

Deltek.

Clarity: Architecture & Engineering Industry Study

44th Annual Comprehensive Report

In collaboration with:



+



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INTRO

After a banner financial year, Architecture and Engineering (A&E) firms continue to see strong performance despite increasing costs. While financial performance and pipelines are strong, firms still face challenges developing staff.

The 2023 outlook remains positive but growth is expected to moderate from 2022 highs with The American Institute of Architects forecasting construction spending growth at just under 6%.¹ The engineering industry outlook is also bullish with American Consulting Engineers Council reporting that optimism remains extremely high across all market sectors and within all geographic regions.²

But continued growth is not without its challenges. Pipelines are strong but firms are faced with increased labor costs, staffing shortages, and inflationary pressures on project delivery efforts. Rising compensation demands and stiff competition for talent are causing businesses to shift their focus from new candidate attraction to staff retention, development and succession planning. Improving employee experience, expanding access to career development plans, and the introduction of Diversity, Equity and Inclusion (DE&I) initiatives are among the top human resource challenges.

With strained resources, firms will need to think more strategically about the projects they tackle. What are the criteria to determine the viability of a new project? Do they have enough staff with the right skills to manage projects won? Will shortlisted opportunities be profitable and/or conducive to achieving firm goals?

The need for efficient project management (PM) tools and procedures will continue to intensify. However, as many businesses narrowed their focus and pursuits, an unfortunate decrease in investment, advocacy and usage of supporting technologies like Human Capital Management (HCM) solutions was seen. With continued growth on the horizon, the need for additional investment is clear. Firms of all sizes prioritized creating a strategic plan for implementing technology as a top initiative in helping address their challenges and provide a competitive advantage in the coming years.

10.2% Net revenue growth forecast, down from 17.6% high

13.7% Employee turnover levels remained consistent year-over-year

18.4% Significant increase in Operating Profit on Net Revenue, up 5.6 ppts year-over-year



ABOUT THE STUDY

For the last 44 years, Deltek has conducted an annual survey of firms in the Architecture & Engineering industry to identify benchmarks on key performance indicators, gain perspective on current market conditions and better understand industry trends.



Methodology

The online survey was developed in partnership with CMG Consulting and conducted between January and March 2023, with financial metrics captured covering the 2022 fiscal year. The 44th Annual Deltek Clarity Architecture & Engineering Study includes data from a variety of firms from all sizes and regions across the United States and Canada.

Firm Type

The umbrella term of Architecture and Engineering (A&E) refers to all architecture, engineering and allied firms included in the Study. Three broad categories are broken out for a more in-depth analysis:

- Architecture (A) or Architecture/Engineering (A/E) firms are either pure architectural design firms or architecture-dominant firms that also provide engineering services. A/E firms are also known in the industry as “big A, little E” firms. In this report, 37% of participants were in the A or A/E category.
- Engineering (E) or Engineering/Architecture (E/A) firms are either pure consulting engineering firms or engineering-dominant firms that also provide architectural services. E/A firms are also known in the industry as “big E, little A” firms. In this report, 55% of participants were in the E or E/A category.
- “Other” refers to the companies in the industry that do not fit into either category based on the traditional definition but are critical to the delivery of projects. Such firms might include environmental science, fire protection, surveying or others operating within the industry. This year, 9% of the Study’s respondents were placed into this category.

Firm Size and Region

The size of participating firms was diverse when measured by the number of employees. Deltek defines small, medium and large firms in the following way:

- Small: 0-50 employees (37% of participants)
- Medium: 51-250 employees (46% of participants)
- Large: 251+ employees (17% of participants)

Participating firms have headquarters in the United States or Canada.

The geographical distribution of firms follows:

- **United States 93%**
 - West 29%
 - Midwest 27%
 - South 17%
 - Northeast 15%
 - Washington D.C., Maryland, Virginia 5%
- **Canada 7%**

High Performers

Each year, Deltek breaks out a group of high performers for additional analysis. High-performing firms are defined as those achieving a net labor multiplier of 3.0 or higher and an operating profit on net revenue of 15% or higher. This year, high performers represented 20% of all Study participants.

A total of 583 firms took part in this year’s Study, representing a broad cross-section of businesses within the Architecture and Engineering industry in North America.

EXECUTIVE SUMMARY

Firms experienced a banner financial year despite shifting market conditions and steadily rising labor costs. Revenue KPIs outpaced cost increases and helped firms reach 10-year performance highs, yet firms show concern about continued profitability at current levels.

Firms reported record-gains in operating profits on net revenue, driven by positive returns on strategic investments made as market conditions were most favorable. Despite these gains, workforce challenges may be forcing firms to be more selective in the projects they pursue. According to ACEC³ about half of firms have turned down work due to workforce shortages, forcing them to focus their efforts on what's most profitable.

Performance against key project management metrics improved versus 2021, helping firms manage and execute more projects on time and on/under budget. Yet investment in project management Centers of Excellence have stalled while businesses struggle with skill shortages and work to close expertise gaps in project management and project execution functions.

- As growth forecasts outpace firms' capacity to deliver, firms have a greater focus on pursuit strategies to ensure they are going after the right projects.
- Firms are investing more time and effort into cross-training, upskilling and engaging staff to mitigate attrition and avert future labor challenges.

- Revenue KPIs outpaced rising inflation and labor costs as firms demonstrated the ability to drive efficiency and productivity while translating labor costs into outsized revenue growth.
- Recognizing the economic tailwinds they were enjoying in 2022, firms borrowed strategically to invest in new assets to capture additional efficiencies while facilitating near-term growth.
- Technology is having the biggest impact on project management and financial management. Demonstrating the value of installed solutions to staff will be a critical step towards improving KPI performance, accurately tracking resources and modernizing workforce capacity planning processes.
- Firms have become more creative in supporting and training their PMs, but still face increasing difficulty in alleviating administrative responsibilities while taking full advantage of technology to improve project visibility and management.



Technology Trends

Firms are focused on strategic technology plans, cybersecurity and business process improvement to help reach digital maturity and combat challenges of rising costs and talent management.

Firms express a desire to undertake more strategic technological improvements in high-impact operational areas such as project management and financial management, yet an increase in businesses' reliance on manual data entry over the year prior signals a disconnect between strategic goals and implementation or an appetite to truly tackle the issues in the year.

Nonetheless, firms continue to self-report digital maturation and advancement overall, bringing more operations in-house and empowering staff to champion key technologies.

53%

see project management as a key area of investment in the next 12 months

Data and cybersecurity outpace all other IT operations challenges. In a game-changing move, firms begin offering revenue generating technology services.



ADDRESSING TOP TECHNOLOGY CHALLENGES

1 Cost of technology

Rising costs are a key pain point; to improve efficiencies, firms should thoroughly examine their current technology to ensure alignment with strategic objectives and then prioritize solutions that maximize return on investment (ROI). For existing tech tools, firms should leverage internal champions to help drive adoption and impact across the organization, which can also help employee engagement and retention rates.

2 Prioritizing applicable trends

Project managers and staff that are pulled in too many directions can easily lose sight of valuable technology trends that can provide important competitive advantages. To achieve their strategic objectives and surpass client expectations, companies should combine their technology strengths with outside experts who can fill the technology gaps and provide effective guidance. At that point, shortlisted technology solutions can be integrated into project execution via tech-savvy employees, diminishing the need to recruit more specialized – and potentially more expensive – employees.

3 Educating employees about technology trends

It's not enough for firms to prioritize which technology trends are most applicable without full buy-in from the employees who are responsible for utilizing them. Comprehensive education across operational staff is essential to successful deployment – and maximizing the effect – of new technology solutions.

Transforming for the Future

A&E firms are continuing to evolve their use of technology, looking for ways to not only improve how they run their business, but leverage it as a competitive advantage. While firms may perceive themselves at different stages of digital transformation, the pace of technology change means the evolution never stops. With increased digital maturity and improved business application utilization in mind, firms are taking ambitious steps to leverage technology to fundamentally change how their businesses are run and the services offered to clients.

However, the cost of implementing technology can be a significant challenge for firms that lack the time and resources needed to make the necessary changes. In fact, technology costs are listed as the biggest barrier to emerging technology adoption, impacting more than half of firms surveyed.

To keep up with the pace of change, A&E firms should focus on enhancing their existing technology capabilities by ensuring they are leveraging their tech solutions to the fullest. Firms should also focus on upskilling existing staff on more than just technical training, but incorporating technology training as a key element of learning while leveraging more tech-savvy staff that can serve as champions of technologies.

Given the vast array of technology solutions, apps and platforms, it can be difficult to identify and prioritize which trends are the most critical to help the firm today and well into the future. It can also be challenging to gain sufficient manager and employee buy-in to learn and use the right technology tools consistently and effectively to really gain the benefit across the business. In the upcoming years, the A&E companies that can effectively overcome these difficulties and maintain a harmonious relationship between technology, project execution and company strategy will emerge as the most competitive.

High technology costs, questions regarding the applicability of tech trends and employee knowledge of tech trends inhibit technology adoption.



“Firms need to rethink – and ultimately redefine – what it means to be a CIO. It is a strategically critical role that needs to have the human, institutional and political capital to make decisions and affect change. This requires a commitment to investing both human and financial resources, and the tone needs to be set at the top.”

– **Daphne Bryant**, Executive Director, American Council of Engineering Companies

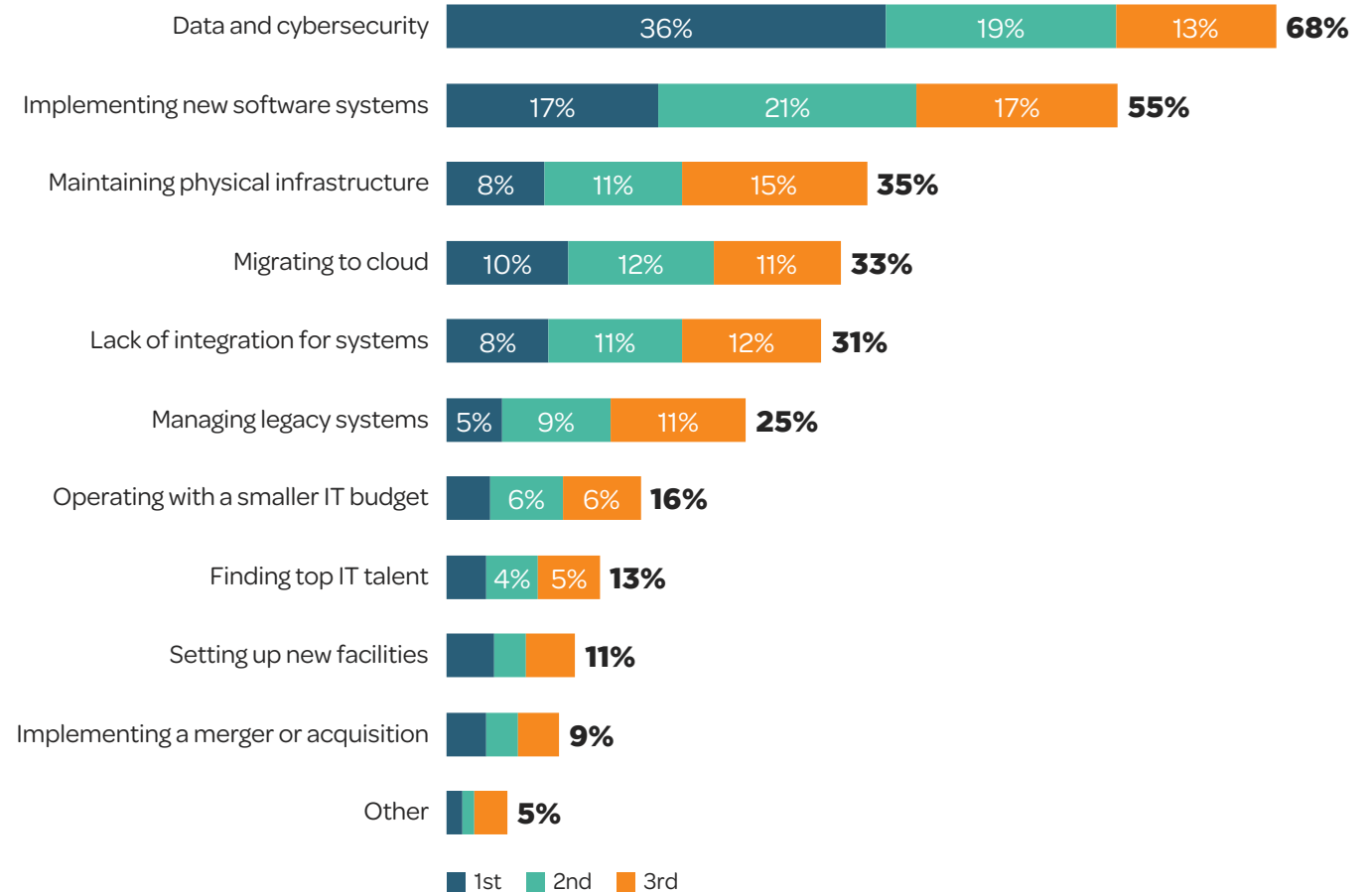
IT Operations Challenges

Cyberattacks are increasingly common worldwide and the A&E industry is no exception. In fact, 18% of participants indicated their business had been impacted by a cybersecurity threat or attack in the last 18 months.

More than two-thirds (68%) of A&E firms indicated that data and cybersecurity currently pose one of the top challenges for their IT operations, with 36% identifying it as the number one challenge for the coming year. While down slightly compared to the previous year, cyber safety continues to be the single greatest point of concern.

A majority of companies (55%) indicated their capacity to adopt new software systems is a top challenge, either because they want to implement new solutions to replace outdated legacy systems, strive to keep up with cutting-edge technology, or a little of both. While the motivation may vary, the result is the same across all firms: a growing need for a more cohesive and coordinated software strategy and a notable lack of the necessary in-house knowledge and resources to support them.

As it stands, 35% of firms face challenges maintaining their physical infrastructure. One third of firms (33%) are having difficulties migrating operations to the cloud, with similar representation expecting to struggle to manage legacy systems. In the near future, important choices must be made between the upkeep and maintenance of aging physical and digital properties, especially if businesses lack the budget to address both.

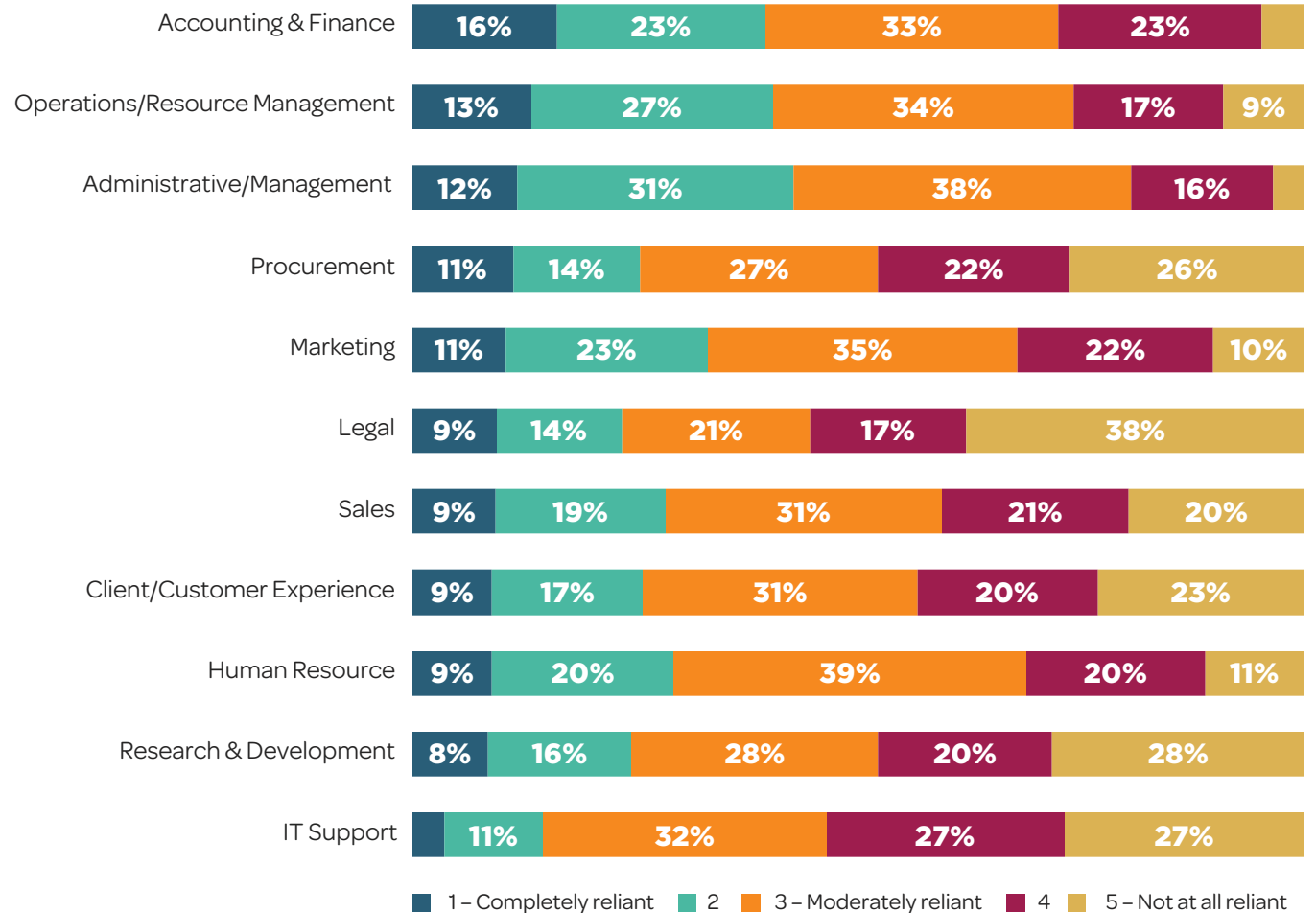


Reliance on Manual Data Entry

Recent shifts to remote data management may be a challenge for firms with a high reliance on manual data entry methods for key operational processes and business functions. Despite an abundance of technology solutions available that deliver significant operational benefits, firms still depended quite heavily on manual data entry in 2022.

Most firms (81%) are completely to moderately reliant on manual data entry for administrative and management functions, up five percentage points from last year. More than two-thirds (72%) of firms are completely to moderately reliant on manual data entry for accounting and finance, and (74%) are completely to moderately reliant on manual data entry for operations and resource management.

There are firms that may not have the necessary tools to digitally transform certain functions, while others may have the tools but are not taking advantage of the solutions they have by using them effectively. Taking a critical look at business processes today for inefficiency is the first critical step. Then firms can identify where there are opportunities to automate and streamline workflows with technology. A key factor is the people involved in the process and helping them understand the value of moving away from dated processes and systems to a process that may seem more challenging but can save the firm valuable time and money.

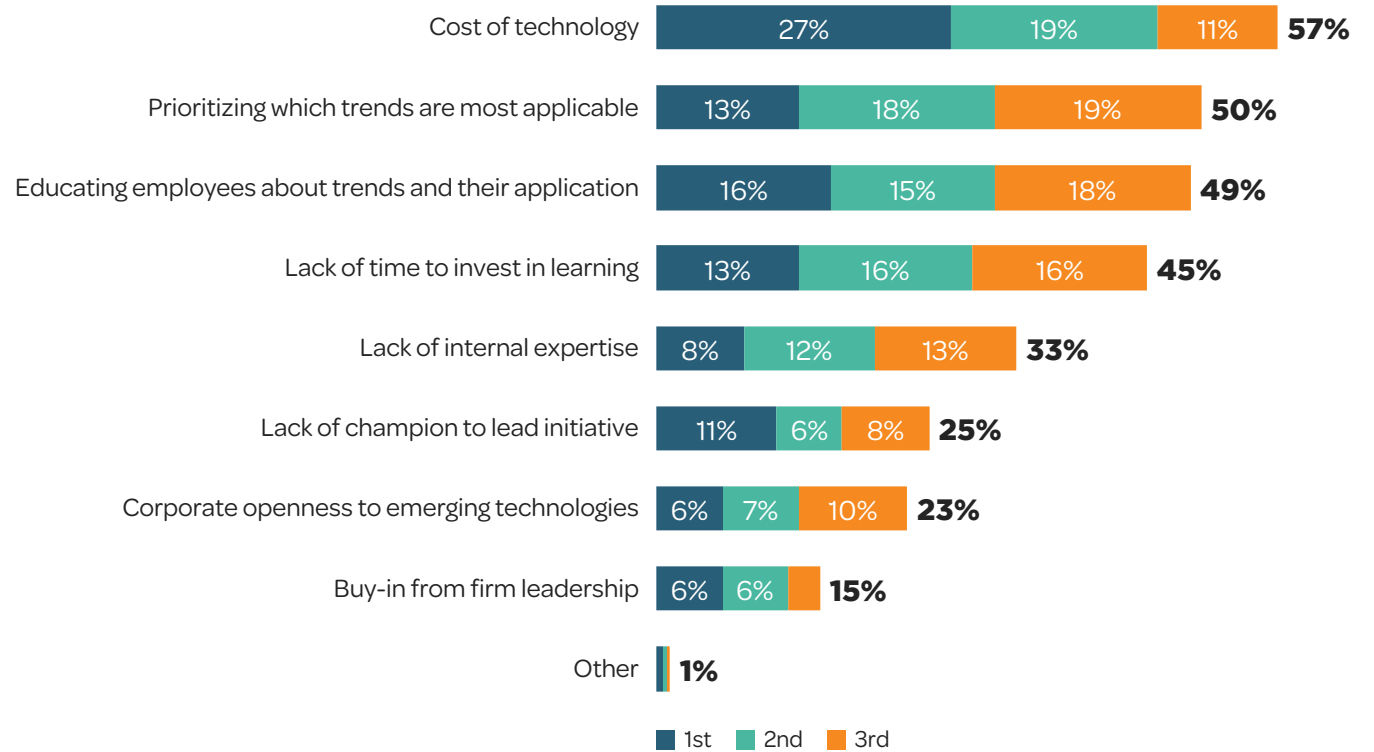


Top Technology Challenges

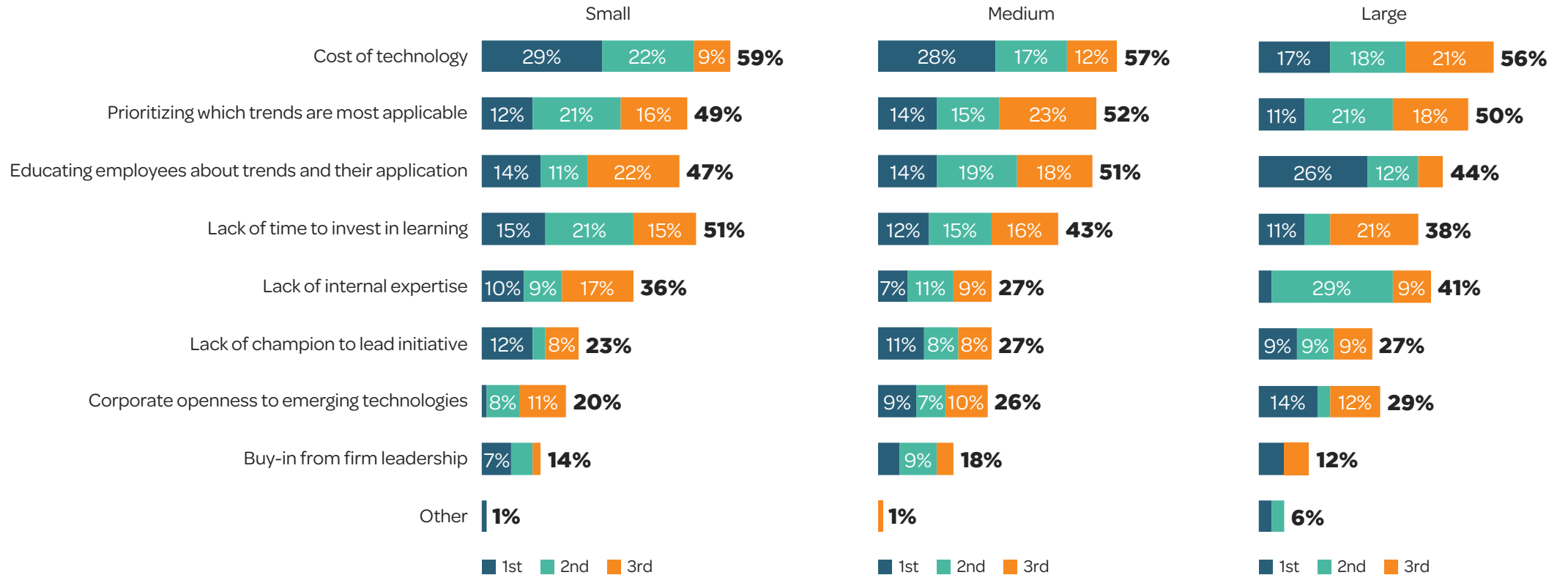
A&E firms have different views on the main obstacles they face when implementing emerging technologies, depending on their size. Yet there was one thing they all agreed on: the cost of technology, coming in as one of the top three challenges for more than half of respondents. Of those, small firms were the most concerned with the rising costs of technology, with 29% citing it as their number-one concern, rising three percentage points since the prior year.

Prioritizing which trends are most applicable to their firm ranked number two and was a comparatively equal challenge for companies of all sizes, though large and small firms expressed slightly more concern. It comes as little surprise, then, that educating employees about strategically-significant tech trends and their proper adoption came in as a close third challenge.

A fourth but significant barrier to technology adoption is lack of time to invest in learning, ranked high by small and medium-sized firms at 51% and 43%, respectively.



Top Technology Trend Challenges by Company Size

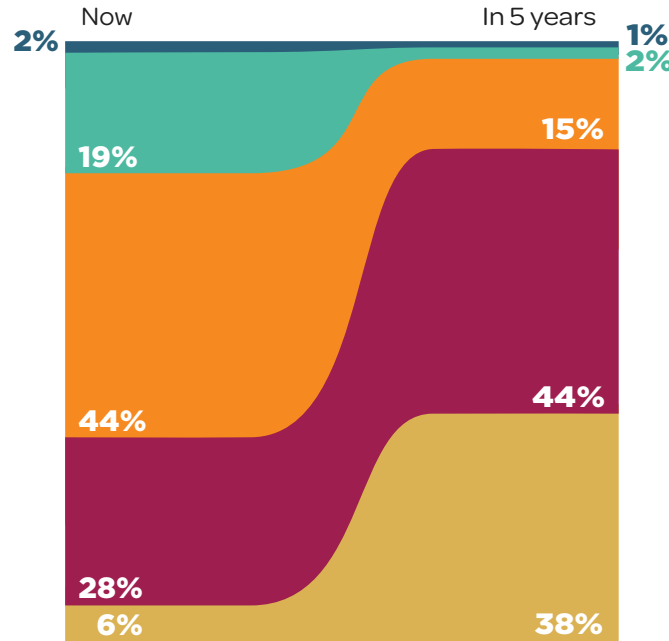


Digital Transformation Maturity Spectrum

The technology used by A&E firms is advancing quickly and firms are more optimistic about their progress in achieving digital maturity. A firm's digital maturity is based on the alignment between their business strategy and IT management, ultimately creating a culture of innovation. Firms classified themselves as more advanced and mature than in 2021, up 14 percentage points from 18% to 32%.

Looking ahead five years, firms' digital transformation projections are even more optimistic. Last year, 69% reported they would be in the advanced or mature stages in five years; this year, 82% identified they will be at the advanced or mature stage in five years, with 93% of large firms and 81% of small and medium-sized firms expecting to reach these milestones.

This anticipated jump in digital maturity is encouraging, considering that firms intend to ramp up the development of strategic plans for technology. But this rapid pace of maturity will require firms to commit to a plan to achieve the desired level of maturity and develop actionable tactics that turn the positive sentiment into reality.



- **Nascent.** There's a disconnect between business and digital IT initiatives or a misalignment with company strategy
- **Exploratory.** There's a recognition of the need for digital transformation strategy but execution is at the lighthouse stage, on an ad-hoc project, which is neither predictable or scalable
- **Applied.** There's alignment between business and IT goals and momentum to adapt, but not dedicated focus on the full disruptive potential of digital initiatives
- **Mature.** Business and IT management are integrated and delivering digitally enabled product / service experiences on a continuous basis
- **Advanced.** Digital transformation is a primary strategic focus at the executive level and a culture of innovation is prevalent along with, increasing revenue, improving customer experience and growing operating margins

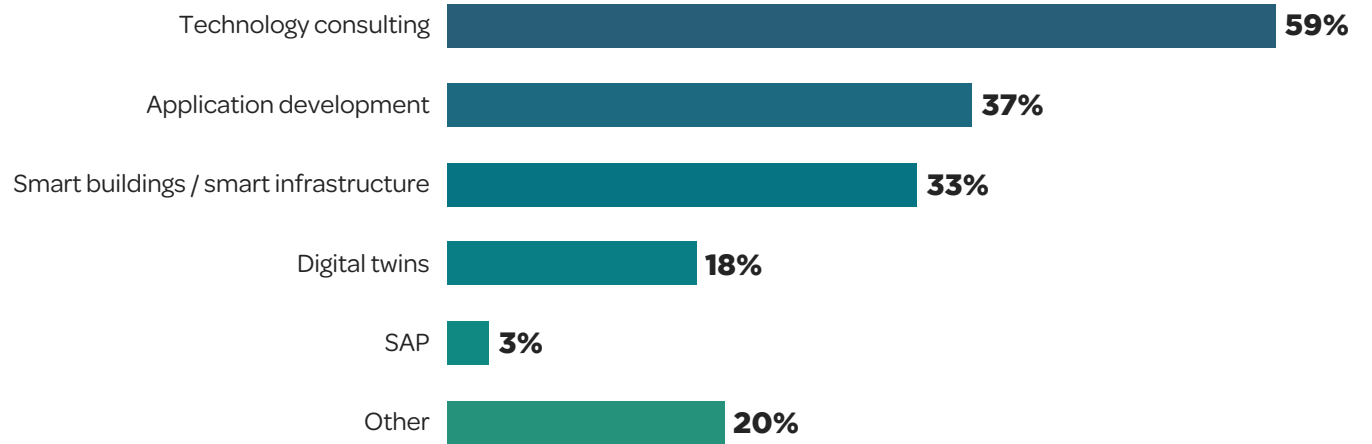
Offering Revenue Generating Technology Services

While most firms have not yet addressed the potential market opportunity that Technology Services represent, nearly one quarter (23%) of respondents indicated in this year's survey that their firms are already engaged in the space or have services to address these needs already underway. Chief among them are technology consulting services, which account for 59% of A&E technology service offerings, followed by application development services (37%), smart building and infrastructure services (33%) and digital twins (18%), which utilizes virtual modeling to accurately reflect physical objects.

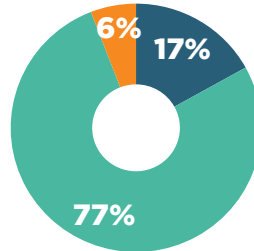
Firms providing technology services also indicate the revenues from these services can be fairly substantial, representing 20%+ of topline revenue – with 16% indicating technology services revenue accounts for almost all of their firms' revenue, opening the door to exciting new options in revenue diversification for businesses of all sizes.

Finally, several firms in this year's study (16%) indicated that their technology service offerings are generating – or are expected to generate once released – recurring subscription revenues. The power of passive income from recurring revenue streams stands to be a game-changer for firms who previously relied almost exclusively on project-related, transactional revenues, and should be explored further.

Technology Services Offered

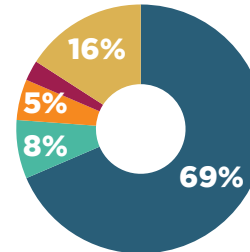


Revenue-Generating Tech Services Offered



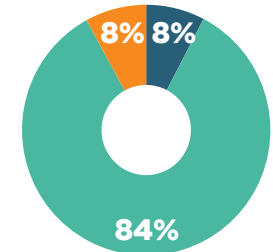
- Yes
- No
- Under consideration

% of Revenue from Technology-Based Solutions



- 0% to 19%
- 20% to 39%
- 40% to 59%
- 60% to 79%
- 80% to 100%

Subscription/Recurring Services Offered



- Yes
- No
- Under consideration

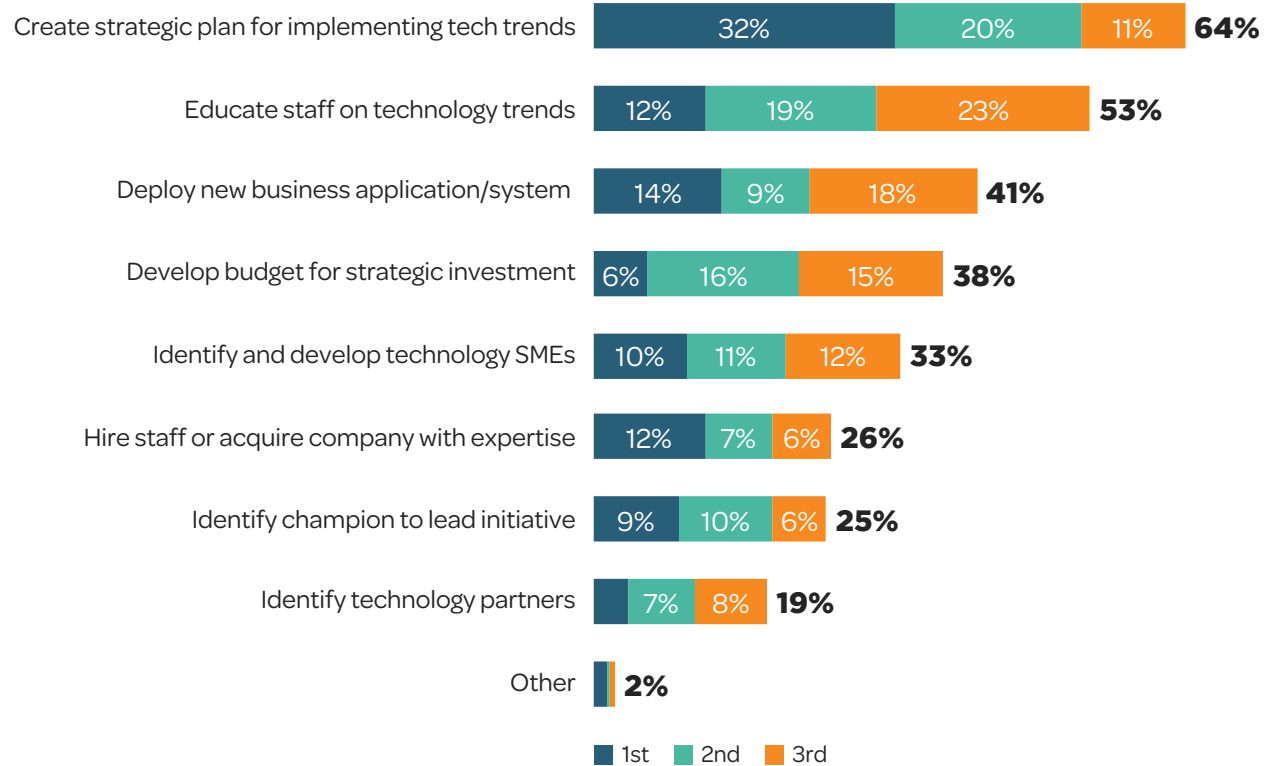
Top Technology Trend and IT Initiatives

A&E firms continue to adopt and integrate new technologies. Nearly two-thirds (64%) are prioritizing the creation of strategic technology implementation plans, which was the top-ranked initiative for the second year in a row. Additionally, more than half of respondents indicated the need to educate staff on critical technology trends (53%).

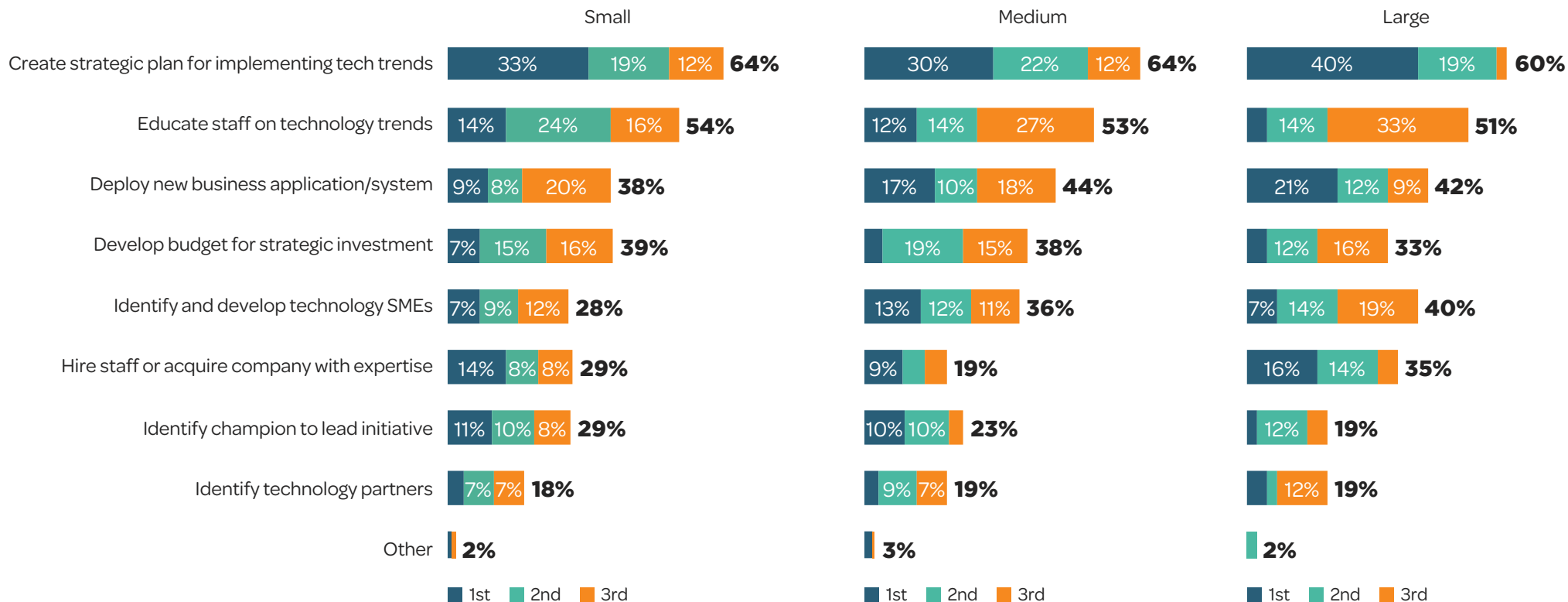
The third most important priority is the deployment of new business application systems (41%), a newly-introduced option in this year's study. This year, it outranked developing budgets for strategic investments (38%), as well as the need to create internal technology subject matter experts (33%).

Creating new security policies and procedures continued to be the top priority for addressing firms' IT operational challenges at 53%, down slightly from last year. Re-engineering business processes increased markedly, as nearly half (46%) of firms indicated an intention to focus resources there. Additionally, consolidating the number of vendors and systems used was mentioned by nearly a third (31%) of respondents.

At the end of the day, firms are focusing on addressing technology-related challenges with better strategies, improved policies and processes, increases in comprehensive education and greater leverage of optimized solutions.



Top Technology Trend Initiatives by Company Size

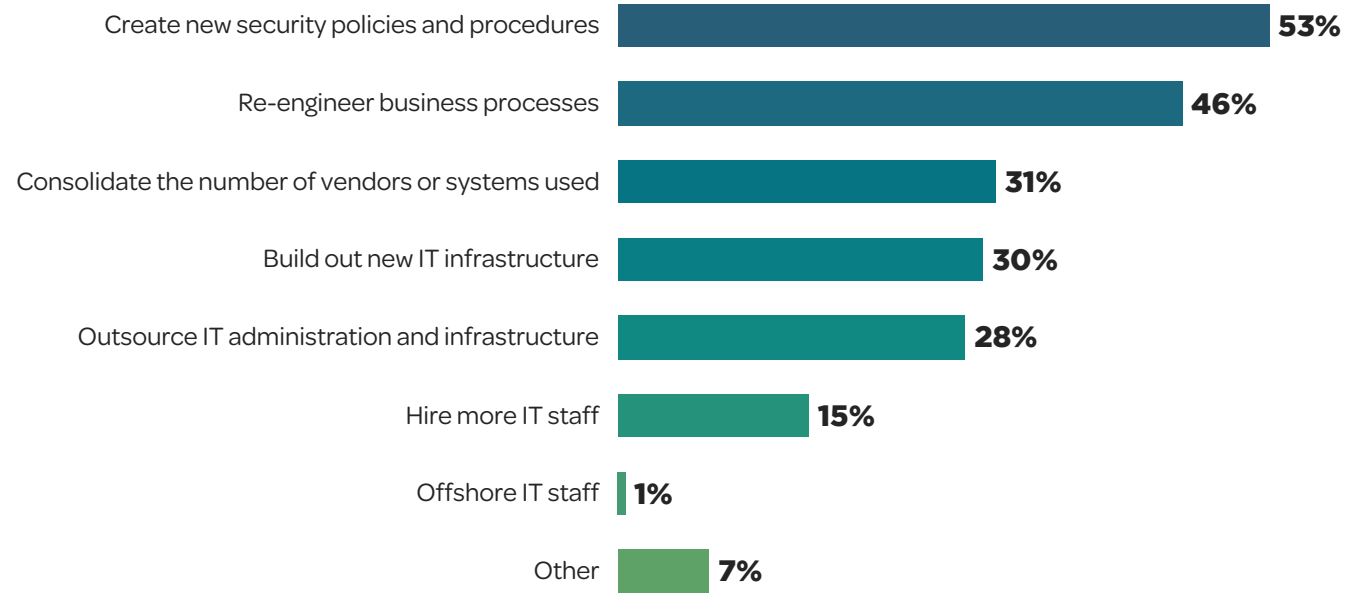




“The biggest adoption barriers continue to be the high initial cost of implementing software and lack of awareness. Firms should actively be exploring technology enhancements and invest in them.”

— **Michael Geary**, CEO, Society for Marketing Professional Services

Addressing IT Operations Challenges



Technology Trends

A&E firms have a wide array of options when it comes to tools and advancements in technology. By prioritizing the right investments that align with key business goals, firms will be able to increase productivity, control costs and increase employee satisfaction.

Even with the promise of significant cost and time savings, upfront investments in technology can be a hard sell for businesses with limited resources, particularly when there are several infrastructure priorities to tackle at once. Many A&E firms still struggle with the cost and internal training aspects of this equation, which is why the timing of those investments is critical if optimal results are required.

That said, firms are counting on similar tech investments to pay off across project execution, financial management, resource management, business development and project management.

By selectively adopting effective technology solutions on operations and project delivery – alongside the internal experts to champion them – firms can position themselves to reap the rewards of new revenue streams from their ventures into new areas, like technology services.

From improving productivity to attracting talent to delivering better client experiences, smart investments in technology can yield far-reaching dividends that empower firms to be more competitive, profitable and better protected against emerging cybersecurity threats.



Business Development

A strong but more conservative revenue growth forecast will require firms to be more strategic about capture planning and leveraging internal resources to build momentum for the future.

Reported win rate remained strong, but firms saw an overall decline from a post-pandemic high in the number of proposals submitted becoming awarded, from 50% in 2021 to 41% in 2022. 2023 outlook is still positive with a net revenue forecast of 10.2% with growth expected in the transportation and water resources sectors and firms prioritizing nurturing existing client relationships.

10.2%

Net Revenue Growth Forecast

Coming down from a post-pandemic high of 17.6% in 2022, the 2023 outlook remains strong, especially considering the strong 2022 performance baseline.



ADDRESSING TOP BUSINESS DEVELOPMENT CHALLENGES

1

Time to nurture client relationships

Continued market growth will make it even more critical for firms to retain and keep up with existing clients, as well as find innovative ways to attract new prospects with existing business development (BD) talent. Upskilling BD talent and streamlining the BD process via technology will free up time to nurture these strategic client relationships.

2

Increased competition

Increased M&A activity is creating larger firms with greater resources but could also eliminate some competitors that were acquired by larger firms. To stave off competition, firms must increase differentiation through more strategic and deliberate client relationship development, targeted marketing strategies and better brand recognition.

3

Identifying new prospects

Qualifying potential clients that best align with firm strengths will continue to be a challenge. Firms will need to be strategic in targeting pursuits that best align with a firm's offerings, talent and resources, all while diversifying into the best markets for their business goals.

The A&E industry remains strong. However, inflation and rising costs are challenging margins and M&A activity continues to be strong but may be leveling off a bit. Firms have made inroads into staffing challenges, but open positions still remain. Being more strategic about which opportunities to pursue will be key to maintain future momentum.

Time constraints continue to intensify as firms struggle to respond to RFPs and RFQs in a timely manner given limited marketing, BD resources and the increasing cost of competing for projects. Expanding and further developing opportunities from existing client relationships also grew significantly in importance as a top challenge.

Cross training existing staff to perform BD tasks has increased in focus as a way to address staffing challenges and improve win rate. More companies are shifting away from solely dedicated BD staff or seller/owner models towards a blended approach. But by overtaxing existing staff, firms also increase the risk of spurring employee turnover and regrettable attrition. Use of a go/no go process, which takes staffing levels and other internal business metrics into account, can help firms balance which projects are worth pursuing and which are better to pass on. The good news is that 80% of firms employ a formal go/no go process, up three percentage points year-over-year.

The use of spreadsheets or no technology at all to manage business development, while still high at 24%, is moving in a positive direction, down from more than 30% a year ago. Leveraging a dedicated CRM solution sharpens strategic focus, reduces tedious manual data entry, eases the burden on already overtaxed staff, and frees resources to better pursue opportunities.

More firms expect their position in transportation, water and energy/power to grow or remain steady in the next 18 months, while firms are expecting declines primarily in residential and hospitality, which could signal softening in other markets to come in the near term. The good news is that firms are still expecting a strong balance in public and private markets, making a strong case for further revenue stream diversification.

The market remains strong but rising costs and staffing challenges still exist, not only for A&E firms, but for their clients potentially impacting viability of some future projects. Firms need to continue to be diligent in strategic pursuits to reach aggressive growth targets.



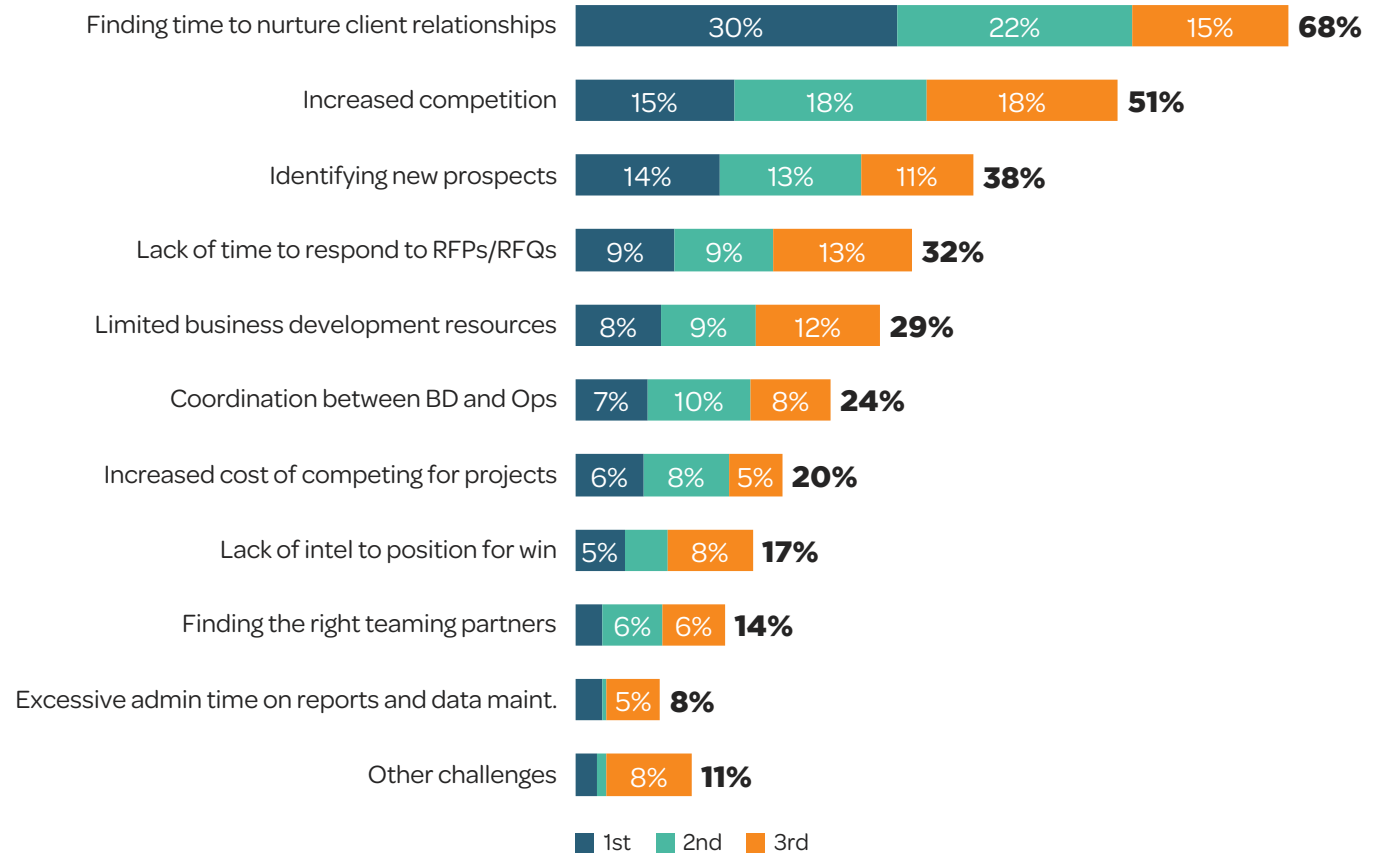
“Firms should double down on investments in both technology and talent, and in building and sustaining client relationships. Investment in the latter is critical to growth and would be best supported through a combination of specialized staff training and CRM software platforms.”

— **Daphne Bryant**, Executive Director, American Council of Engineering Companies

Top Business Development Challenges

The top three business development challenges remained constant but grew in importance with even more firms ranking them as their biggest roadblocks. In a growing market, finding time to nurture client relationships continues to be difficult with 68% of firms ranking it as one of their top three challenges (up nine percentage points). With increased competition an ongoing top challenge, firms not only need to further concentrate their efforts on keeping both existing and new clients engaged, but must also maintain or grow their market share through identifying new business prospects.

The stress on existing resources to address these strategic priorities is showing. Lack of time to respond to RFPs/RFQs rose four percentage points year-over-year, with limited BD resources continuing to be one of the top challenges for nearly 30% of firms. Excess admin time on reports/data is further taxing BD staff, growing five percentage points year-over-year. These challenges, teamed with rising costs, could put an increased strain on team productivity if not aided by the right technology, data and supporting processes.



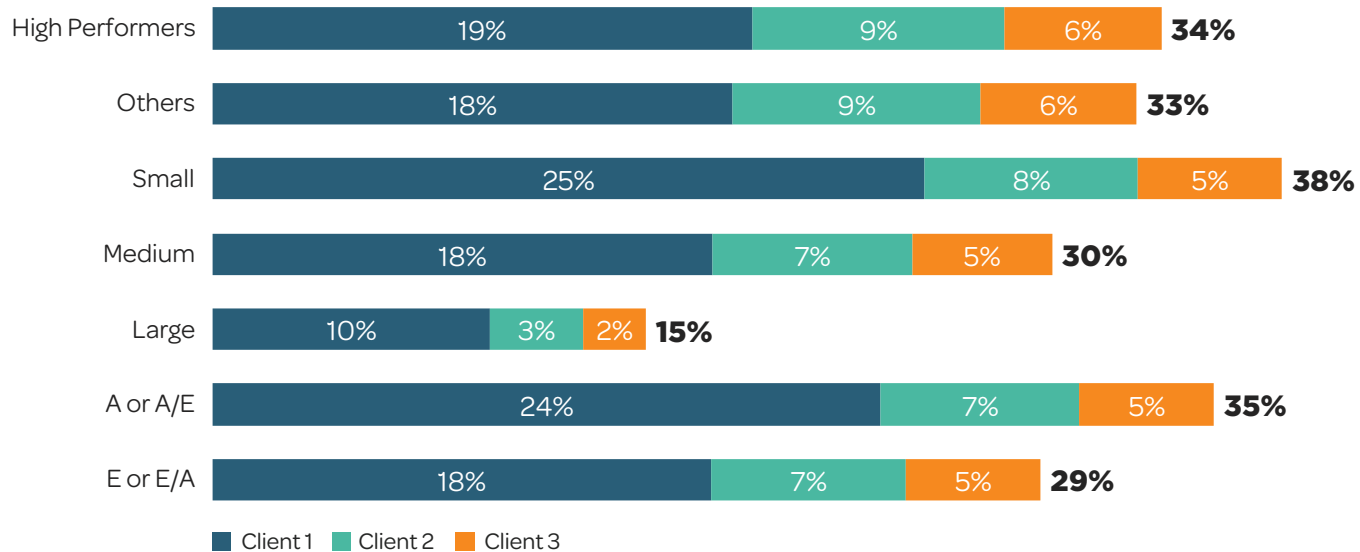
31%

-4

Revenue from Top Three Clients

In general, firms became more diversified, reducing their dependence on opportunities and revenue from their top three clients, lowering their overall risk. Revenue from the top three clients declined four percentage points overall, from 35% percent to 31% percent. Small-sized firms experienced the biggest decline, falling 11 percentage points to 38%.

Going against this trend, high performers and medium-sized firms saw a modest bump of one and two percentage points, respectively. While diversification is a positive step, firms also need to be cognizant of the increased competition that may be taking key projects away, ultimately forcing diversification of clients.



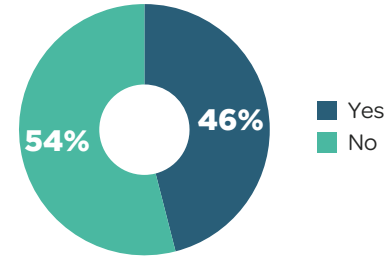
Firms with a Formal Business Development Process

Overall, more firms are using a formal business development process, growing from 45% to 46%, up one percentage point year-over-year. But the trend is not consistent across differently sized businesses.

While the use of a formal business development process among medium-sized firms grew five percentage points, usage declined eight points across small firms and two points across large firms. Engineering firms experienced a small dip (-0.7 points) while architecture firms experienced a bigger decline (-1.9 points).

The overall increase and consistent use of formal business development processes supports the increase in win rates. With overall proposal volume down, firms that use formal business development processes are better positioned to evaluate which opportunities to pursue, create a strategic pursuit strategy, apply and measure the proper resources needed to win, and ultimately earn the rewards of higher success. Small firms in particular could benefit from greater guidelines on opportunity evaluation, internal collaboration and overall opportunity management.

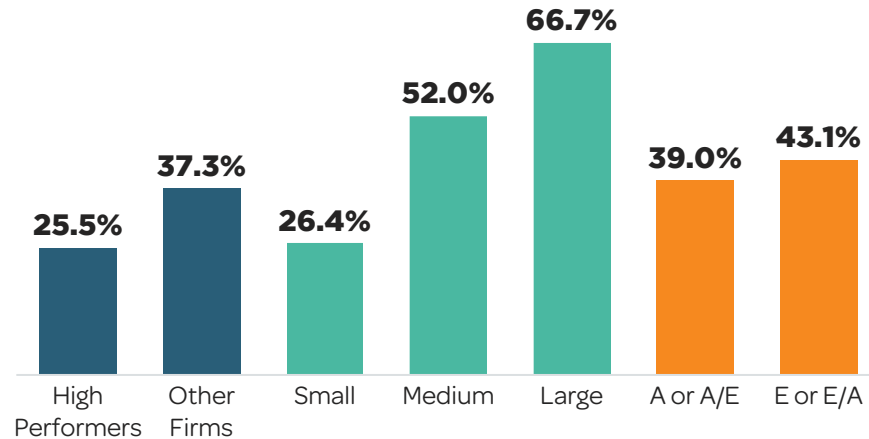
Firms with Formal Business Development Process



46%

+1.0

Internal Project Performance Evaluations by Firm Size/Type



Business Development Responsibilities

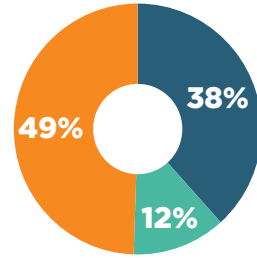
To garner additional insights about staffing trends and their impact on the business development process, survey respondents were asked who is responsible for business development in their firm and which business development model(s) they use.

2022 brought on an important shift in business development models for firms. Previously, firms overall were fairly evenly split between those with a seller/doer model (41%) and those that used a hybrid model (43%). This year saw a shift with more firms gravitating towards the hybrid model (49%) and away from having dedicated seller/doers (38%). Small and medium-sized firms drove the trend.

While this could be a strategic process to improve the pursuit strategy, the difficulty of maintaining dedicated business development staff (only) and seller/doer models, with limited staff and resources, likely played a part in the growing popularity of the hybrid business approach.

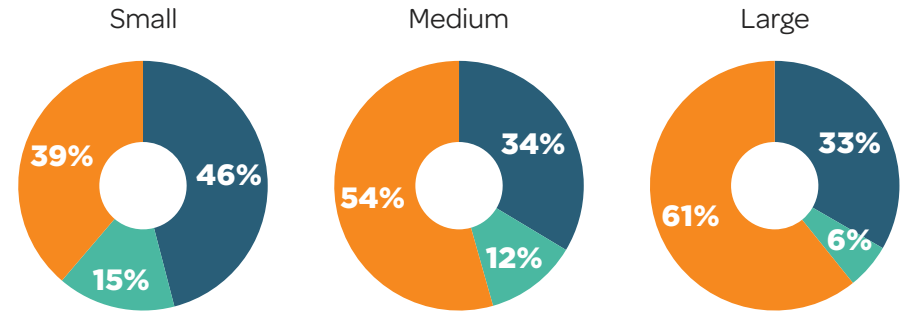
However, large firms experienced the opposite effect, expanding their usage of the seller/doer model by 17 percentage points (from 16% to 33%) and significantly reducing their engagement with both the hybrid and dedicated business development staff approaches.

Business Development Model



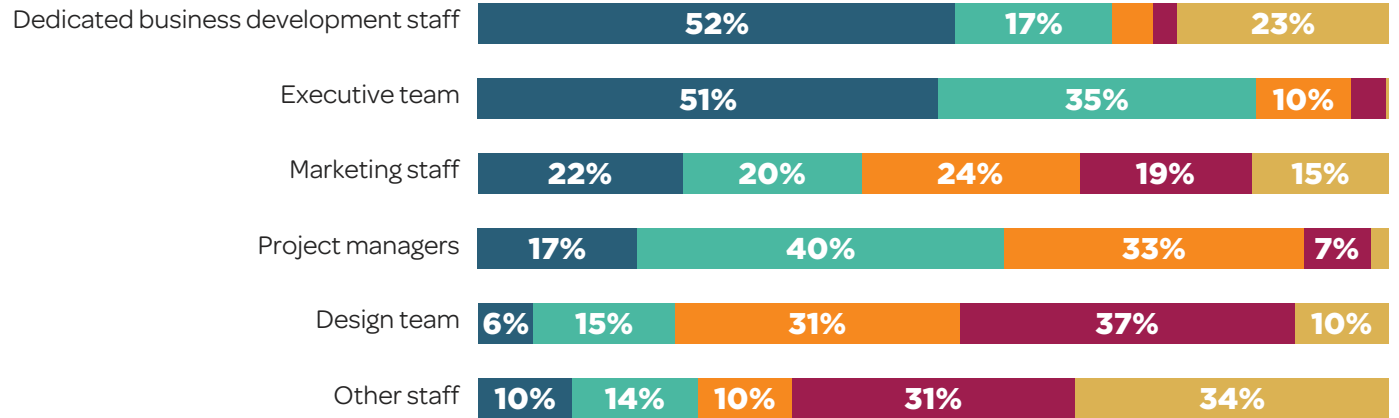
■ Seller/doer
■ Dedicated BD staff
■ Both

Business Development Model by Company Size



■ Seller/Doer
■ Dedicated BD staff
■ Both

Responsibility for Business Development



■ Almost always responsible ■ Often responsible ■ Sometimes responsible ■ Rarely responsible ■ Never responsible

80%

+2.0

Employing Go/No Go Process

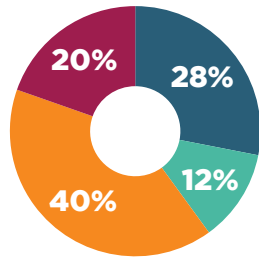
When operating in a market with a high degree of competition and limited resources, using a go/no go process becomes critical to evaluate which projects are worth pursuing. 80% of firms employed a go/no go process, up two percentage points year-over-year. A go/no go process determines if a project is worth the effort and investment required to pursue and the criteria is determined by the firm.

The Deltek Clarity Survey further asks firms to identify the types of opportunities for which they employ a formal go/no go process.

This year, 40% of firms indicated they use a go/no go process for all opportunities, illustrating a positive and sustained change (+5.0 points) over the previous year. More than a quarter (28%) are using it for strategic opportunities only, while 12% are limiting it for prospects/new clients only.

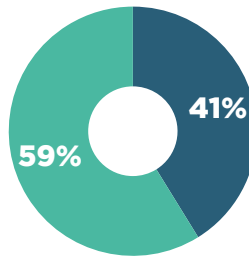
Among firms that don't employ a formal go/no go process, 41% are considering it, up 23 percentage points from the previous year. A greater number of small and large firms saw a jump in consideration (up 20 and 42 percentage points, respectively). However, unlike them, consideration by medium-sized firms dipped slightly year-over-year.

Go/No Go Processes



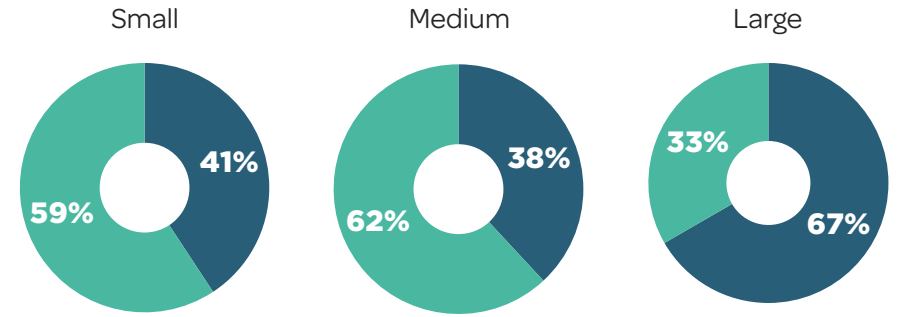
- Yes, for strategic opportunities only
- Yes, for prospects/new clients only
- Yes, for all opportunities
- No

Considering Go/No Go Process



- Yes
- No

Considering Go/No Go Process by Company Size



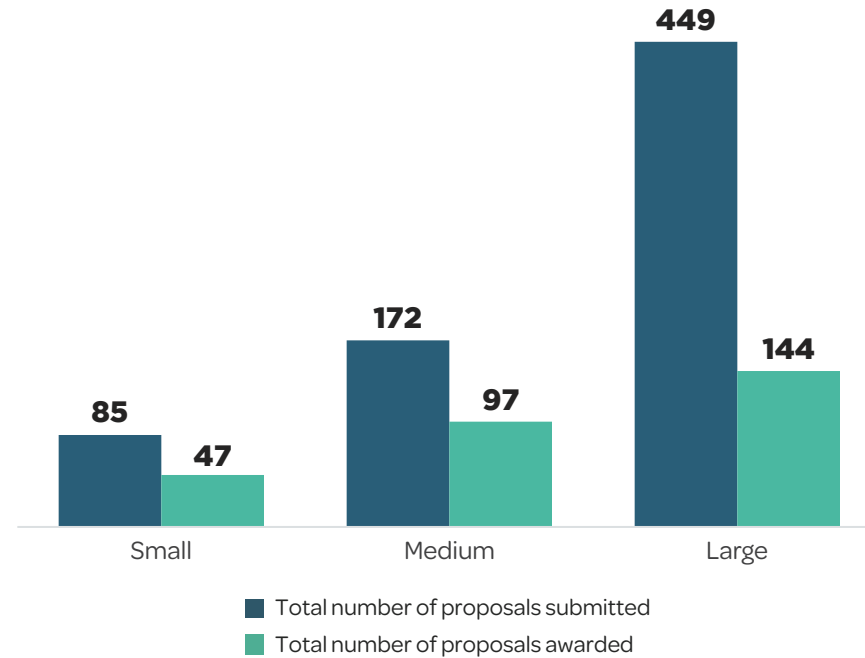
- Yes
- No

Proposal Volume

Firms saw a decline in the number of proposals submitted year-over-year coming off a post-pandemic high. On average, firms submitted 48% fewer proposals compared to the high volume of proposals submitted in 2021. For small and medium-sized firms, the percentage of proposals awarded dipped slightly from 57% to 55%, and 58% to 56% respectively. Larger firms experienced the biggest drop in the percentage of proposals awarded from 45% to 32%.

Respondents indicated that project fit (i.e. whether a project aligns well with the firm) was less of an influencing factor this year for proposal submission than expanding on existing client relationships, which rose from 58% to 72%. Firms may also be limiting proposal pursuits to some prospects due to staffing shortfalls, time constraints or truly honoring the go/no go process for pursuits.

Number of Proposals Submitted vs. Awarded

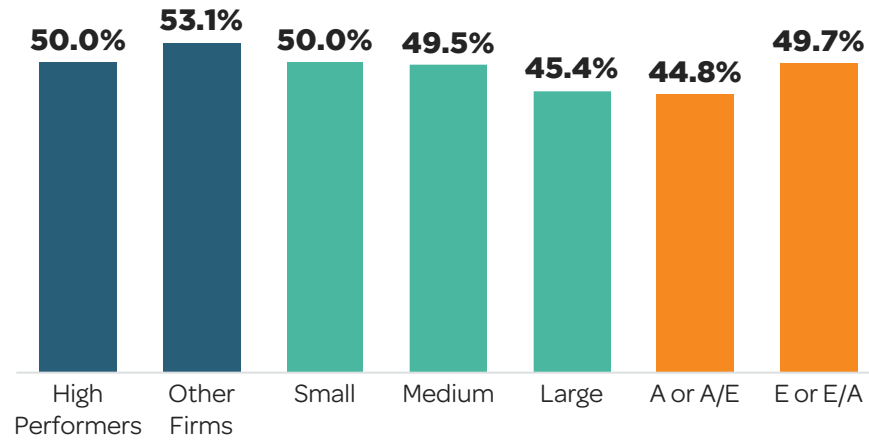


Win Rate

The overall win rate rose slightly to 49.6% from 49.2%. Win rates remain strong across all sized segments with small and medium-sized firms remaining relatively flat around 50.0 % and large firms seeing the greatest growth, up nearly three percentage points to 45.4%. Architecture firms also experienced win rate growth, up four percentage points year-over-year.

Yet the number of firms reporting that their win rate grew or stayed the same decreased to 79% from 90%, with 13% seeing a slight decrease in win rate levels. Overall, 11% of firms reported significant increases and 37% reported a slight increase in win rates, declining 3 percentage points year-over-year.

The average win rate is the second highest in the last decade, approaching the high of 50% in 2017.



49.6%

+0.4

Top Quarter

62.6%

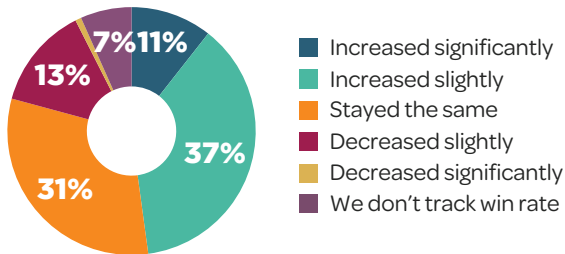
Bottom Quarter

38.3%

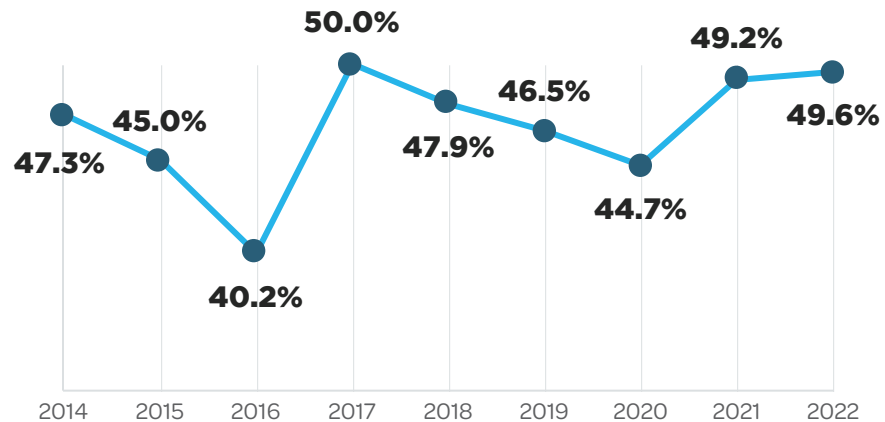


Total number of competitive proposals awarded divided by total number of competitive proposals submitted

Win Rate Change



Win Rate: 9-Year Trend



47.9%

-0.6

Top Quarter

64.1%

Bottom Quarter

32.1%

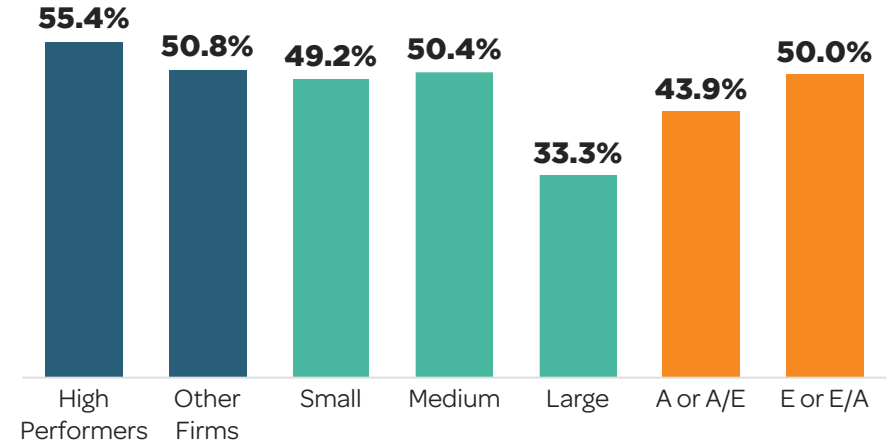


Total dollar value of competitive proposals awarded divided by total dollar value of competitive proposals submitted

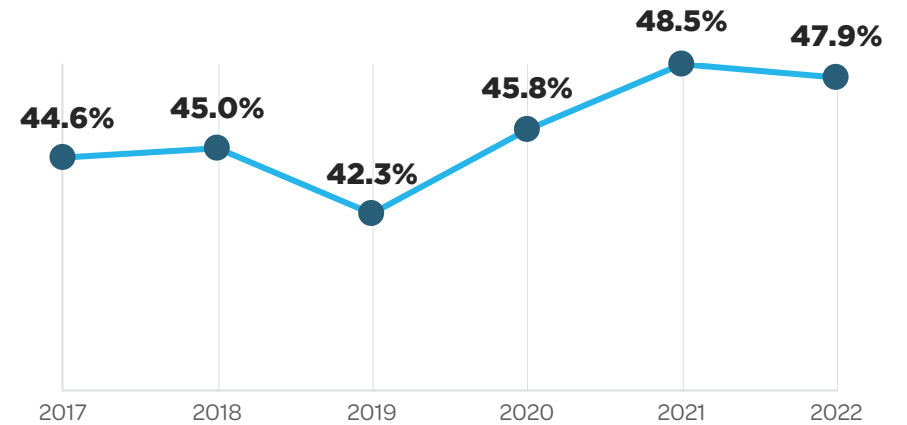
Capture Rate

While win rate measures the number of proposals submitted to number of proposals awarded, capture rate measures the total dollar value of the proposals submitted compared to those awarded.

Overall capture rate fell less than one percentage point year-over-year, with large firm growth (+3.4% points) offsetting small and medium-sized firm declines, down 0.8% and 0.7% percentage points respectively. Architecture firms' capture rates increased to 43.9% from 35.3%, while engineering firms' capture rate remained flat at 50.0%. With overall win rate growing (number of proposals) and capture rate declining (value of proposals), firms are winning a greater number of smaller projects year-over-year.



Capture Rate: 6-Year Trend

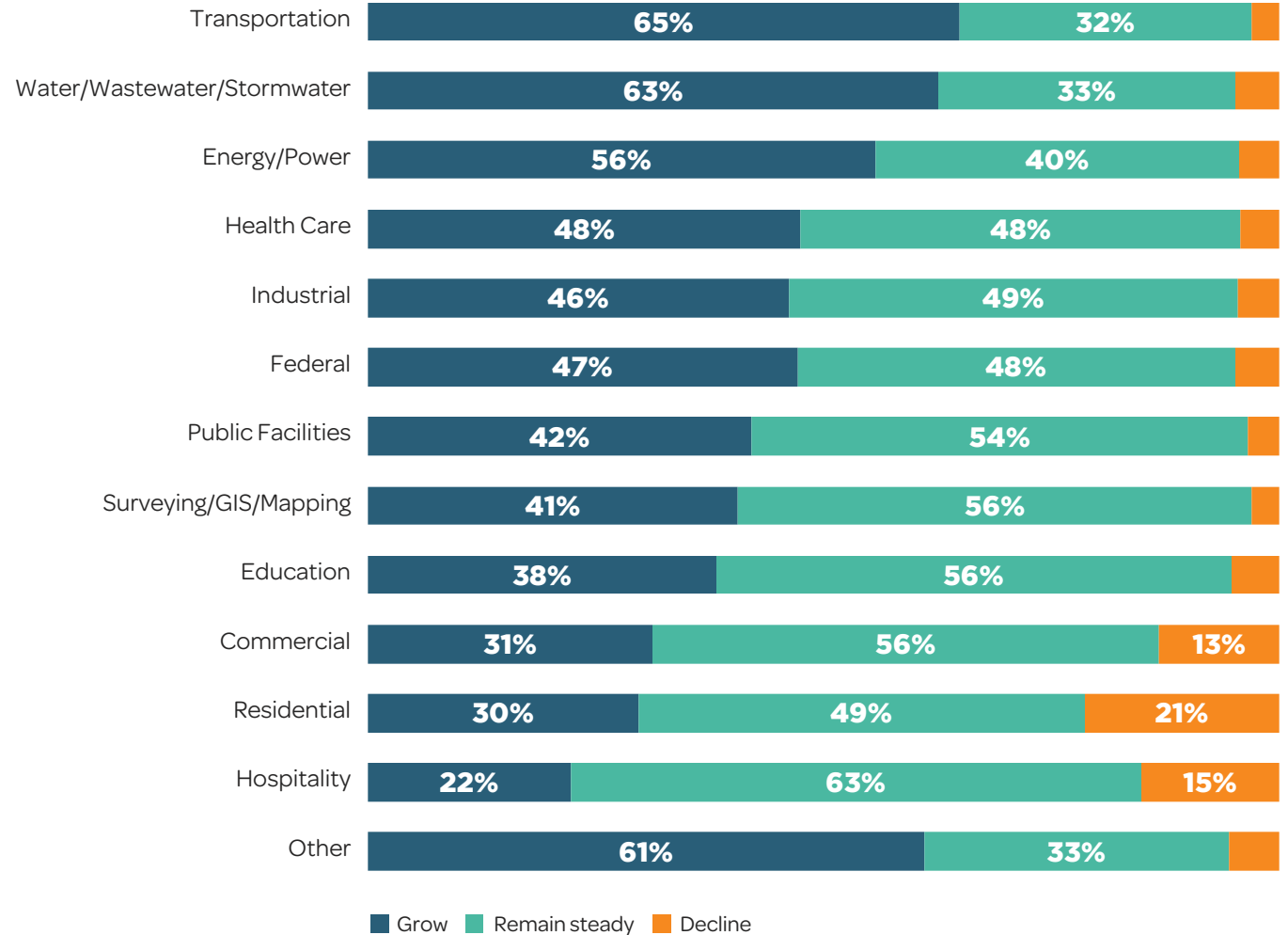


Position in the Market in the Next 18 Months

A&E firms were asked whether they expect their firm's position in various markets to grow, remain steady or decline over the next 18 months (through mid-2024).

Firms expect greater growth prospects in the transportation and water/wastewater/stormwater markets, which are expected to see an influx of funding from the Infrastructure Investment and Jobs Act (IIJA). Sixty-five percent of firms expect their position in the transportation market will grow (up from 59% of firms the previous year) and 63% expect their position in water markets will grow (up from 60% the previous year).

While some markets like education are predicted to hold steady, firms are less optimistic about their future positions in the residential, hospitality and commercial markets, which are expected to display the steepest declines year-over-year.

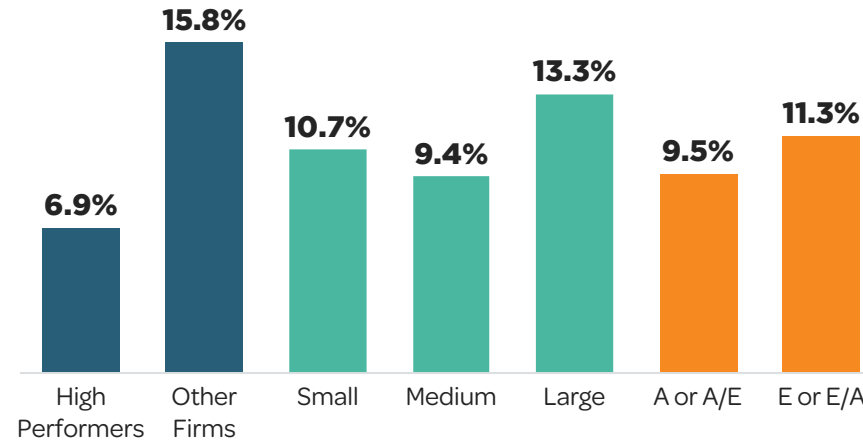


Net Revenue Growth Forecast

Across the board, firms are more conservative in their outlook for the coming year, forecasting net revenue to grow by 10.2% versus 17.6% in 2021, a decrease of more than seven percentage points year-over-year. But, with a strong financial performance in the last year, a double digit forecasted growth still points to high expectations for the year to come.

Large and small sized firms are the most bullish with an expected net revenue growth of 13.3% and 10.7% respectively. Medium-sized firms are not far behind, forecasting 9.4% growth. Both architecture and engineering firms have a positive outlook, predicting increases of 9.5% and 11.3%

Also worth noting is the wide gap in firm forecasts. While the median is hovering just north of 10%, the top quarter of firms are expecting greater than 24% year over year revenue growth – unprecedented growth in the industry.



10.2%
-7.4

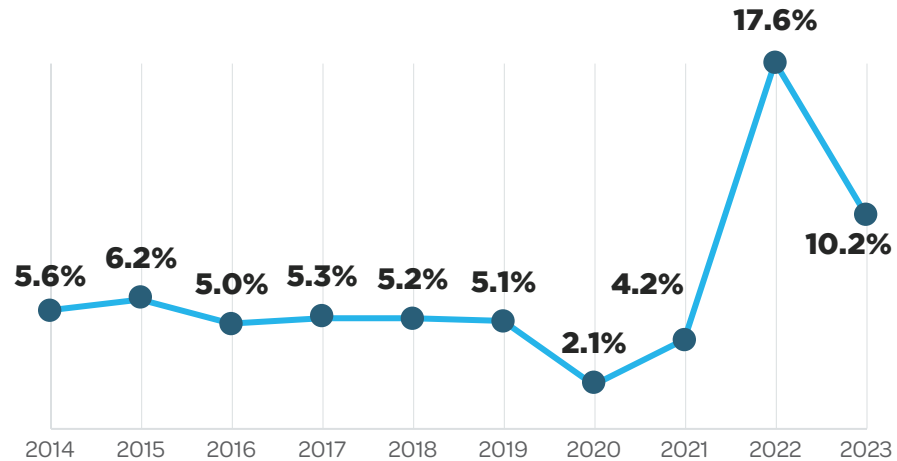
Top Quarter

24.6%

Bottom Quarter

1.3%

Net Revenue Growth Forecast: 10-Year Trend



Top Marketing Techniques

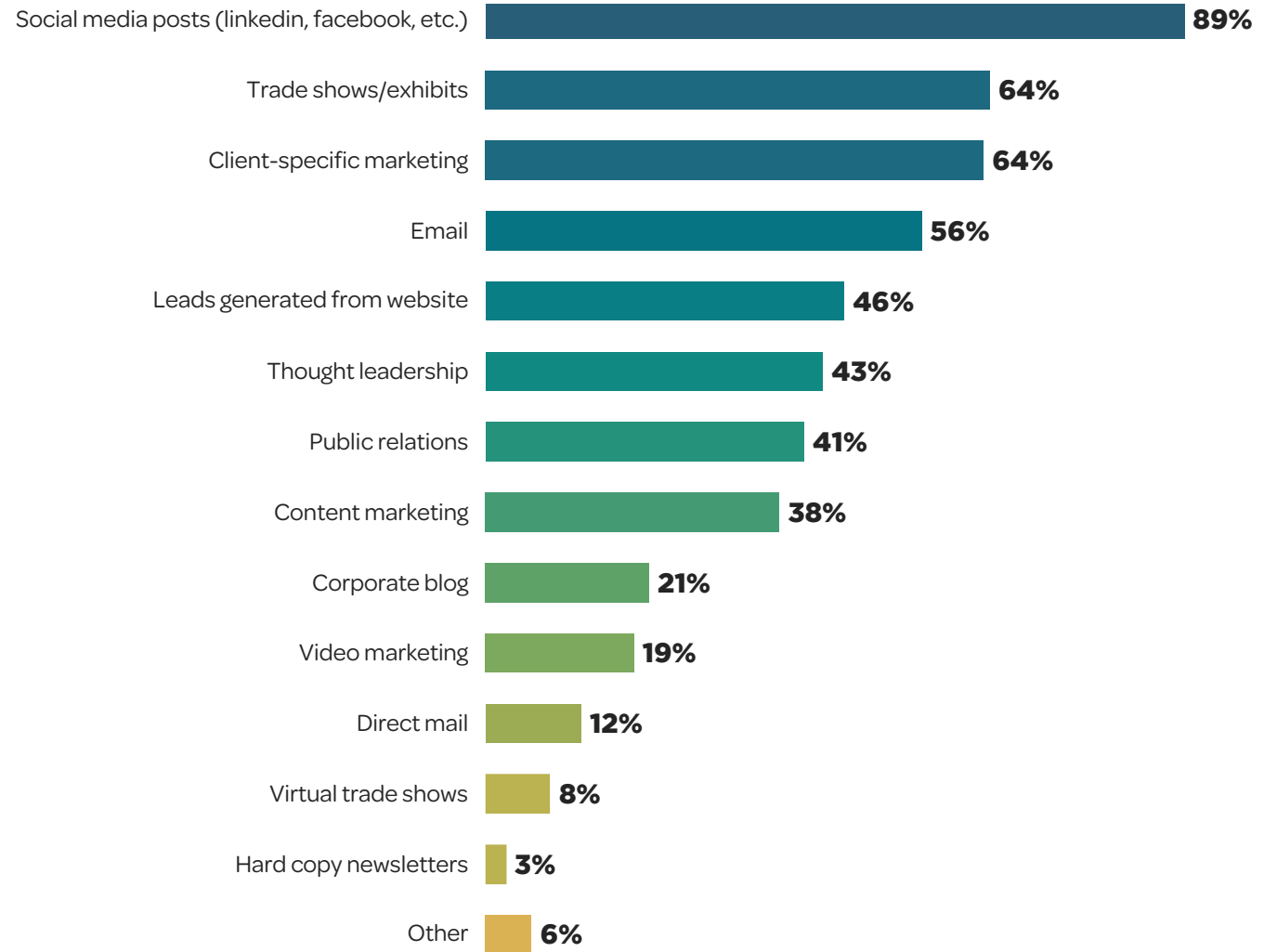
The post-pandemic marketplace signals a return to more in-person marketing techniques in addition to developed virtual and emerging high-tech options. The result? Firms today have a wide range of marketing techniques at their disposal.

Social media and client-specific marketing remained the top two marketing techniques year-over-year, with social media showing an uptick in importance (up four percentage points) and client-specific marketing slightly dipping by three percentage points. Attending and exhibiting at trade shows rose up the ranks among popular marketing techniques, up eight percentage points year-over-year to 64% as in-person events become safer and more lucrative to attend. Client-specific marketing remained a top three tactic but was used slightly less in 2022 versus 2021.

Conversely, use of virtual trade shows showed marked declines, further proving that firms are embracing the return and benefits of high-touch marketing.

Looking to the future, firms are employing a mix of multiple marketing techniques and technologies to reach and engage a wider range of clients, a wise move in an increasingly competitive marketplace with tighter growth prospects. Client-specific marketing (73%) continues to rank as the most important marketing technique, followed closely behind by social media activity (70%). Trade shows showed the biggest increase, up 10 percentage points year-over-year.

Marketing Techniques Currently Used

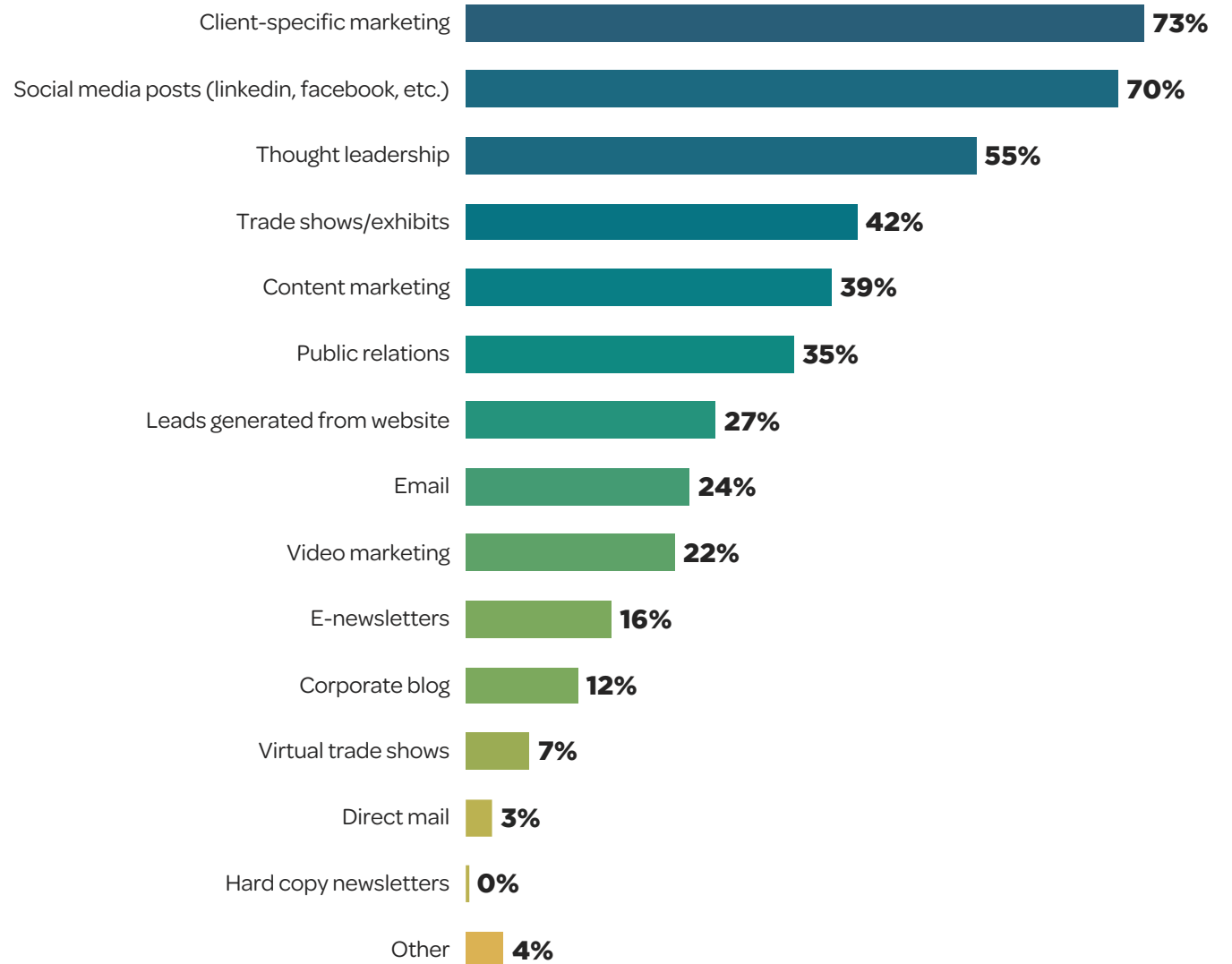




“In any organization, everyone should be doing BD – not just the BD professional. The challenges arise when organizations don’t have an expectation that technical staff also contributes to client development.”

— **DR. PAULA STAMP**, At-Large Director, Society for Marketing Professional Services

Marketing Technique Importance in Five Years

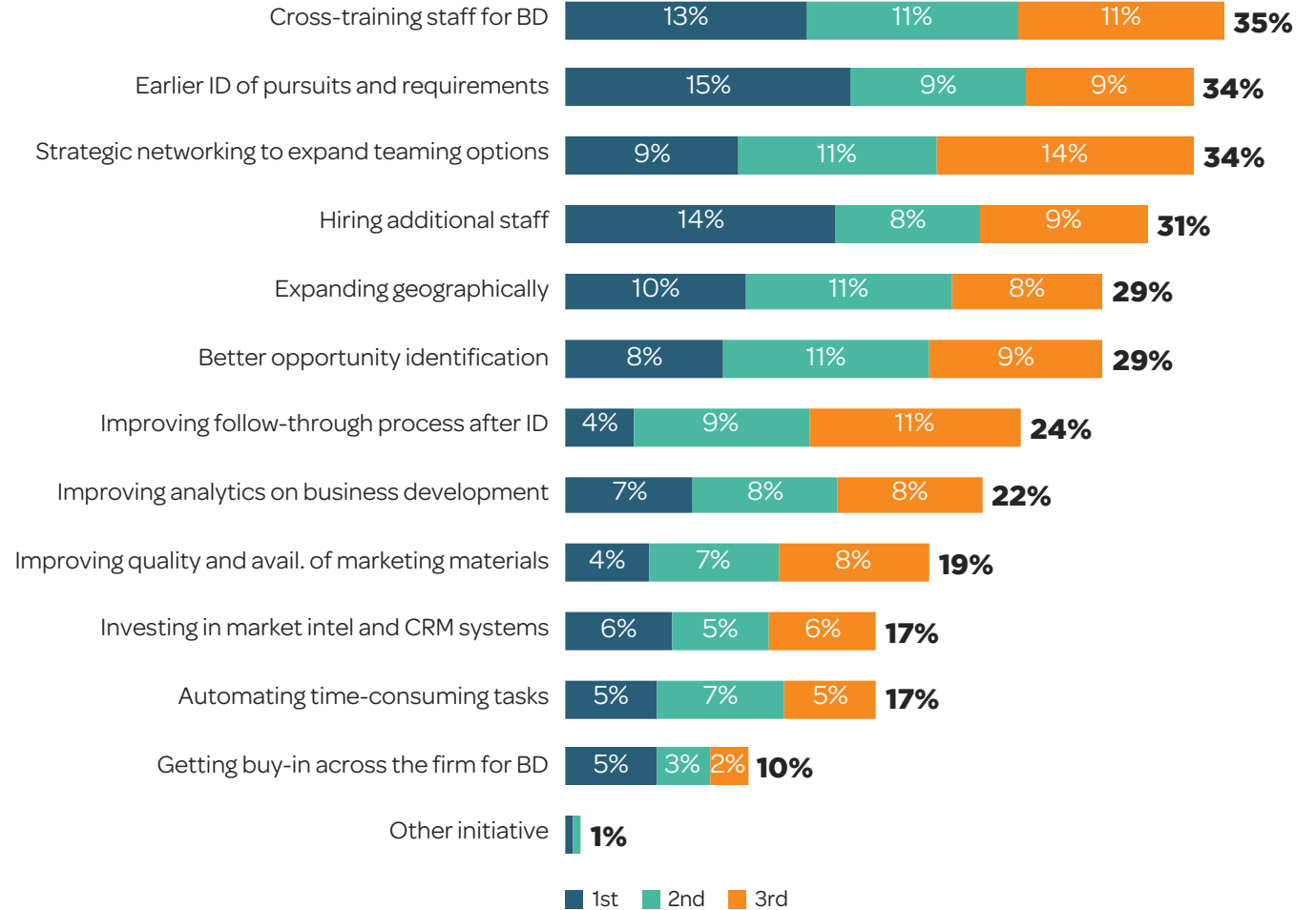


Top Business Development Initiatives

Industry staffing challenges continue to affect business development. Inroads have been made to fill pandemic gaps, but rather than focus solely on new hires moving forward, firms are looking to bolster BD and marketing initiatives by cross-training internal staff. Cross-training staff was the top business development initiative, up from 5th place a year ago. Conversely, hiring additional staff fell from 1st place to 4th place.

Strategic networking/teaming and earlier opportunity identification and evaluation remained highly important, and data shows a strong desire among firms to further bolster results through the improvement of their follow-through processes and analytics (rising three percentage points each).

Current market conditions are leading firms to become more strategic and diversified in their pursuits. With overall proposal volume down, firms are focused on nurturing existing client relationships for continued business while getting better at earlier opportunity identification (+7 points) and follow through processes (+3 points).



Business Development

Looking forward, firms remain optimistic across much of the industry, challenging businesses to be more strategic and intentional about the opportunities they choose to pursue. Firms will also need to closely monitor project delivery to ensure that teams can deliver on projects in the pipeline if current project timelines shift.

With the outlook for A&E firms remaining positive, growth opportunities will come to businesses with diversified market offerings, engaging marketing strategies and effective tactics to nurture current and new clients alike in the short, medium and long term.

Some of the biggest questions looking forward will be sustainability and profitability as many firms struggle to find the right balance of resources, talent and technology to deliver on what they've promised. Continual improvements to potential project evaluation and selection processes, coupled with deliberate go/no go criteria will help the

business development process align with company needs. And, as an industry that tends to have very optimistic, but perhaps not always accurate forecasts, firms should focus on pipeline visibility and accuracy to ensure the company is planning for the right potential projects.

Industry-wide staffing and hiring challenges will force firms to leverage internal resources in order to solve challenges and capitalize on opportunities. Effective staff cross-training, strategic partnerships and the implementation of more efficient business development processes will help firms find firm footing despite market changes.



Project Management

Visibility into project management KPIs and the tools to manage them continues to challenge project managers.

More projects were on track for schedule and budget this year, a positive sign after reporting sharp downturns in the previous year. Firms continue to struggle with staffing challenges that have a material impact on project

performance. Improvements in project visibility and further investments in internal PM training and best practices will help improve the quality of deliverables and boost business performance.

59.76%

Projects On or Ahead of Schedule

A&E firms must provide the next generation of PMs with better project management tools and training.



ADDRESSING TOP PROJECT MANAGEMENT CHALLENGES

1 Staff shortages

The ability to hire and retain staff continues to strap A&E firms more than any other challenge. Effectively balancing work across fewer contributors while keeping production levels high and avoiding burnout is the order of the day. Attracting and retaining impactful staff can be aided by offering tools, training and work cultures that resonate with next-generation PMs.

2 Competing priorities

Firms with well-scoped strategic plans, clearly defined roles and responsibilities and the tools to execute them are the best equipped to efficiently manage project resources. Quality control hubs – like CoEs and PMOs – are excellent tools for driving best practices forward.

3 Inexperienced project managers

As firms reduce their dependence on new PM hires, upskilling and training, promotion and formal career development planning are the keys to maintaining productivity gains and managing deliverable quality. As more experienced PMs graduate to new roles, sharing their knowledge and expertise with newer PMs is critical to advancing operational growth.



“On the whole, firms are challenged with the cost of labor and materials while still trying to meet client demands.”

– **Michele Russo**, Vice President, Research & Practice, American Institute of Architects

Staffing shortages remain the number one challenge facing A&E firms over the next three years, with 62% naming it in their top three.

Open positions have a significant impact on all aspects of delivering A&E projects. For example, PMs may have to divert their attention from managing the overall project to compensate for a lack of expertise on the project delivery team, potentially affecting productivity and increasing the likelihood of execution delays as well as staff burnout.

As the search for skilled and competent project managers becomes increasingly challenging and costly, companies are turning towards investing in internal training for and upskilling of their current employees, which is now deemed essential for future success. With only one in four firms indicating at least 75% of their project leaders possessing formal project management training, the evidence is clear that more training is urgently needed across the industry. Yet, less than half of firms are investing in internal PM training (up 13% from last year) and developing internal best practices (40%), and the number of firms using clearly defined PM processes edged up only slightly.

A&E firms are constantly re-evaluating how to best modify their compensation and benefits plans to lure and retain skilled PM staff. Sustaining their growth and profitability requires these firms to evaluate and refine

billing rates to accommodate reported increases in salaries and costs of doing business.

Staffing shortages can hinder the timely delivery of projects and negatively impact client satisfaction, which is of increased concern as many companies indicated they are not monitoring client satisfaction as a performance metric.

Despite these obstacles, firms evaluated themselves positively in terms of client relationship management, as they shifted relationship management responsibilities to project staff and third-party organizations; a move expected to positively impact client satisfaction.

Project management effectiveness may be hampered by staffing issues, with firms trying to balance strong pipelines and backlogs with increased staffing costs and skill gaps.



“One of the challenges is connecting all the relevant teams on the same platform and ensuring employees are regularly and properly using those systems.”

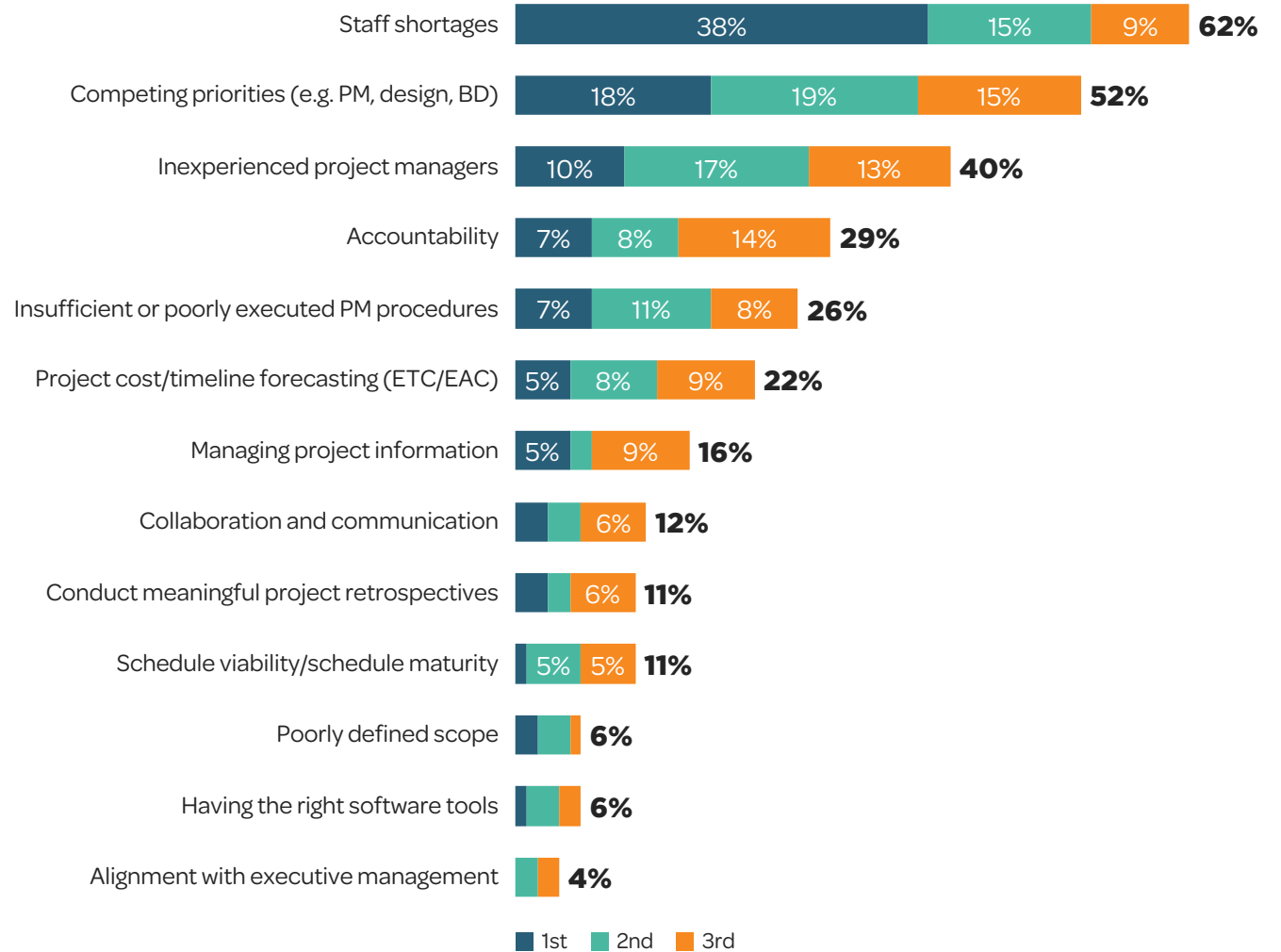
— **Michael Geary**, CEO, Society for Marketing Professional Services



Top Project Management Challenges

The pressing requirement for additional personnel was the most commonly stated challenge expected by firms over the next three years. In fact, staff shortages jumped one percentage point to 38% as the top challenge and 62% of firms identified it as one of their top three. Project managers are challenged by several factors, not limited to maintaining a high volume of output at quality levels, delivering projects on time and under budget, managing workloads effectively across fewer available resources and retaining key staff members showing signs of burnout.

According to respondents, 40% of companies face the issue of project manager experience levels, which indicates a shortage of staff with adequate skill sets. This highlights the need for comprehensive training and project-specific professional development to equip PMs with the necessary strategies and tools to perform their duties efficiently. Firms must also revisit their strategic plans to direct priorities and invest in tools and training that facilitate project task delegation. Technology can also give staff more visibility and oversight over key scheduling and budgeting metrics.



Additional Challenges Facing Project Management

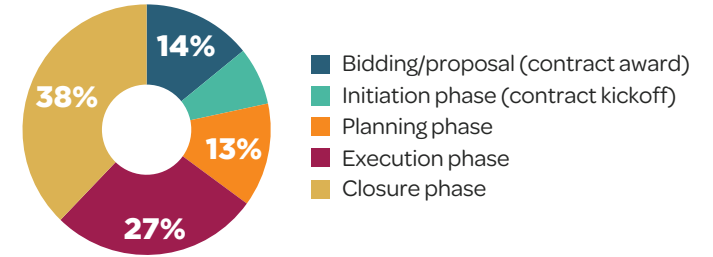
Professional A&E firms elaborated on their challenges in managing projects, providing valuable information on where new processes, tools and staff can be introduced to improve operations.

Participants were asked to identify the project lifecycle phase that is the most challenging and the project close-out phase was identified by 38% of firms. More than a quarter of firms identified project execution as the most challenging phase, increasing two percentage points over last year. In contrast to the previous year, planning and bidding/proposal processes were smoother, whereas the initiation and closure phases posed greater difficulties this past year.

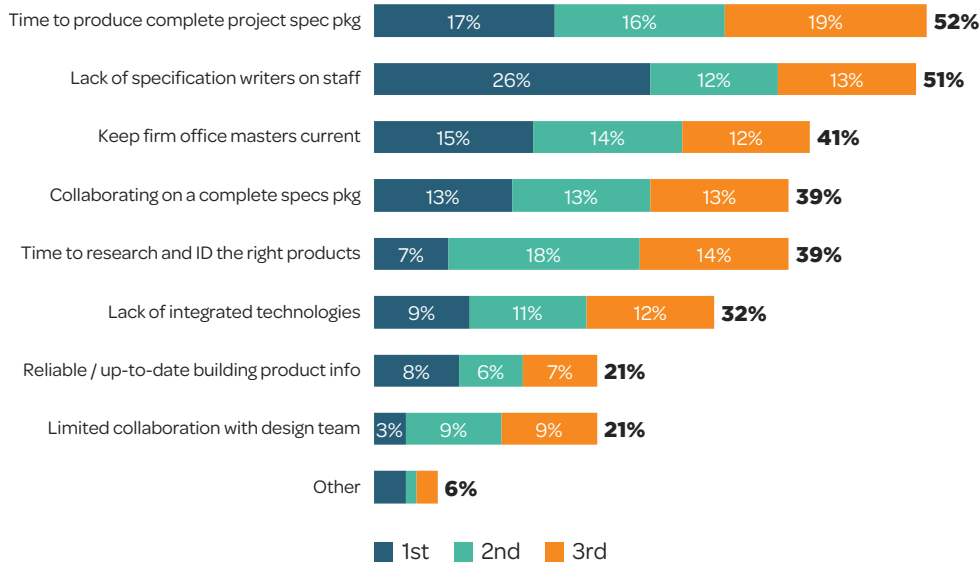
When asked about the construction specification process, more than half of firms (52%) indicated the time needed to produce a complete product spec package as one of their top challenges, followed closely behind by a lack of specification writers on staff which remained the number one challenge for all respondents at 26%.

Firms also identified key challenges with the management of project information, with ensuring the quality of deliverables topping the list (56%) and half of respondents identifying administrative workload as the second biggest overall challenge.

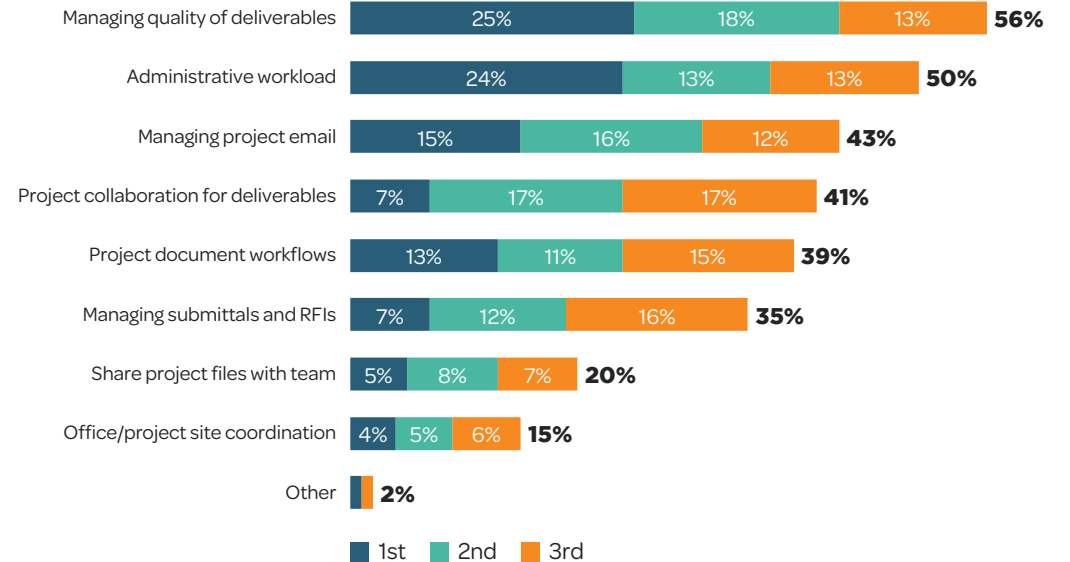
Most Challenging Phase of the Project Lifecycle



Top Construction Specification Challenges



Top Challenges Managing Project Information



Project Management KPIs Tracked

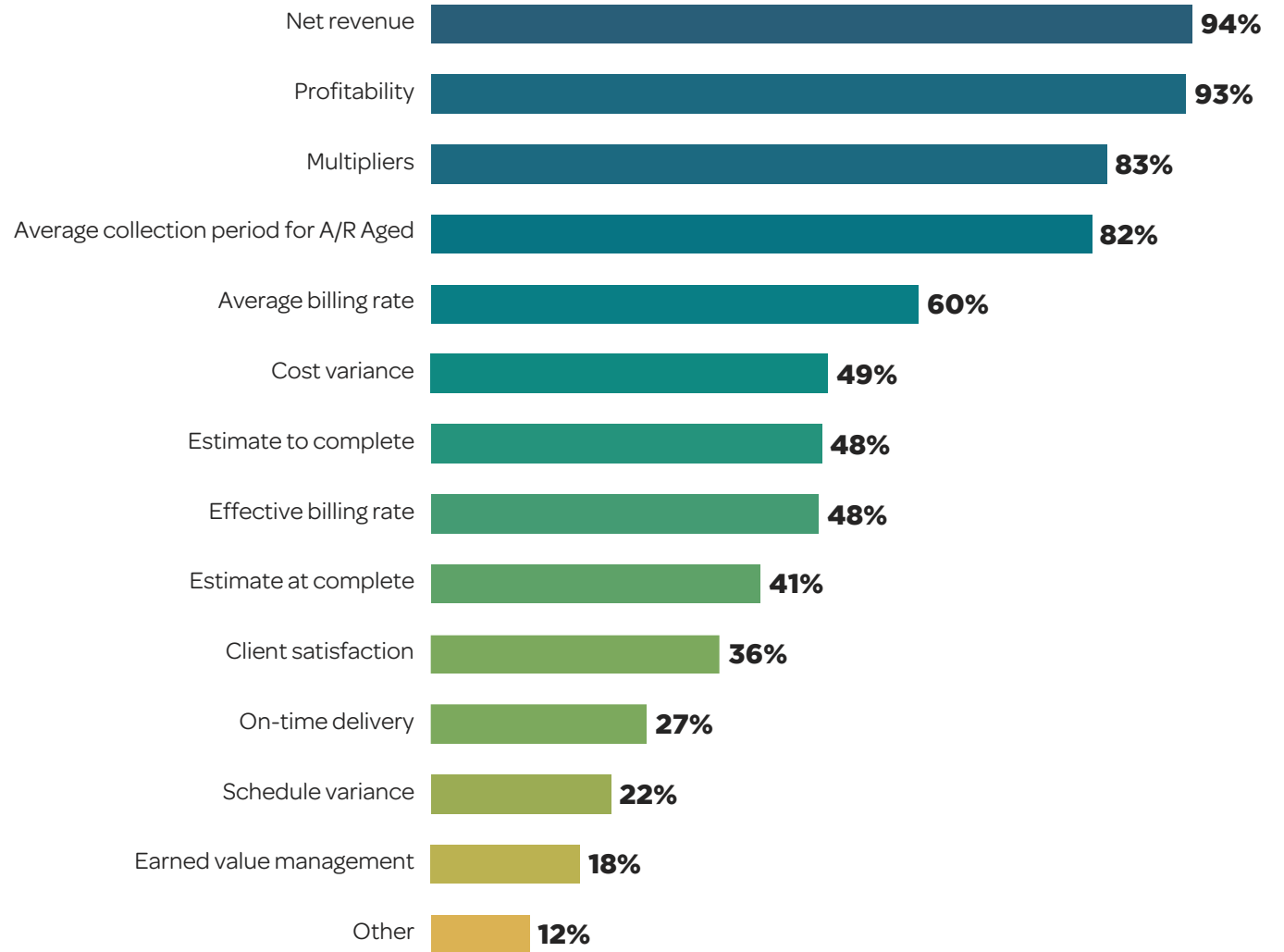
Effective project management requires careful planning and monitoring, which is why respondents employ a variety of KPIs to track progress.

Overall, the KPIs tracked remained consistent with prior years, including net revenue, profitability and multipliers, showing a focus on project financials.

However, firms indicated lower reliance this year on KPIs that are not financially driven, but are valuable to uncover issues that impact the bottom line like client satisfaction, schedule variance and earned value. PMs may have less visibility into important insights that facilitate course correction and better overall project outcomes.

The imbalance between financial and non-financial KPIs warrants attention, because it is critical for PMs to become savvier in understanding the projects as a whole. In fact, financial leaders indicated that increasing the PMs' financial knowledge ranks fourth on the list of top financial challenges, demonstrating a disconnect between the metrics tracked and resulting financial project performance.

And, while tracking financial performance is critical, forward-looking KPIs are key to improving results. Leveraging existing project technology and financial tracking tools stands to increase PMs' comprehensive visibility and enable improved project profitability, generate fewer operational surprises and provide better risk mitigation.



68.27%

+0.47

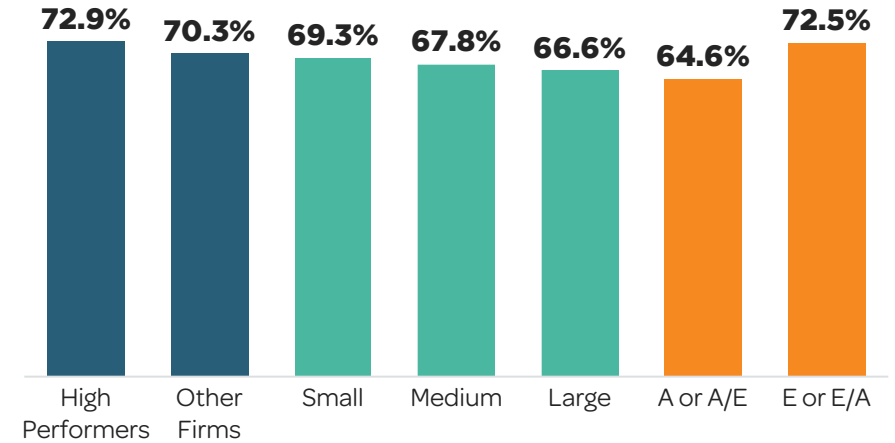
Projects On or Under Budget

Firms reported that 68% of projects were currently on or under budget, continuing a modest rebound from a nine-year low in 2020. Most firms experienced minor gains in this area. Large firms were the only ones that reported a decline in this metric.

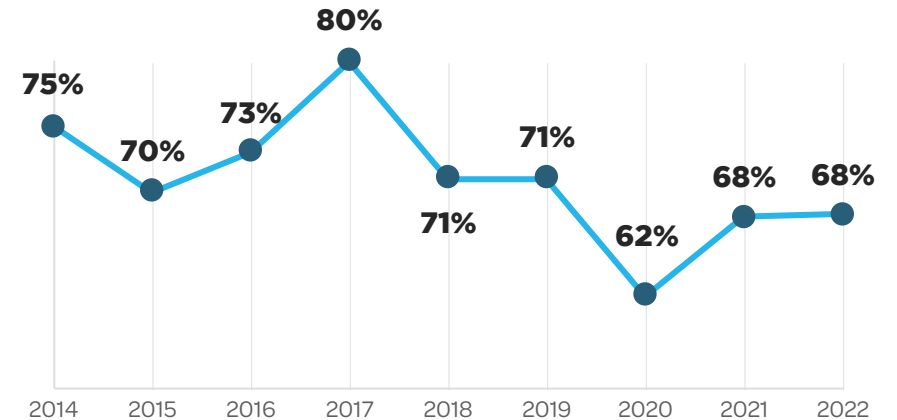
Although a positive movement, it also indicates nearly one in three projects is over budget, a fact that directly impacts client relationships, profitability and potential investment in much-needed tools and training.

With tighter budgets and limited hiring, project managers are expected to face difficulties in meeting project deadlines and matching expected billing rates. Firms will need to balance high labor costs by focusing on retaining valuable staff through the delivery of impactful training and designing career development paths that both enhance employee satisfaction and demonstrate a commitment to career advancement. This will soften regrettable attrition and minimize staffing-related project delays. Tighter project scoping and aggressive management of project execution can also be expected to help increase productivity and drive delivery gains.

Performance versus the prior year was relatively flat in 2022, a modest improvement over 2020, which represented a decline in On/Under Budget performance of 62%.



Projects On or Under Budget: 9-Year Trend



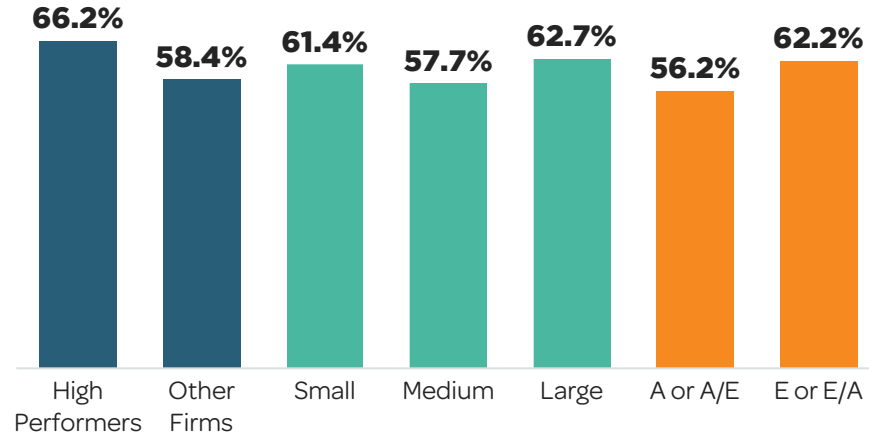
Projects On or Ahead of Schedule

Firms reported that nearly 60% of projects were on or ahead of schedule, up over one percentage point year-over-year.

Most firm types reported improvements compared to the previous year, with only large firms and engineering firms reporting small declines. However, the overall percentage is still well below where it should be for a project-based industry.

To deliver within schedule, PMs require the right staff and the right technology and operational tools to be more proactive and agile, particularly amidst slower hiring and rising labor costs. Real-time visibility into project task status can enable greater agility and efficiency among project managers to meet milestones, keep costs low and maintain their project delivery schedules with limited resources. Firms should also review PM KPIs to ensure that what is being measured addresses potential concerns like projects behind schedule. In this case, are PMs trained and do they have the tools to manage beyond standard financial performance and proactively monitor other critical metrics like schedule variance?

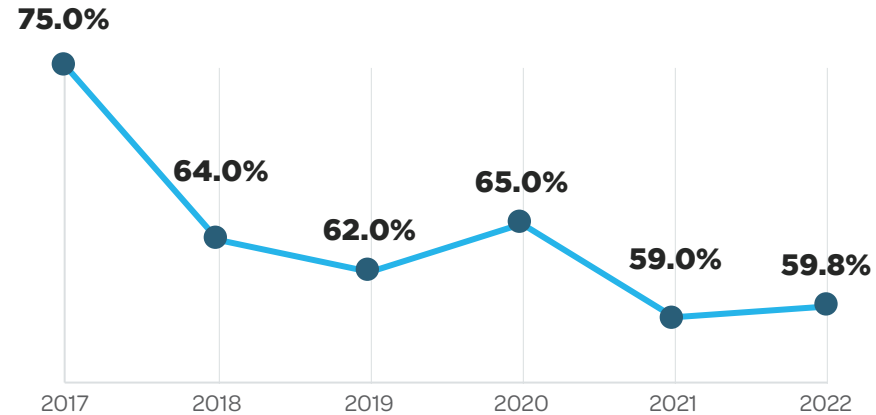
Across the last six years, On/Ahead of Schedule performance has declined markedly, with results in 2022 reflecting a slight improvement over the previous year, but still down (-5.2 percentage points) from 2020.



59.76%

+1.26

Projects On or Ahead of Schedule: 6-Year Trend



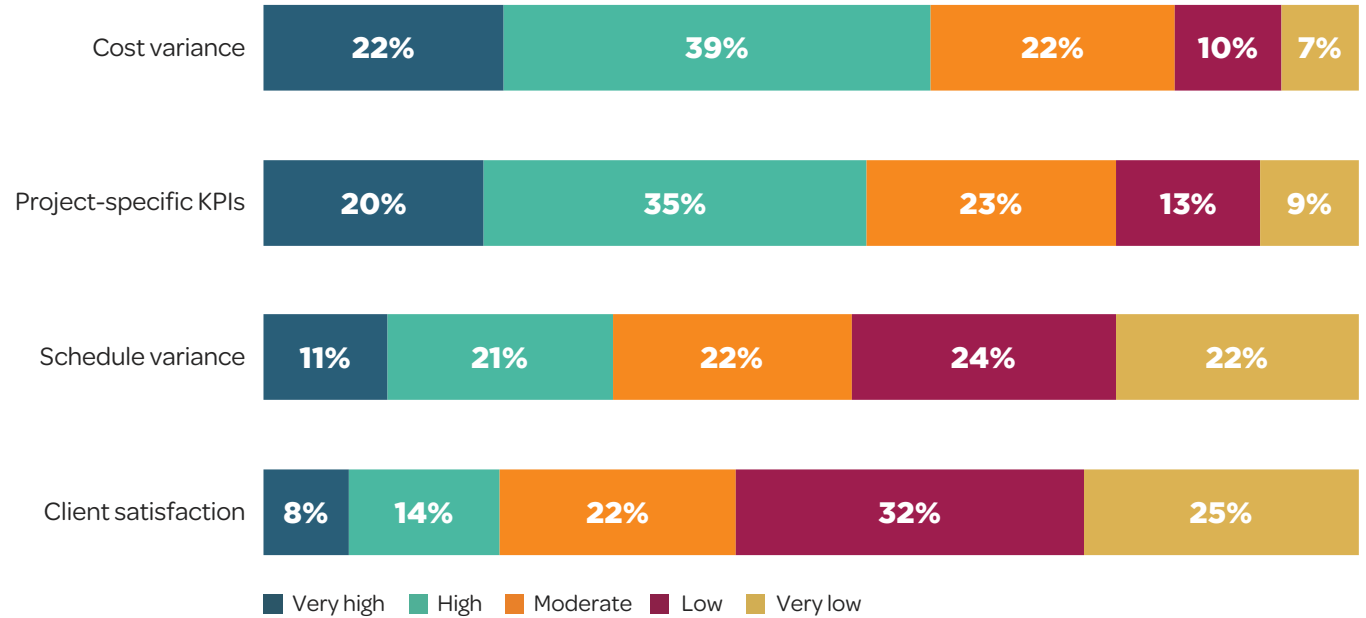
Project Status Visibility

Firms assessed the extent to which PMs have visibility to project-level and organization-wide KPIs. Overall, visibility levels rebounded somewhat year-over-year. Improvements were noted in schedule variance, where 46% of firms reported low to very low visibility into scheduled versus actual deliverable dates, a four percentage point decrease from 2021. Still, it is concerning that this continues to be an issue for almost half of A&E firms.

Project leaders also face difficulty measuring and monitoring schedule variance, especially its outsized impact on profitability given project management, talent deployment and execution challenges.

For project teams to improve their processes effectively, leadership needs to offer PMs a higher level of visibility into KPIs such as client satisfaction. According to recent statistics, only a small percentage of PMs (22%) have a high or very high level of visibility into client satisfaction, a critical driver of the firm’s overall strategy and operations. This could be because firms are not making it available to PMs or the firm isn’t prioritizing the capture of this client feedback. Either way, leadership must prioritize providing PMs the visibility to make informed decisions to deliver success.

While firms may be finally implementing and leveraging existing tools to manage these metrics and are taking positive strides toward providing PMs the access and visibility to monitor them in real time, more is needed to deliver timely and actionable insights into the status of their projects.



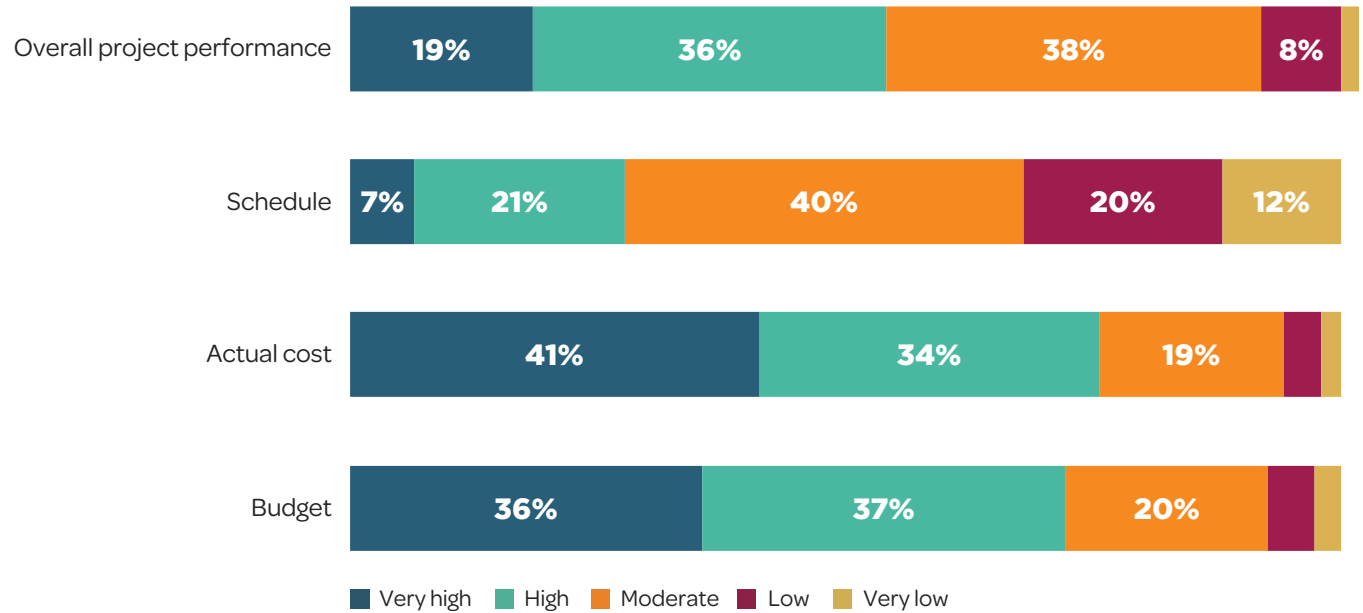
Project Reporting Accuracy

The accuracy of project reporting, particularly in terms of performance metrics, was a major focus among respondents. Having gained more confidence in their ability to precisely report project costs and budgets, firms still struggle to report project schedules accurately.

For example, while three out of four firms are highly or very highly confident in their ability to accurately report on project costs, only 28% have high or very high confidence in the accuracy of project schedule reporting, down from 35% the previous year.

Maintaining project schedules is a fundamental PM metric, but many firms indicated a lack of confidence in the accuracy of this metric on their projects. Leveraging better technology to manage schedules can not only improve visibility for all teams but also improves accuracy when PMs are held accountable for updates. And, with a primary focus on project financials, schedules may be overshadowed by other project performance metrics.

It is crucial to maintain accuracy in schedule reporting, as contracts often depend on percentage completion and timely delivery. Inaccurate reporting can have adverse effects on cash flow, profitability and employee motivation. Even moderate improvements in project reporting accuracy (up to 12%) may not be sufficient to counterbalance any negative effects.



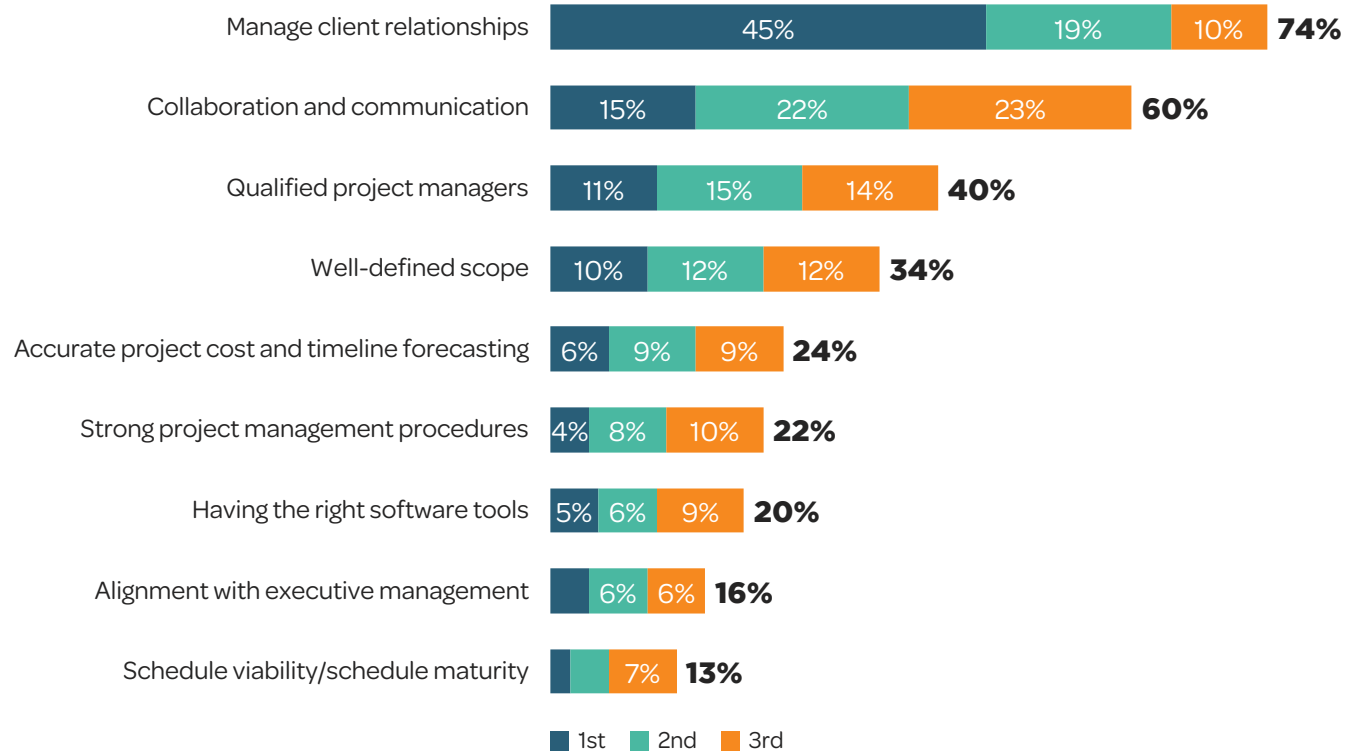
What Firms Do Well in Project Management

Managing client relationships through good collaboration and open communication is a key strength for many A&E firms.

According to this year's survey, firms continue to rank their ability to handle client relationships as their strongest suit in terms of project management. Collaboration and communication skills are also identified as strengths by many firms, displaying a four percentage point increase from the previous year.

This suggests that firms are taking steps to strengthen their communication and collaborative abilities with clients. Firms are also feeling slightly more confident in the qualifications of their project managers, possibly reflecting a combination of skilled new hires and training for existing staff.

But effective communications also hinge on the quality of the data being shared. A loss of previous-year gains in well-defined scoping, which dipped from 41% to 34%, can sour otherwise positive client relationships by causing projects to go off schedule and rise above budget. Further training and development of advanced project management skills, as well as investment in tools to track KPIs and milestones, are effective ways to give PMs the best chances of success.



Projects Using Clearly Defined PM Processes

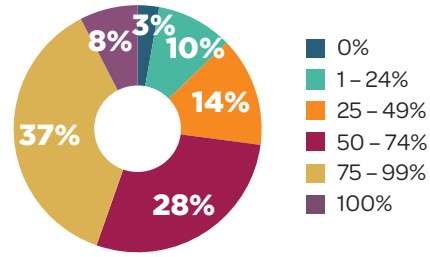
Firms disclosed their frequency of utilizing well-defined project management methodologies and processes. In a reversal from the prior year, twice as many of those surveyed reported using a clearly defined PM process in 100% of projects, a four-point increase year-over-year to 8%.

In continuation of this positive trend, the percentage of firms' projects not using a clearly defined PM process decreased by five percentage points, showing a growing commitment to continuous process improvements across all segments.

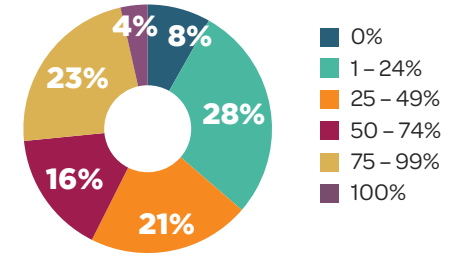
Still, the percentage of firms utilizing a PMO or CoE for projects remains low and is trending downwards in all segments, at just 11% of firms from 15% in 2021, a number driven primarily by large firms, which are far more likely to have a PMO in the first place.

To ensure that plan goals and strategies are met, it is crucial to either develop a strategic plan or make references to an existing one. Additionally, it is important to establish a CoE or PMO that is tailored to these specific objectives and supports the training and development of current and future project managers transparently and methodically.

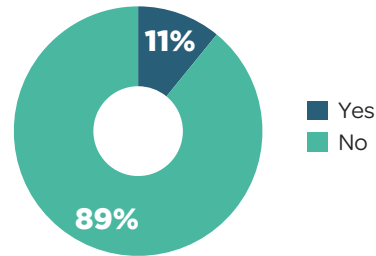
Projects Using Clearly Defined PM Process



Project Leaders with Formal Project Management Training



Firms with PMO or Center of Excellence



Internal Project Performance Evaluations

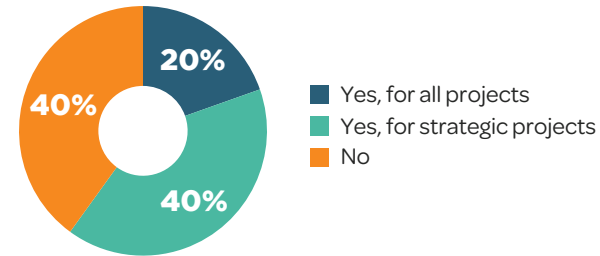
The use of internal project performance evaluations is relatively constant year-over-year. Among firms that complete project performance evaluations, 40% do so for strategic projects only, while 20% do so for all projects.

The slight uptick in project performance evaluations for all projects was driven largely by high performers and architectural firms. Large firms' responses indicate they are most likely to conduct internal project evaluations, particularly for strategic projects.

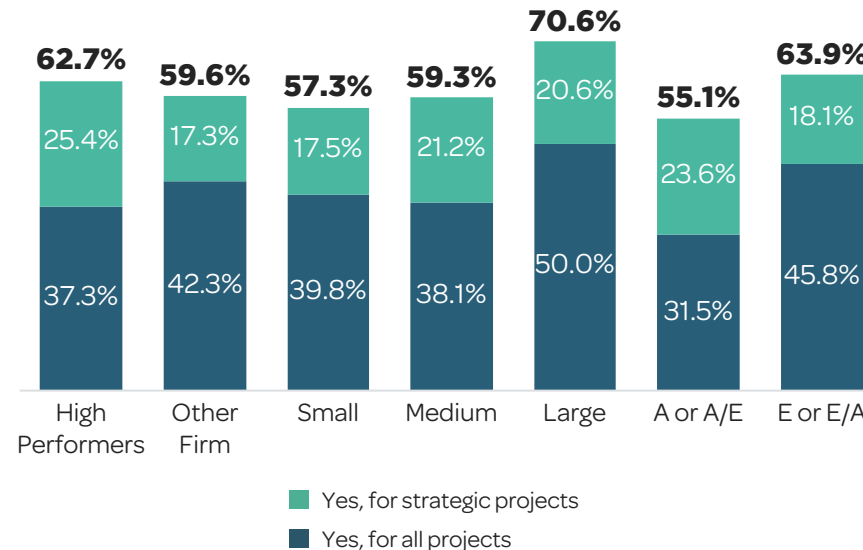
Among those who do not measure internal project performance, consideration for doing so continues to remain flat year-over-year, with 36% considering it for strategic projects and 11% for all projects.

In the coming years, new generations of project staff will expect more prompt feedback as part of their training and career advancement initiatives. These assessments can enhance retention rates, improve professionalism and ultimately contribute towards positive financial outcomes.

Internal Project Performance Evaluations



Internal Project Performance Evaluations by Firm Size/Type



Measuring Client Satisfaction

High client satisfaction is a powerful tool that can help establish a company's reputation and attract future work.

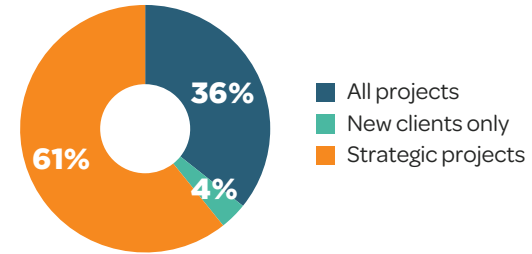
This year, the measurement of client satisfaction remained squarely focused on strategic projects, with a small decrease in emphasis on all projects, falling from 40% to 36%.

Almost half of A&E firms (40%) report irregular measurements of client satisfaction and nearly a third only measure it at the end of a project, a 19% decline versus the prior year. That said, the number of firms measuring client satisfaction at key project milestones was flat in 2022 (18%), and although they are in the minority, firms that measure client satisfaction annually increased by seven percentage points to 12%.

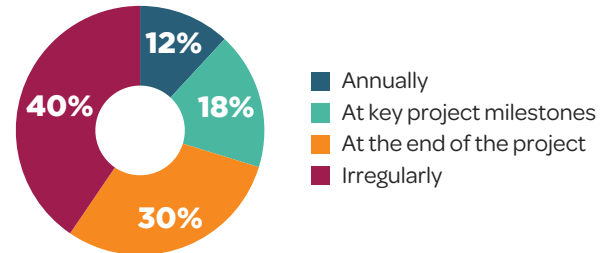
For those firms not currently conducting evaluations, fewer are considering measuring client satisfaction now than the year before, dipping from 52% to 49%.

It is natural for every company to have its unique approach to measuring client satisfaction. However, it's crucial to establish a standard procedure for analyzing and utilizing client feedback to enhance services. Keeping open lines of communication with clients and fostering a culture of transparency are essential components of this strategy.

Measuring Client Satisfaction by Project Type



Frequency of Measuring Client Satisfaction



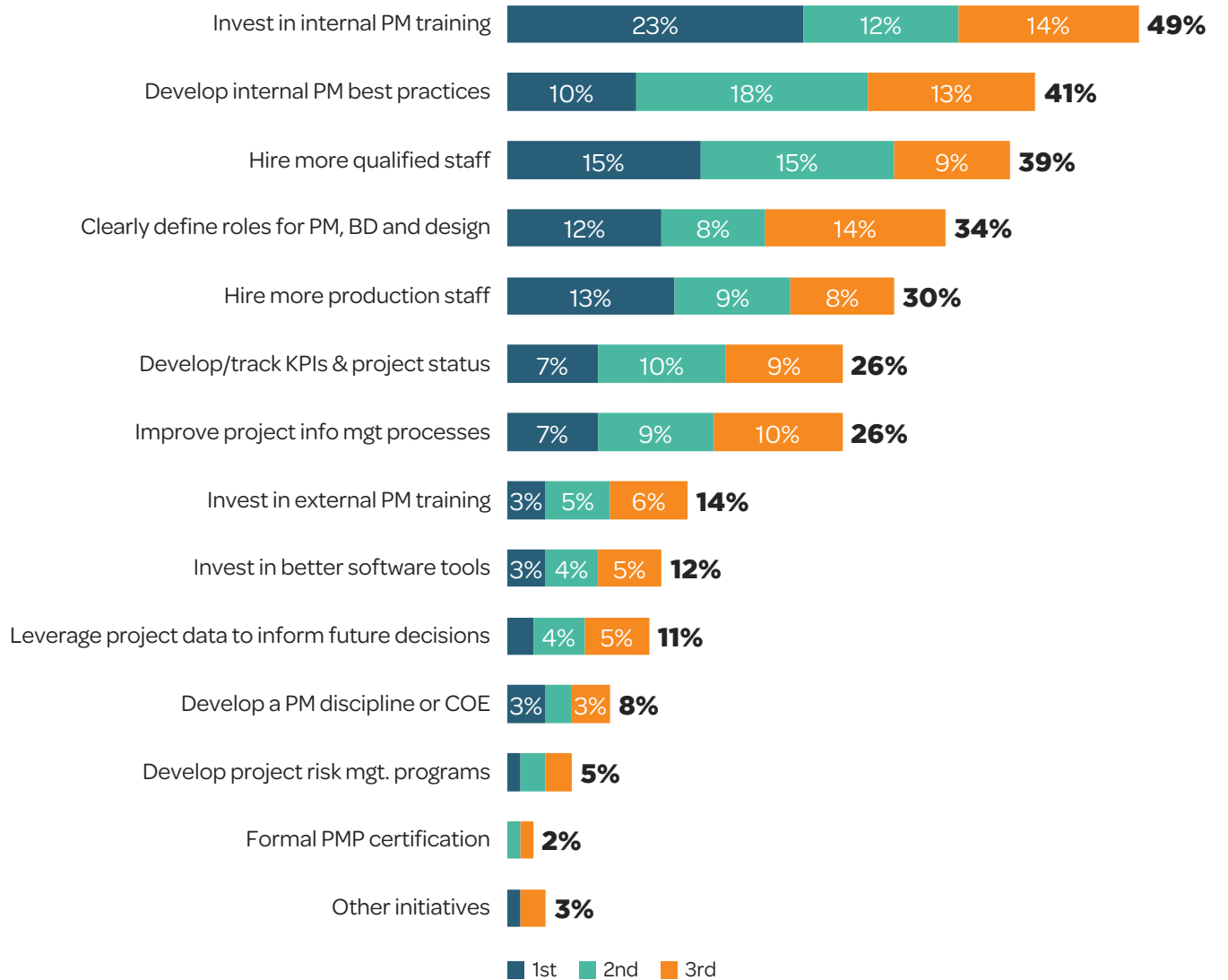
Top Project Management Initiatives

For 2022, respondents placed investing in internal project management as their top strategy of focus for the next three years, replacing last year's priority of hiring more qualified staff, now in third place.

Plans to concentrate on developing best practices for project management (up one percentage point to 41%) and clearly defining project management responsibilities (34%) with investments in hiring more production staff following closely behind as top priorities moving forward.

While new technology and process automation could provide significant support here – in addition to firms' technology leaders' desire to invest in project management business applications going forward – only 12% of project management leaders are prioritizing investment in better software tools. It is important to note that technology investments can take several forms, but the purchase and implementation of new tools is not necessarily required. Real gains can also be made through additional training and focus on extracting the most value out of already-on-hand tools.

As firms continue to see strong pipelines and backlog, now is the time to focus on investments in training inexperienced PMs or more PMs, leveraging technology to deliver greater visibility into project performance and improving or implementing project management processes to ensure that project delivery and client experience is the best it can be.



Project Management

Firms continue to face project management and design challenges, prompting them to seek alternative ways of supporting and training their project leaders using internal process enhancements. Using technology to reduce administrative responsibilities and improve project visibility can improve proactivity and provide substantial relief to smaller teams.

Going forward, A&E firms should calibrate staffing strategies from acquisition through training to ensure their workforces meet growing project demands. As hiring experienced PMs becomes more costly and firms focus on developing and advancing their top PM talent, the challenge will shift to upskilling less-seasoned project managers and better equipping them to tackle emerging project challenges swiftly and profitably.

Firms need to keep PMs engaged over the long term by providing the right training, time and tools to manage projects proactively with the most important KPIs – beyond just financials. Implementing career pathing strategies can help companies cultivate a team of

passionate project leaders who are committed to delivering successful projects for satisfied clients.

Developing an in-house community committed to actively learning and sharing important lessons from each project with other team members is also an important objective. Activated via a PMO, CoE or other formalized ways of leveraging senior PMs' experiences – even those who may have graduated to senior roles in their firms – can provide valuable training, guidance and a view of best practices for inexperienced project managers. With greater transparency and continuous improvement from the front lines, PM teams stand to improve their effectiveness across the board.



SECTION FOUR

Human Capital Management

With staffing still a challenge and cost of new hires growing, firms must focus on developing and cross-training existing staff to deliver projects.

The number of firms reporting more open positions in 2022 fell markedly versus 2021 levels. While inroads have been made with new hires, 46% of firms are still reporting similar levels of open positions. With employee turnover remaining flat, the focus has shifted to cross-

training and upskilling staff. This inward focus is realized with greater attention on succession and career development planning as well as performance management.

6.7%

Staff Growth

Staff growth doubled year-over-year.



ADDRESSING TOP TALENT ACQUISITION CHALLENGES

1 The availability of good candidates

With employee turnover still high but stabilizing, nearly every firm is facing challenges with solid candidates in the talent pool. But firms are realizing that the ability to secure new talent and fill open positions is only one part of the equation. Nurturing and developing existing talent is equally important to overall firm strength and improved retention. Upskilling, cross-training and purposely developing talent will best position firms to capitalize on growth.

2 The ability to offer competitive compensation

The cost of new hires is rising, and firms are continuing to struggle balancing the need to increase compensation to attract talent with the needs of current staff. Offering competitive compensation declined as a talent acquisition challenge as more firms are addressing it. Competitive pay does however remain an ongoing initiative as firms contend with increased competition due to remote work, capturing talent with in-demand skillsets and retaining current employees.

3 Finding the right solutions and tools to match qualified candidates to open positions

Finding sufficient time and budget to be able to select the best technology solutions in order to identify and speed up candidate selection remains a challenge. The right tools can widen the candidate pool and provide relief on compensation requirements, as well as assist in nurturing new hires via well-constructed development programs and facilitate mentorship opportunities with more seasoned staff members. Firms may also want to re-evaluate mandatory position requirements in favor of trainable candidates with complementary skill sets.

Revenue growth forecasts signal continued positive momentum. A&E firms expect favorable, yet competitive market conditions. In order to win big, businesses must bolster their internal resources, starting with their own talent. Do they have the right business development resources needed to prioritize and capture new opportunities? Once won, are the project management skills and resources in place to deliver? And lastly, can firms retain the trained staff they have today in order to reduce future turnover and attrition that would negatively impact bottom line project profitability?

Amidst the heated competition for candidates, firms will need to be even more strategic about how they are attracting new employees and retaining existing ones. Competitive compensation packages (salary and benefits) continue to be important, but they are only a start. The workforce is ever evolving in not only how they prefer to work (i.e. remotely, hybrid, or in-person), but also in what they value in a position and a company culture. It will be important for firms to shift the ways they engage diverse candidates and employees, provide opportunities for upskilling, training and advancement, as well as champion operational tools designed to facilitate project and workforce success. Progressive human resource teams are already doing this by offering visible career development plans meant to engage talented candidates and staff members

who are looking for longer-term professional growth opportunities. This has proven to be an effective way to minimize the negative impact of attrition, staffing shortages and unfilled positions on a business' overall health.

Firms will need to develop and launch the necessary internal cross-training and upskilling programs to fully support essential business functions.



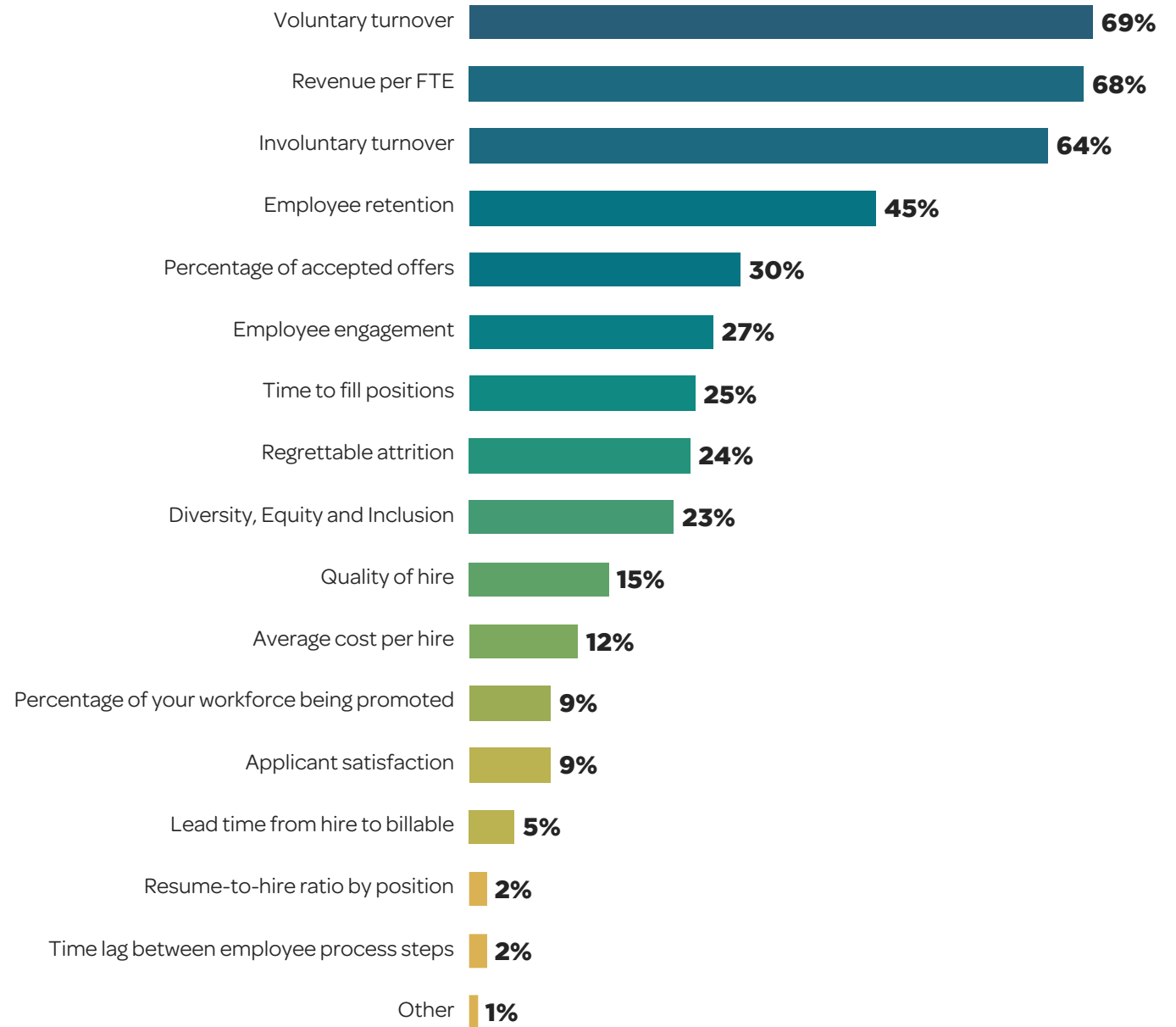
“Architecture firms are having continued difficulty hiring enough staff and balancing employee demands for higher compensation/benefits.”

— Michele Russo, Vice President, Research & Practice, The American Institute of Architects

Human Capital Management KPIs

Currently, firms are spending more time tracking employee management key performance indicators (KPIs) than the year before, particularly ones closely related to retention and hiring. Measurements like voluntary turnover, involuntary turnover and employee retention are high on the watch list, rising nine, twelve and two percentage points, respectively. Revenue per FTE is also under increased scrutiny in 2022 (+6.0 points) as firms try to balance offering higher compensation with future project revenue to remain competitive yet profitable.

Percentage of accepted offers and time to fill positions are also data points that are increasingly being measured in order to accurately gauge and further improve existing hiring procedures and job application processes. New metrics were added to the list this year, such as regrettable attrition, Diversity, Equity and Inclusion (DE&I) and quality of hire. While it's a positive sign that firms are actively tracking these KPIs in recent years, more needs to be done to translate this data into actionable insights. Paying more attention to the entire hiring process, from time to fill positions, to quality of hire, to applicant satisfaction, will surface important areas of improvement to address.



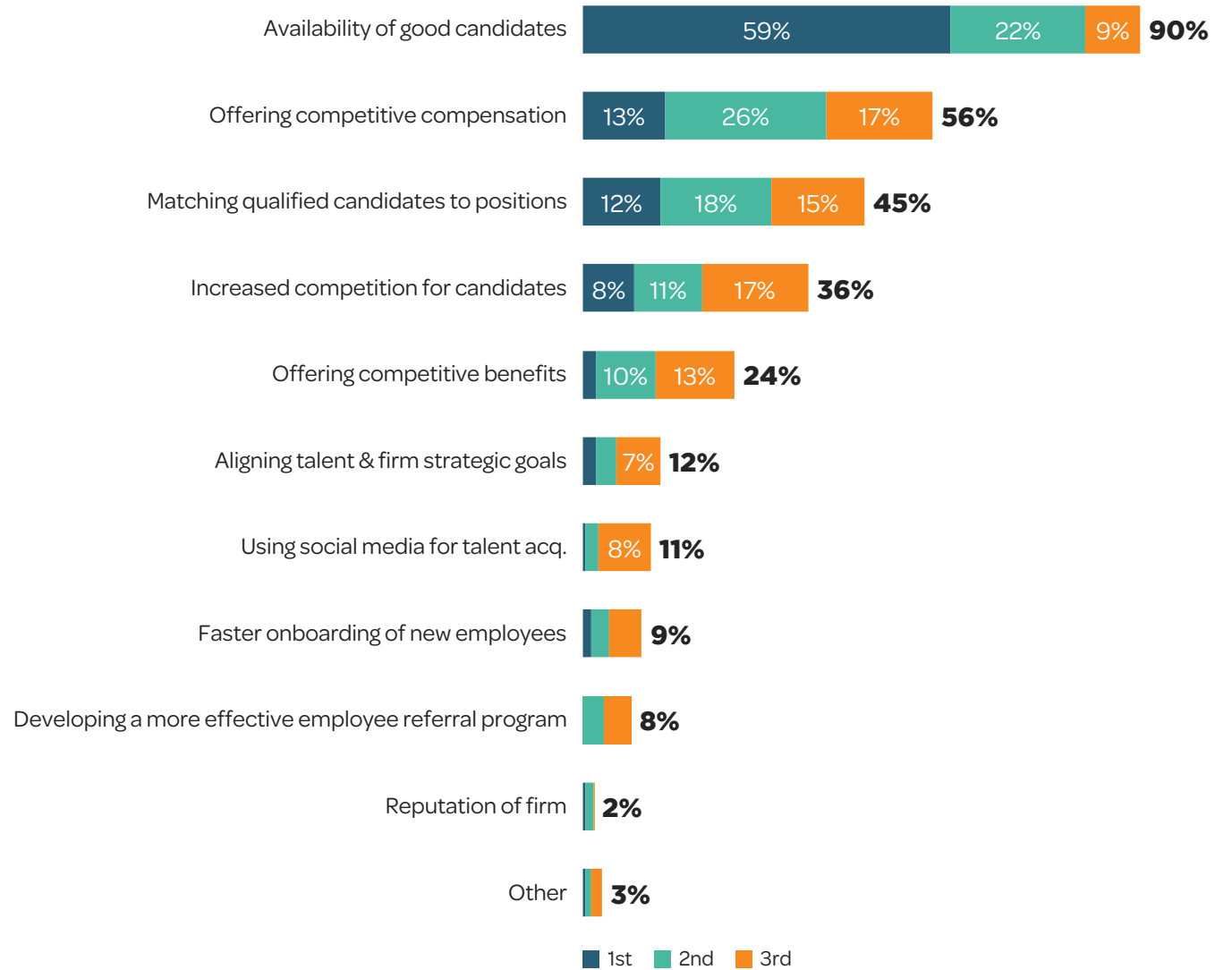
Top Talent Acquisition Challenges

Over the past year while firms overall increased staff growth, 90% of them still rank the ability to find good candidates as one of their top three challenges.

To compete for the best talent, firms are looking at more creative benefits and more competitive compensation as total labor cost per employee grew 3% in 2022. As a result, fewer firms (56%) report offering competitive compensation as one of their top challenges, down 14 percentage points year-over-year, but offering competitive benefits, which today can go beyond medical and dental to encompass a range of work-life balance benefits, increased slightly and was cited by almost a quarter of firms as one of their top challenges.

Thirty-six percent of respondents cited candidate competition as a concern, which is a new metric in this year's study and further demonstrates just how heated the hunt for talent has been in recent years. But other measurements hint at significant talent acquisition improvements as a result, such as faster new employee onboarding times, better employee referral incentives and other positive hiring changes that helped them successfully attract talented people.

Firms are also considerably less challenged with using social media for talent acquisition in 2022, dropping 10 percentage points year-over-year.



13.7%

+0.1

Top Quarter

18.6%

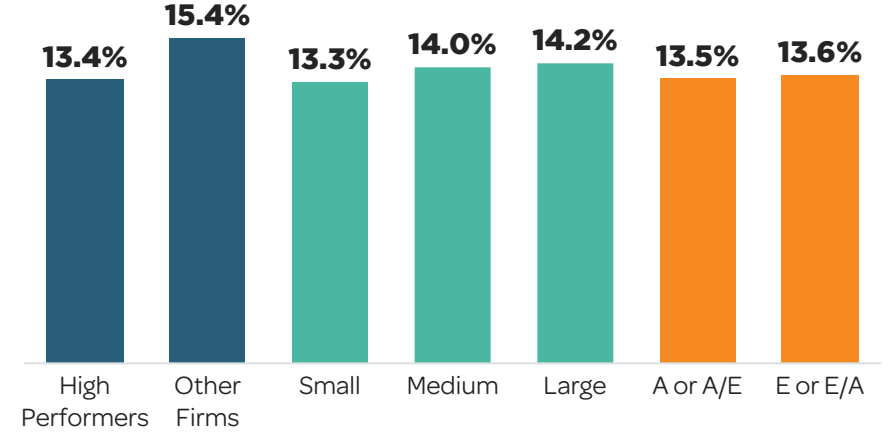
Bottom Quarter

9.8%

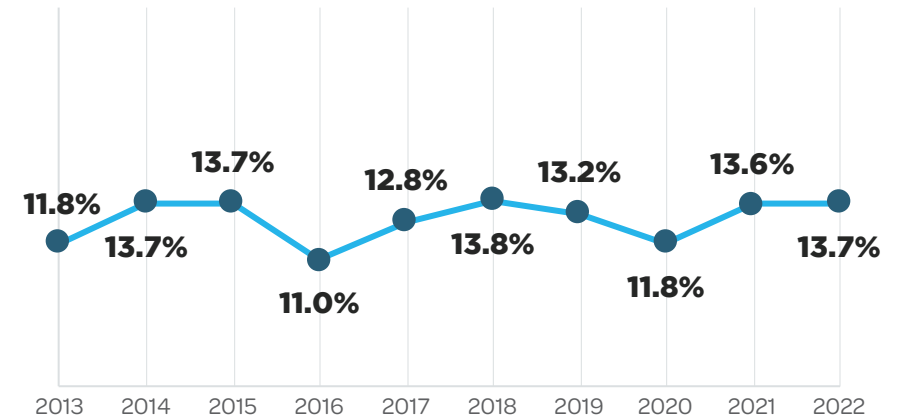
Employee Turnover

The substantial staff growth firms experienced in 2022 was offset, however, by a relatively high but stable staff turnover rate. Overall, firms are still experiencing a nearly 14% churn rate. Small firms experienced the biggest jump in employee turnover, increasing by more than one percentage point, while medium-sized firms and large firms saw turnover dip slightly.

Continued erosion of workforce levels makes it difficult for firms to make strategic decisions around business development and project staffing, more reason why firms need to focus more intensely on retention, upskilling and career path development.



Employee Turnover: 10-Year Trend



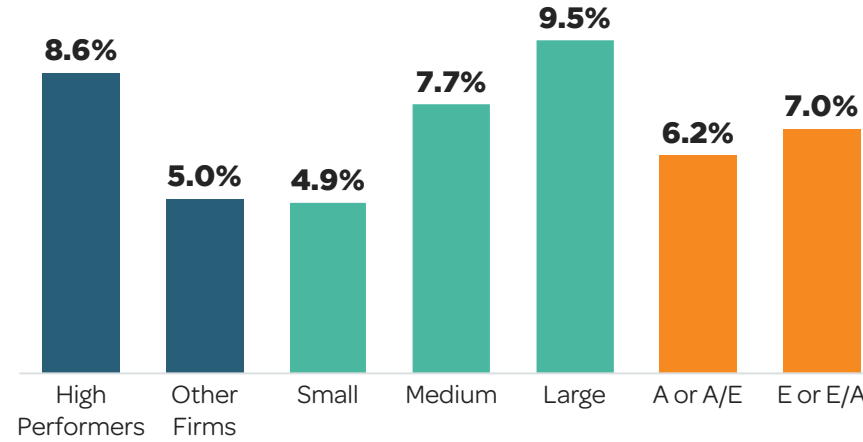
Staff Growth or Decline

Despite the ongoing stated challenge of finding qualified talent, staff growth nearly doubled across all segments, rising from 3.2% in 2021 to 6.7% in 2022. Large firms experienced the most growth, increasing almost six percentage points year-over-year. It's also a positive sign for the industry that both architecture and engineering firms experienced strong growth of around four percentage points in the last year.



“Attracting and retaining talent is potentially limiting capacity to pursue and deliver projects.”

— **John Gamble**, President & CEO, Association of Consulting Engineering Companies - Canada



6.7%

+3.5

Top Quarter

13.2%

Bottom Quarter

1.6%

Open Positions and Hiring Lead Times

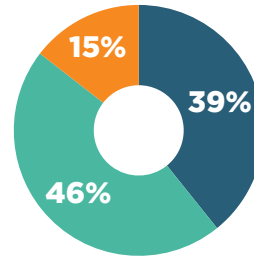
The share of firms reporting more open positions sharply declined 26 percentage points. However, hiring challenges are not off the table as 46% of firms report that the number of open positions remain the same. More than 70% of firms indicate that the open positions are the result of both staff growth and inability to fill current vacant positions, creating a challenge at both ends of the hiring spectrum.

Overall, the average time to fill a position has remained flat, with 42% of firms reporting 31-60 days to fill a position, and 52% reporting more than 61 days to fill a position. While large firms are moving against the trend and reporting substantial reductions in their times-to-fill, the opposite is true for smaller firms, which are spending a longer time evaluating candidates or may be struggling to compete for candidates with larger firms.

Firms have decreased average lead time from hire to billable to 35 days, down from 38 days the previous year.

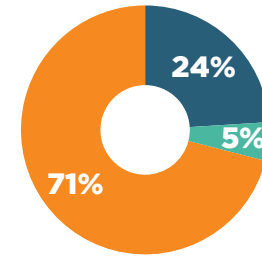
While filling existing positions continues to be challenging in this increasingly tight labor market, firms must accurately evaluate the entire hiring processes in order to balance speed and candidate quality, all while eliminating unnecessary delays and steps in the interview cycle. This is a key opportunity to leverage technology to ensure that processes are automated where it makes sense so firms won't miss a key opportunity with a candidate due to internal workflow challenges.

Number of Open Positions



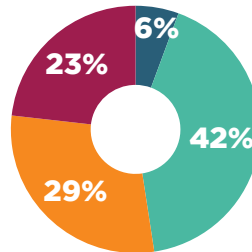
- More open positions
- About the same
- Fewer open positions

Reason for Open Positions



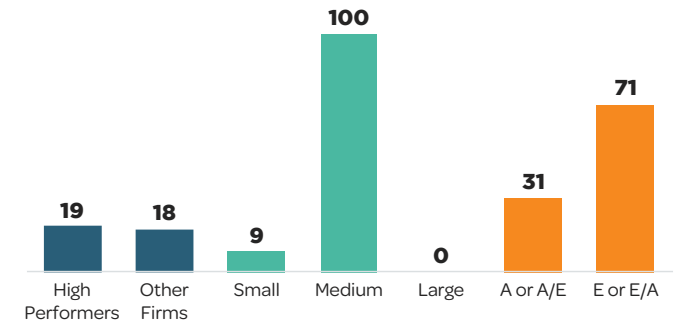
- Growth
- Cannot fill existing positions
- Both growth and cannot fill existing positions

Average Time to Fill Position



- 0-30 days
- 31-60 days
- 61-90 days
- >90 days

Average Lead Time (35 days)

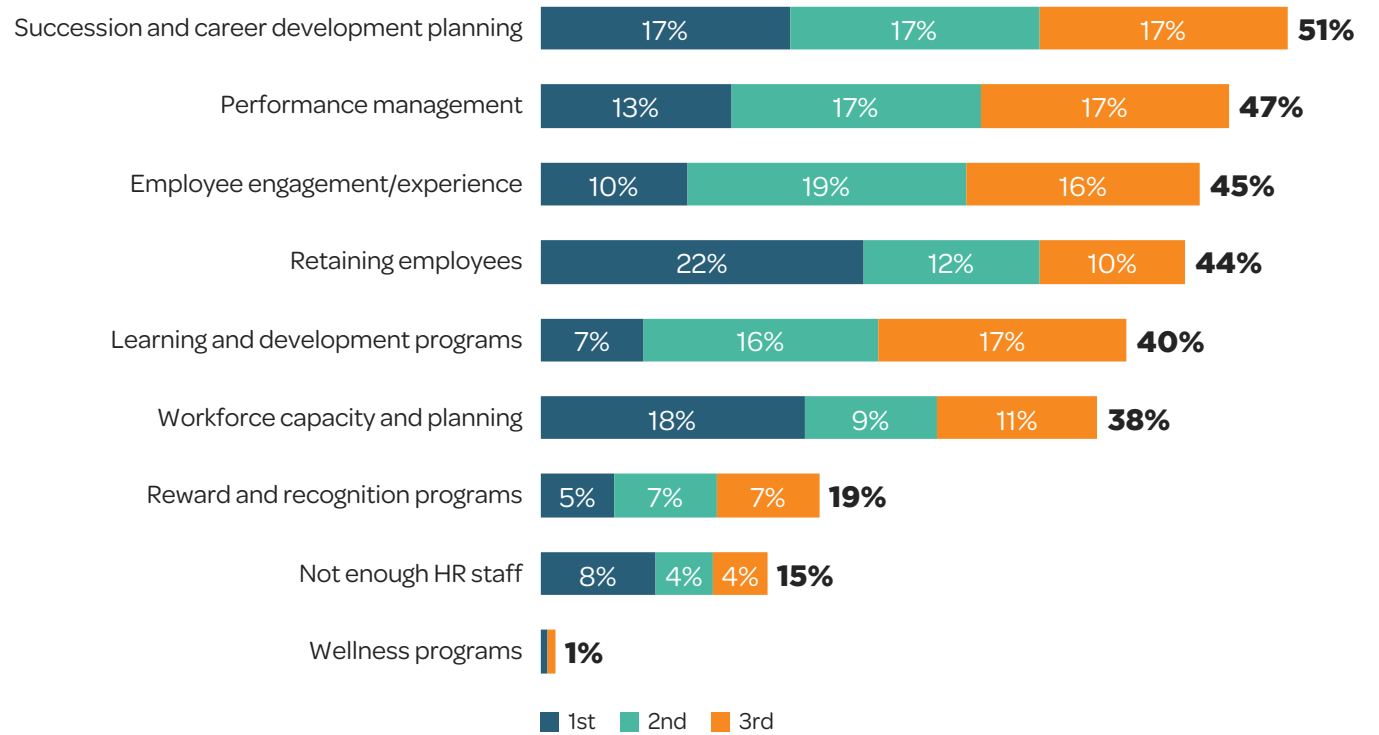


Top Challenges Managing Human Resources

A&E firms appear to have stemmed the tide of pandemic-related attrition with retaining employees dropping five percentage points from the top position to fourth. As a result, workforce capacity and planning has also fallen in importance, dropping 10 percentage points year-over-year.

This shift has HCM professionals now challenging themselves to upskill and drive performance of new and existing employees. Succession and career development planning is at the top of Human Resource staff's minds, up five percentage points year-over-year. Performance management is also becoming a bigger challenge as more firms look for ways to retain and promote talented professionals so they remain with the business longer, up six percentage points. Finally, learning and development programs are up as a result, growing six points year-over-year. These are all steps on the path to greater employee loyalty and engagement.

The need for reward and recognition programs also rose as a challenge, up 14 points year-over-year as firms return to more business as usual practices. However, with 15% of firms stating that they do not have enough HR staff, they run the risk of not being able to deliver on business growth initiatives. Firms should treat this challenge as an opportunity to implement technological and service-related automations that can help them effectively manage their people with fewer HR employees on hand.

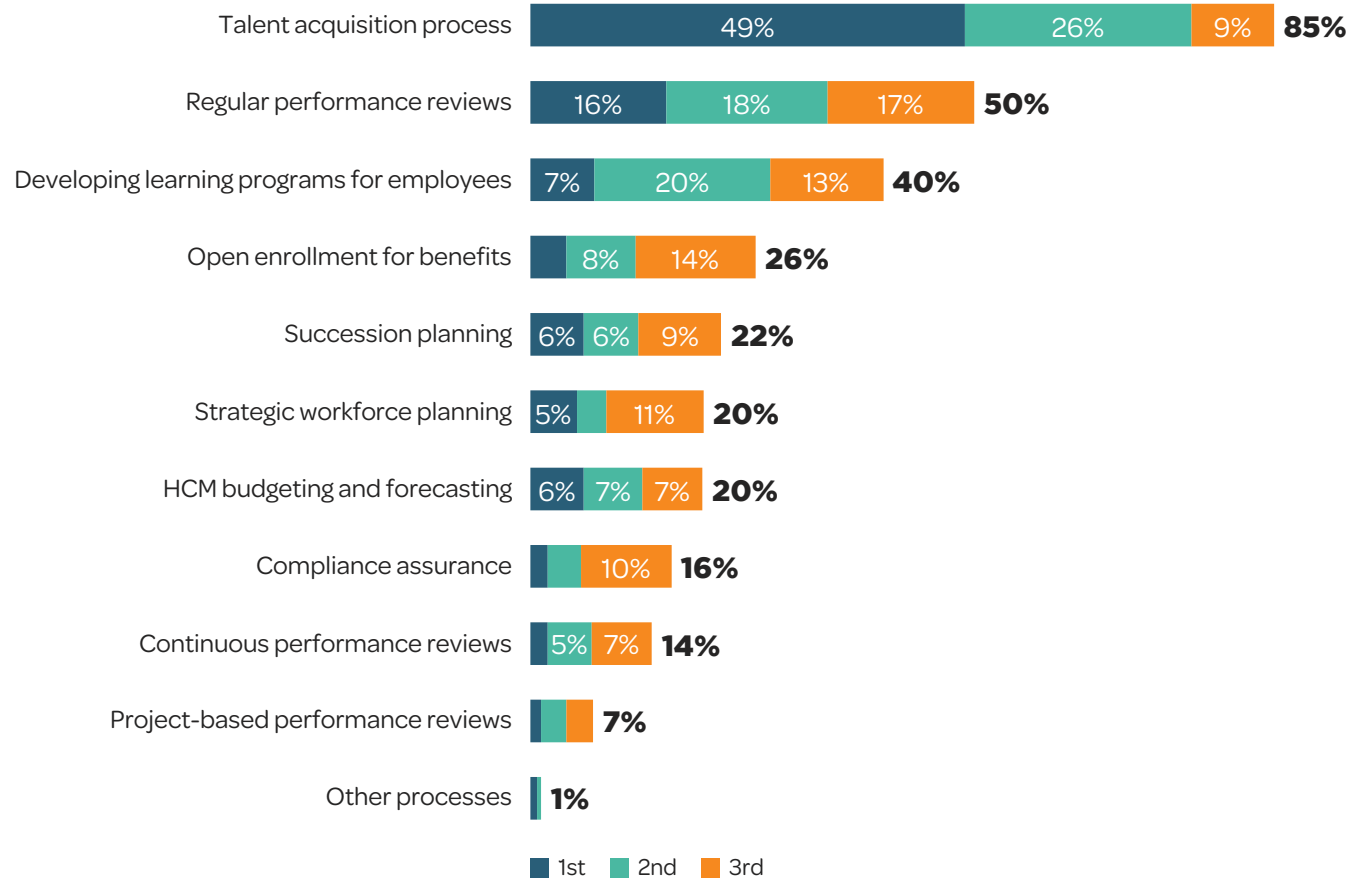


Most Expensive Business Process to Support

Given the staffing challenges firms continue to face, talent acquisition was reported to be the most expensive business process for A&E firms to support. Nearly half of all firms ranked this as their number one challenge.

One way for firms to stem increasing costs related to talent acquisition is to maintain focus on initiatives that lead to greater retention. Annual/bi-annual performance reviews, the second most expensive business process, could be replaced with more efficient, effective and timely continuous or project-based performance reviews. Increased focus on developing learning programs can nurture and strengthen in-house personnel to take on increasing levels and areas of responsibility.

Strategic workforce planning and HCM budgeting and forecasting each fell, with only 20% of firms reporting them as one of the top three most expensive business processes. This is positive as firms take on more agile hiring processes and technologies to help bring down the costs of hiring new talent and keeping staff actively engaged.



40%

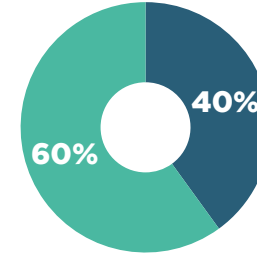
-6

Firms with Formal Succession Planning

Overall, succession planning fell six percentage points year-over-year, with firms favoring current leaders, next-in-line leaders and first-line leaders for critical business roles and functions. In fact, only nine percent of firms include all employees in these efforts, down from 10% the previous year, indicating firms are being more selective regarding which individuals will get formal opportunities to grow.

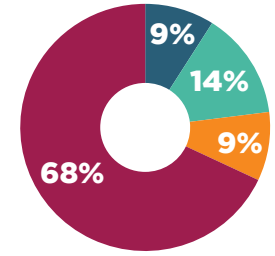
While smaller businesses increasingly favor extending growth opportunities to all employees, high-potential employees and first-line leaders, larger firms spearheaded the trend of limiting succession planning to current leaders and next-in-line leaders in 2022, reportedly reducing their succession planning initiatives for all employees.

Succession Planning



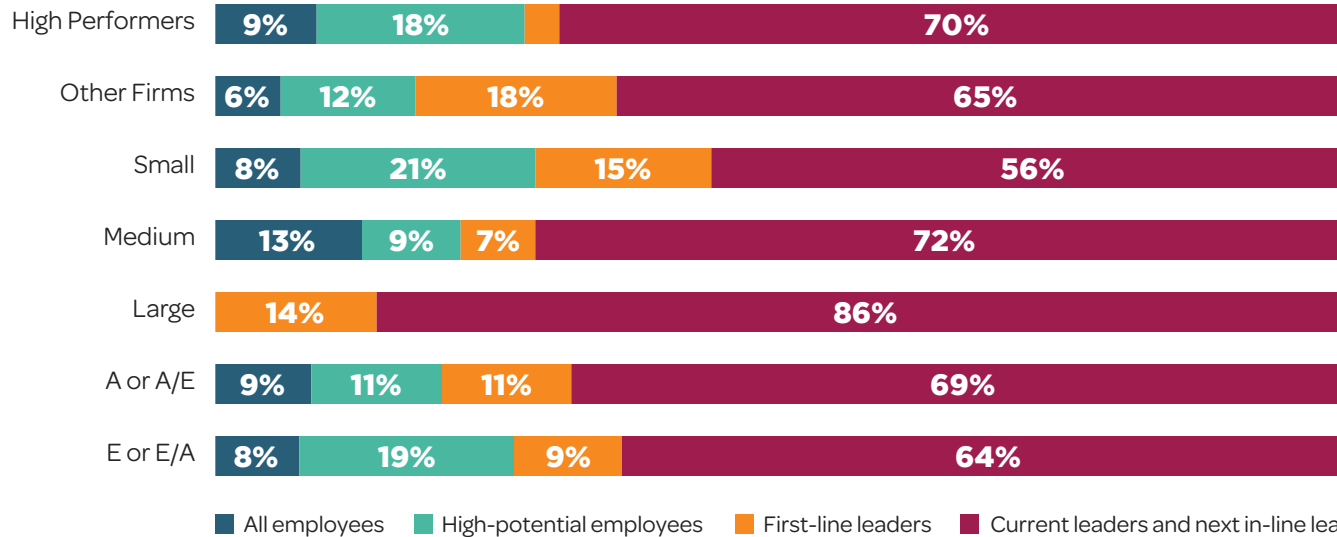
■ Yes
■ No

Who Succession Plan Applies to at Firm



■ All employees
■ High-potential employees
■ First-line leaders
■ Current leaders and next in-line leaders

Who Succession Plan Applies to By Firm Type/Size



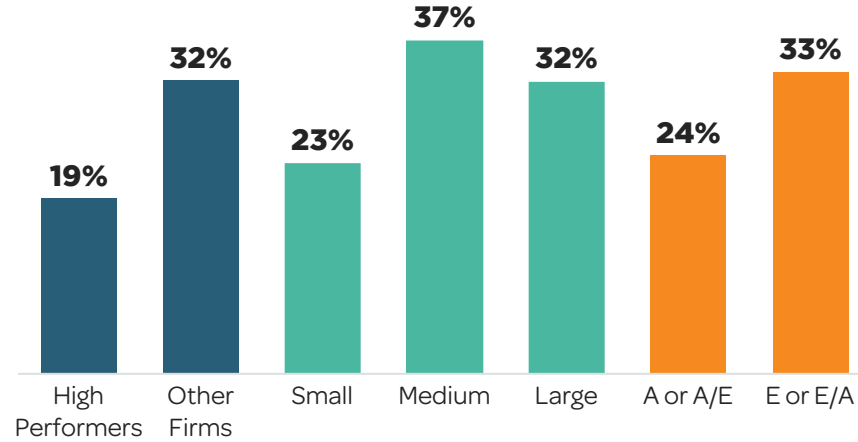
Firms with Career Development Plans

Another tool firms are utilizing to engage new and existing talent is implementing and promoting formal career development plans. Despite the fact that employee retention and succession planning are becoming increasingly important to firms, the use of career development plans declined by nearly six percentage points compared to the previous year.

This change was most apparent in large firms, which experienced the biggest decline from 52% to 32% in 2022. There was also a

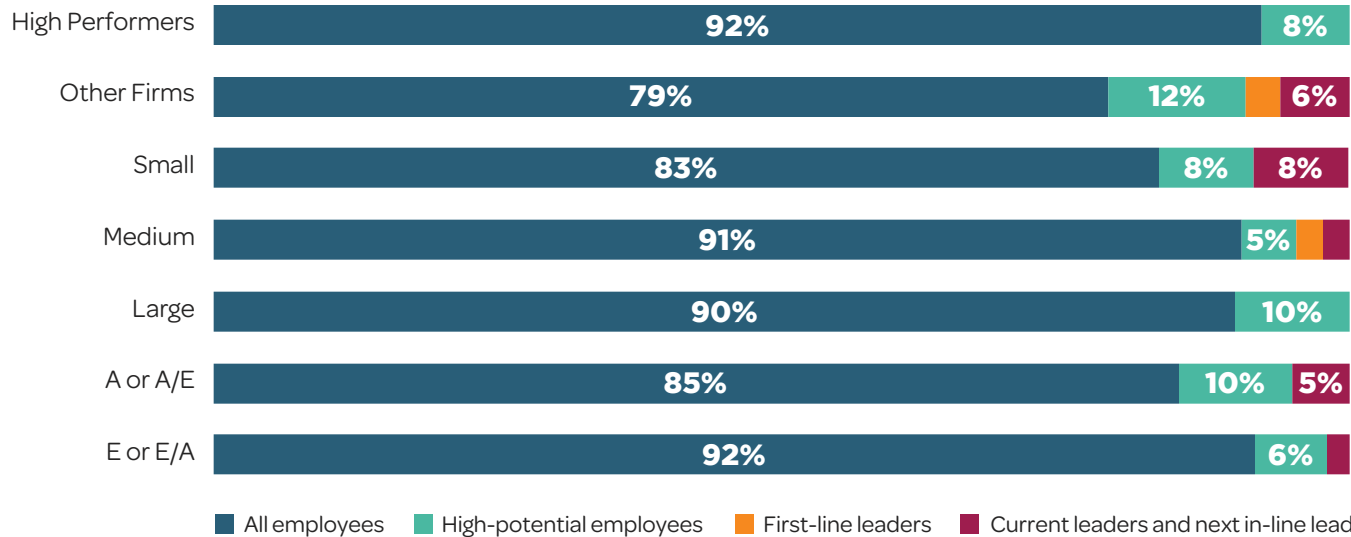
significant decline in high performing firms which saw a decline from 38% to 19%. Other businesses faced similar, yet less steep declines.

Nonetheless, small and medium-sized firms aim to make career development plans available to all employees at a rising rate. This was generally consistent across businesses with the notable exception of large firms, which plan to focus more time and resources towards the development of high-potential employees.

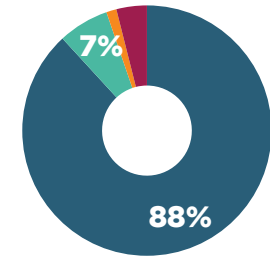


27.2%
-5.9

Career Development Plan Application By Firm Type/Size



Career Development Plan Application

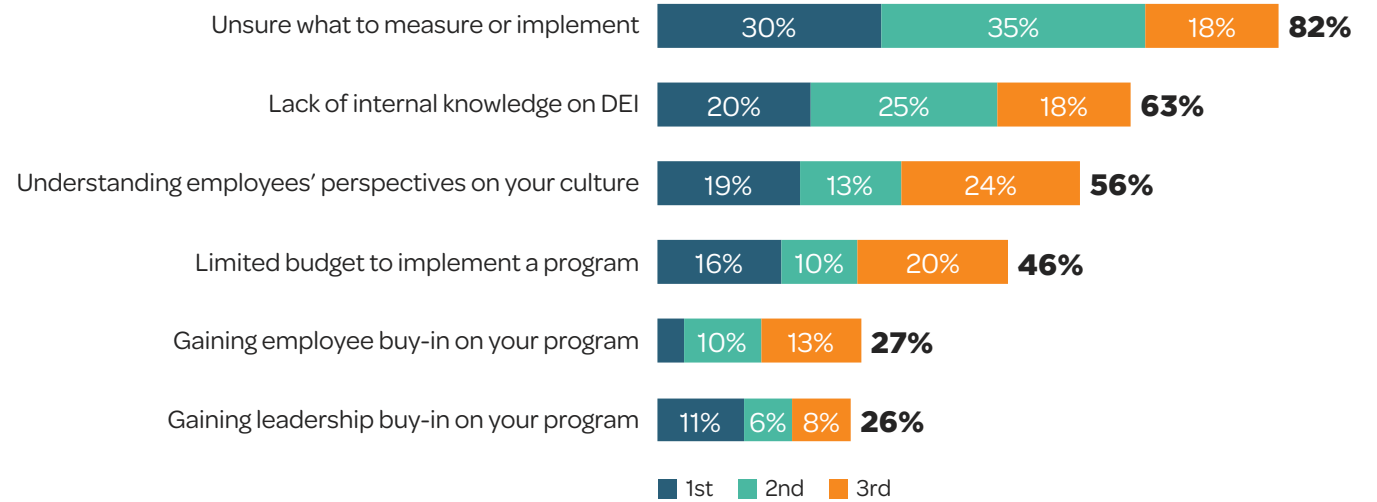


- All employees
- High-potential employees
- First-line leaders
- Current leaders and next in-line leaders

Top Challenges Building DE&I Programs

There is a growing desire to build and nurture internal Diversity, Equity and Inclusion (DE&I) programs in A&E firms, however most respondents are unclear regarding the steps they need to take to start.

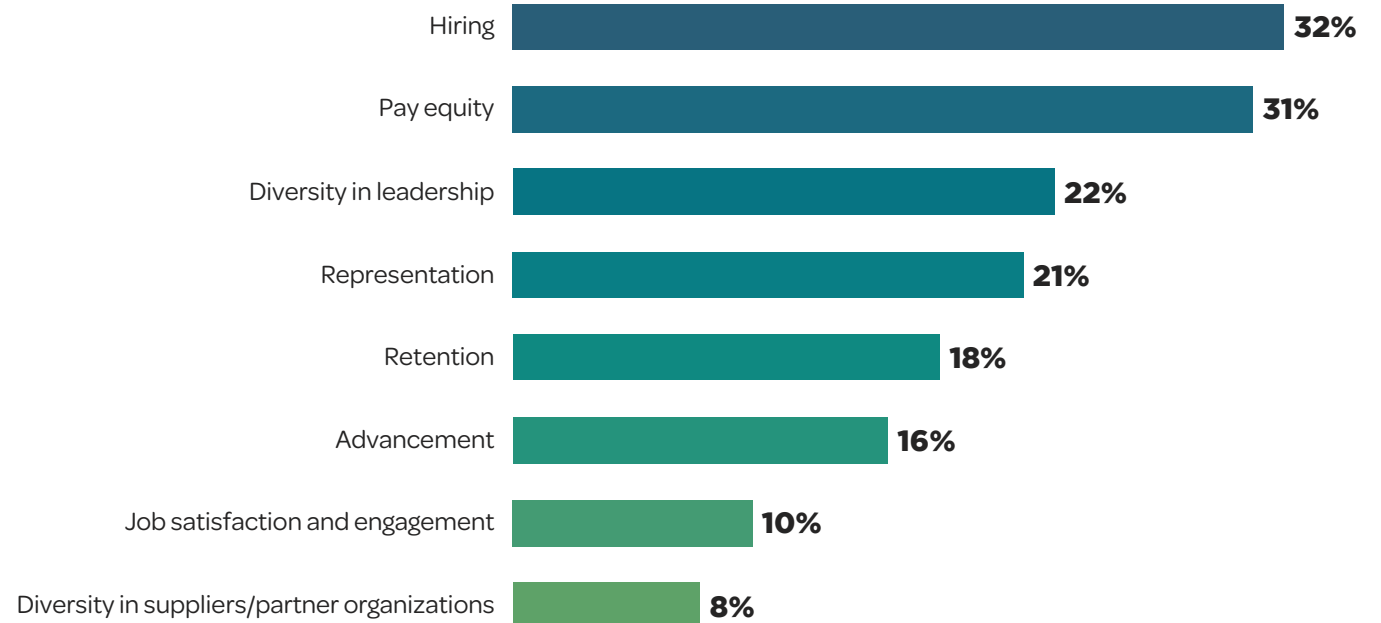
An overwhelming majority of firms (82%) disclosed that they were unsure what to measure or implement, with more than half citing a perceived lack of internal knowledge on DE&I and important gaps in understanding regarding employees' perspectives on firm culture. While the solution to these issues may seem straightforward, the fact of the matter is that most firms are not looking to hire more experienced or specialized HR staff members any time soon. With rising recruitment costs already a challenge for business leaders, the added issue of limited funds to implement DE&I programs make the proper implementation, promotion and adoption of one suboptimal.



DE&I Metrics Tracked

We asked respondents which DE&I metrics their A&E firms were actively tracking. Of those who did, hiring (32%), pay equity (31%) and diversity in leadership (22%) were ranked as the top three metrics currently tracked to understand DE&I adoption within the firm. Diversity in new and existing staff members was also considerably more important than the diversity of suppliers and partner organizations.

While positive changes in diversity hiring and pay equity can be an effective candidate attraction and recruitment tool, the real test of whether or not a DE&I program can keep diverse talent from going elsewhere lies in its tangible ability to enact real and visible changes within the hierarchy of an organization.



23.0%

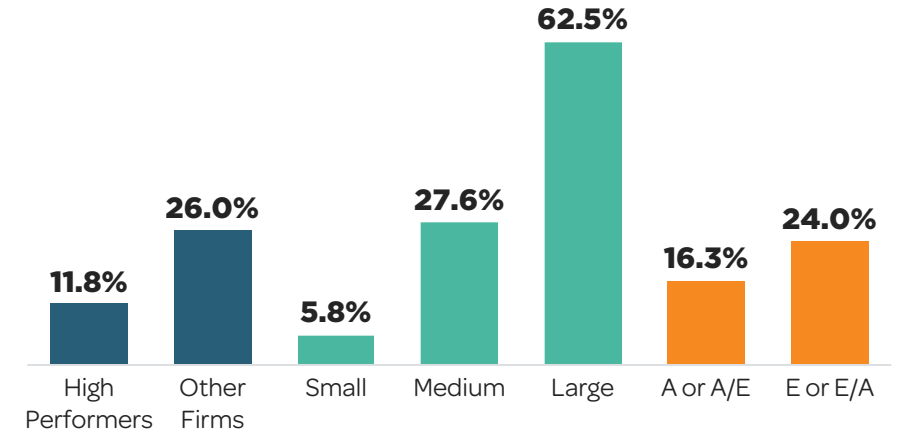
-0.3

Firms with Learning Management Systems

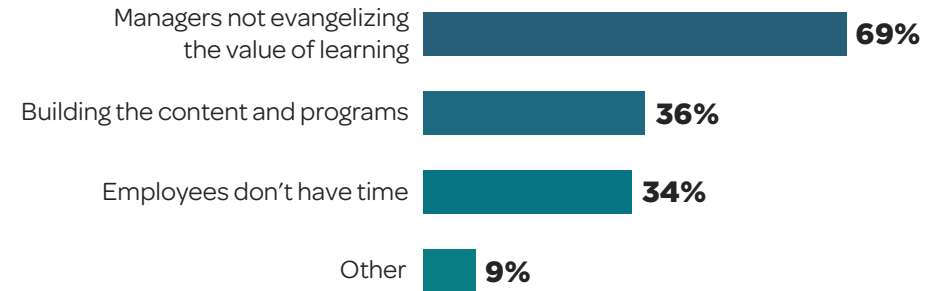
Another area to help create, deliver and track the professional skills development of employees is the use of a formal learning management system (LMS). Firms with an LMS overall remained relatively flat year-over-year, with small firms seeing a slight uptick (+0.9 points), while large firms experienced a decline (-3.3 points). Even with a decline in large firms, they still far outpace small and medium-sized firms with more than 60% leveraging an LMS system.

While the two leading common challenges to adopting learning management systems largely declined (i.e. content program building and employee lack of time to leverage the LMS), twice as many respondents identified issues with managers not evangelizing the value of learning as an increasing challenge (up to 69% from 37% in 2021). Firms would be well-served to provide front-line managers with data and insights proving the positive impact of these tools and programs on employee and firm-wide success.

Learning Management System Possession



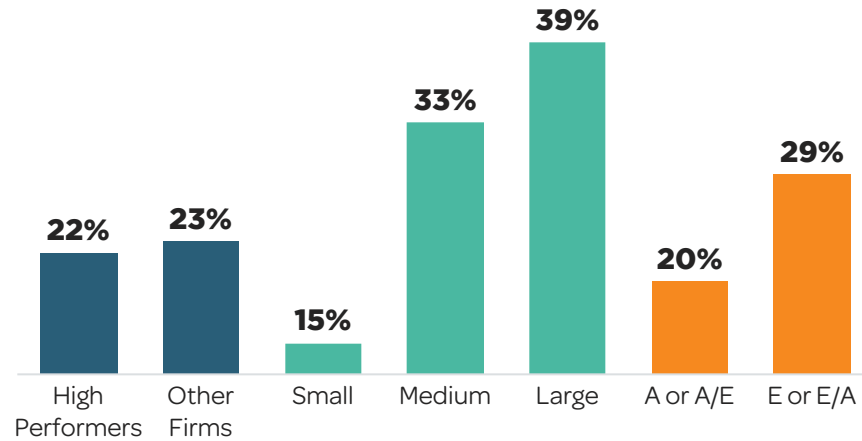
Top Challenges with Adoption of LMS



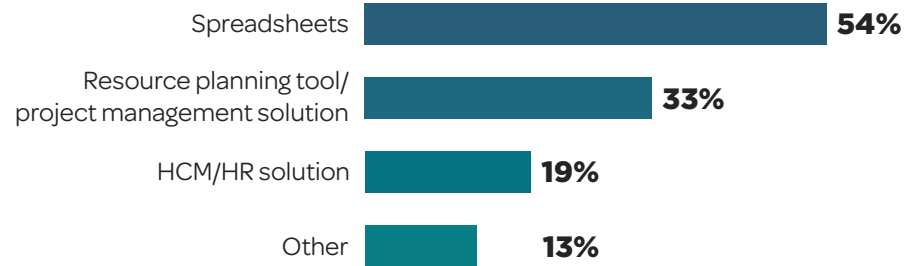
Firms with Learning Management Systems

Small and large firms drove overall declines in utilization of a skills repository in 2022, decreasing by 10 and 15 percentage points, respectively. This could be due to the fact that more than half of respondents house their skill repositories in spreadsheets, making accessing and updating data a cumbersome and laborious task.

Firms with a Skills Repository



Location of Skills Repository



23.0%

-0.3

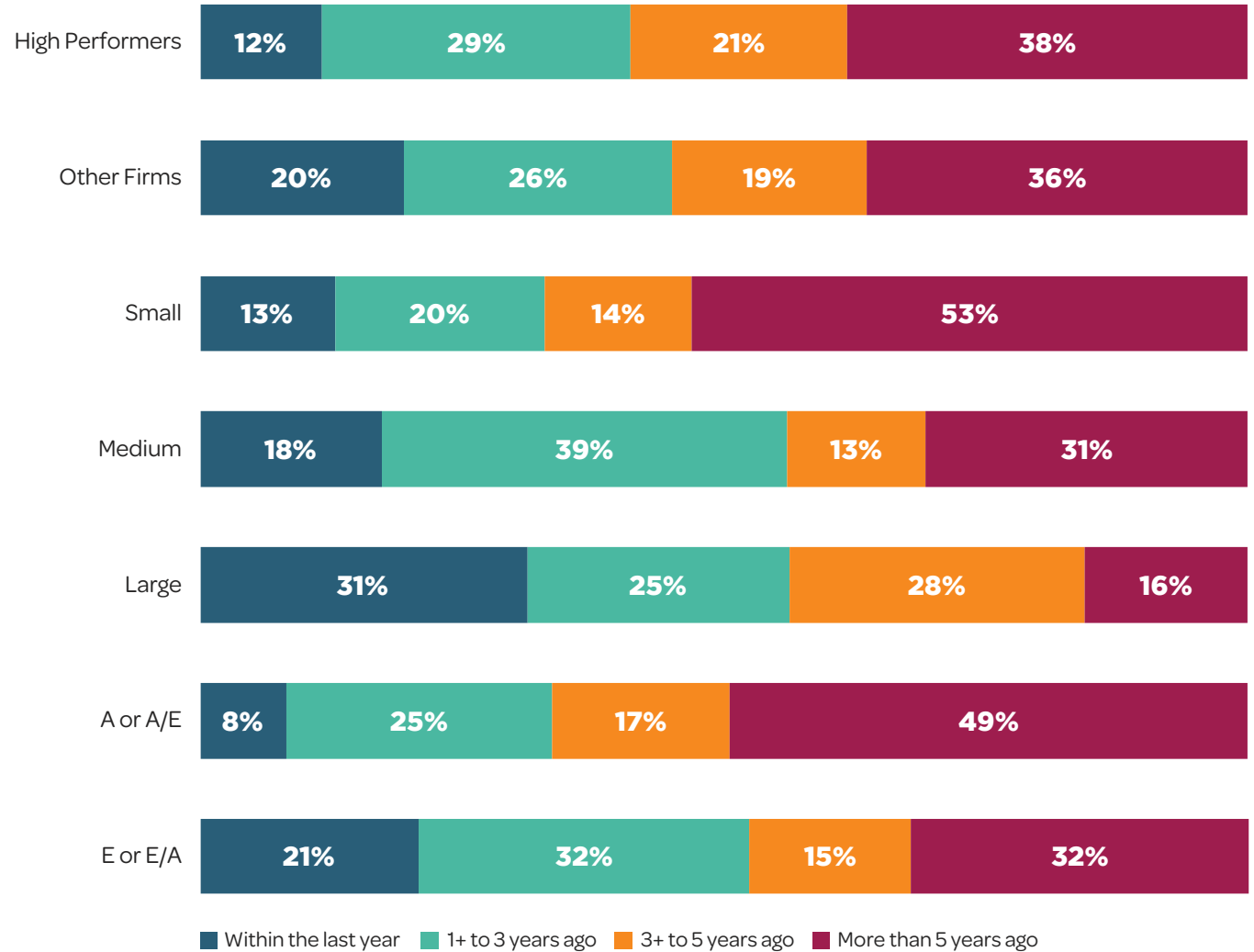
Use of Human Resource Management Solutions

Overall, utilization of HR Management Solutions declined by five percentage points from the previous year. In fact, almost a third of firms reported not using any HR management tools at all in 2022.

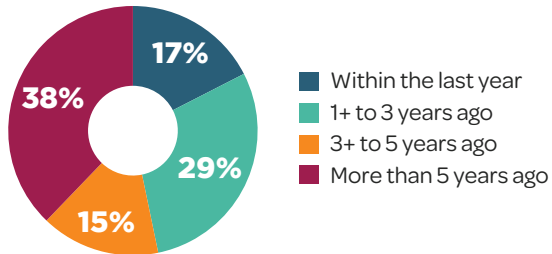
Large businesses, which tend to place a greater emphasis on technology use in general, were more active in implementing HR Solution upgrades or replacements in the last year, up five percentage points to 31%.

Small and medium-sized firms are taking longer to upgrade or replace their HR systems, which could put them at a disadvantage in the recruiting and onboarding process in particular. Of those indicating the existence of an HR management tool, more than half indicated that their solution has been in place for at least three years.

Last HR Solution Modification By Firm Type/Size



Last HR Solution Modification



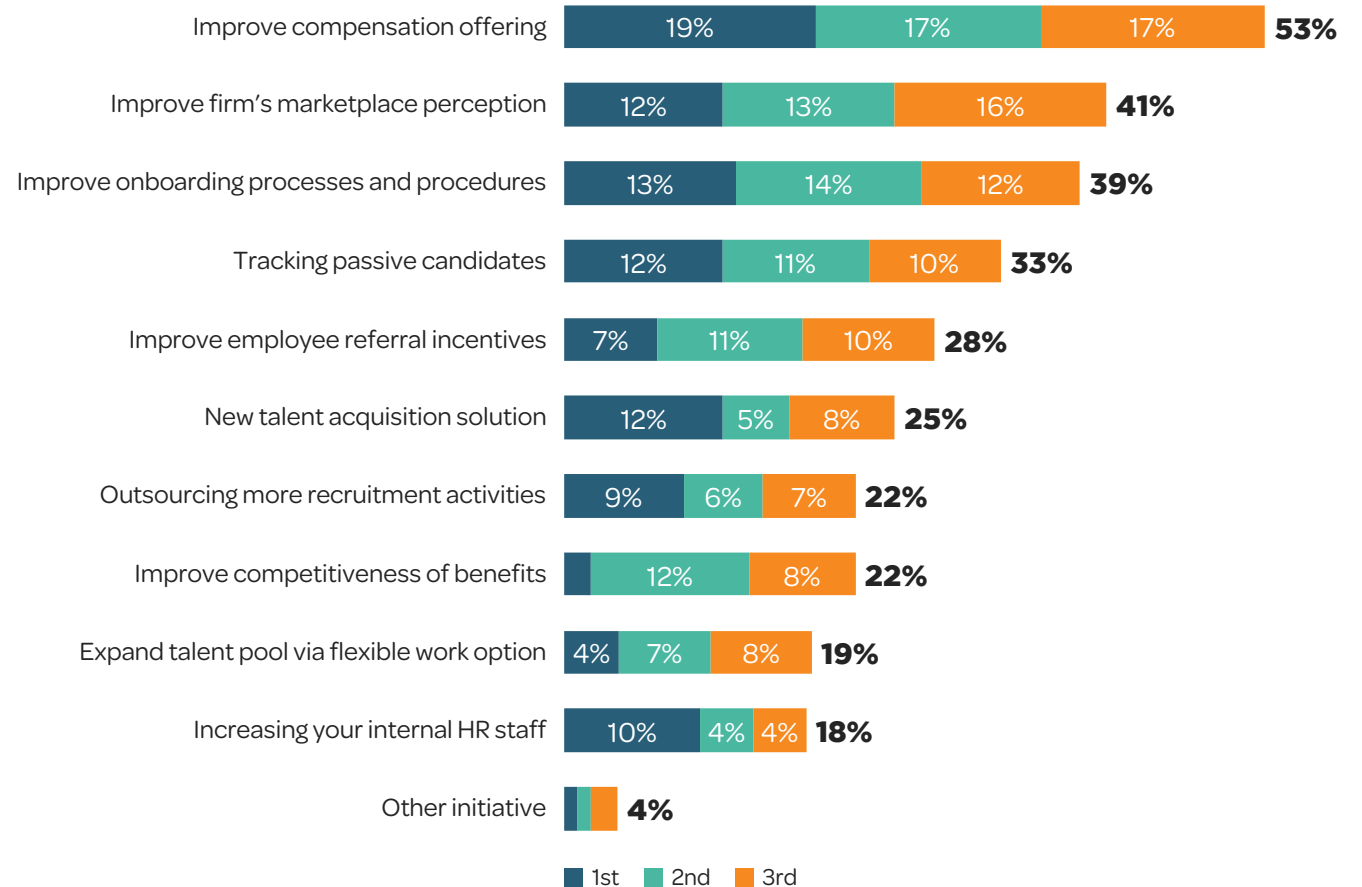
Top Talent Acquisition Initiatives

Firms were asked to identify the initiatives they plan to undertake over the next three years to improve talent acquisition. While the top initiatives remained relatively similar, improving compensation grew by three percentage points over the previous year, shifting the focus away from the firm's marketplace perception as one of the most important recruitment factors for A&E respondents.

Improving onboarding processes and procedures grew as an important initiative, rising seven percentage points. This is an opportunity for firms aiming to speed up hire to billable timelines, generating revenue from new hires as quickly as possible.

Better tracking of passive candidates (+8 points) rose as an initiative with firms which could be keeping an eye on strong candidates in other firms or even former employees who regrettably departed and may be showing signs of wanting to return. Implementing a new talent acquisition solution declined as a top initiative (-7 points), potentially short-sighted knowing the efficiencies an acquisition solution can bring.

Striking the right balance between salaries and benefits that match desired skill levels, with the impact of rising labor costs on future revenue growth, will be vital to success. Firms will also need to re-evaluate traditional recruiting methods, taking advantage of benefits like remote working to attract talent from around the world and leveraging new technology tools to match qualified candidates to open positions.

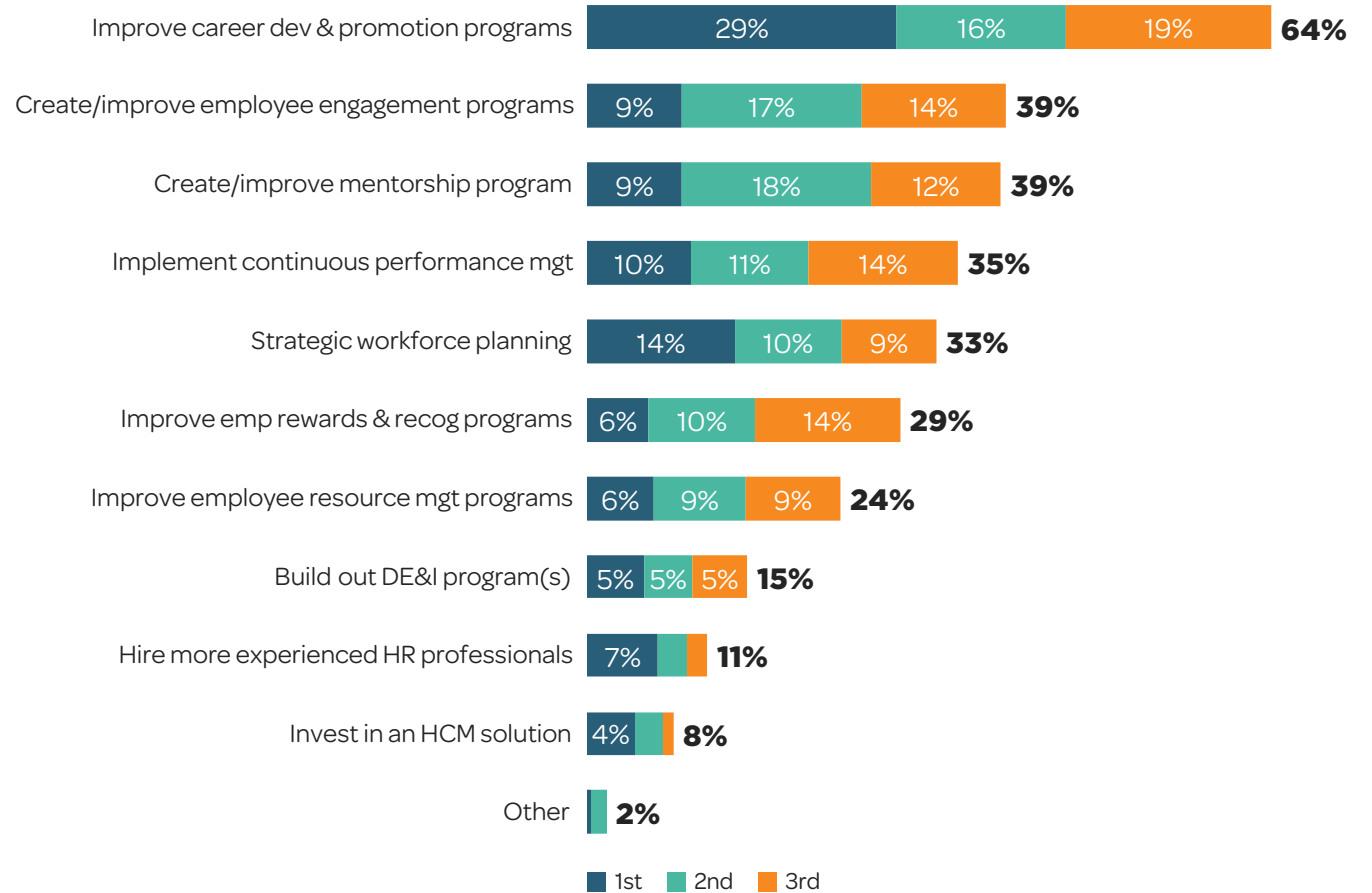


Top Initiatives for Managing Talent

As inroads have been made in hiring talent and stemming attrition, firms must continue to focus on employee development and engagement in order to achieve their growth and revenue goals. Sixty-four percent of respondents reported improved career development and promotion programs as one of their top initiatives for managing talent (+9 points year-over-year). Creating and improving employee engagement programs remains a top HR initiative, as do mentorship programs.

Building out a Diversity, Equity and Inclusion (DE&I) program outranked hiring additional or more experienced HR professionals, however this will be difficult to achieve without the necessary expertise or tools. That's why adopting HR technologies to reduce the administrative burden on dedicated staff is fundamental towards the successful implementation and tracking of this initiative.

Given the clear need for comprehensive employee management, career tracking and retention, firms will need to reconsider their budget for Human Capital Management (HCM) solutions in order to support the growing need for more time and resources to this key area of business operations. Unfortunately, even fewer intend to do so in 2022, representing a five percentage point decline versus the previous year. Further strategic alignment with IT will be necessary to correct this trend as only 26% of respondents plan to invest in HCM business solutions within the next 12 months.



Human Capital Management

Successful talent acquisition, management and retention is vital for A&E firms looking to capture growth, adapt and evolve with the changing times. Talent attracts talent, so firms that actively support, advocate and develop their people will see success in both new candidate attention and employee retention.

With ongoing talent acquisition and retention challenges, professionals are increasingly being tasked with finding, onboarding and developing staff more efficiently and effectively. Savvy firms are leveraging tools that help by accurately tracking metrics spanning the entirety of Human Capital Management, surfacing gaps and areas of opportunity. More prudent internal and external resource utilization, tangible process improvements, strategic budgeting and more accurate financial projections and metrics are all examples of continuous improvements that can help make HCM more of a competitive advantage for firms rather than a financial burden.

While there is clear opportunity to improve the impact of HCM through technology, career pathing and DE&I initiatives (to only name a few strategies), too many firms have not fully embraced solutions that could take their productivity, talent and growth to the next level. Those who do will be well-positioned to outpace the competition and reap the benefits.



Financial Management

After achieving a set of bullish goals in 2021, firms experienced an incredibly successful financial year. Sustaining performance will require continued focus.

Firms were particularly adept at leveraging direct labor costs and subconsultants to drive increased revenues in 2022, delivering significant improvements in operating profit (EBIT). Particularly strong revenue growth outpaced growth in headcount and wages, as firms delivered gains across a number of key financial

metrics while making strategic investments when economic tailwinds were strongest.

18.4%

Operating Profit on Net Revenue

Despite increases in total labor expenses, firms improved their ability to translate direct labor costs into revenue growth that outpaced operating costs.



ADDRESSING TOP FINANCIAL CHALLENGES

1

Finding and retaining qualified staff

Despite cost increases from acquiring and retaining talent, firms have demonstrated success in leveraging their workforce at greater rates this past year, achieving the highest net revenues per employee in a decade.

2

Increasing profitability

Firms continue to refine their strategies, leveraging both technology and process improvements to reduce project delivery costs, particularly on time-intensive and manual tasks. Despite high margins, firms must strengthen internal resources to balance out staffing challenges as labor costs continue to rise.

3

Managing growth

As some markets may be softening, others expect healthy growth in 2023. Pursuit of more diverse project types is expected to continue while investments in staff upskilling is prioritized to improve project delivery.

As firms recognized the strategic importance of their workforces in a very competitive market by filling many critical jobs in the last year, they continue to prioritize retaining, cross-training and internally promoting impactful talent to ensure a robust workforce that is fit for the fight ahead.

Thanks to the implementation of these and other improvements, operating profit on net revenue nearly doubled to 18.4% in 2022, the result of notable boosts in utilization rates and multipliers for both net labor and total payroll. Net revenue growth was likely driven by efficient delivery on fixed price contracts and/or an increase in the number of subconsultants used to deliver projects. Going forward, firms must be diligent in ensuring the overall health and satisfaction of their workforce to maintain manageable employee attrition rates and sustain these operating levels. As a result, further investments in business process improvements as well as comprehensive financial management training for project managers are near-term focus areas.

Diligence in driving the timely completion of work as well as tightening billing and collection processes continue to be important priorities to help firms ensure they are effectively capturing revenue in a timely manner and protecting cash flow. With the observed uptick in collection periods this year, firms must be attentive to driving the timely completion of project work, ensuring

prompt billing for those projects and quickly collecting on invoices to capture their lofty near-term growth goals.

Investment in staffing and business process improvements are generating strong financial returns. Going forward, sustainable growth management is essential.



“The inflationary pressures we are seeing – coupled with the new normal of materials pricing and supply chain issues – continues, so better managing these processes are top of mind for many businesses.”

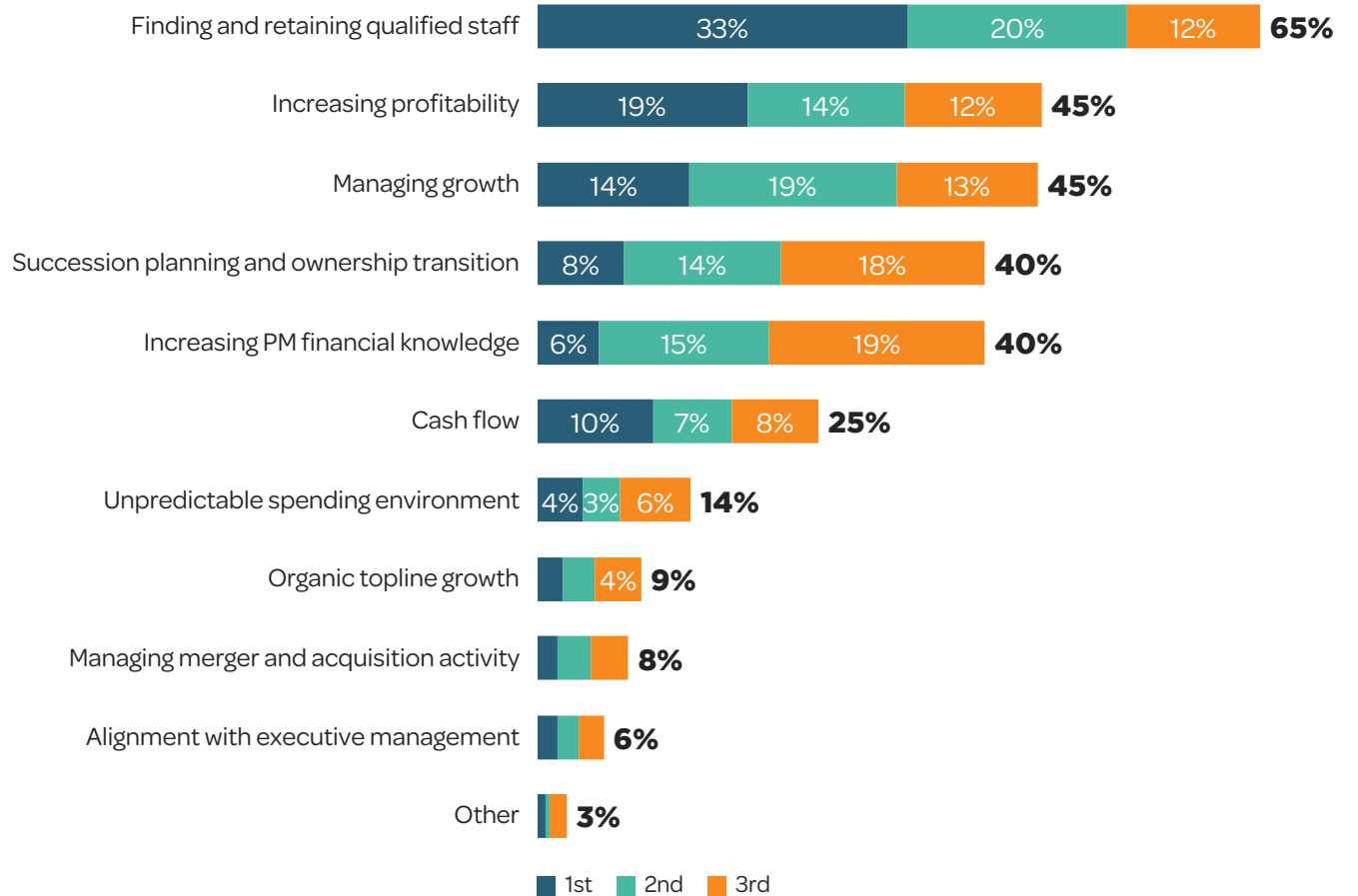
– **Dr. Paula Stamp**, At-Large Director, Society for Marketing Professional Services

Top Financial Challenges

The most-prominent financial challenges faced by firms in 2022 continue to be consistent with previous years. Finding and retaining qualified staff continues to be the top concern with nearly two-thirds (65%) identifying it as one of their top three challenges of the year. More than half of these respondents (33%) indicated it was their top financial challenge overall.

Increasing profitability jumped up one spot from the previous year to the number two spot while managing growth fell three percentage points year-over-year to land in third position. The near-term reality is that firms must focus on balancing robust pipelines of new projects while leveraging existing resources to effectively deliver what's in the backlog in a profitable way despite rising costs.

Firms' continued challenges driving financial savviness among their project managers as well as succession planning and ownership transitioning received additional recognition this year, increasing eight and three percentage points, respectively.



18.4%

+5.6

Top Quarter

32.0%

Bottom Quarter

8.4%



Divide pre-tax, pre-distribution profit by net revenue (total revenue minus consultants and other direct expenses).

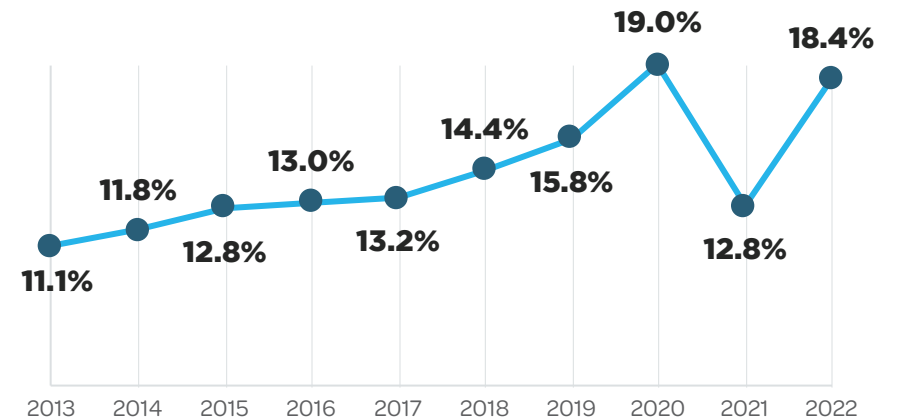
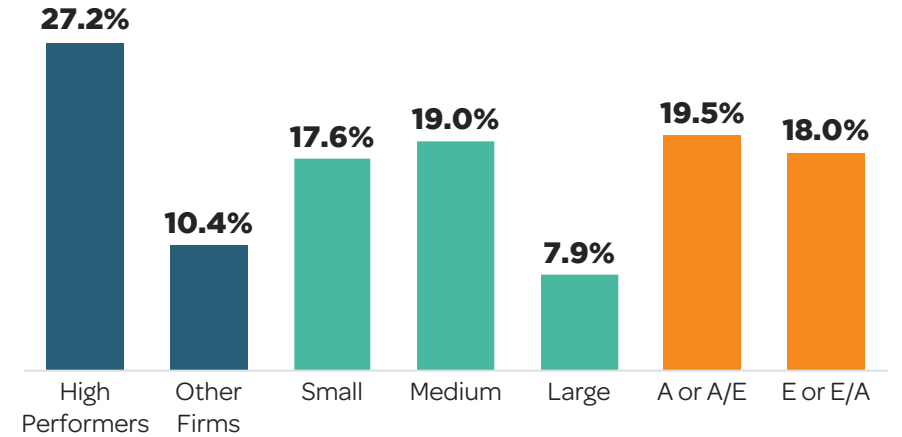
Operating Profit on Net Revenue

Overall, operating profit on net revenue rose more than five and a half percentage points in 2022 to 18.4%. Despite generalized increases in labor costs, profit margins rose in all segments. Architectural firms saw the greatest growth compared to 2021, increasing to 19.5%.

Small firms also improved, growing more than six percentage points to 17.6%. Medium-sized firms also improved by nearly six percentage points (to 19.0%) compared to the previous year. High performers lead the pack in this metric, reporting an improvement of more than three percentage points to 27.2%. Achieving an operating profit of 15% or better is one criterion for being a High Performer, but in 2022 a significant percentage of participants paced well above that level.

10-Year Trend

Results this year are considerably better than near-term results posted every year, except the pandemic-driven results of 2020. Increases in firms' abilities to translate direct labor costs into revenue, along with adept management of increasing labor costs have been important factors in driving margin results.



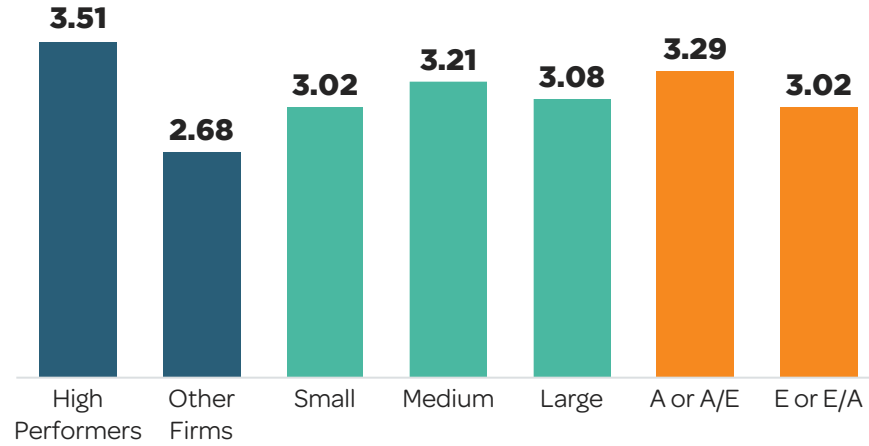
Net Labor Multiplier

Firms reported a slight improvement in net labor multiplier in 2022, further indicating continued effectiveness at translating labor costs into revenue.

Most segments reported gains year-over-year, with the biggest increases observed in architectural firms, medium-sized firms and small firms. In the same period, non-high performing firms reported a slight decline of 0.11 percentage points.

The median for the High Performing segment is well above the 3.0 minimum threshold for our “high performer” metric, indicating improvements in either fixed fee performance or billing rates since the pandemic.

Importantly, some portion of observed revenue growth this year is likely to be the result of greater utilization of subconsultants relative to last year.



3.10

+0.11

Top Quarter

3.51

Bottom Quarter

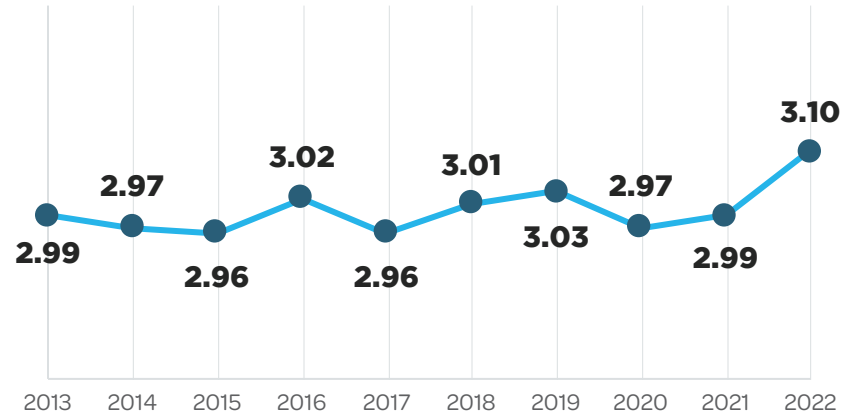
2.62



Divide net revenue by direct labor (cost of labor charged to projects)

10-Year Trend

Across a broader timeline, net labor multiplier has demonstrated a strong upward trend, with this year’s performance representing a new 10-year high at 3.10.



1.85

+0.11

Top Quarter

2.11

Bottom Quarter

1.62



Divide net revenue by total labor or multiply utilization rate by net labor multiplier

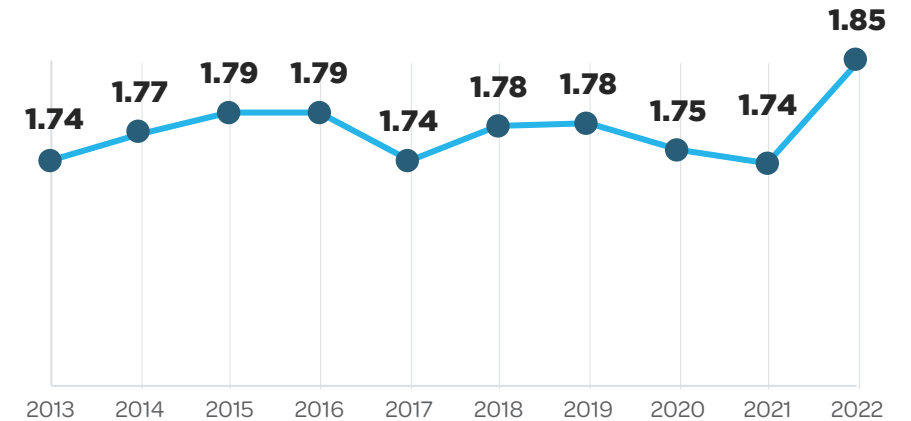
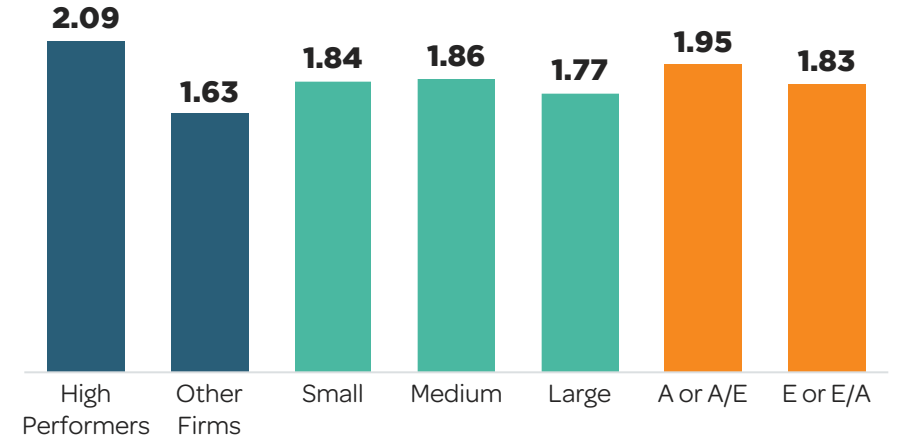
Total Payroll Multiplier

By directly relating total labor costs to a firm's revenue generation, total payroll multiplier (also called revenue factor) tracks movement between the key metrics of net labor multiplier and utilization rate to gauge firms' efficiency in converting all labor-related expenses to revenue.

Moving with net labor multiplier, the total payroll multiplier grew compared to the previous year, rising to 1.85 in 2022. This result signals that direct and indirect labor costs kept pace with one another across all participating firms. Architectural firms (+0.2) and medium-sized firms (+0.13) reported the greatest increases year-over-year, rising to 1.95 and 1.86, respectively.

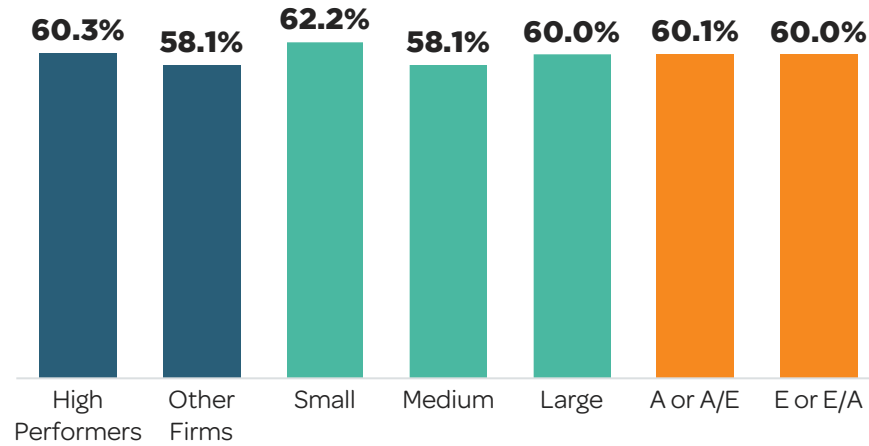
10-Year Trend

FY 2022 delivered the highest total payroll multiplier results observed in the last decade. Results this year are significantly higher than 2021, and up as much as 0.06 to 0.07 when compared to near-term performance in 2018 or 2019.



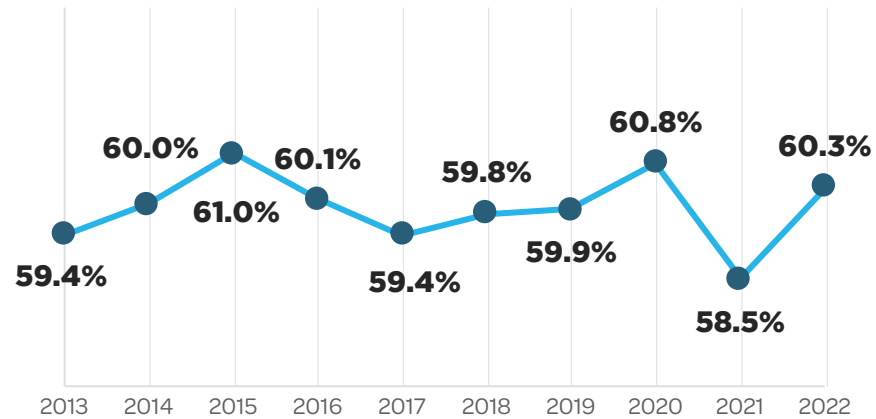
Utilization Rate

Utilization rate rose by almost two percentage points, as nearly all business segments grew relative to year-ago results. The contributions of non-project labor costs declined relative to 2021, with large firms and architectural firms reporting the largest year-over-year gains, each rising by nearly three percentage points in 2022. Since utilization rate is calculated based on labor dollars expended, increases in project-related labor costs – both rate and volume – have had a significant impact on the overall rate.



10-Year Trend

After a sharp dip in 2021, utilization rates are rising again, bouncing back nearly two percentage points to 60.3% as direct labor costs represented a greater share of A&E firms' payroll costs in 2022.



60.3%

+1.8

Top Quarter

65.6%

Bottom Quarter

54.4%



Divide cost of labor charged to projects by the total labor cost of the firm

154.8%

-5.6

Top Quarter

186.7%

Bottom Quarter

126.1%



Divide total overhead (before distributions) by total direct labor expense

Overhead Rate

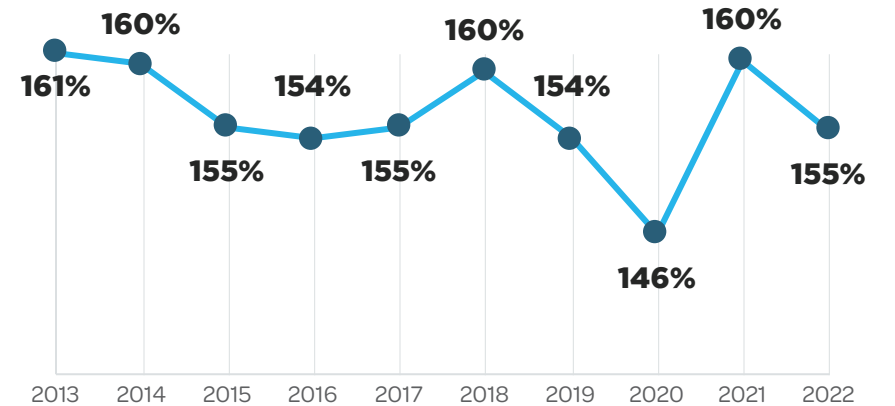
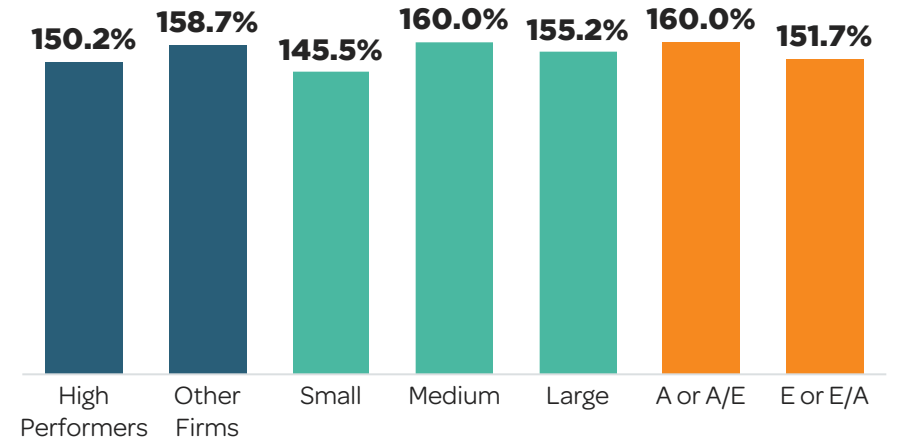
As direct labor expenses increase, firms tend to tighten their belts by increasing their utilization of internal staff, improving both the efficiency and effectiveness of those roles to drive profit margin performance.

In 2022, overhead rate decreased by nearly six percentage points overall, as total overhead costs fell slightly relative to total direct labor costs in all segments. Unsurprisingly, overhead rates for small firms (-12.7 percentage points) experienced the greatest decline, dropping to 145.5% compared to the previous year.

Typically, when utilization increases, overhead rate drops. Given labor cost increases, though, additional reductions were also likely made to produce the observed decline.

10-Year Trend

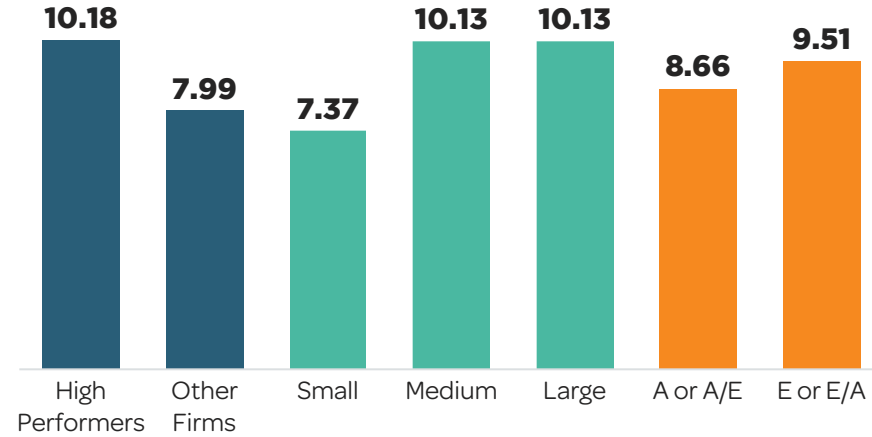
After last year's sharp increase in annual overhead rates, the drop to 155% in 2022 reflects a return to performances last observed in 2015 – 2017.



Backlog in Months

As revenues grew in 2022, firms also reported a slight increase in their revenue backlogs, which increased by nearly 6 days from 2021 results.

Across segments, most businesses saw slight increases relative to last year, with high performing firms indicating their backlogs grew by nearly seven weeks while small-sized businesses' revenue backlogs were relatively unchanged year-over-year.



8.94

+0.19

Top Quarter

11.88

Bottom Quarter

5.60



Divide backlog dollars by total revenue, then multiply by 12

77.66

+0.85 days

Top Quarter

99.63

Bottom Quarter

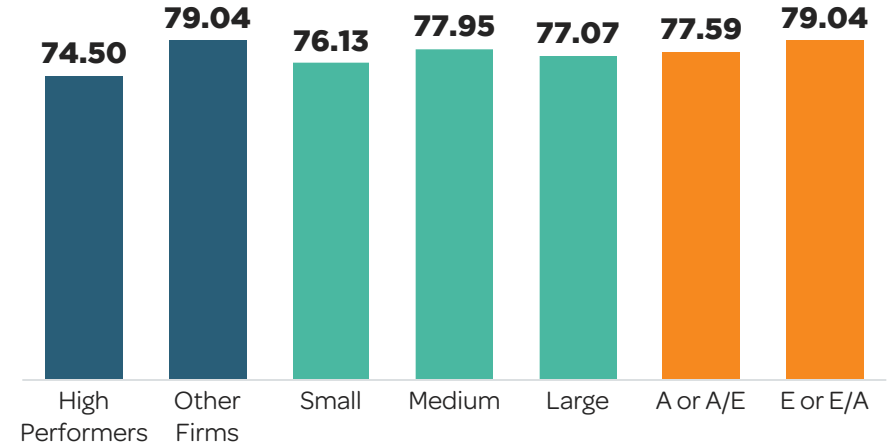
56.95



Divide accounts receivable by annual total revenue, then multiply by 365

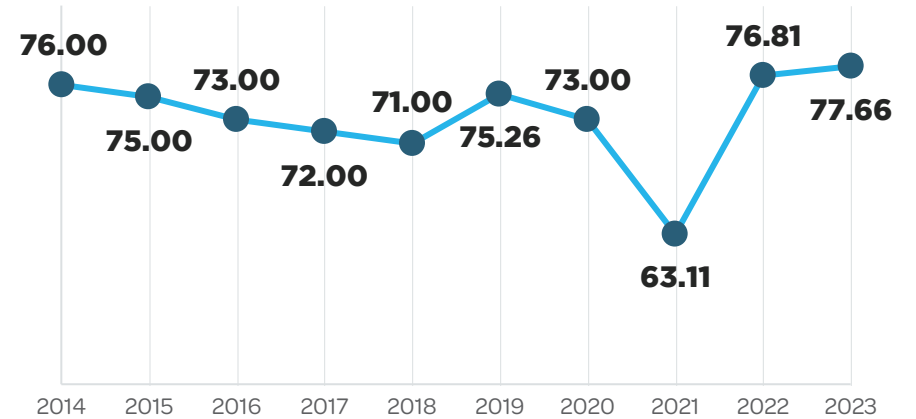
Average Collection Period in Days

Average collection period increased by nearly a day from 2021 results as tighter cash flow management helped firms stabilize their invoicing backlogs. In 2022, firms reported waiting nearly 78 days to collect on their receivables, with large firms (+9 days), engineering firms (+6 days) and high performers (+4 days) all experiencing increases in collection periods year-over-year. Conversely, architectural firms (-4 days) and medium-sized firms (-4 days) saw improvements in cash management processes, shortening their collection periods compared to the previous year.



10-Year Trend

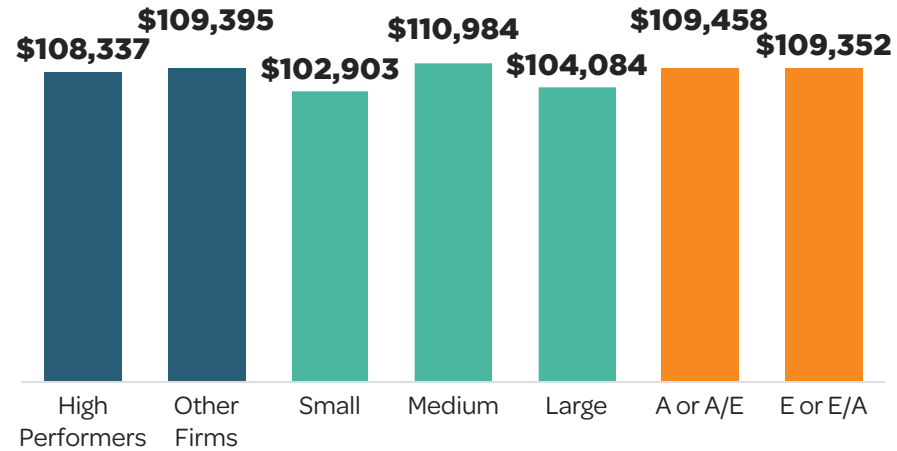
After firms saw a solid decrease in average collection period mid-pandemic, the number of days has jumped significantly in the last two years. Firms may need to take a closer look at what is happening in the collection process that can be controlled internally to find a balance between 2020 and today's numbers.



Total Labor Costs per Employee

In 2022, labor-related costs grew at a higher rate than firms' headcounts. The median reported labor cost per employee rose by three percent compared to the previous year to \$108,998, and that wage growth was experienced generally across segments.

The largest annual increase versus year-ago results was observed among high performers, which was up nearly nine percentage points. While many segments indicated growth in total labor costs per employee, small and large firms reported declines compared to 2021 results.



\$108,998

+\$3,293

Top Quarter

\$122,863

Bottom Quarter

\$93,569



The sum of total labor and other labor-related expenses (taxes, insurance, etc.) divided by the average number of employees during the year. Excludes bonuses.

\$90,728

\$4,379

Top Quarter

\$101,009

Bottom Quarter

\$79,807



Divide total labor expenses by current number of full-time employees.

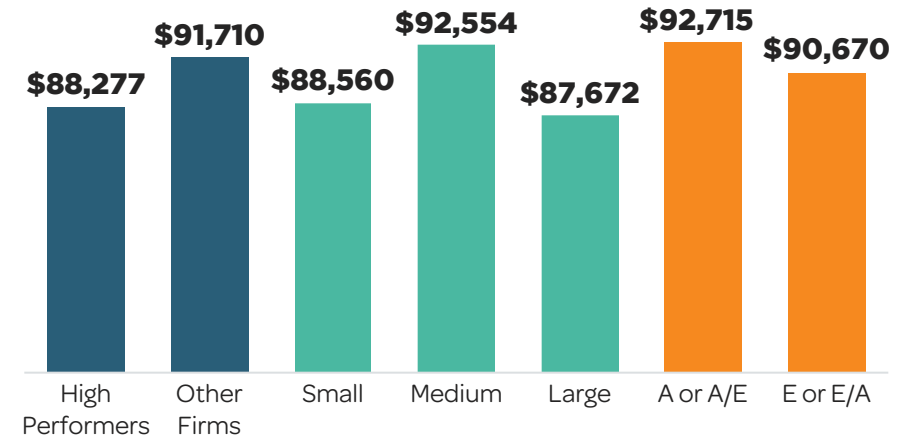
Gross Wages per FTE

The competitive labor market has resulted in higher wages over the last year, a challenge the A&E industry must tackle when it comes to attracting and retaining quality talent.

Median reported gross wages per FTE rose by five percent in 2022 to \$90,728, an increase which was largely reflected across all segments.

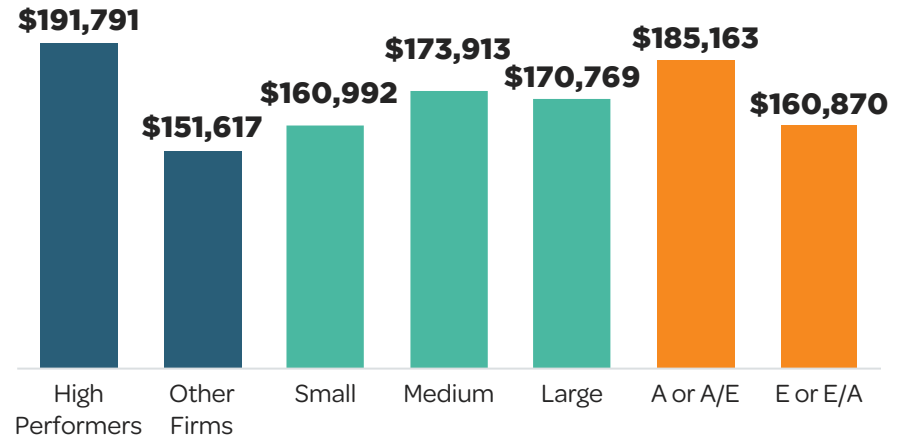
Most prominent changes versus year-ago results were observed in high performers (+10%) while the remaining segments saw increases in the order of \$4,000 to \$5,000 versus 2021.

While high performers saw the biggest year-over-year increase in wages per employee, they also delivered very strong financial performance and were likely able to attract more impactful project delivery talent. As firms are looking for better ways to compete, it's key to understand what competitors in the talent marketplace are doing to attract the best and brightest.



Net Revenue Per Employee

Net revenue per employee increased considerably (+13 percentage points) as revenue growth outpaced increases in employee headcount in each segment. The largest gains were reported by architectural firms (+\$35K), medium-sized firms (+\$25K) and high performers (+\$21K).



\$168,158

+\$19,693

Top Quarter

\$201,549

Bottom Quarter

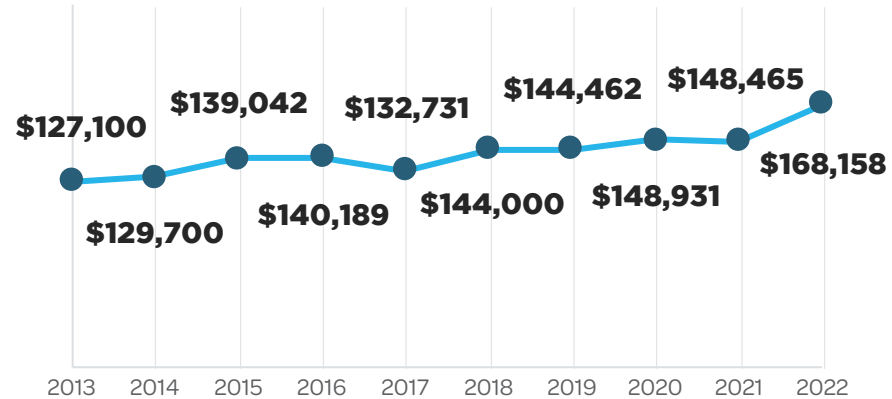
\$140,474



Divide net revenue by average total staff during year, including principals

10-Year Trend

The increase in net revenue per employee represents the highest recorded rate on a steadily increasing trend for the last 10 years. A portion of the gain can be attributed to employee productivity drivers like technology improvements and the implementation of process efficiencies. That said, continued attentiveness to employee experience will help strengthen retention of valuable contributors, helping them avoid burnout and overwork, which is a prime near-term focus.

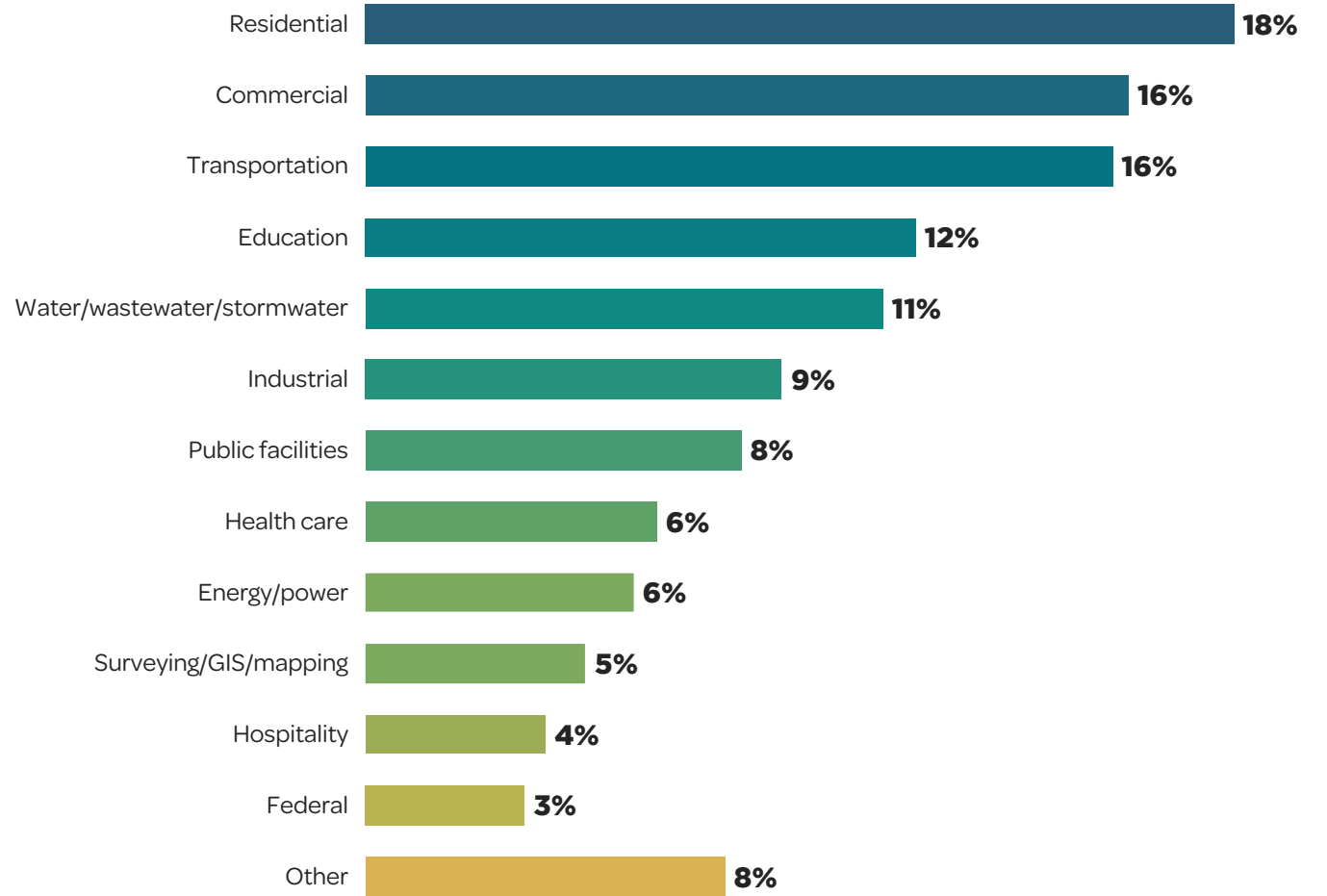


Net Revenue by Project Type

2022 opened the door to increased federal spending in key infrastructure projects, particularly in the transportation, water/wastewater/stormwater, education and public facilities sectors. In the transportation sector alone, net revenues grew by five percentage points, as other industries saw smaller yet material gains in project revenue mix.

Net revenue growth was also seen in the residential sector, which increased from 14% of net revenues in 2021 to 18% in 2022, helping to offset shrinkage observed in the commercial and healthcare markets.

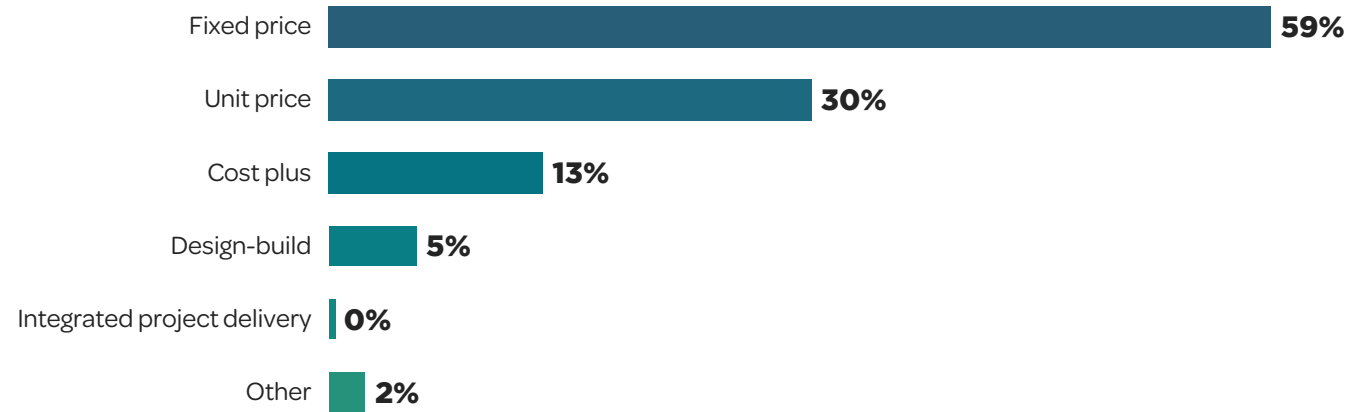
With infrastructure spending expected to continue, some firms continue to focus on diversifying their portfolios to maintain competitiveness across a variety of sectors. Interest rate impacts will likely continue to influence new project starts, particularly in the residential and commercial sectors.



Revenue Mix by Contract Type

Fixed-price contracts represented the lion's share of firms' profits in 2022, bringing in more than half (59%) of business revenues, a five percentage point increase relative to the prior year. Unit price contracts – including time and materials, hourly rates, per diem and salary multiples-based contracts – accounted for 30% of reported revenue, down one percentage point versus last year.

Revenues from cost plus contracts represented 13% in 2022, up five percentage points from 2021.



\$7,991

\$597

Top Quarter

\$14,584

Bottom Quarter

\$3,951

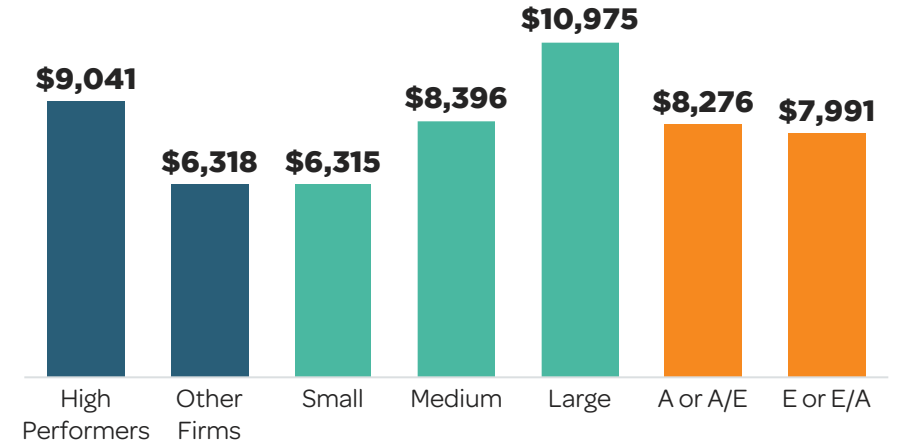


Total fixed assets minus goodwill and depreciation, then divided by current number of employees

Net Fixed Assets Per Employee

Net fixed assets per employee rose eight percentage points year-over-year, as firms increased fixed asset investment, including software solutions.

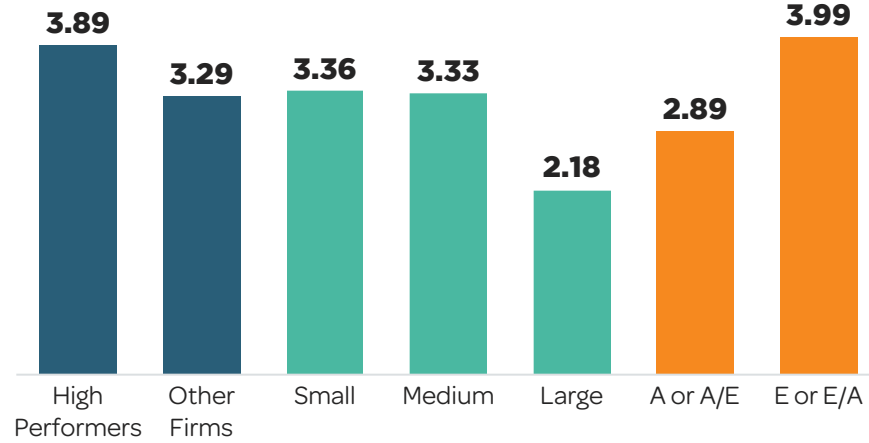
Most prominent changes versus year-ago results were observed in architectural firms (+\$2,137) and small firms (+\$1,911). Results reported by large firms were largely flat year over year.



Current Ratio

Respondents indicated flat levels of short-term liquidity, with current assets over three times current liability levels in 2022, as firms continued tight management of cash and payables.

From a growth perspective, most segments reported current ratio increases year-over-year, though small businesses (-1.0) and large firms (-0.07) indicated they experienced dips in liquidity versus last year.



3.29

« -0.05

Top Quarter

5.80

Bottom Quarter

2.14



Divide current assets (cash and near-cash assets) by current liabilities (due in one year or less)

23.6%

-2.0

Top Quarter

50.4%

Bottom Quarter

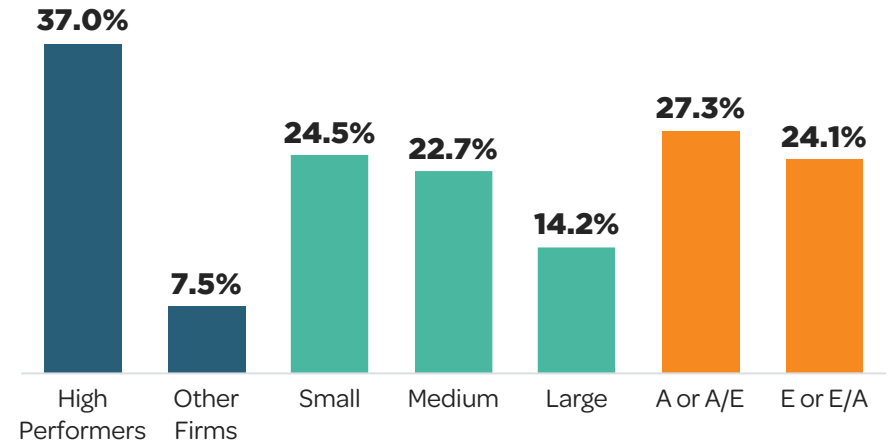
1.4%



Divide pre-tax income
by stockholders' equity,
times 100

Return on Equity

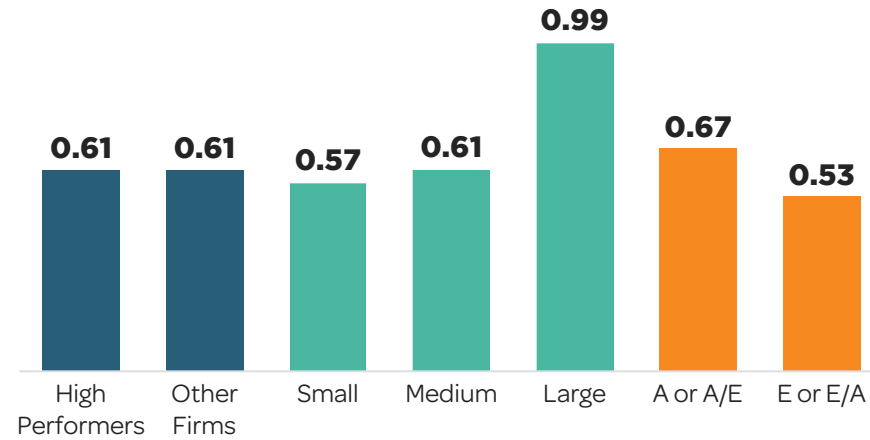
An observed decrease in Return on Equity (-2 percentage points) this year is consistent with changes seen in Net Fixed Assets per Employee and Current Ratio. Results are likely the result of firms utilizing borrowed capital to invest in new assets to drive growth while this year's economic tailwinds were strongest.



Debt to Equity Ratio

A key metric used to evaluate the health of a firm's balance sheet, the debt to equity ratio considers the amount of debt being carried to finance a firm's assets relative to the equity held by that firm's shareholders.

This year, firms reported their debt to equity positions were largely unchanged, year over year, coming in at 0.61 in 2022. Consistent with the previous year, large firms (0.99) indicated higher debt ratios when compared to small (0.57) and medium-sized (0.61) firms. Except for high performers and small firms, debt loads declined across all other tracked segments relative to last year.



0.61

+0.0

Top Quarter

1.06

Bottom Quarter

0.24



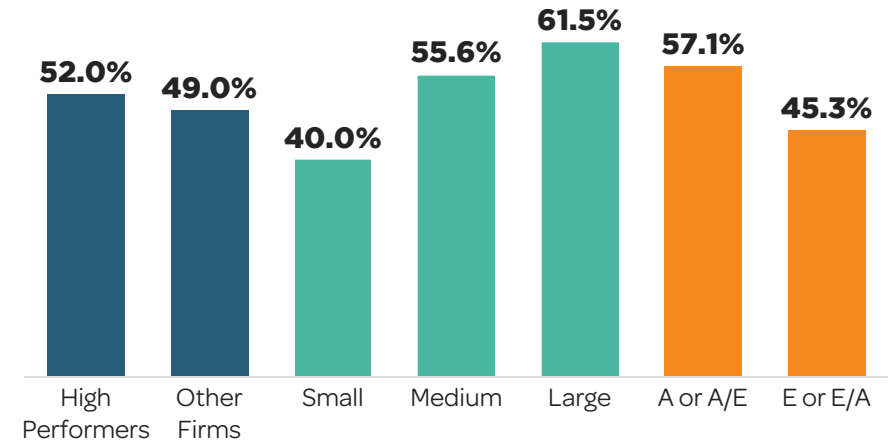
Divide total liabilities by stockholders' equity

50.6%

-2.1

Firms with a Completed Firm Valuation

Broadly, firms reported a significant dip in having completed a firm valuation, with results down more than two percentage points versus 2021. Architectural firms were the lone outliers this year, reporting a seven percentage point increase in responses indicating a firm valuation had been completed within the past 24 months. Worth noting is that with the unprecedented number of mergers and acquisitions in the previous year, many firms that had previously completed valuations may have completed a merger or acquisition as well.

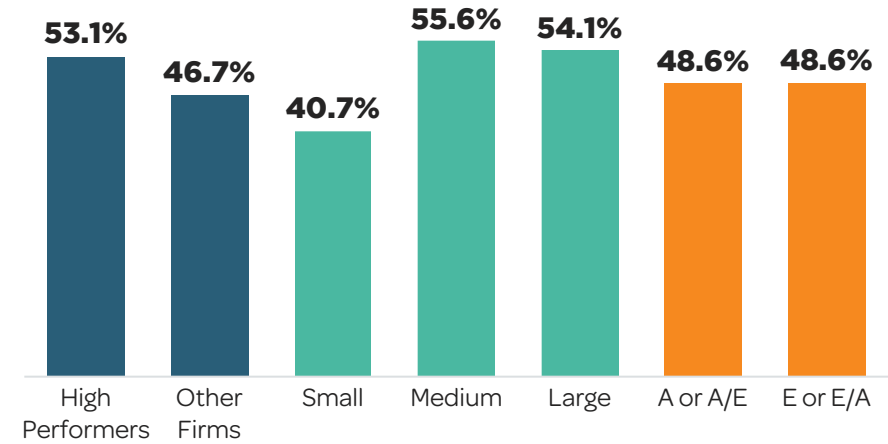


49.4%

-6.1

Firms that Plan to Complete a Valuation

Fewer firms indicated plans to complete a firm valuation within the next 12 months, which is reflected broadly across all business segments except high performers, which were largely unchanged year over year. That high performing firms would increase their focus here makes sense, as obtaining a firm valuation makes the most sense for firms with higher likelihood to become an acquisition target by a larger peer. As growth forecasts soften, M&A activity and firm valuations can also be expected to flatten in parallel.

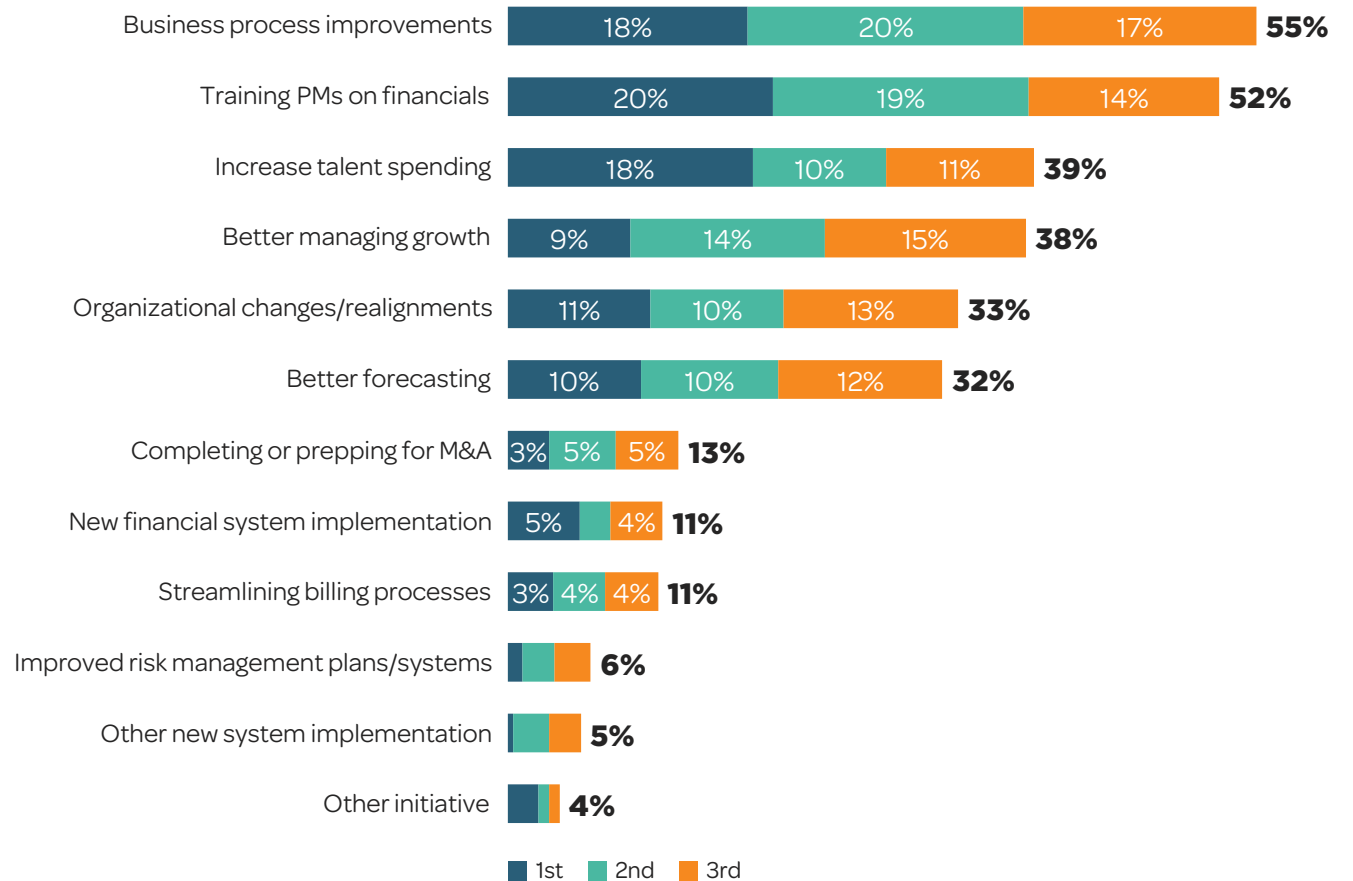


Top Financial Initiatives

Firms have several strategies at their disposal to address the financial challenges they face in the next several years. Identifying and implementing business process improvements along with an increased focus in growing the financial savviness of project managers continued to be the two most-important go-forward initiatives, flipping in order from the previous years' results. For the second year in a row, both initiatives were identified by more than half of respondents to be more pressing than increasing spend for talent acquisition and retention. As firms evaluate business process improvements, it will be critical to evaluate wasted time, wasted money and wasted resources to identify opportunities for automation, process improvement or simply eliminating outdated processes.

Increased spending for talent acquisition and retention (-2 percentage points) declined slightly year over year but is still a prominent focus among financial decision-makers.

Better managing growth (+9 percentage points) grew markedly last year as firms recognized the need to drive efficiency and effectiveness in their pipeline management, talent development, project execution and cash flow management efforts. Notably, the observed change in improved growth management was the result of more firms indicating it as one of their top three most-important priorities for the next three years.



Financial Management

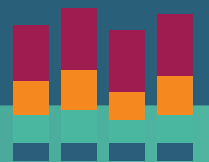
Firms bounced back from a challenging 2021 with stellar financial performance, achieving 10-year highs across several strategic KPIs. As topline growth opportunities shrink from 2022 levels, rising labor costs can be expected to push firms to be more strategic and creative in managing production to translate those investments into sustainable bottom-line growth.

Strategic spending in hiring, retention and process improvements have led to the achievement of incredible financial performance this past year. Financial leaders have run their firms with greater sophistication while implementing technology solutions to drive process improvements and capture significant operating efficiencies, delivering meaningful gains in financial performance over the last year.

While total labor costs have risen – largely as the result of increased wages driven by multiple forces including supply and demand and increased workforce mobility – new project opportunities and market growth in different industry segments

signals the likelihood of continued positive financial projections for the coming year.

A tremendous opportunity awaits A&E firms that effectively position themselves as a workplace of choice for skilled and experienced contributors. Investing in greater automation and further reducing regrettable attrition through improved employee experiences – via promotions, loyalty rewards for long-term contributors, extending part-time opportunities to valuable retirement-eligible team members and driving higher FTE engagement rates, etc. – will be key in helping sustain continued outsized financial performances.



SUMMARY



Firms hired aggressively and invested strategically, which translated into significant financial gains in 2022. As the market continues to grow and rising costs challenge A&E businesses to do more with less, firms must be more strategic in their pursuits and address talent gaps as they balance opportunities with the resources required to support them.

Staffing challenges that hamstring firms from capitalizing on opportunities in this favorable market must be addressed. To stay competitive, upskilling, cross-training and offering career pathing opportunities must be leveraged to attract new talent and develop and retain key contributors.

Continued investment in retaining impactful PM resources while making the necessary technology investments to make them more efficient will be necessary as the labor market continues to tighten. Improved career-pathing means top PMs will develop and advance out of their current roles. This increases the need for firms to provide the training and mentoring that upskills the next generation of PMs.

Leveraging technology to improve financial results and capture greater efficiencies will improve productivity. Recent asset investments have teed firms up to take advantage of capitalizing on near-term growth opportunities. Greater use of automation to reduce staffing requirements while improving employee experiences and driving higher engagement rates will pay dividends in the near and mid-terms.

While some may still consider investing in new technologies cost prohibitive, the impact of sticking with outdated, inefficient practices will be significant and put firms at a competitive disadvantage. Efficiencies gained and freeing staff from burdensome processes to focus on more impactful responsibilities should be key considerations in determining ROI.

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
KPIS/BALANCE SHEET DETAILS								
KEY PERFORMANCE INDICATORS								
Net Revenue Per Employee	\$168,158	\$191,791	\$151,617	\$160,992	\$173,913	\$170,769	\$185,163	\$160,870
Total Revenue Per Employee	\$207,685	\$230,884	\$184,770	\$203,125	\$208,864	\$209,130	\$240,356	\$188,285
Operating Profit on Net Revenue	18.4%	27.2%	10.4%	17.6%	19.0%	7.9%	19.5%	18.0%
Operating Profit on Total Revenue	14.1%	21.0%	9.1%	14.0%	15.3%	7.0%	13.0%	15.6%
Net Labor Multiplier	3.10	3.51	2.68	3.02	3.21	3.08	3.29	3.02
Total Payroll Multiplier	1.85	2.09	1.63	1.84	1.86	1.77	1.95	1.83
Utilization Rate	60.3%	60.3%	58.1%	62.2%	58.1%	60.0%	60.1%	60.0%
Overhead Rate	155%	150%	159%	146%	160%	155%	160%	152%
Average Collection Period (Days)	77.7	74.5	79.0	76.1	78.0	77.1	77.6	79.0
Total Employee Cost	\$108,998	\$108,337	\$109,395	\$102,903	\$110,984	\$104,084	\$109,458	\$109,352
Net Fixed Assets Per Employee	\$7,991	\$99,778	\$108,176	\$103,154	\$107,056	\$112,268	\$104,513	\$107,685
Staff Growth/Decline	6.7%	8.6%	5.0%	4.9%	7.7%	9.5%	6.2%	7.0%
Employee Turnover	13.7%	13.4%	15.4%	13.3%	14.0%	14.2%	13.5%	13.6%
Win Rate	49.6%	50.0%	53.1%	50.0%	49.5%	45.4%	44.8%	49.7%
BALANCE SHEET RATIOS								
Work-in-Process per Employee	\$5,556	\$5,556	\$5,574	\$5,837	\$4,986	\$11,690	\$4,631	\$5,740
Backlog - End of Year per Employee	\$163,934	\$191,765	\$139,711	\$137,443	\$178,235	\$127,904	\$177,712	\$156,520
Backlog in Months	8.9	10.2	8.0	7.4	10.1	10.1	8.7	9.5

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
BALANCE SHEET RATIOS (CONTINUED)								
Total Assets per Employee	\$98,749	\$114,346	\$94,058	\$94,615	\$100,665	\$103,308	\$107,309	\$92,787
Total Liabilities per Employee	\$38,225	\$41,436	\$35,824	\$35,665	\$41,567	\$56,902	\$44,723	\$33,875
Total Equity per Employee	\$20,597	\$22,261	\$16,452	\$22,548	\$19,550	-\$10,496	\$16,452	\$22,242
Return on Assets	13.9%	28.4%	4.7%	14.2%	14.0%	9.8%	14.2%	13.4%
Return on Equity	23.6%	37.0%	7.5%	24.5%	22.7%	14.2%	27.3%	24.1%
Current Ratio	3.29	3.89	3.29	3.36	3.33	2.18	2.89	3.99
Debt to Equity Ratio	0.61	0.61	0.61	0.57	0.61	0.99	0.67	0.53
INCOME STATEMENT DETAIL (PER EMPLOYEE)								
TOTAL REVENUE								
Total Revenue per Employee	\$207,685	\$230,884	\$184,770	\$203,125	\$208,864	\$209,130	\$240,356	\$188,285
DIRECT EXPENSES								
Consultants per Employee	\$27,655	\$33,703	\$21,927	\$27,843	\$28,414	\$17,747	\$66,344	\$17,500
Bad Debt per Employee	\$462	\$447	\$469	\$506	\$458	\$88	\$999	\$362
All Other Direct Expenses per Employee	\$2,140	\$1,076	\$3,753	\$2,337	\$1,732	N/A	\$2,140	\$1,798
Total Direct Expenses per Employee	\$37,832	\$40,034	\$35,028	\$36,111	\$41,292	\$26,627	\$73,328	\$22,876
NET REVENUE								
Net Revenue per Employee	\$168,158	\$191,791	\$151,617	\$160,992	\$173,913	\$170,769	\$185,163	\$160,870
DIRECT LABOR								
Direct Labor per Employee	\$53,451	\$52,486	\$53,679	\$56,655	\$53,037	\$51,935	\$55,148	\$53,497

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
GROSS PROFIT								
Gross Profit per Employee	\$112,337	\$140,526	\$100,070	\$106,298	\$117,455	\$98,830	\$125,258	\$109,099
INDIRECT LABOR								
Vacation, Holiday, Sick & Personal per Employee	\$9,304	\$9,152	\$9,754	\$9,132	\$9,926	\$8,655	\$10,116	\$9,113
Marketing per Employee	\$5,316	\$5,123	\$5,544	\$4,791	\$5,925	\$6,436	\$7,306	\$4,424
All Other Indirect Labor per Employee	\$23,024	\$22,514	\$23,338	\$22,977	\$23,077	\$19,546	\$23,009	\$23,024
Total Indirect Labor per Employee	\$37,202	\$35,872	\$39,073	\$34,979	\$38,162	\$38,913	\$38,400	\$35,110
LABOR-RELATED EXPENSES								
Statutory Taxes per Employee	\$7,117	\$7,156	\$7,060	\$7,000	\$7,335	\$6,945	\$7,270	\$7,150
Workers' Comp. per Employee	\$243	\$243	\$240	\$264	\$217	\$202	\$227	\$254
Group Health, Life, Etc. per Employee	\$7,062	\$6,823	\$7,556	\$6,823	\$7,566	\$6,093	\$6,250	\$7,739
401(k) Match, Pension Plan, Etc. per Employee	\$3,012	\$3,150	\$2,718	\$3,129	\$2,717	\$4,309	\$3,012	\$2,969
All Other Labor-Related Expenses per Employee	\$1,031	\$828	\$1,146	\$1,544	\$828	\$1,247	\$1,397	\$828
Total Other Labor-Related Expenses per Employee	\$18,911	\$19,090	\$18,852	\$17,950	\$19,422	\$14,514	\$18,672	\$19,284
OTHER STAFF EXPENSES								
Professional Licenses, Registrations, Dues per Employee	\$833	\$892	\$764	\$782	\$850	\$1,262	\$765	\$864
MARKETING EXPENSES (NON-LABOR)								
Marketing Expenses per employee (marketing and business development expenses including materials, conference expenses, travel, etc.)	\$1,549	\$1,694	\$1,413	\$1,843	\$1,422	\$1,387	\$2,391	\$1,056

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
CORPORATE EXPENSES								
Professional Liability Insurance per Employee	\$2,180	\$2,367	\$2,013	\$2,213	\$2,150	\$660	\$2,451	\$2,013
Other Business Taxes per Employee	\$407	\$390	\$417	\$765	\$285	\$128	\$463	\$388
All Other Corporate Expenses per Employee	\$2,854	\$2,470	\$3,320	\$3,013	\$2,504	\$2,365	\$2,797	\$2,713
Total Corporate Expenses per Employee	\$5,193	\$5,368	\$5,102	\$5,716	\$4,665	\$1,966	\$5,603	\$4,616
TOTAL OVERHEAD								
Total Overhead Expenses per Employee	\$84,066	\$85,810	\$82,896	\$81,251	\$86,184	\$78,032	\$91,018	\$79,436
OPERATING PROFIT								
Operating Profit (Loss) per Employee	\$26,541	\$46,032	\$18,551	\$26,263	\$29,198	\$12,317	\$31,201	\$26,420
INTEREST, BONUS, OTHER								
Interest-Net per Employee	\$167	\$186	\$158	\$161	\$174	-\$64	\$149	\$167
Bonuses per Employee	\$8,330	\$14,897	\$6,227	\$8,017	\$8,822	\$5,146	\$9,006	\$8,321
Other (Income) or Expense	\$46	\$49	\$46	\$3	\$186	-\$193	\$46	\$63
PRE-TAX INCOME (LOSS)								
Pre-Tax Income (Loss) per Employee	\$15,307	\$29,032	\$8,758	\$15,217	\$15,742	\$8,846	\$19,378	\$15,140
TAXES								
Taxes per Employee	\$692	\$677	\$769	\$1,739	\$611	\$1,276	\$649	\$726
NET PROFIT								
Net Profit (Loss) per Employee	\$14,119	\$29,032	\$7,855	\$9,777	\$15,063	\$7,063	\$17,523	\$13,208

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
BALANCE SHEET DETAIL (PER EMPLOYEE)								
CURRENT ASSETS								
Cash per Employee	\$15,355	\$21,847	\$12,900	\$15,567	\$14,794	\$15,232	\$21,791	\$13,725
Accounts Receivable per Employee	\$45,750	\$49,129	\$41,575	\$49,211	\$41,575	\$33,124	\$55,547	\$40,670
Work-In-Process per Employee	\$5,556	\$5,556	\$5,574	\$5,837	\$4,986	\$11,690	\$4,631	\$5,740
Prepaid Expenses per Employee	\$2,727	\$2,422	\$2,784	\$2,462	\$2,773	\$3,410	\$3,176	\$2,734
Other Current Assets per Employee	\$1,169	\$1,284	\$1,077	\$1,054	\$1,318	\$1,087	\$2,609	\$1,003
Total Current Assets per Employee	\$72,748	\$80,777	\$69,293	\$75,811	\$70,011	\$67,462	\$85,267	\$68,183
FIXED ASSETS								
Fixed Assets (except Goodwill) per Employee	\$24,845	\$30,895	\$21,247	\$20,719	\$29,020	\$47,714	\$23,800	\$28,893
Depreciation per Employee	-\$15,068	-\$16,485	-\$13,621	-\$12,567	-\$17,318	-\$22,878	-\$12,913	-\$16,386
Goodwill (net of amortization) per Employee	\$2,314	\$2,479	\$2,107	\$1,367	\$2,479	\$2,820	\$1,356	\$2,314
Total Fixed Assets per Employee	\$11,973	\$13,620	\$10,021	\$10,069	\$13,231	\$33,868	\$10,626	\$12,309
OTHER LONG-TERM ASSETS								
Long-Term Notes/Loans Receivable per Employee	\$0	\$240	\$0	\$0	\$0	\$429	\$0	\$0
Other Long-Term Assets per Employee	\$0	\$0	\$0	\$0	\$0	\$852	\$0	\$0
Total Other Long Term Assets per Employee	\$0	\$351	\$0	\$0	\$856	\$1,978	\$0	\$0
TOTAL ASSETS								
Total Assets per Employee	\$98,749	\$114,346	\$94,058	\$94,615	\$100,665	\$103,308	\$107,309	\$92,787

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
LIABILITIES & STOCKHOLDER'S EQUITY								
ACCOUNTS PAYABLE								
Accounts Payable - Consultants per Employee	\$5,758	\$7,383	\$5,300	\$5,158	\$7,339	\$3,422	\$14,231	\$3,467
Accounts Payable - Vendors per Employee	\$1,375	\$1,354	\$1,391	\$1,333	\$1,375	\$3,438	\$1,664	\$1,354
Total Accounts Payable per Employee	\$6,073	\$6,902	\$5,744	\$5,123	\$7,132	\$5,441	\$14,070	\$3,295
ACCRUED EMPLOYEE EXPENSE								
Accrued Employee Salaries per Employee	\$2,837	\$3,140	\$2,437	\$2,880	\$2,813	\$3,198	\$3,920	\$2,776
Accrued Employee Vacation, Sick, Etc. per Employee	\$3,373	\$2,639	\$3,549	\$3,373	\$3,443	\$2,437	\$3,619	\$3,019
Other Accrued Employee Expense per Employee	\$802	\$1,429	\$325	\$340	\$806	\$4,055	\$949	\$644
Total Accrued Employee Expenses per Employee	\$4,816	\$5,045	\$4,795	\$4,217	\$5,045	\$11,953	\$4,786	\$4,856
OTHER CURRENT LIABILITIES								
Line-of-Credit & Short-Term Notes Outstanding per Emp.	\$4,120	\$4,893	\$3,886	\$3,886	\$4,120	\$8,928	\$5,446	\$4,120
Current Taxes per Employee	\$326	\$344	\$326	\$490	\$164	\$371	\$485	\$272
Other Current Liabilities per Employee	\$4,216	\$3,561	\$4,735	\$3,699	\$4,216	\$7,359	\$7,844	\$3,510
Total Other Current Liabilities per Employee	\$7,395	\$7,852	\$7,034	\$8,095	\$6,855	\$14,783	\$8,205	\$6,018
TOTAL CURRENT LIABILITIES								
Total Current Liabilities per Employee	\$20,654	\$20,431	\$21,014	\$17,050	\$21,692	\$30,917	\$29,377	\$16,020
LONG-TERM LIABILITIES								
Long-Term Debt per Employee	\$3,598	\$4,148	\$2,500	\$4,433	\$2,439	\$16,615	\$3,232	\$3,598
Deferred Taxes per Employee	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Long-Term Liabilities per Employee	\$0	\$0	\$0	\$0	\$345	\$563	\$0	\$0

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
TOTAL LIABILITIES								
Total Liabilities per Employee	\$38,225	\$41,436	\$35,824	\$35,665	\$41,567	\$56,902	\$44,723	\$33,875
STOCKHOLDERS' EQUITY								
Stock & Additional Paid-In Capital per Employee	\$1,285	\$3,318	\$857	\$625	\$3,126	\$11,634	\$905	\$1,355
Distribution/Dividends - Current Year Only per Employee	-\$5,746	-\$4,272	-\$6,246	-\$5,322	-\$6,110	-\$8,543	-\$4,762	-\$8,330
Principal's Equity - Long-Term Notes per Employee	-\$2,452	-\$8,830	-\$431	-\$6,032	-\$2,165	N/A	-\$2,452	-\$2,403
Previous Years Retained Earnings per Employee	\$50,548	\$54,852	\$48,401	\$53,416	\$49,958	\$30,330	\$57,130	\$50,120
Current Net Profit (Loss) per Employee	\$15,030	\$28,150	\$9,710	\$23,696	\$13,873	\$7,063	\$26,525	\$12,213
Other per Employee	-\$1,236	-\$2,118	-\$340	-\$1,328	-\$788	-\$8,792	-\$9,052	-\$1,198
Total Stockholders' Equity per Employee	\$23,152	\$23,582	\$20,518	\$137,269	\$5,459	\$0	\$35,927	\$15,388
Total Liabilities & Stockholders' Equity per Employee	\$58,701	\$63,685	\$55,370	\$58,595	\$58,725	\$46,406	\$62,456	\$55,492
SECTION METRICS								
BUSINESS DEVELOPMENT METRICS								
Net Revenue Growth Forecast	10.2%	7.0%	16.0%	11.0%	9.0%	13.0%	9.0%	11.0%
Win Rate	49.6%	50.0%	53.1%	50.0%	49.5%	45.4%	44.8%	49.7%
Capture Rate	47.9%	55.4%	50.8%	49.2%	50.4%	33.3%	43.9%	50.0%

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
BUSINESS DEVELOPMENT METRICS								
What percentage of your firm's net revenue is contributed by your firm's top three clients? Client A	19%	19%	18%	25%	18%	10%	24%	18%
What percentage of your firm's net revenue is contributed by your firm's top three clients? Client B	7%	9%	9%	8%	7%	3%	7%	7%
What percentage of your firm's net revenue is contributed by your firm's top three clients? Client C	5%	6%	6%	5%	5%	2%	5%	5%
What percentage of your firm's net revenue is contributed by your firm's top three clients? Combined	31%	34%	33%	38%	30%	15%	36%	29%
PROJECT MANAGEMENT METRICS								
What percentage of your firm's current projects are being reported as on or under budget? (Average)	68%	73%	70%	69%	68%	67%	65%	73%
What percentage of your firm's current projects is being reported as on or ahead of schedule? (Average)	60%	66%	58%	61%	58%	63%	56%	62%
Firms that complete internal project performance evaluations (Mean)	60%	63%	60%	57%	59%	71%	55%	64%
Firms measuring client satisfaction (Mean)	37%	37%	32%	28%	38%	53%	26%	40%
HUMAN CAPITAL MANAGEMENT METRICS								
Staff Growth/Decline	6.7%	8.6%	5.0%	4.9%	7.7%	9.5%	6.2%	7.0%
Employee Turnover	13.7%	13.4%	15.4%	13.3%	14.0%	14.2%	13.5%	13.6%
Voluntary Turnover	12.50%	13.04%	11.87%	10.00%	14.04%	15.56%	11.67%	12.50%
Involuntary Turnover	1.67%	1.27%	1.78%	0.00%	1.80%	1.18%	1.27%	1.43%
Average Time to Fill Position	61-90 Days	61-90 Days	61-90 Days	61-90 Days	31-60 Days	31-60 Days	31-60 Days	61-90 Days

STATISTICS AT A GLANCE

	ALL PARTICIPANTS	HIGH PERFORMERS	ALL OTHER FIRMS	SMALL (1-50 EMP)	MEDIUM (51-250 EMP)	LARGE (250+ EMP)	ARCHITECTURE OR A/E	ENGINEERING OR E/A
FTE BREAKDOWN BY CATEGORY								
Technical and Professional	40	40	40	20	70	256	29	46
Marketing and Business Development	2	2	2	1	3	8	2	2
Financial/Accounting	2	2	2	1	3	11	2	2
Technology/IT	1	1	1	1	2	4	1	1
Human Resources	1	1	1	1	1	5	1	1
Administrative or Clerical	2	2	2	1	3	3	1	2
Other Executives	3	3	2	2	3	4	3	2
Other Employees	1	2	1	1	1	13	1	5

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