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A Sector-Wide Analysis of Construction Disputes

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The construction industry is at a pivotal point of transformation, driven by shared goals and challenges across the environmental, energy, industrial manufacturing, and technology sectors. Despite their different objectives, these sectors are united by common themes: the pursuit of innovation, sustainability, and resilience in a rapidly changing world. Here, with help from the 2025 Arcadis Construction Disputes Report, we review the key trends, challenges, and opportunities that are reshaping these sectors collectively as they pave the way for the future.

Key Trends Across Sectors

INNOVATION AS A CATALYST FOR CHANGE

Innovation stands as a common pillar across all construction sectors. From adopting advanced technologies to rethinking traditional processes, innovation is key to addressing contemporary challenges and unlocking new opportunities. The construction industry is embracing technological advancements almost as quickly as the new technology becomes widely available. The integration of AI, IoT, and Building Information Modeling is transforming project management, enhancing efficiency, and optimizing resources across sectors. These technologies enable smarter design, efficient resource allocation, and streamlined operations, ultimately fostering a culture of continuous improvement and adaptation.



COMMITMENT TO SUSTAINABILITY

Sustainability is a core focus across sectors, with a shared commitment to reducing environmental impact and promoting resource conservation. Each sector is heavily invested in developing sustainable solutions to meet global demands for eco-friendly practices. All sectors are focusing on renewable energy systems, energy efficient designs, green building materials, and embracing innovation in sustainability to drive significant advancements. The adoption of eco-friendly construction methods is essential to meet regulatory requirements and align with global climate goals.

RESILIENCE AND ADAPTABILITY

In an era marked by rapid change and uncertainty, resilience and adaptability are critical priorities shared by all sectors. This is reflected in their approaches to infrastructure development and project management.

Sectors are focusing on designing and constructing resilient infrastructure that can withstand climate-related challenges and other external pressures. This includes the development of decentralized energy systems and smart cities that are equipped to handle disruptions efficiently.

The importance of resilient and adaptable supply chains is also recognized and addressed across the board. Sectors are investing in local sourcing, digital supply chain management, and risk management frameworks to mitigate disruptions and maintain project timelines.

Challenges and Solutions

The technology, building, transportation, environment, and energy sectors each play distinct roles in shaping the modern world, characterized by their unique challenges and innovations.

The technology sector is the backbone of modern economies, driving innovation and connectivity through advancements in AI, IoT, and cloud computing, with a strong emphasis on sustainable practices and the development of data centers.

In contrast, the building sector faces economic pressures and environmental demands, focusing on eco-friendly construction methods, such as modular construction and the use of sustainable materials, while grappling with rising costs and labor shortages.

The transportation sector is witnessing growth through digitalization and sustainable construction, emphasizing resilient infrastructure to withstand climate change challenges. Meanwhile, the environmental sector is leading the charge toward sustainability with net-zero energy buildings, circular construction practices, and the integration of smart infrastructure to manage essential resources efficiently.

Lastly, the energy sector is undergoing a transformation driven by renewable energy projects, energy storage innovations, and the rise of decentralized energy systems, with an emphasis on both upgrading existing infrastructure and developing hybrid energy solutions. Each sector is distinct in its focus yet interconnected in the broader pursuit of sustainability and innovation.

NAVIGATING REGULATORY LANDSCAPES

While innovation and sustainability are paramount, navigating complex and evolving regulatory environments remains a significant challenge across sectors. The need for compliance with diverse standards and regulations can slow progress and inflate costs. However, sectors are working collaboratively to simplify regulatory processes and encourage compliance.

ADDRESSING LABOR SHORTAGES

A common obstacle for all sectors is the shortage of skilled labor. The increasing demand for specialized professionals is outpacing supply, necessitating investment in training and recruitment initiatives to expand the talent pool. Collaboration with educational institutions and apprenticeship programs is crucial to bridging this gap.

MITIGATING SUPPLY CHAIN DISRUPTIONS

Supply chain disruptions pose a persistent threat to construction timelines and budgets. Across sectors, companies are exploring local sourcing options, building partnerships with multiple suppliers, and adopting digital tools to enhance transparency and efficiency. By implementing these strategies, sectors aim to build more resilient supply chains.

CONCLUSION

The construction industry is at the center of a global transformation. Across its environmental, energy, industrial manufacturing, and technology sectors, the industry is addressing the challenges of climate change, resource conservation, and economic resilience with innovative solutions.

While each sector faces unique challenges, their collective commitment to innovation, collaboration, and sustainability ensures that the industry as a whole is well-equipped to meet the demands of the modern world.



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