



REMAINING COMPETITIVE IN CONSTRUCTION SECTOR

IN INDIA, THE PERENNIAL COMPLEXITIES FACED BY THE CONSTRUCTION INDUSTRY INCLUDE, MATERIAL COSTS, SUPPLY CHAIN IRREGULARITIES, LABOUR AND SKILL SHORTAGES, AMONGST MANY OTHERS. REALTY+ SPOKE TO THE WELL-ESTABLISHED GLOBAL AND DOMESTIC LEADERS IN THIS SEGMENT ON THE CHALLENGES, OPPORTUNITIES AND NEW DIGITAL APPROACHES IN THE INDIAN CONSTRUCTION SECTOR.



According to the World Economic Forum, more than 70% of the global GDP will be generated from construction by 2050. The forecast acknowledges the role and significance of the construction industry in economy but also makes us ponder on the challenges the sector faces resiliency, technology, equity, and sustainability across the countries.

HOW IS TECHNOLOGY IMPACTING THE CONSTRUCTION INDUSTRY, PEOPLE AND BUSINESSES?

SS Reddy - The overall goal for the sector is to improve the lives of residents and the community, while safeguarding the environment. Technology plays a big role in these efforts. The pandemic, especially, forced a transformation upon the construction sector with the use of technology expanding to other services such as administration and procurement.

The need for operational efficiency and digital transformation can no longer be taken for granted. It is imperative to continue the growth of the sector. This is

an opportune time for previous industry practices to be reassessed and for new systems to be introduced including AI and Data Analytics. This applies to all traditional fixtures of the sector such as ERP, project management and customer service.

Saurabh Sharma – Technology has had a powerful impact on the construction industry. Traditionally this has been a slow mover in the adoption of tech but since the onset of the 2nd decade of this millennium, we can notice a certain shift in the way things are done. Starting from the design stage of projects, where we have already seen major inclination towards adoption of 3D design methods using BIM and better visualization techniques and software being put to use.

In addition to this, we can also notice the use of gaming tech such as AR and VR in helping remote homebuyers get a first-hand experience of how their dream home shall look like. This came to good use during the pandemic when physical commute and contact were limited. A new emergence has been the use of drones in not just in curating promotional videos and aerial views but also



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“India’s urban planning initiatives depend heavily on smart and sustainable cities, wherein in technology will play a massive role. These smart cities have underlying themes including device connectivity, utilization of big data and creation of feedback loops. Smart Cities Mission is an urban renewal and retrofitting programme by the Government that aims to develop 100 cities across the country making them citizen-friendly and sustainable. India has unique challenges due to its large population and fragmented social infrastructure. Innovative technological approaches to housing, transportation and utilities will have to be implemented in order to overcome these challenges.”

remote supervision in treacherous terrain on infrastructure projects in hilly and remote areas.

Manish Khandelwal - Much like any other industry, advancements in technology have had quite a significant impact on the construction and infrastructure industry. We have witnessed an increase in the quality and overall functioning of the construction industry. This has further led to an increase in the demand for technologically smart products focused on sustainable living. From a plumbing and sanitation perspective, technological advances have allowed us to address problems like wastage of water.

HOW ARE COMPANIES ENSURING REAL-TIME CONSTRUCTION OPERATION MANAGEMENT?

SS Reddy - The incorporation of technology in construction helps simplify large-scale complex operations and streamline data management with more accuracy and efficiency. The goal is to consistently deliver high-quality, relevant information and insights for a better real-time construction operation management. This may include real-time digitization of data and integration of all

operations via internet of things (IoT). Furthermore, drone footage of construction sites, combined with advanced analysis and design methodologies, allow the construction of increasingly more efficient buildings with minimal impact on the surrounding environment.

Saurabh Sharma - Construction companies have now come to realize the importance of engaging specialist consultants such as PMC’s on major projects to serve the purpose of real-time construction management. In many case scenarios, where the owner/financiers are not from construction background or are foraying into their 1st project into construction domain, prefer to have a specialist Project Management Consultant like David Adamson Group on board with them to help them navigate and mitigate the challenges faced in Construction operation management. The use of Project Trackers and multi-user dashboards is also catching on now. Many companies are adopting Power BI backed dashboards in order to remain up to date in real time regarding the challenges faced on construction projects.

Manish Khandelwal –As the demand for housing and development is on the rise, additional public investment