

EXECUTIVE INSIGHTS

AEC and Construction Services: Engineering Purposeful Growth

The recent economic downturn has affected most industries, including architectural, engineering and construction (AEC) and construction services firms. Commercial construction experienced a slowdown in the first part of COVID-19 and was below its long-run trend in 2021. But the sector, which includes specialist construction consulting firms, construction project management players and other services firms, enjoys strong market dynamics (see Figure 1). Growth in residential construction, including in outer suburban markets, has increased demand for commercial construction. Civil construction starts are projected to increase by 16% in 2023.¹ Lodging, office, manufacturing, healthcare, education and other institutional end markets are all expected to grow through 2026; only the retail end market is likely to see a small drop.



Source: L.E.K. research and analysis



Of course, the sector does face some risks. Recent interest rate hikes have already affected the residential market, and prolonged and higher interest rates could constrain investment in the commercial construction sector. In addition, supply chain disruptions, although moderating, may continue to delay construction activity, and commodity prices remain volatile. But overall, we are looking at strong market fundamentals and a number of macro trends that make this an attractive sector.

Growth drivers in AEC and construction services

The tailwinds that are carrying this sector forward include both economic drivers and a handful of other factors, from increased regulation to demand for greater climate resilience. This has meant that many projects have become more complex, requiring a wider range of AEC and construction services.

Infrastructure spending. Infrastructure spending is expected to grow in the near term. Not only are current levels of underinvestment unsustainable, but the Infrastructure Investment and Jobs Act will give a welcome boost to spending. Moreover, infrastructure spending cycles tend to differ from other economic cycles and do not track gross domestic product (GDP); in fact, they have historically held firm during recessions (see Figure 2). In terms of services, cost and project management consulting is more attractive during recessions due to an interest in lowering costs.



Figure 2 Analysis of infrastructure spending (1998-2015)

*Standard deviation is a means of calculating volatility, indicating that commercial and infrastructure construction are less volatile relative to residential construction

**Residential includes single and multifamily housing

^Census does not report federal roadway spending prior to 2002 Source: U.S. Census Bureau **Sustainability efforts.** Private firms and government clients are increasingly focused on the environmental impacts of infrastructure development, benefiting markets such as power, renewables and infrastructure. In addition, there is a growing emphasis on climate resilience for some projects, which increases the need for value-added consulting, design and engineering expertise. A further growth opportunity exists for firms with environmental remediation capabilities given the rise in demand for these solutions.

Growth in regulation. An increase in both regulation and legal activity has had a direct impact on construction and engineering projects. For example, in March 2022, the Securities and Exchange Commission (SEC) proposed rules that would require public companies to disclose extensive climate-related information in their SEC filings. The 2015 definition of WOTUS (waters of the United States) was reinstated in 2021 to include smaller streams, and the law requires compliance for discharges into dry streams and ditches. In 2021, New Jersey announced the Brownfield Redevelopment Incentive to provide tax credits to companies undertaking brownfield remediation projects. The continued evolution in guidelines and enforcement of federal and state regulations creates demand for consulting and engineering services as clients seek support in navigating these changes.

Lack of pricing pressure. Pricing for the sector is expected to remain strong in part due to labor shortages. While talent scarcity can constrain the ability to meet demand, it also keeps prices high. Pricing for AEC consulting and construction services can even be countercyclical in recessions, due to non-GDP-driven spending. In addition, cost-effective engineered solutions are often considered more attractive by stakeholders during economic downturns, so services such as cost management and project management can actually see an uptick in a recession.

Outsourcing. A challenging labor market has meant that corporations, developers and government agencies are increasingly facing a shortage of qualified engineers. Outsourcing represents an attractive — and increasingly common — alternative to hiring in-house AEC talent and other construction services professionals, a clear opportunity for firms that provide these resources to clients.

The price of success: Haphazard growth

Buoyed by positive market growth drivers, many AEC and construction services companies have grown quickly. But peer under the hood and it becomes apparent that much of that expansion is undirected and somewhat random. AEC and construction services firms frequently grow as a result of client demands for specific services, while others expand services when they bring on new hires with additional capabilities. Many firms enhance revenues by taking on projects that are outside their core capabilities because their clients are asking for specific services. But turning around and selling these services to other clients can be challenging. Unsurprisingly, clients expect both excellence and expertise, including a solid track record for specific services. Many place a high value on local relationships, and it can be hard to transfer relationships within client organizations that are often siloed. Above all, the experience that a customer has had with an AEC and construction services firm on prior work determines who they will select for future work, making it difficult to convince them to consider other options. Clients also want to have a specific point of contact that they can go to for support, regardless of the project assignment.

Furthermore, because many firms have decentralized operations, offices or business lines may grow opportunistically and independently from one another without a systematic review of how capital, labor and management time could be more optimally deployed. While taking an entrepreneurial approach to growth can ensure that firms are responsive to market and customer needs, it can also lead to a lack of focus or missed opportunities.

Ensuring purposeful growth

A combination of entrepreneurial expansion practices and cross-selling challenges has meant that firms struggle to pursue organized and purposeful growth. Yet without that intentional trajectory, these companies are missing out on opportunities to maximize profits and ensure their future viability. Companies need to set priorities based on market fundamentals (e.g., opportunity size, margin profile, growth rate) and their ability to leverage their existing talent and resources. There are several strategies that companies should consider on the path to purposeful growth.

Analyze market position and performance

Starting with a grounded understanding of market positioning is essential. Firms need to systematically analyze their performance across end markets, service lines and geographies. This will determine where they are underweighted versus overweighted compared with the overall market. They will then have to weigh these factors against other considerations such as their margins, growth and capabilities across each of these areas. Combined, this information will facilitate decisions about where to invest for optimal expansion (see Figure 3).

Focus on core capabilities and find differentiators that foster loyalty

Purposeful growth starts with a fundamental question: What does the firm do well? This is especially pertinent to the construction services and AEC space because these companies compete along so many dimensions, including reputation, breadth, depth, service, price,



Figure 3 Analysis of sample client market positioning

Adjust/address priority focus area to take account of margin, growth and Client's

Source: Management data; L.E.K. research and analysis

technical solutions and regulatory expertise (see Figure 4). Technology capabilities, in particular, are growing in importance, and it's critical for firms to stay abreast of emerging construction solutions (see sidebar).

One important differentiator is the ability to deliver complex versus standard projects, which enhances customer loyalty. In recent work we performed for an engineering and consulting company, we found that technical capabilities and track record were the most important purchasing criteria for complex projects, while price and responsiveness mattered more for standard projects. Another key differentiator is the ability to deliver projects at scale. Even when delivering at scale, however, companies need to be able to tailor their approach to the needs of local markets.



Source: L.E.K. research and analysis

Background on AEC and construction services

AEC and construction services firms rely on a range of software offerings, including construction management solutions that enable them to manage the project, financial details and customer relationships across a construction project. They may also employ a number of technologies with varied levels of maturity (see Figure 5).

These solutions are evolving rapidly, and companies need to keep a close eye on changes and emerging trends, particularly since innovative technologies and combinations of technologies can create new customer use cases. For instance, sensors and smart devices provide information about site assets' location, condition and usage and can be a rich source of information to help manage productivity, performance and maintenance needs. While many of these technologies are still being developed, they have the potential to influence — if not change — the game, particularly in terms of efficiency, cost-effectiveness and competitive differentiation.

Figure 5

Technological impact on commercial construction

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Collaborative software	BIM	Drones/automated solutions	Sensors and wearables	AR/VR
Companies are increasingly leveraging software to drive efficiencies (e.g., construction management software)	BIM software is being used to maximize collaboration between all parties in the construction process	Drone/automation technology is providing new insights into construction while reducing human risk	Sensors and wearables are enhancing safety, communications and other common construction challenges	AR/VR are enhancing the ability to work efficiently and effectively
<		Maturity of technology		

More mature Which technologies will have the most impact on commercial construction? Les

Less mature

Note: BIM=building information modeling; AR=augmented reality; VR=virtual reality

Source: Research & Markets, Reteam, AGC, Trend Analysis on Adoption of Virtual and Augmented Reality in the Architecture, Engineering, and Construction Industry (2020 Academic publication), U.S. Chamber of Commerce

Make talent acquisition central to M&A efforts

Given that talent and relationships are so critical, firms might consider focusing their M&A activities on this dimension. Examples include acquiring small, strategic firms with specific capabilities and talent; pursuing "acqui-hires," in which a firm targets and recruits a team of individuals from a competitor; and taking a strategic planning approach to recruiting to ensure that hiring addresses top priorities.

Create an intentional geographic expansion strategy

Companies need to think carefully about where and when to establish a physical presence, focusing on regions that are seeing meaningful growth. For optimal resource allocation, it makes sense to establish a physical footprint where a local presence is most valued and to leverage more distant, shared resources where it is less so.

Establish new roles and cross-sharing processes and incentives

As already noted, cross-selling can be a challenge for AEC and construction services firms. Services firms need to develop incentives to spread relationships across their entire organization and introduce clients to specific expertise. They must also seek a delicate balance between centralization and the need for local relationships.

Doing this successfully may call for establishing new roles. For instance, firms may need to deploy account managers to cultivate national accounts, supported by a dedicated program management team. Program management staff can also be dedicated to managing relationships in key growth cities to increase share of wallet. Firms may need to establish internal resource-sharing procedures to deploy key talent to local markets. They may also need to create incentive structures in order to demonstrate to new hires that there is a clear pathway to career growth.

Building for the future

Strong market fundamentals and resilience of demand make AEC and construction services an attractive sector. For many firms, it is their very success that has prevented them from taking a more strategic approach to growing their business. But past success is rarely a guarantee of future wins. It is also likely that without a clear vision of how and where to grow — and a path for getting there — these firms are leaving money on the table. Those that choose to embrace purposeful growth, however, will find themselves much better positioned to thrive in the years to come.

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

Endnotes

¹Constructiondive.com, "Sector watch: 'A lot of money on the table' for civil construction this year." https://www.constructiondive.com/news/2023-outlook-public-funding-will-jumpstart-civl-activity/639951/

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