

CONSTRUCTION TIMES

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Covid-19

A WINDOW OF OPPORTUNITIES

High time we digitalized the infra sector and made India a manufacturing hub



Shailendra Roy
L&T



Dr. Niranjan Hiranandani
Hiranandani Estate



Vipin Sondhi
Ashok Leyland

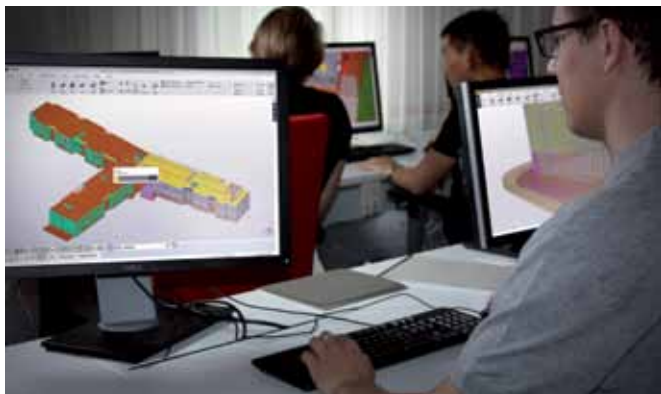


Paul Wallett
Trimble Solutions

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WINDOW OF OPPORTUNITIES



Construction Industry needs to embrace automation and digitalization that help prepare them to mitigate the business impact or create new opportunities in crisis times. **Agith G Antony** tracks the developments in automation and digitalisation in the construction industry.

INTERACTIONS



- 25 We need to have an open mind and accept the new set-up and way of working.
- Dr. Niranjana Hiranandani, President (Nation) NAREDCO & President, ASSOCHAM



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- Paul Wallett, Regional Director, Middle East and India, Trimble Solutions



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The initial cost to adopt the technologies is a major deterrent.
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- Vipin Sondhi - MD & CEO Ashok Leyland



THE FUTURE OF CONSTRUCTION INDUSTRY LIES IN DIGITIZATION AND AUTOMATION

We have indigenously developed Integrated Management Information System (IMIS) for water utilities.

Subhash Sethi, Chairman, SPML Infra Limited

Within the next 3-5 years there will be a good integration of digital technologies including IoT, Cloud Computing, BIM, ML & AI, 3D Printing and Robotics.

How do you assess opportunities of digitalizing construction industry?

Just over two months ago, everything was normal in India and news of a virus spreading from China was creating impulse in political and business circles. Two months later, we are facing the biggest challenge of human and business survival across the world. This disruption caused by the Corona virus (Covid-19) pandemic has opened some new avenues for businesses across the segment. The remote working and technical control over things have become more relevant now than ever. The construction industry which is working on traditional methods with insignificant automation and digitalization has started understanding the role of digital technologies. They are no longer mere tools to making things a bit better; they have now fundamentally changed the way business is done. Digitization permeates every part of a construction business and the industry is aware of the

importance of it. The problem lies with adoption and level of implementation. Other industries like manufacturing, medical, music, media, finance and telecommunication services have adopted it in early stage and they reaped the benefits.

What do you think the time frame for better integration of digitalization?

The construction industry is considered the least digitalized but with the new development after the Covid-19 outbreak, it is estimated that within the next three to five years there will be a good integration of digital technologies including Internet of Things (IoT), Cloud Computing, BIM, Machine Learning, 3D Printing and Robotics in its workflows. In today's highly competitive world, companies are increasingly being expected to deliver high quality construction project on time to their clients and provide world class solutions for the requirement. A large majority of companies in the construction field



42 MLD Sewage Treatment Plant, Kanpur

now recognize how non-digitization of processes is affecting every part of their businesses. The project tendering in India is becoming more digital with e-tendering for most of the government projects as it ensures contract award process is more transparent and efficient. The added advantage with electronic tendering is that it reduces costs of the entire process while increasing efficiency and saving on time. Government has adopted e-procurement solutions for competitive bidding and awarding bids to the lowest bidder meeting specification. This is also helping construction material suppliers to contribute their products to planning processes via digital channels that are a critical success factor and digital platforms are growing in significance for all construction projects procurement.

What do you think the next wave of digital technologies?

The next wave of digitization is coming through newer technologies including general ledger technologies like blockchain, automation, and smart artificial-intelligence (AI) that will revolutionize the construction industry and I believe that we are not far away from using these in our projects as the post pandemic there will be high desire of contact less working with much lesser human intervention to produce better results in lesser time. We believe that the future of construction industry lies in digitalization and automation and those companies that move early to develop and implement their digitization strategy will be the winners as the construction industry goes digital.

What do you think the major pain points for this transition and your suggestions to address those?

Digitization plays an important role to improve productivity and despite knowing the benefits construction industry still lags behind. The problem lies rather with implementation even in those areas where companies do recognize the potential of digitization. Today connected devices are important tool of functioning at construction sites, but in India we barely see any construction workers organizing their work with tablets although it can contain all the required applications which have the promise of huge benefits. Even with the right digital strategy in place, planned execution is vital. We are hopeful that things are changing and with the lockdown situation and uncertainty over the retreat of the pandemic, it has expedited the urge to go for advancing of digitalization and automation.

What do you think the major aspects for effective management of digital transformation?

Some of the important aspects which are critical to the effective management of digital transformation are a) mobilization, which needs shared ownership, accountability, and responsibility; b) sufficient



**220 kV GIS Substation
Alipurduar, West Bengal.**

resources devoted to it as a core organizational priority; c) right investment in the technical talent needed in data analytics and digital field; d) agile and flexible approach in anchoring all aspects; and e) if initiatives prove difficult to scale, withdraw funding for them. Construction companies planning to initiate digitization of functioning need to consider these aspects to increase their chances of digital transformation with substantial success rate.

What contributory role your company has been playing for this transition?

At SPML Infra Limited, we had recognised the importance of digital technologies much earlier. We have already implemented a number of initiatives our core functioning coordinated and controlled through SAP business suite-HANA; digitalization of old records and files; storing and organizing all current information electronically which is easily retrievable for quick decision making.

Our several water and power projects are installed with automation and SCADA systems. Since we are a leading water management company and providing drinking water facilities to over 50 million people every day, we have indigenously developed Integrated Management Information System (IMIS) for water utilities as accurate monitoring of water flow rates plays an important role, both in improving efficiency through early identification of leakage and accurately tracking volumes of water transported for revenue-generating purposes. We firmly believe that use of digital technologies on the ground demonstrates the productivity growth with ease of operation and maintenance. With the experience and in-house technical support, SPML Infra will be more than willing to provide guidance and motivation to fellow industry players in implementing suitable digital technologies and automation system.

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