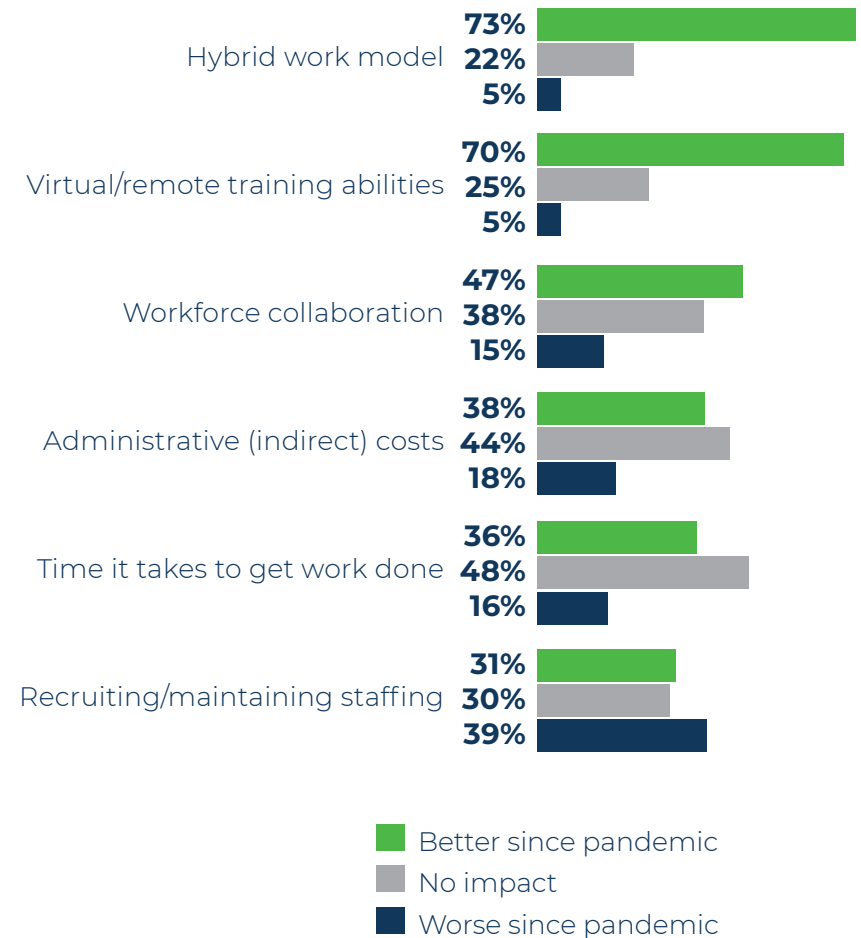


time. Indeed, aside from the state of the economy, resource attraction/retention is the issue over which AEC firm leaders say they lose the most sleep. Overall, recruiting and maintaining appropriate staffing levels have suffered as a result of the pandemic, with 39% of firms reporting that things have worsened in this area since the pandemic.

The data suggests that while most firms have well-documented compensation plans, tech-forward firms appear to be taking better care of their employees in terms of compensation, providing a clear pathway for deciding salary increases, for example. That translates into a clear advantage in hiring and retention. Half of tech-forward AEC firms reported that recruiting and maintaining appropriate staffing levels actually have improved since the pandemic, while almost half (46%) of tech-static firms indicated they have done worse in this area since the pandemic.

Firms appear to be gaining that edge in recruiting and retention by looking at the intersection of data and HR planning. Tech-forward firms are more likely to have well defined salary and bonus plans, for example, both of which are highly important to employees and prospective hires alike. Meanwhile, firms that aren't as data-savvy struggle to connect

Effects of Pandemic

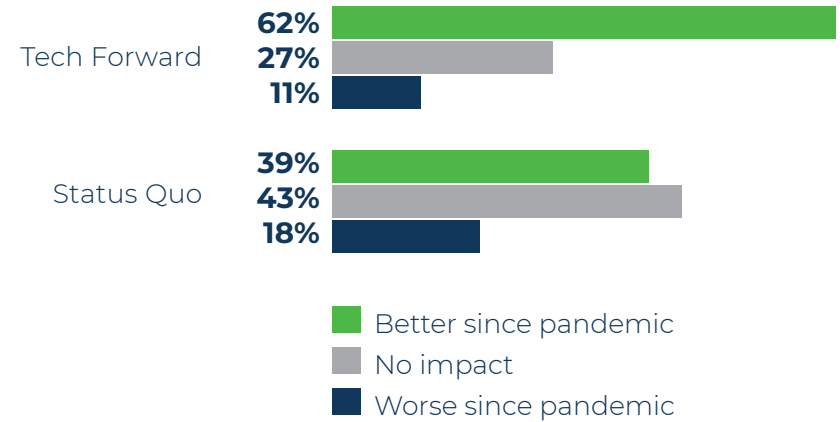


the dots that enable them to take the steps that truly move the needle with hiring/retention.

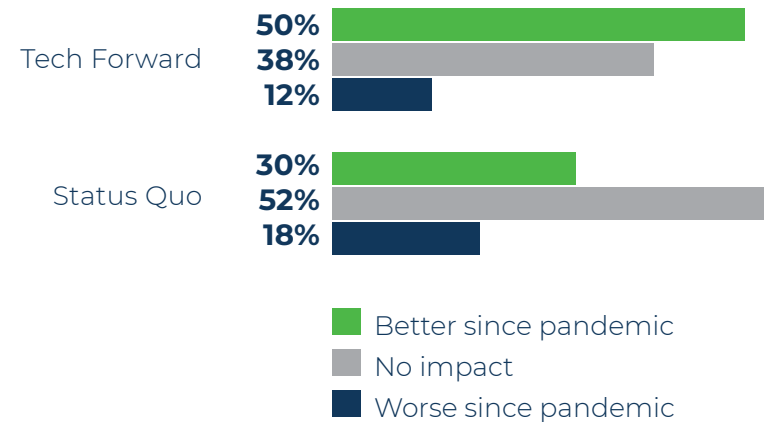
Being tech-forward benefits firms and their workforces in other important ways. For example, tech-forward firms report significantly higher levels of workforce collaboration and worker productivity/efficiency since the pandemic than their tech-static counterparts, likely because they had more digital collaboration and communications tools in place.

Above all, AEC firms have proven to be resilient throughout the pandemic. From a production standpoint, only 16% report a reduction in the time it takes to get work done. Furthermore, seven in 10 report that their virtual and remote training capabilities have improved, for example, while close to half (47%) report improved workforce collaboration.

Effect of Pandemic on Workforce Collaboration by Technology Maturity



Effect of Pandemic on Worker Efficiency/Productivity by Technology Maturity



Keys to Elevating Your AEC Firm With Technology

What does all this suggest about how technology can help AEC firms improve their ability to attract and retain top talent, and generally run their businesses better? Here's a quick checklist:

- ❑ **Use data to drive decisions and actions.** Data is invaluable in helping firms allocate resources, manage projects, align around KPIs, monitor and manage the client and employee experiences, and plan. And the fresher, more trusted the data, the better the outcomes of those decisions and actions tend to be.
- ❑ **Align around KPIs.** Synching projects and teams to the right KPIs drives better performance across the organization.
- ❑ **Integrate the IT infrastructure.** Firms tend to flourish when their organizational IT “nervous system” runs on silo-free, fully integrated ERP, CRM, and other business apps.
- ❑ **Actively seek opportunities to automate processes.** Automation helps people be more productive, perform higher-value work and feel more empowered in that work.
- ❑ **Head to the Cloud.** Firms that run their business with Cloud-based software/apps generally benefit from a more mobile-ready, scalable, and secure IT environment.
- ❑ **Offer mobile/remote access.** Here in the era of hybrid work, employees expect AEC firms to provide ready remote access to digital tools, systems, and data. Anything less and the employee experience suffers, as does a firm's ability to attract and retain talent.
- ❑ **If your firm is tech-forward, be sure to tout it to potential employees.** A firm that provides a top-notch, tech-enabled employee experience should trumpet that to attract talent.

Accounting and Finance

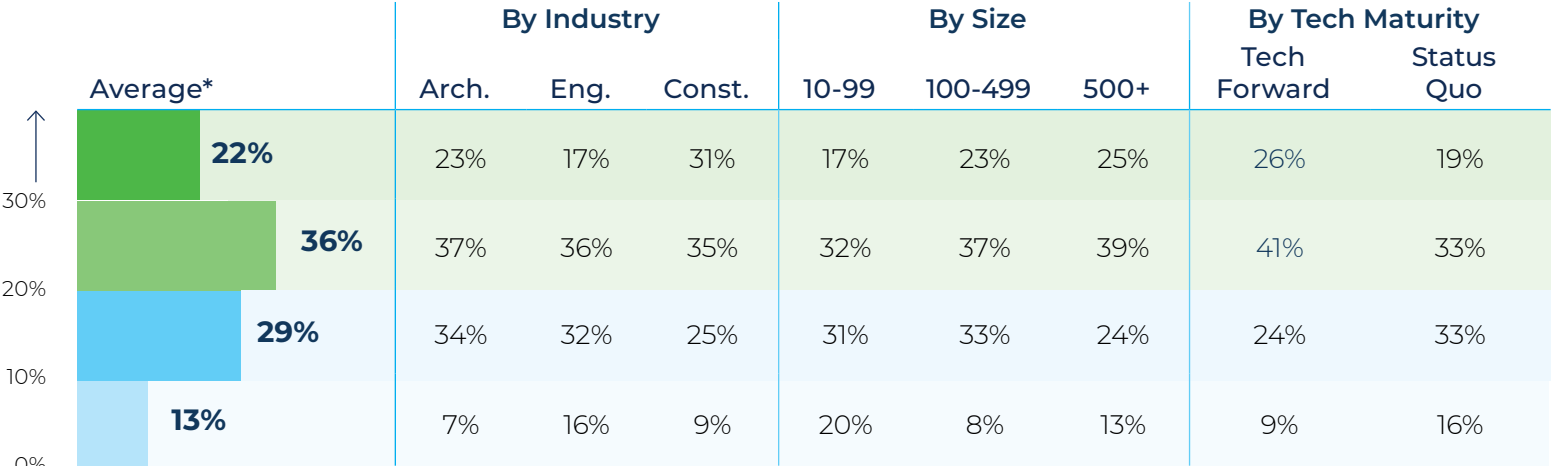
Accounting and Finance

An up-close look at how AEC firms are faring in terms of profitability, plus details about the biggest challenges firms face with billing, projections and other key accounting and finance functions, the tools they’re using to meet those challenges, and the financial and accounting metrics they use most — and wish they were using more. Don’t miss the checklist at the end of this section to see how your firm’s accounting system measures up.

Key Takeaways

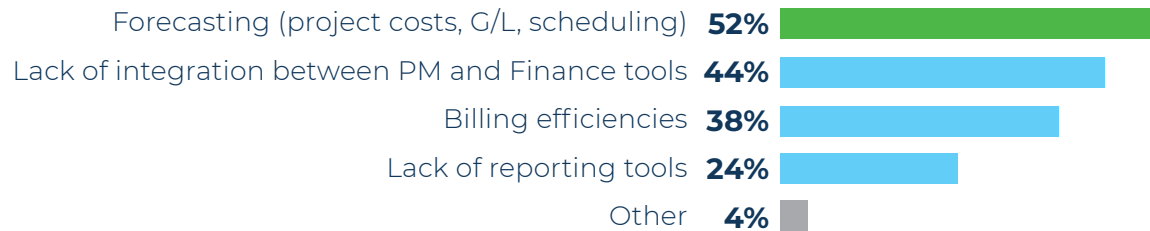
- Business has been good for AEC firms for the better part of a decade, and 2022 was no exception. Optimism remains high over the next 12 months, as more than half of surveyed firms expect to be highly profitable in the next year. That share is even larger among tech-forward firms.

Projected Profit Rate Over the Next 12 Months



*excludes "Don't Know" responses

Biggest Financial Challenges for Company (Select all that apply)



- As it did in last year's survey, forecasting tops the list of financial challenges among AEC firms, with 52% listing it as their number one issue. A lack of integration between project management and finance tools is next on the list, followed by billing efficiencies, an issue that wasn't among the top three challenges last year. Firms that excel at forecasting give themselves a big edge over those that don't, as they are likelier to make better decisions on a wide range of fronts, from predicting project costs to staffing to the growth goals they set for themselves.
- As for the integration issue, this lack of connectivity between PM and finance tools likely explains at least in part the next challenge on the list: billing efficiencies (or deficiencies). Having a clear line of site from project schedules and budgets to actuals gives

PMs and accounting staff the ability to bill faster and more efficiently.

- Most AEC firms report their DSO/AR Turnover falls in the 30-45 day range. Investing in ways to streamline your cash flow can decrease time-to-cash and enable you to inject those dollars back into the business-fostering growth.



INSPIRED INSIGHTS

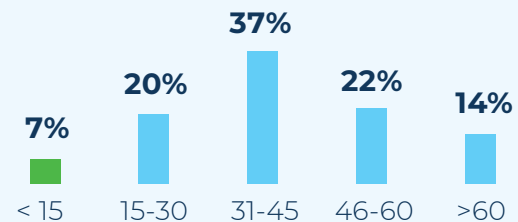
Automated Invoicing Accelerates DSO

Automating and streamlining customer-facing and back-end billing processes can make a world of difference for AEC firms, especially those that today rely on manual, time-consuming processes. Automating invoicing with email delivery, enhanced invoice tracking, automated payment reminders and online payment options shrinks DSO/AR Turnover substantially.

As industries flock to automated, online payment options, AEC firms that continue to rely on manual, paper check-driven processes open themselves up to undue liabilities associated with fraud. This also makes them more expensive to do business with. In contrast, firms that adopt more tech-forward options for payment processing reap the benefits of being easier to do business with, posting automation and brand relevance.

Ultimately, shrinking DSO and improving cash flow can have a huge positive impact on how a firm invests in talent, the client experience it provides, and its own strategic growth initiatives.

Days Sales Outstanding (DSO)/AR Turnover*



*excludes "Don't Know" responses

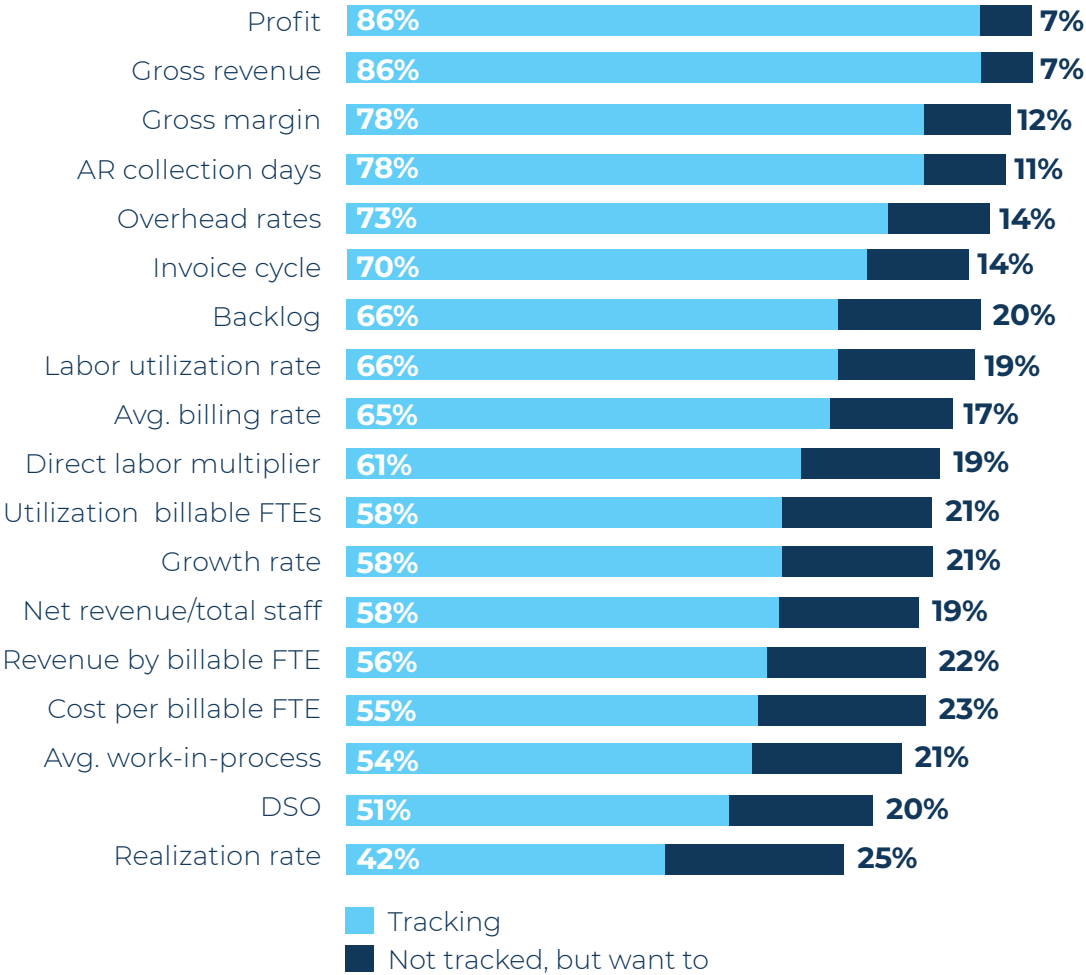
Metrics that Matter

How are AEC firms measuring themselves? Profit, gross revenue, gross margin, AR collection days and overhead remain the most tracked metrics. Meanwhile, more firms are tracking backlog, labor utilization and growth rate in 2022 compared to 2021.

As for metrics that firms wish they tracked but aren't currently:

- Realization rate (25%) provides a better understanding of what their actual or effective bill rates are on fixed-price jobs.
- Cost per billable FTE (23%) helps them understand fully burdened job cost and get a better handle on true profitability.
- Revenue by billable FTE (22%) provides insight into how people are producing and performing.
- Utilization by billable FTE (21%) shows firms how effectively they're managing resources.
- Growth rate (21%) offers insight into firm trajectory.

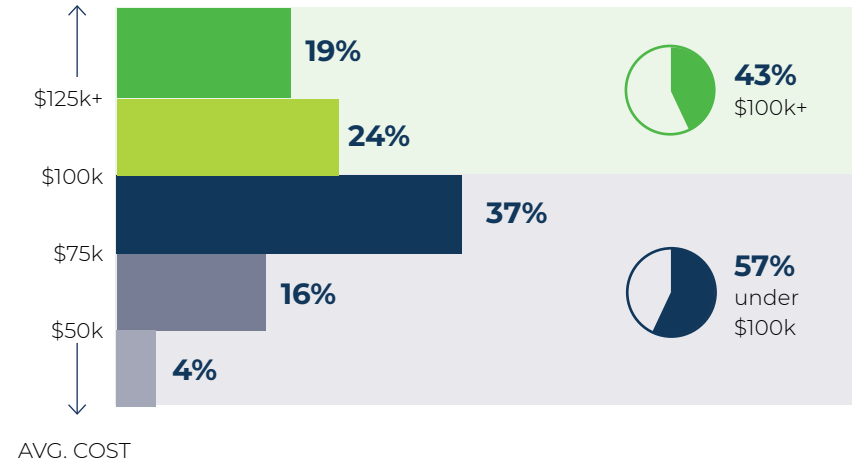
Financial and Operational Metrics (Select all that apply)



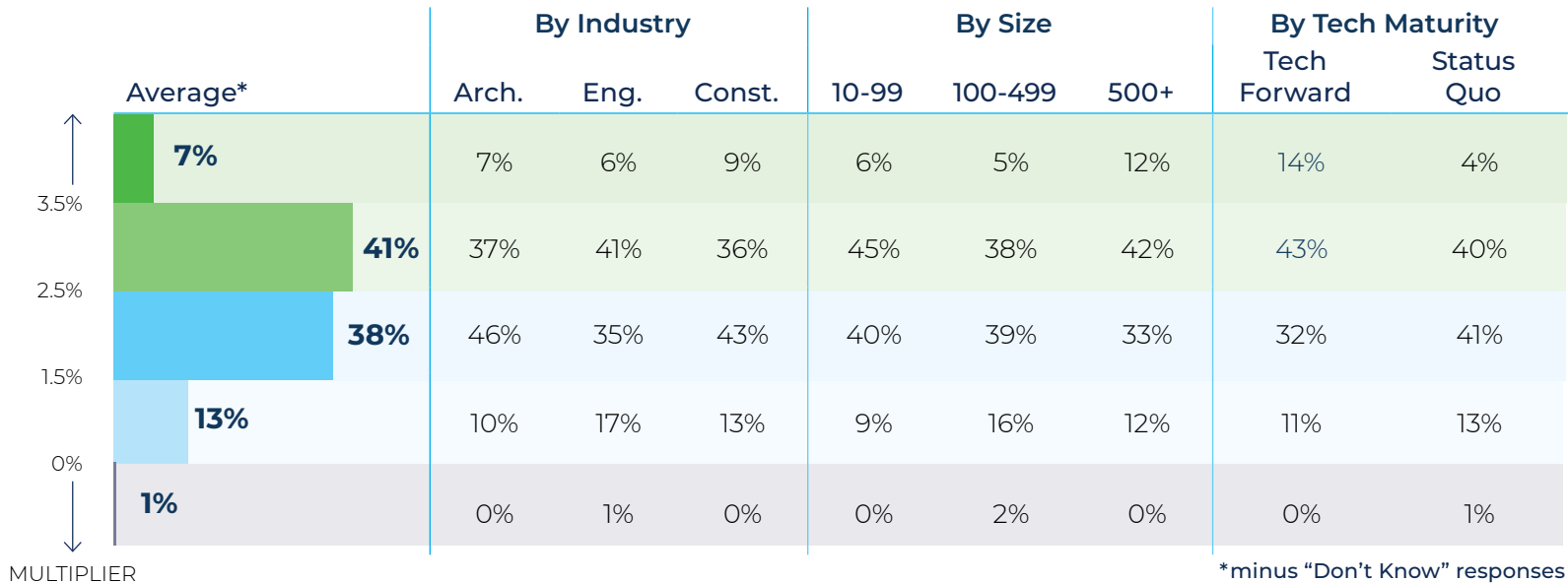
Direct labor multiplier is a valuable mechanism for measuring and predicting profitability and growth. A multiplier in the 2.5 to 3.0 range is about average across the AEC industry. Tech-forward firms are more likely to hit above 3.5 and less likely to fall below 2.5.

Average total employee cost is on the rise. A sizable portion of firms expect average employee cost to exceed \$100,000 in the year ahead. Inflation is indeed a real phenomenon that AEC firms must manage.

Average Total Employee Cost Over the Next 12 Months



Direct Labor Multiplier Over the Past 12 Months



Accounting System Checklist

Excelling in today's AEC business takes an accounting system that provides:

- ❑ **GAAP compliance.** A financial system should adhere to the principles of GAAP. While not a requirement for most private companies, if you decide to sell your business, GAAP statements are a must.
- ❑ **Project accounting.** Seamlessly recording project costs and revenues ensures your financials and project positions are always in sync.
- ❑ **Real-time reporting.** Your accounting system should give you the bottom line in real-time, without having to wait for batch processing due to outdated technology.
- ❑ **Financial insights and trends,** readily accessible via easy-to-use, interactive analytic dashboards and reports.
- ❑ **A detailed, reliable audit trail** across accounting, labor and expense transactions.
- ❑ **Flexible, scalable rate structures** for project billing, job costing, payroll and accounting for indirect rates.
- ❑ **Multi-company/multi-currency options.** An accounting solution should scale as you grow, whether that's domestically or in foreign markets.

Execute Projects Successfully



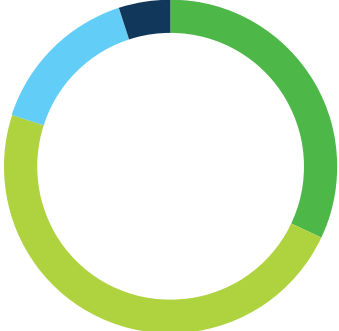
Execute Projects Successfully

A deep dive into the survey data reveals how AEC firms are monitoring and managing projects, how much visibility they have into their in-progress projects, and the metrics they're using (or wish they were using) to track project outcomes. Plus, a checklist to gauge the quality of your firm's project management system.

Key Takeaways

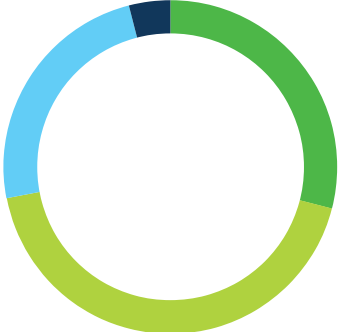
- Firms with mature project-management and resource-management processes tend to outperform their peers in a range of key areas. Likewise, visibility into project performance throughout the lifecycle of the project is paramount to ongoing success. Here in this reporting period, however, only about one-third of firms consider their project-management and resource-management processes very mature. Among tech-forward firms, about half consider their project-management and resource-management processes very mature, significantly outpacing their tech-static counterparts.
- To understand just how much room for improvement there is in project- and resource-management, consider that more than one-third of AEC firms indicated they don't know if their projects are completing on-time and on-budget. There's a ready-made competitive advantage for the two-thirds of firms that don't have this glaring blind spot.

Project Management Maturity



Very mature	32%
Somewhat mature	48%
Somewhat immature	15%
Immature	5%

Resource Management Maturity

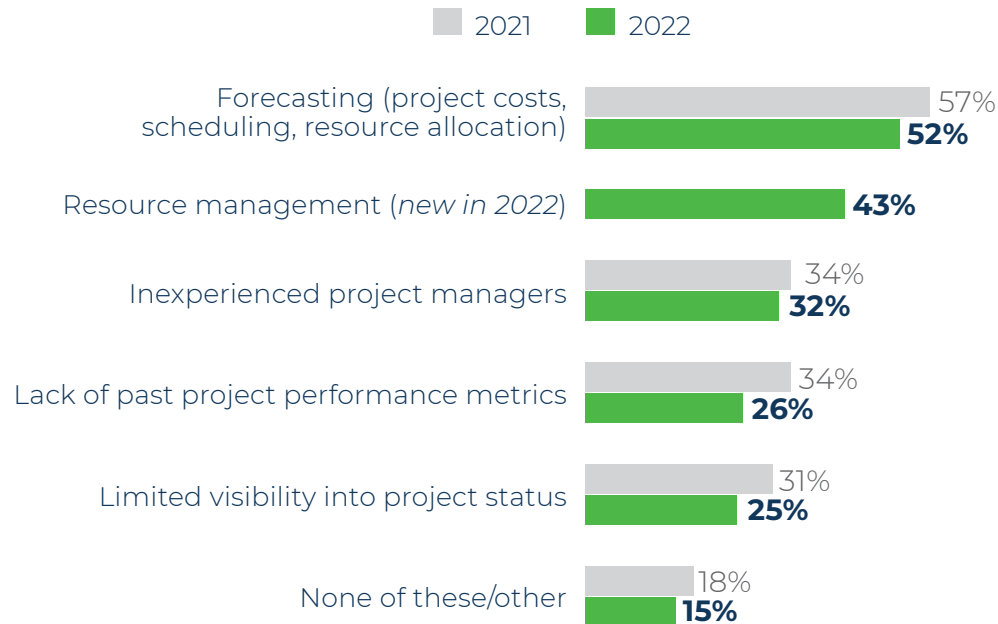


Very mature	29%
Somewhat mature	43%
Somewhat immature	24%
Immature	4%

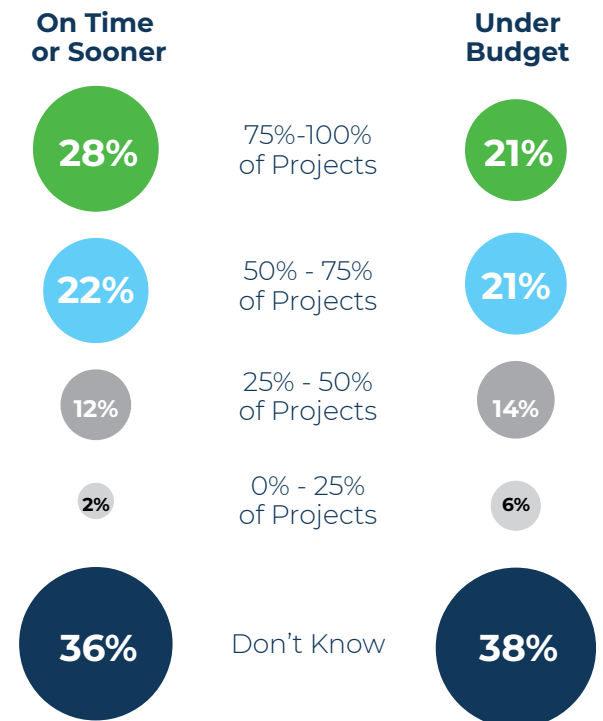
- Forecasting project costs, schedules and resources continues to challenge AEC firms, 52% of which report this as their biggest project management challenge. Resource management is second on the list of biggest project management challenges, named by 43% of firms.

- While there was slight improvement in firms' visibility into project status from a year ago, the fact that 25% of firms report this as a challenge suggests that a lot of firms lack the timely insight they need to manage projects more efficiently and profitably.

Biggest Project Management Challenges (Select all that apply)



Percent of Projects Reported On Time or Sooner and Under Budget





INSPIRED INSIGHTS

The Agile Project Management Advantage

Facing stiffer competition for projects and escalating pressure on the financial bottom line, AEC firms are responding by adopting proven project management approaches from other industries.

Agile project management mitigates risks related to schedule, quality of deliverables, etc., and delivers consistent value via a flexible, iterative approach. Applied to AEC projects, agile project management involves:



Working solutions via an iterative planning approach that segments projects into shorter “sprints,” so teams have more latitude to quickly adjust to changes with minimal impact on cost and schedule.



Delivery of work product/value throughout various execution stages of a project, with quality verification and testing occurring as deliverables are produced.



Anticipating change, emphasizing flexibility. Agile project management readily accommodates changes on the fly, so stakeholders stay alert and ahead.



Constant collaboration instead of perpetual negotiation.

An agile approach means inviting feedback early and regularly from stakeholders, and engaging customers in decision-making and discussions throughout project execution.



Individuals and interactions over processes and tools.

Agile project management places a large value on the execution teams (people) that often are cross-functional, multidisciplinary and responsible for planning and executing their own work.

Metrics that Matter

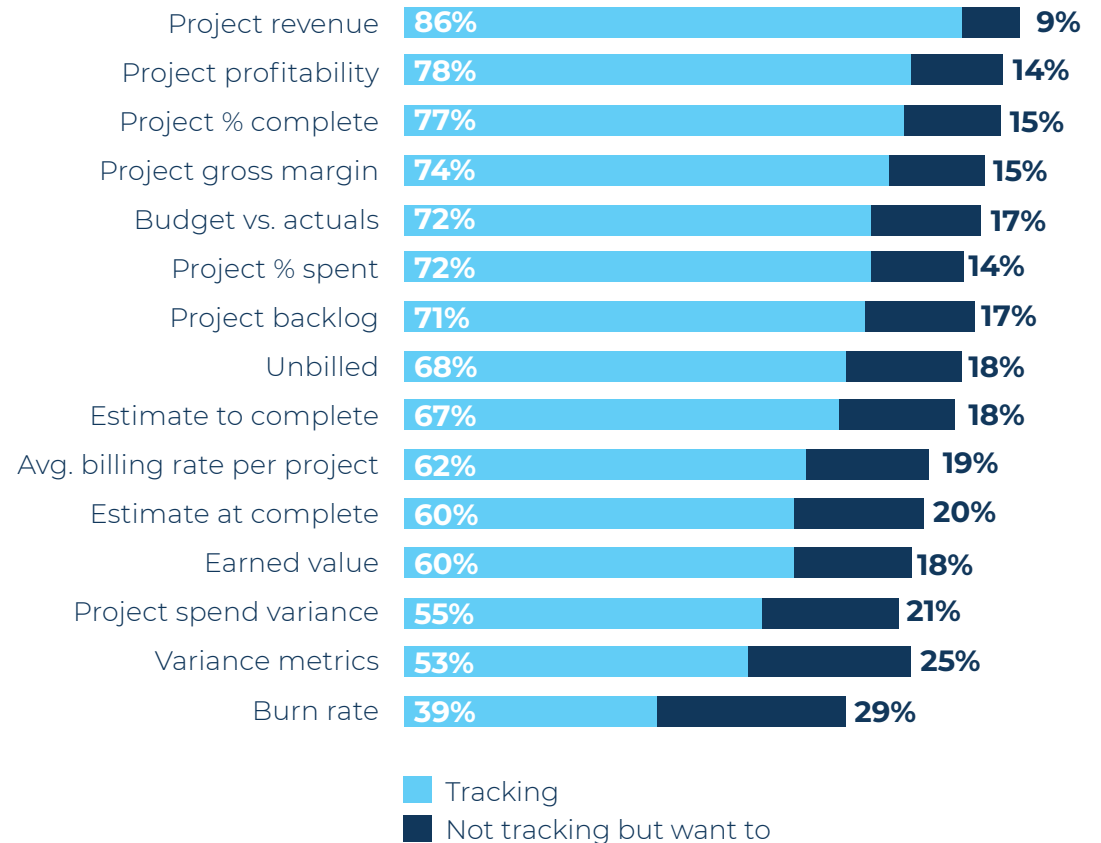
We know that more than one-third of AEC firms are flying blind, without insight into whether their projects are finishing on-time and on-budget. However, for firms with these insights, 50% report that their projects are on-time more often than not and 42% report their projects are on-budget (or below budget) more often than they run over budget.

Three metrics are sought after by 90% or more of firms: project revenue, project percent complete and project profitability.

Among the metrics firms want to track but currently aren't:

- Burn rate, an indicator of how quickly a firm can get work done, tops the list (29%).
- Variance metrics are next (25%). This shows how a project is tracking against the contract, budget or schedule.
- Other metrics firms wish they tracked, like project spend variance, earned value, estimate at complete, estimate to complete and earned value, help firms understand how they're doing on a specific project and

Project Metrics Tracking

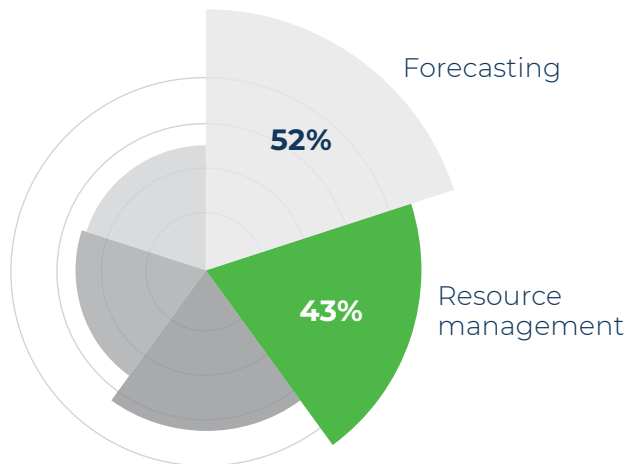


the extent to which a project is trending toward on-budget/on-time. These metrics can also raise red flags about potential issues, allowing a project team to address them before they occur.

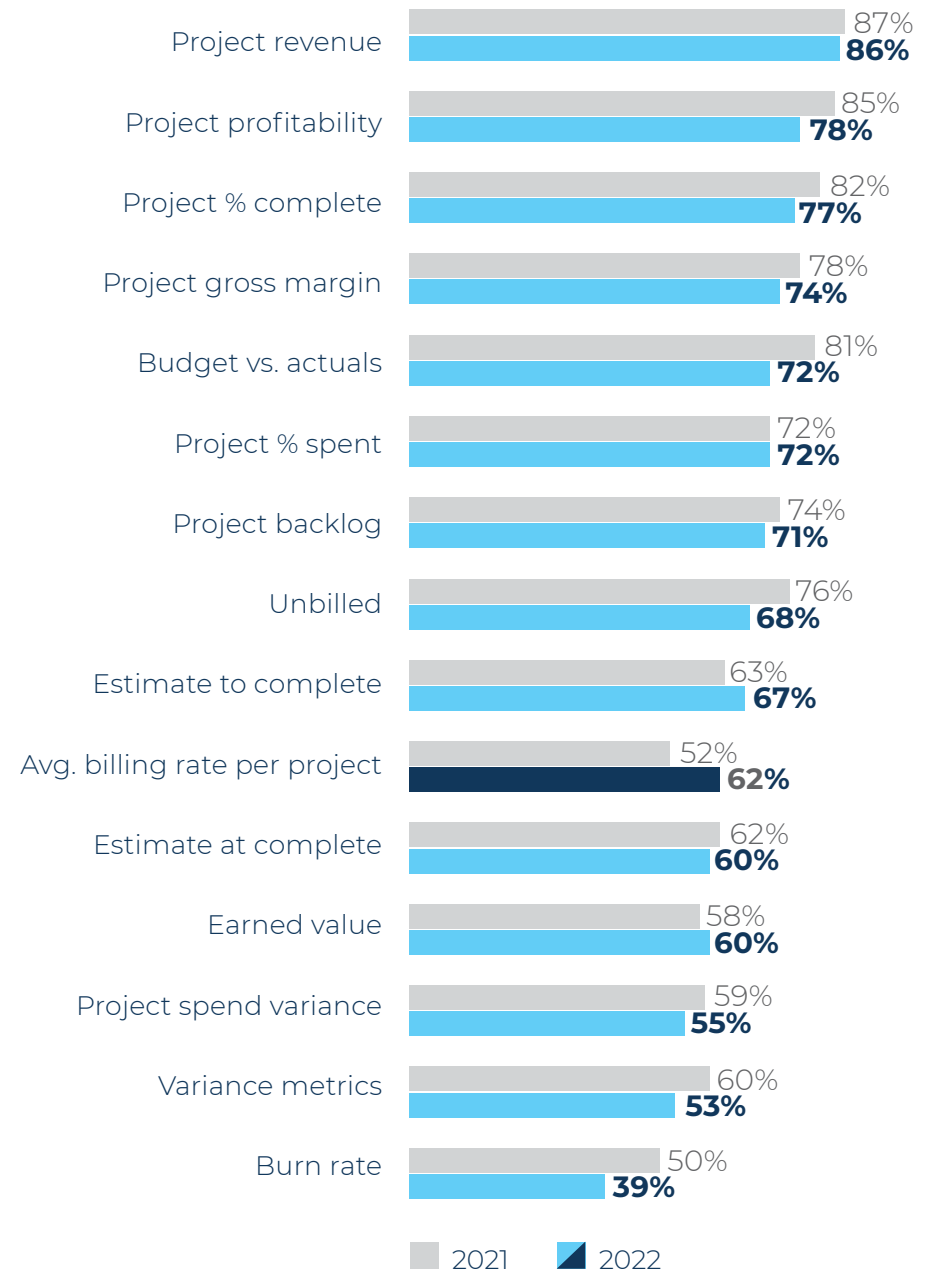
Average billing rate per project was the metric that gained the most from the last reporting period in terms of percentage of firms tracking. Clearly, firms want to better understand what they can bill amid downward pressure on bill rates and rising employee costs.

Those rising employee costs are evidence of the fierce competition in hiring and retention. With this trend in mind, we added resource management to our list of project management challenges and — no surprise — it debuted at number two. As such, we expect to see greater emphasis placed on tracking metrics that provide insights into a firm's bench strength in relation to their current and forecasted projects.

Biggest Project Management Challenges



Project Metrics Tracking Compared to Last Year



Project Management System Checklist

How consistently a firm brings its projects to the finish line on-time and on-budget, with win-win outcomes for client and firm alike, depends not only on how well project managers do their jobs, but also on the tools a firm provides PMs to help them do their jobs better. Those tools should enable PMs to:

- ❑ **Estimate opportunity win value** and probability to improve company forecasting.
- ❑ **Establish project controls** for accurate time, expense and billing.
- ❑ **Access project planning and insights** for more agile project management.
- ❑ **Easily capture metrics** such as estimate-to-complete, estimate-at-complete, and project-percent-complete for improved earned value management and better project forecasting.
- ❑ **Access real-time, interactive reporting** and analytics to ensure projects are trending towards being on-time and under-budget.
- ❑ **Intuitively forecast** and manage resources for optimized planning.
- ❑ **Capture and report** out fully burdened project costs with ease and flexibility.
- ❑ **Gain key insights** from past project performance data to improve future pursuits.

Capturing Your Market



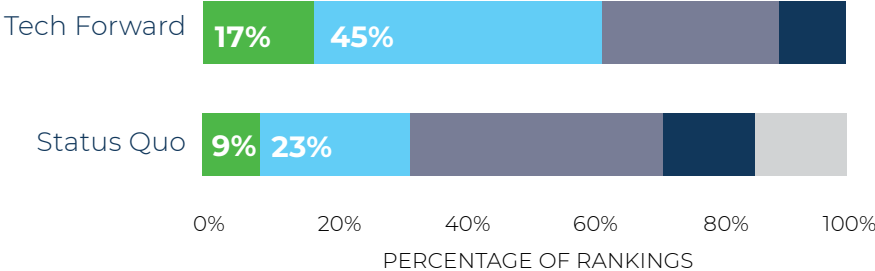
Capturing Your Market

An in-depth analysis of business development data and tactics highlights how AEC firms are faring in terms of key metrics like win rate and capture rate, the importance of measuring capture rate, the biggest business development challenges firms face, and why tech-forward firms are winning more business than tech-static firms. Plus, a checklist at the end of the section to determine if your firm has the customer relationship management capabilities it needs to win more business.

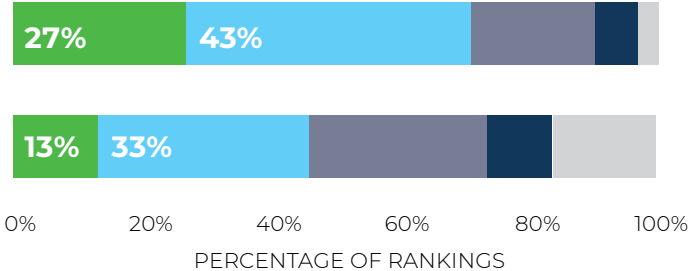
Key Takeaways

- Firms appear to be winning projects at a strong rate - particularly tech-forward firms. As AEC firms fine tune their pursuit strategy with a modern tech-forward approach, the dividends are self evident, especially in the projected year ahead.

Actual Proposal Win Rate, Past 12 Months



Projected Proposal Win Rate, Next 12 Months



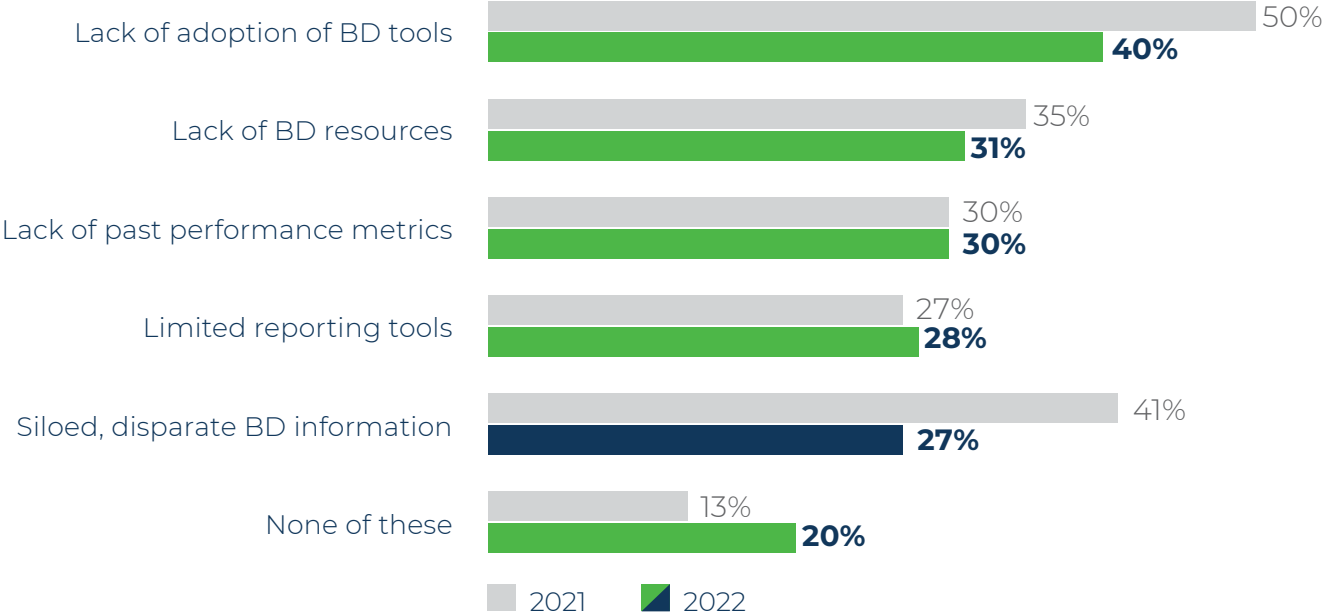
■ 76% - 100% won
 ■ 50% - 75% won
 ■ 25% - 50% won
 ■ 0% - 25% won
 ■ Don't know

- With so much economic uncertainty and so much more new business likely up for grabs as a result of the federal infrastructure package and other sources, now is the time to put a finer point on business development processes, so instead of capturing just any new business, firms capture the right new business.
- A lack of adoption of business development tools tops the list of biggest business development challenges firms face here in this reporting period (it was named by 40% of firms), followed by a lack of BD resources (31%) and a lack of past performance metrics (30%). One

area where we see significant progress is in the area of siloed, disparate business development information, a challenge that significantly fewer firms said they are dealing with this year compared to last.

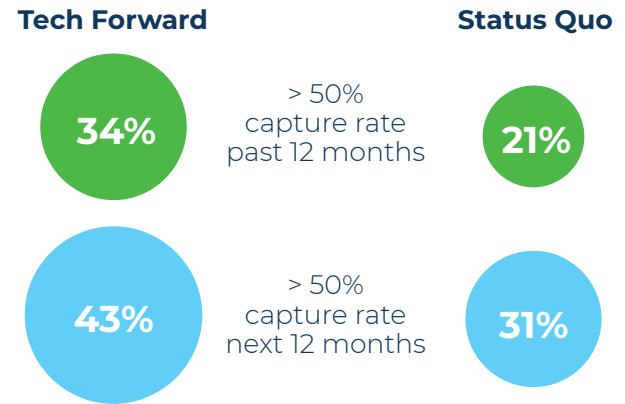
- Here’s another area where tech-forward firms are surpassing their tech-static peers: 17% land in the top quartile for proposal win rate in the last 12 months compared to 9% of tech-static firms. Looking a year into the future, more than one-quarter of tech-forward firms project a win rate exceeding 75% in the next 12 months, compared to 13% of tech-static firms.

Biggest Business Development Challenges Compared to 2021
(Select all that apply)

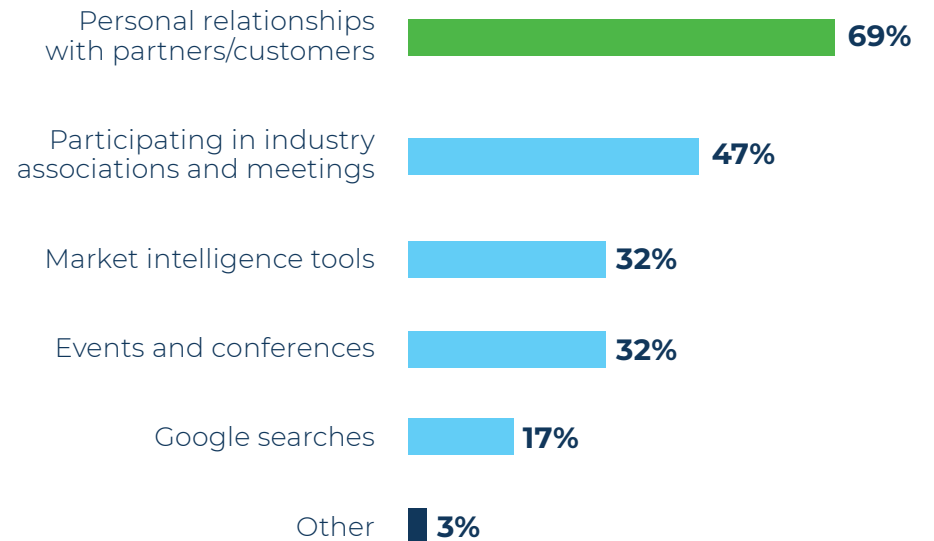


- A vast majority (92%) of AEC firms actually know their win rate. But a smaller share are tracking a metric that could well provide a better indication of business sustainability. That metric is capture rate, and today it is tracked by just 58% of firms. A slightly higher portion of tech-forward firms (60%) track capture rate. Among tech-forward firms, 34% report a capture rate higher than 50%, compared to 21% of tech-static firms. Check out Inspired Insights on [page 40](#) for more about capture rate and why it's worth tracking.
- How are AEC firms uncovering new business opportunities? They rely most heavily on partners and customers. Just 32% use market intelligence tools, which suggests these could be an untapped resource for generating new opportunities.
- In the project pursuits area, about as many firms have a formal go/no-go process as have an informal “go on gut instinct and experience” go/no-go process. But, it's worth considering what happens if the people with the best instincts and deepest experience leave the firm.

Actual and Projected Capture Rate



Approaches Used to Find New Opportunities (Select two)





INSPIRED INSIGHTS

Why Capture Rate Could Be Your Best BD Metric

For some firms, a win is a win. But the most successful, consistently high-performing firms don't settle for just any new business. They strive to *win the right business* — projects that are most profitable, generate the most revenue, stand the best chance of a positive outcome and that project teams find most desirable. In short, projects that fall into a firm's sweet spot.

Capture rate is a metric that helps firms zero in on their sweet spot. Think of capture rate as a weighted win rate, where you're not just counting wins, you're capturing the dollar value of those wins. In simple terms, it's the total dollar value of the projects a firm wins as a percentage of the total value of the projects on which a firm bids.

Capture rate highlights the important distinction between winning one \$1 million dollar job versus 10 \$10,000 jobs. Having more wins and a high win rate is nice, but it can be skewed by cherry-picking, for example. Firms that focus more on capture rate are likelier to find more of the "sweet spot" projects that will sustain them (and engage their employees) over the long haul.

Our advice: Pay attention to win rate, but prioritize tracking capture rate.

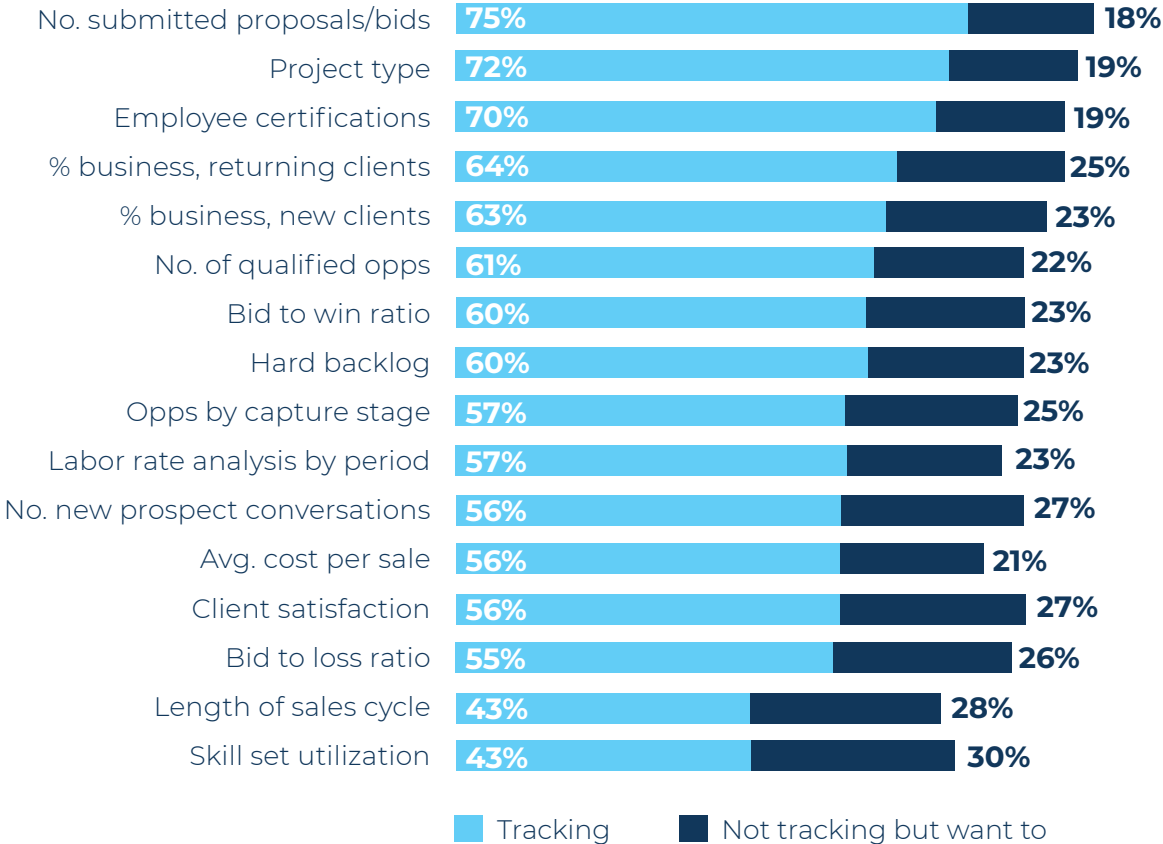
Metrics that Matter

Among the sales and pipeline metrics that firms track, employee certifications jumped into the top five most tracked, as did the source of business (existing or new clients).

As for the metrics that firms said they want to track but aren't currently:

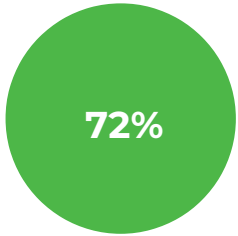
- Skill-set utilization (30% indicated they wished they were tracking) helps a firm determine if it has the right people on the right projects, and the extent to which its bench can support its pipeline.
- Length of the sales cycle (28%) tells firms how long it takes to get new business through the door, which impacts forecast accuracy and the backlog picture
- Client satisfaction (27%) reveals much about a firm's client experience — where it's strong and where it needs improving. As much weight as clients put on having a positive project experience with their AEC firm, expect this metric to gain prominence in coming years.

Sales and Pipeline Metrics Tracking



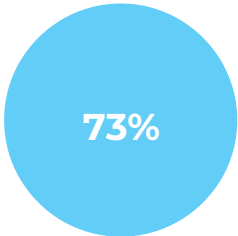
Client Satisfaction

Tech Forward

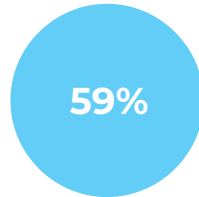


Tracking
Client
Satisfaction

Status Quo



Tracking
% Business,
return clients



INSPIRED INSIGHTS

Why CX Could Be Your Competitive X Factor

Client experience is the too-often-overlooked art and science of proactively measuring client satisfaction. Instead of asking clients to tell you how you could have done better after the fact, when the damage from a bad experience is already done, firms that closely monitor client experience can identify and act upon shortcomings earlier, before minor issues escalate into full-blown problems.

Our advice: Survey early and often throughout a project, and closely manage the client experience your firm provides. CX can be a genuine competitive differentiator, and this is how delighted repeat customers are made.



CRM System Checklist

A top-notch CRM (customer relationship management) system could give your firm a real edge in cultivating new clients, and sustaining strong, lasting client relationships. Look for a CRM system that provides:

- ❑ **Seamless, bi-directional integration** with your project-based ERP and other critical business tools like Outlook, BambooHR, Constant Contact etc.
- ❑ **Optimized workflows**, task assignment, easy visualization of opportunities by stage and automated notifications.
- ❑ **Real-time, interactive data** and metrics to guide business decisions, with easy-to-use reporting and analytics.
- ❑ **Tools to track key project performance** (current and historical) to inform analytics and priority pursuits.
- ❑ **Resource planning** for both active and TBD resources.
- ❑ **Forecasting that reacts** to updated win probability as opportunities move through the funnel.
- ❑ **One-click record updates** from opportunity to executable projects.
- ❑ **Cloud-based, mobile-enabled** capabilities for secure on-the-go access to all your data.
- ❑ **Key insights** from past project performance data to improve in-process pursuits.

Afterward

A Big Thank You!

We owe a huge debt of gratitude to the AEC executives who took time out of their busy schedules to share their insights and data. Thank you for being so forthcoming and thoughtful about the practices, successes, and challenges facing your firms. It led to findings that we believe will be invaluable in helping guide the AEC industry and helping the firms that comprise it raise their games.

Here at Unanet, the AEC industry has always inspired us to reach for greater heights. Your design, attention to detail, and vision make our world a better place. It is our hope that this report serves as a go-to source of benchmarking, insight, and inspiration as we all strive to do better for our clients, employees, communities and our own bottom lines.

About Unanet

Unanet is a leading provider of project-based ERP and CRM solutions purpose-built for architecture, engineering and construction firms, professional services firms, and government contractors. More than 3,400 project-driven organizations depend on Unanet to turn their information into actionable insights, drive better decision-making, and accelerate business growth—all backed by award-winning support delivered by a people-focused, forward-thinking team for whom the success of your projects, people, and financials is paramount. www.unanet.com

Contacting Us

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The logo for the AEC Inspire Report. It features the letters 'AEC' in a white box above the word 'INSPIRE' in a large, bold, white font. Below 'INSPIRE' is the word 'REPORT' in a smaller, white font. The text is set against a dark blue background with a white grid pattern.

AEC INSPIRE REPORT

Unanet used information gathered from the AEC industry survey participants referenced in the “Respondents” section of the 2022-2023 *AEC Inspire Report*. While the information provided to us was independently sourced, vetted and compiled, we have relied exclusively on the 2022-2023 AEC Inspire survey participants for the accuracy and completeness of the data. No survey can be guaranteed to be 100% accurate, and errors may occur. Unanet does not guarantee the completeness or the accuracy of the data submitted by AEC Inspire survey participants and thus does not accept responsibility for your reliance on this report or any of the information contained herein. The information contained in the 2022-2023 *AEC Inspire Report* includes estimations, approximations, and assumptions and is not intended to be legal, accounting, or tax advice. Please consult a lawyer, accountant, or tax advisor before relying on any information contained in this report. Unanet disclaims any liability associated with your reliance on any information contained herein.