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# ROADS & HIGHWAYS

WIRED FOR THE FUTURE

# Striving to keep learning and building on our knowledge banks to improve processes and enhance operational efficiencies



Adopting many new-age technologies that are reliable, accurate, provide timely information and help in achieving operational excellence, says **HARENDRA SINGH**, Chairman and Managing Director H.G. Infra Engineering Ltd

## How feasible is the advanced use of technology in the Roads & Highways sector?

The use of advanced technology is instrumental for the growth of the Road & Highways sector if adopted in a considered manner. From the very beginning, we have always strived to keep learning and building on our knowledge banks to improve processes and enhance operational efficiencies. We have a strong emphasis on IT and are adopting many new-age technologies. Many new-age technologies that are reliable, accurate, provide timely information and help in achieving operational excellence and are need of the hour.

We have made several investments in the technology for improvement in our systems and processes over the years, and we will continue to promote this investment in future also to ensure and solidify our position as a leading infrastructure company. The implementation of SAP back in 2018 set the foundation for an integrated platform for most of our functions. Since then, we have seen numerous changes and new developments. We have also taken several new initiatives during the year with a wide selection

of technologies ranging from control on fuel dispensing and fuel level management, RFID based technologies on equipment that offer real-time tracking and information on consumption of HSD. Numerous initiatives have been taken to address project data and enable site engineers to record and provide data instantly across the organization. Additionally, we have also invested in integrated platforms that help automate vendor onboarding, tracking and resource management tasks.

## What are the possible roadblocks in implementing these technological advancements, seeing the present stage of the sector?

The sector is a labour-intensive sector that generates employment opportunities for all types of workers. One possible roadblock faced when implementing several technological advancements is sometimes the resistance among the lower pedestal of employees, given their lack of knowledge about the technology and various benefits arising from it.

Seeing the present stage of the sector, there is a necessity for training employees with advanced technologies. While implementing any new



technological advancements, we first train our employees. Further, we resolve any doubts concerning it because, the technology, when used correctly, will only help in easing their job.

**Which is that one technology that you would like to see being implemented in the sector?**

Technology is a crucial part of the sector, and we cannot pinpoint just one technology that is helpful to the industry. The lifecycle of a project has different phases, eg, pre-construction, construction and operation/maintenance. We have to adopt technologies as per the lifecycle of a project. BIM (Building Information Modelling) is something that we would like to implement in the coming time. Usage of BIM goes beyond the typical planning and design phase of the project. It extends throughout the project lifecycle. We are also promoting the use of MOBA FDMS and FLMS among our company to ease out processes. Some of these technologies are already being implemented and some are in process. Several technologies related to real-time data collection and monitoring may also prove helpful for the management to take decisions timely.

**Given the rising focus of implementing technology, how do you see the future outlay of the Road & Highways sector in the country?**

The highway sector is the backbone of all-around development of any country and consequently of the economy. On the construction side, deployment of project planning and real-time monitoring systems, advanced equipment, new materials and improved construction methodology is allowing the construction sector to achieve record per day kilometres construction of highways.

The usage of new-gen technologies has also gained momentum in infra-construction space, wherein much encouragement is being given to the use of real-time technologies and virtual operations. One of the recent one among them is the National Highway Authority of India's move of making drones mandatory for video recording of the National Highway projects. The implementation of RFID based automated systems for fuel dispensing and consumption control is the need of all the organisations in the road infrastructure sector.

These are continuous improvement processes. Today, most of our functions are being performed with new ideas to add new functionalities in SAP including instant payment to our vendors and suppliers. These new developments in technology have also reduced execution time, provided ease of construction and access to real-time information.

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