

environmental



Managing business challenges and anticipating shifts in a post-COVID world

EFCG's latest annual executive leadership gathering explored how CEOs are addressing shifting priorities and gearing for an extended bumpy period as the pandemic and its economic repercussions continue, whilst looking to wider trends shaping the future industry

A year on from EFCG's prior executive leadership conference in the fall of 2019, the operating environment for consulting and engineering firms has shifted in a way that no-one could have predicted. At that time, firms were happily predicting the strong top- and bottom-line performance of 2018-19 to continue through into 2020; but there was also an underlying warning from EFCG that the industry was due for a recessive period and that firms should ensure they were well prepared.

This year's event - held online in October - naturally focused on how the growth targets, group strategies and other major trends shaping the future of the industry have shifted in light of the global pandemic. Attendees heard how the most successful firms navigating the crisis may be those who are doubling down on their core competencies, and why conservative budgeting may be prudent given the industry's prior track record of over-optimistic growth targets ([EA 27-May-20](#)).

BY ANDREAS GEORGOULIAS, EFCG

As the wider architecture, engineering, and construction services (a/e/c) industry heads into one of the most uncertain times in recent history, it made the **Environmental Financial Consulting Group (EFCG)**'s 2020 Executive Leadership Conference that much more pivotal this year, as EFCG provided its customary assessment of changing industry data and trends, welcoming speakers from both inside and outside the industry to debate "what's next?" for a/e/c firms.

Over 500 business leaders attended this three-day virtual conference - comprising nineteen individual sessions - that addressed some of the most pressing trends, including the global economic state, impact of technology, risk management, M&A, social justice and sustainability, as well as workforce management.

The meeting kicked off with a panel of industry leaders explaining how they've tackled 2020 and are planning ahead for 2021; providing direction on what considerations need to be



“

Focus on providing an experience to your employees remotely, to build loyalty and make sure people embrace the company culture when working from home

Alexandre L'Heureux, WSP

part of the planning toolbox for next year.

Northwestern University business professor and economics scholar Ronald Braeutigam, stressed the importance of remaining cautiously optimistic, with the recognition that "this is a resilient industry, but we are not out of the economic hardships of 2020 yet". For the first time in 80 years, the US now joins those few countries with debt larger than GDP.



“

How do we create a place where everyone can bring their whole self to work and feel empowered to do great things?

Mike Carragher, VHB

In addressing the conference, Dominique Lueckenhoff, senior VP for corporate affairs and sustainability for the **Hugo Neu Group** and a professor at the faculty of Virginia Tech's Center for Leadership in Global Sustainability, underscored the need to think more holistically about sustainability and resiliency when planning infrastructure projects. And this is tied to a heightened need to implement solutions that address an evolving range of challenges to build more healthy, inclusive, and equitable communities. "Today, more than ever, we are in an adaptive state and have to pivot," Lueckenhoff noted, adding that "we've got to start thinking about how the challenges integrate, so that we can implement solutions that solve for multiple problems."

Rick Cotton, executive director of the **Port Authority of New York and New Jersey**, also noted the importance of recognising the significance of climate change impacts and taking action on sustainability when discussing his organization's sustainability initiatives and goals as part of its commitment to the 2016 Paris Agreement. "We believe climate change is an existential threat and we are committed to doing our part to respond to it," Cotton said.

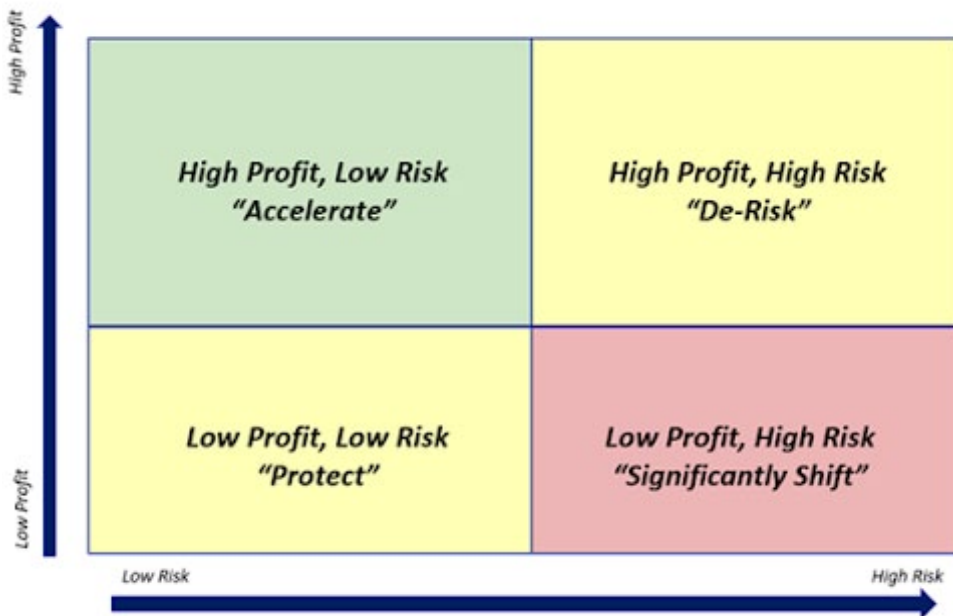
Industry overview, data trends and overarching insights

An industry overview session was led by Rebecca Zofnass, managing partner at **EFCG**. She referenced the results of the latest EFCG survey, based on the participation of business leaders from around 200 firms, representing \$150bn in annual revenues, citing the eleven key benchmarking metrics EFCG tracks for a/e/c firms.

The COVID-driven recession will most likely have a longer than previously anticipated impact on the sector, Zofnass asserted. EFCG's latest survey showed that revenue growth estimates for 2020 are generally 3-5% down where they were a year ago (when CEOs were expecting average internal growth of around 8%). Most firms are also expecting slower growth through 2021, 5.1% on average, with larger firms the most cautious in their recent projections at around 2.5% for 2020 and 4% for 2021.

Looking back at the a/e/c industry's growth patterns during previous recessions, Zofnass noted that it does indicate a level of resilience, but that the industry is certainly not immune to

Figure 1: EFCG Profit and risk quadrant analysis



Source: EFCG

economic cycles. If the a/e/c industry follows a similar pattern to the last Great Recession for instance, it would be 2023 or 2024 before growth numbers recover.

With respect to profitability, median profitability is expected to be down slightly in 2020 to 12%, while firms said they expect profitability to decrease slightly further down in 2021. Again, previous recessionary trends for the industry show that profitability can take 3-5 years to recover, therefore, it might not be until 2024 or 2025 this time.

Positively, backlog trends show that firms have not yet been depleting backlog in spite of the difficulties this year, although backlog levels do vary greatly among firms. But where acquisitions and mergers are concerned, survey respondents generally expected deal activity to slow down in 2020, and similar in 2021, noting that in general M&A transactions are fewer and smaller compared to last year.

The COVID-19 pandemic has impacted several other key metrics, including overhead costs, staff turnover, and alternative delivery. Zofnass noted that longer term impacts on overhead are still unknown, but occupancy costs are expected to decline. Firms should think critically about the return of cost cutting initiatives, as in previous recessions firms that strategically cut costs fared better than those that did straight cuts across all overheads, she suggested.

Zofnass then moved onto market and demand trends. Most firms reported that they expect more opportunities will arise with US federal clients, and that the areas most challenged will be US state/municipal clients and non-US private clients. In general, firms cited water/wastewater, renewables, and transport as the



Today more than ever we are in an adaptive state and have to pivot

Dominique Lueckenhoff, Hugo Neu Group

Figure 2: EFCG’s key industry changes post-pandemic

We Believe That Three Things Will Fundamentally Change Post-COVID-19



Source: EFCG

markets with the highest potential at this time. With respect to key geographies, Florida and the Southeast were reported as the most promising, while the Northeast, Midwest, Africa and the Middle East were seen as the least attractive in terms of growth potential.

Overall, firms provided optimistic five-year growth projections. However, EFCG’s historic data indicates that the industry’s long-term growth outlook projections tend to be over optimistic. Furthermore, EFCG research shows that firms that performed better in previous recessions were those that were more conservative with their budget projections and actually underestimated their revenues and profits. As such, EFCG urges firms to consider efficiency budgeting and plan their staffing needs for 5% less than the revenues anticipated for the year.

This session continued with a discussion on risk, and what enables a/e/c firms to thrive during recessions. EFCG research shows that

the most important metrics for these companies during downturns are profit and risk, as growth is no longer correlated with success in recessions. For this reason, EFCG has developed the EFCG Risk Index, which is comprised of several drivers correlated with success during previous downturns, to help firms evaluate their risk position and be better prepared to navigate recessions through the EFCG profit and risk quadrant analysis (Figure 1).

This year, many a/e/c business leaders reported that one of their main priorities is to be more focused and less diversified overall. Furthermore, almost all cited pricing pressures from at least one sector, a trend being accelerated by lower revenues and decreased budgets due to the pandemic as many competitors drop prices to win work and extend backlog. Yet, increased pricing pressures are also likely to facilitate investments in technology so firms can become more efficient, cut costs, and enhance their value

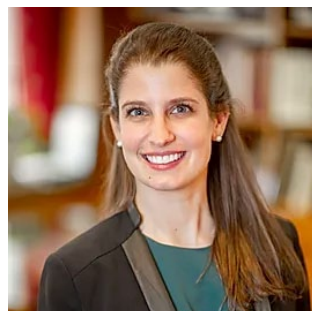
proposition. Zofnass noted that the acceleration of technology, employee engagement in a virtual workforce, and the future of office space will all fundamentally change post COVID-19 (Figure 2).

She concluded the session with some key takeaways: (i) EFCG urges firms to be cautious while making projections and avoid being overoptimistic for 2021; (ii) while increased competition may drive firms to refocus on their core capabilities and utilize technology; and (iii) firms should consistently evaluate risk aspects to identify their risk profile. Overall, the a/e/c industry will see greater innovation and an accelerated pace of change as a result of these shifts.

Expect the unexpected: managing downside risk in times of uncertainty

Next was a session moderated by Andreas Georgoulas, director of risk management and international at **EFCG**, which focused on the risks a/e/c leaders face - particularly in relation to the COVID-induced recession - and how they are preparing for the challenges ahead. He was joined by Alexander L’Heureux, CEO of **WSP**, Brian Coltharp, president and CEO of **Freese and Nichols**, Áine O’Dwyer, principal and CEO of **Enovate**, and Darren Black, national practice leader at **Risk Strategies**.

According to Georgoulas, the global pandemic continues to highlight the importance of having a proper risk management plan to address risks in a timely and effective manner. L’Heureux said that **WSP** has developed an enterprise risk management system to track risks, which is comprised of several indicators that are tracked regularly and reported to the board on a quarterly basis. He acknowledged that COVID has brought some changes that will stay for the long-term, such as the trend to work remotely,



EFCG research shows firms that perform better in recessions are conservative with budget projections

Rebecca Zofnass, EFCG

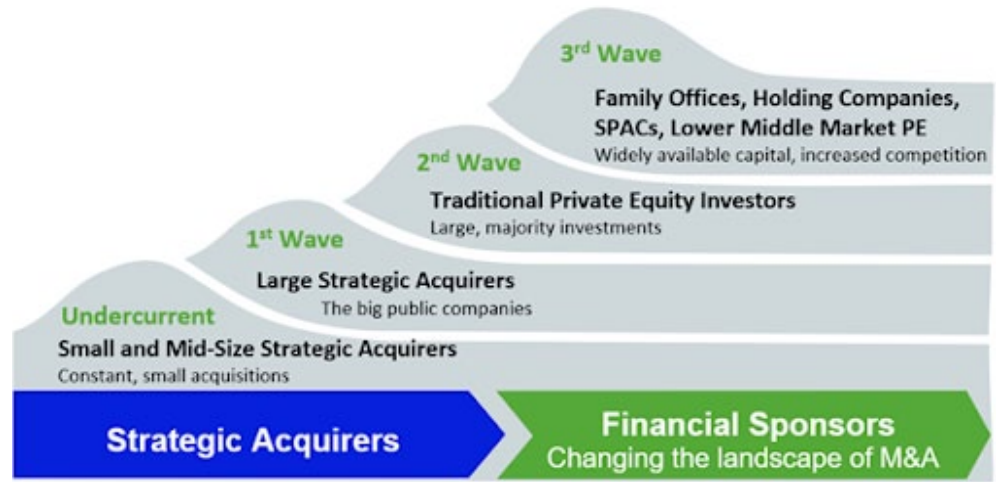
which does have its downsides as well as pluses. "This can result in reduced value as when everyone is working from home it is more difficult to discuss new ways of doing things," L'Heureux noted.

In order to help make WFH successful, he recommended: "It is important to focus on providing an experience to your employees remotely, to build loyalty to your brand and make sure people are embracing the company culture when working from home."

Coltharp pointed to the loss of connectivity with clients as another lamentable risk. "Business has been good during the last six months, but primarily due to the relationships we have built with clients. It is increasingly challenging to stay connected with clients," he said. **Freese and Nichols** assumes construction risk only when it enters into design/build arrangements with contractors, Coltharp noted. And in order to mitigate risks, the consultancy - which operates across the full spectrum of engineering, architecture, environmental science, construction and planning services - has created a design/build committee to consider each such project proposal.

Áine O'Dwyer stated that smaller firms generally have less things in their control when managing risks, adding that **Enovate Engineering** focuses strongly on technology as part of its long-term strategy. "The a/e/c industry moves fast towards integrating new

Figure 3: Waves of acquirers shape the a/e/c industry



Source: EFCG

technologies and we have been focusing on being one step ahead," O'Dwyer noted. The COVID-19 pandemic will accelerate change across the industry and many things are going to be different, she said, but "this environment can be beneficial for a smaller firm, especially as we grow into new areas".

Black from **Risk Strategies** discussed the key trends on claims and policies, noting that in terms of professional liability, a significant uptick in claims - as many had expected at the outset of the COVID crisis

(EA 17-Mar-20) - has not yet been observed. However, the industry is concerned that delayed claims will still eventually be brought, and that contracts signed prior to the pandemic may not have included appropriate force majeure provisions, potentially making them liable for circumstances outside of their control. "Firms need to be mindful of contractual agreements," Black warned.

He also underscored that there are significant impediments to design firms' ability to assume construction risk within design-build or other alternative delivery methods. The fact that many design and engineering firms continue to effectively operate as partnerships, dividing profits at year-end with little retained earnings, leaves little room to support a surety line in order to provide performance bonds or assume risk that cannot be transferred to insurers, as constructors can and must do.

What does a successful M&A deal look like?

EFCG's Jessica Barclay and Chip Elitzer moderated an industry panel session exploring the critical aspects that make mergers and acquisitions in the a/e/c space successful, and how this has changed post-COVID.

Barclay observed that financial buyers are significantly changing the a/e/c M&A landscape by providing capital and intensifying competition (Figure 3). The COVID-19 pandemic has a differentiated impact on firms, which has



EFCG Executive Leadership Conference 2020: Differentiating Sources of Capital panel (Credit: EFCG)



Financial buyers are significantly changing the a/e/c M&A landscape

Jessica Barclay, EFCG

Wright, chairman and CEO of NV5 noted. He revealed that NV5's priority is to look at how to better serve clients together with the acquired company. For this reason, once NV5 acquires a new firm an integration team is formed immediately so that teams from both firms can gradually do more significant business tasks collaboratively, in accordance with a milestone plan that has been agreed upon by both sides.

NV5 has also found that earnouts can be one of the most significant challenges and actually detrimental to the M&A integration process. Hence, it is recommended that firms focus on addressing earnout issues effectively before completing the acquisition.

The discussion continued with the case of the acquisition of the multidisciplinary professional services firm **Missman Inc** by **IMEG Corporation**. Paul VanDuyn, CEO of IMEG, firstly noted that IMEG is not an engineering company per se, but rather a specialist acquisitions company focused on the a/e/c industry. So IMEG has a dedicated M&A team that not only identifies potential targets but also helps with the integration and transition of the acquired firms. The acquired firms report to the M&A team throughout the integration period to make sure all issues are addressed effectively.

The M&A team results in pure overhead expenses, but it compensates as a slower and more focused integration period leads to increased revenues across the acquired firms,

according to VanDuyn. He also highlighted the benefit of hiring advisors during an M&A. "Firms must be clear on what they are looking to become following the transition and possible integration in an M&A opportunity as sellers," VanDuyn said.

Patrick Eikenberry, now **IMEG's** VP of civil engineering (and former president & CEO of **Missman**), added that he did his own personal due diligence before the transaction was completed. He spent a couple of months at IMEG to make sure that it would be the right fit for the firm and that he could successfully lead his team under the new parent.

Rethinking technology

A session entitled 'Rethinking technology, realizing a new competitive edge' was moderated by Marcus Quigley, technology practice lead at **EFCG**. Quigley led an industry panel - including senior executives from **Arcadis Gen, BST Global, CDM Smith, Jensen Hughes, and Tenna** - exploring the latest trends on technology adoption across the a/e/c industry, and how and where firms may be gaining competitive advantage as a result of effectively integrating technology across their organizations.

Quigley said technology is increasingly regarded as one of the most significant opportunities for a/e/c firms to increase valuation, through

prompted EFCG to develop its 'COVID-19 M&A Framework' to help sellers critically evaluate the right time to sell.

NV5 Geospatial Solutions's acquisition this year of data and analytics specialist **Quantum Spatial (EA 08-Jan-20)** was considered by the panel as a case study. "Firms cannot make successful acquisitions unless they focus meaningfully on integration," Dickerson

Figure 4: Diversity among professional employees

Diversity in the A/E/C Industry

Women

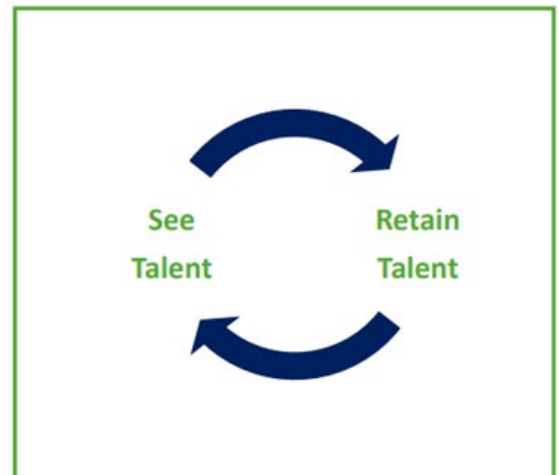


Minorities



Growth has been flat for the last 10 years, but we are seeing early signs of improvement in last year

Challenges in Attracting & Retaining Talent



Source: EFCG

strategy, growth, and profitability. He shared some notable examples of technology adoption across different markets and society at large, including citing AutoCAD as a case study to illustrate how a new technology with sufficient functionality can massively disrupt the market, even at a low price entry point.

Quigley also shared new innovations and tools that can be used to evaluate how employees work together utilizing data firms already collect. These would enable firms to gain a better understanding on how to accelerate change, and focus on better managing their employees.

The panel shared their firms' experiences in making transitions in the way they utilize technology internally, as well as for client work. This requires several organizational, structural, and technical changes that have to be implemented through a well specified plan. They also addressed how firms can better manage change across the organization, as many are finding it increasingly difficult to invest in and implement new ways of doing work and are not able to achieve improved efficiencies through the use of technology.

Overall, the discussion highlighted that technology will be at the core of the a/e/c firm of the future, but companies are currently following different models to bring technology to their clients, such as co-investment, digital subsidiaries and brands, and spinouts (or a combination of these). All panelists highlighted the importance of having a diversified strategy with respect to which options to focus on to

build technology capabilities, as some can be built internally, while some others through acquisitions and partnerships. Therefore, although the industry clearly moves towards greater technology integration, there are many different paths firms could take and should be knowledgeable about to better integrate technology across their organizations.

But in order to be successful implementing organizational changes, firms need to focus considerably on developing a new mindset and culture of innovation across their businesses that would help their technical and human systems support new technological innovations that drastically change how work is monitored and completed. New options and models have become available to understand how change works, but a/e/c firms should note that it takes time and requires a well specified strategy.

DEI goals: beyond doing well, doing good

A conference session dedicated to diversity, equity, and inclusion (DEI) trends and focus aspects for a/e/c firms was moderated by Julie Hasiba, managing partner at **EFCG**. Hasiba was joined by Lisa Black, director of cultural belonging and social ethos at **American Society of Civil Engineers (ASCE)**; Kelly Reed, managing director at **Lockton Companies**; Mike Carragher, president and CEO of **VHB**; and Kristin Beamer, chief marketing officer of **McKim & Creid**.



Firms need to understand where they stand in the DEI space, then take steps to move forward

Julie Hasiba, EFCG

Hasiba suggested that firms need to first understand where they stand in the DEI space, and then take the necessary action steps to move forward. They should build a support and coaching system for the company's leaders, as well as create a safe place for employees to go for support. However, firms should be patient and understand that improving performance on DEI takes time through developing changes to company culture in support of that.

Lisa Black discussed diversity and bias in the workplace, noting that bias can be addressed by creating inclusive work environments where people feel safe to express themselves. She noted that awareness of bias is a key ingredient to creating inclusive work environments where people feel safe to express themselves. And that historically a lot of gains have been made from social movements, emphasizing the importance of continuing to focus on advancing the DEI agenda.

"We must make sure that, within our organizations, the leaders do their part to step up and say: we value inclusive work environments," Black stated.

According to Kelly Reed, organizations are responding differently to social movements during this period, with questions around not only what can one do, but also what can be done to do this right? Reed suggested organizations should set clear and sustainable goals that they



EFCG Executive Leadership Conference 2020: DEI Goals panel (Credit: EFCG)



The pandemic highlights the importance of a proper risk management plan

Andreas Georgoulis, EFCG

would be able to achieve, and ask themselves “to what extent do we have good policies in place so that we can be good stewards of DEI—understanding first and foremost what are the components of a DEI strategy to be effective”.

VHB’s Mike Carragher stressed that, as a CEO, it has been important to reflect on the recent social movements by thinking of how to take care of people at VHB, a c1,400-strong multidisciplinary firm headquartered in Watertown, Massachusetts. Creating virtual community meetings moderated by an outside consultant provided the opportunity to get in discussions with employees about things that may be more difficult to discuss. “For VHB, it all propagated out of the idea on how we create

a place where everyone can bring their whole self to work, no hesitation, no concern, feeling completely empowered to do great things,” Carragher noted.

Kristin Beamer suggested that “DEI initiatives need to go across all the organization, it should not just be one focal point”. She said that while providing the right kind of support is challenging, leadership is critical in order to help things move forward. Beamer also argues that her firm **McKim & Creed** perhaps brings a unique perspective on the debate because it is employee-owned and so typically everyone is thinking about each other.

Redefining workforce productivity in the new virtual world

A panel session on redefining workforce productivity was moderated by Daniel Sosnay, vice president at **EFCG**, focusing on what firms can do to take care of their employees and improve productivity during this challenging period. He was joined by senior representatives of **Arup**, **Terracon** and **Transearch** to discuss the challenges their firms are facing and the steps they are taking to overcome them.

The debate focused on the importance of leaders being flexible and understanding, as each employee and client might be facing a different situation, and many solutions might not work for everyone. Leadership should engage regularly with employees, foster collaboration, and focus on identifying and providing measures to support the various needs of employees across the firm.

Many a/e/c firms have reported that their

employees have become more productive during the pandemic and the resulting remote-working situations, but with teams working harder to meet client needs it increases burnout risk. As such, it is important for employees to feel that their needs are acknowledged and they are provided with the right level of support. Leadership should be available to talk and listen to what employees are concerned about to keep morale up.

However, collaboration and innovation are more limited when working remotely, while building new client relationships is challenging. As such, the company culture is especially critical and must work in combination with its strategy in recognizing that technology is a key enabler for engaging with clients remotely. Addressing this, firms can provide an environment where new hires can learn the company culture and are able to access mentors whilst working remotely. Overall, leaders need to consider how their firm can best utilize technology so they can develop organizations that are able to collaborate effectively and work efficiently in an increasingly digital world.

Finally, although workforce location barriers were significant up to ten years ago, in the future they will be much less of an issue. And as location barriers become less significant, employees will increasingly look for employers that are flexible, adaptable, and forward thinking. Firms should take advantage of this opportunity and build a culture of innovation that attracts and helps retain new talent, as well as identify the tools that would help them become more efficient. Cross-cultural teams were also highlighted as a differentiator in improving productivity that firms should focus on going forward.



Technology is one of the most significant opportunities for a/e/c firms to increase valuation

Marcus Quigley, EFCG

Other EFCG Leadership Conference 2020 sessions

Reinventing your growth strategy: Differentiating sources of capital

Key takeaways from the session include the opportunity for a/e/c/ firms to consider capital now as it ensures survival during downturns, helps seize growth opportunities and manage cash flow concerns.

The state of financial sponsors is changing, as the PE/alternative capital market continues to grow surpassing \$4.5tr of assets under management (AUM), while investors are looking to deploy unprecedented amounts of capital. Yet, although this creates multiple opportunities for a/e/c firms, firms should make sure that the strategy and goals of potential investors align with their own strategy and goals.

International Forum I: The pandemic's impact around the world

The International Forum I highlighted that the global a/e/c markets are going strong, but the long-term growth outlook differs across regions, while in general government stimulus packages are driving growth. Yet, firms worry about what will happen when the government stimulus packages end. In regards to key sectors and geographies internationally,

transportation and energy are noted as being the most attractive, with higher growth expected across EU and Asia. Companies are facing significant challenges to drive efficiencies and win new work and are therefore increasingly looking for ways to innovate.

Leading in the "new normal": How CEOs are adapting to shifting trends

Three key takeaways stand out from this particular session. First, the integration of technology will continue to accelerate as firms aim to lower costs and differentiate their value proposition. Then, since firms have to shift to more remote work environments, leaders must find new ways to effectively engage employees, and drive culture and morale.

Finally, the future of office space remains unclear, as some firms cut costs and redeploy resources, while others reconfigure and use existing space more flexibly in accordance with social distancing regulations.

Maximizing leadership effectiveness: How to advance the C-suite partnership

The 'maximizing leadership effectiveness' session focused on actionable ideas to create successful C-suite partnerships.

A key takeaway is the importance of communication, especially about the things one is not an expert on, and leaders should always try to think about the other person's position in order to maintain an effective working relationship.

Moreover, successful C-suite working relationships rely on trust, which helps teams face challenges and solve problems collaboratively.

Delivering a more sustainable future

A panel focusing on the trend and change driver of sustainability felt that the global pandemic has provided a unique opportunity for a fresh start and accelerated new normal with regards to sustainable development, both externally in terms of service delivery to clients and internally with regards to group strategy, values and mission.

Moreover, there is a strong link between sustainability and innovation; a/e/c firms that have embedded sustainability in their culture tend to stand out in their projects for clients too, it concluded.

FURTHER INFORMATION:

www.efcg.com