IT Matters

BALAJI SREENIVASAN TALKS ABOUT HOW TECHNOLOGY PLAYS A CRITICAL ROLE IN IMPROVING THE EFFICIENCY OF CAPITAL EXPANSION PROJECTS.

Balaji Sreenivasan,
President & CEO,
AURIGO

India's Eleventh Five Year Plan (2007-2012) projects a GDP growth of 8.5 per cent. This aggressive growth serves as a buttress for improving infrastructure and encouraging Public Private Partnerships (PPPs) for the construction and operations of highways, airports and ports, etc. In the Budget for 2010, the Finance Minister allocated Rs 1,735 billion for infrastructure development, which is around 46 per cent of the total plan allocation for FY11.

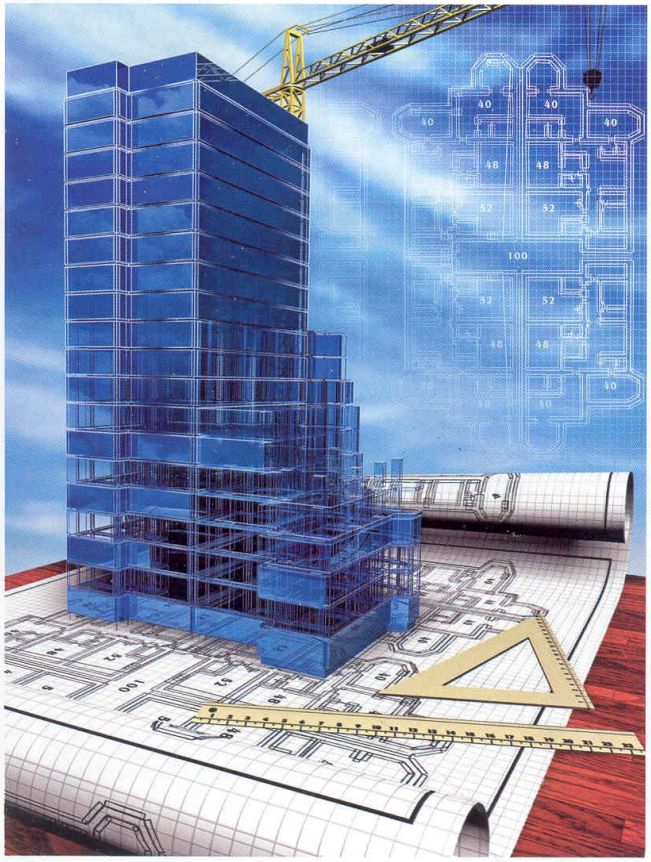
India has the second largest road network in the world stretching to about 3.3 million km. These roads carry about 61 per cent of freight and 85 per cent of passenger traffic. The national highways and expressways constitute 66,000 km, and carry around 40 per cent of the total road traffic. The government is planning to spend a total of Rs 280,000 crore on developing the overall infrastructure and Rs 160,000 crore has been assigned exclusively for road development.

The country's ports play a major role in its growth plans. As Indian trade grows at a pace of 12 per cent per annum, congestion at major ports will depress port performance, unless sufficient capacity is created. Indian ports work at a much higher capacity utilisation when compared to world standards, where utilisation is generally pegged at 120 per cent of estimated port traffic to ensure optimal functioning of the port. To keep pace with its GDP growth rate, India needs to expedite its port capacity expansion plans. Airport developers are likely to see their projects achieve higher than anticipated capacity utilisation in the early years of development. Some of the major growth opportunities lie in the modernisation or upgrading of metro airports.

Today, technology plays an absolutely critical role in improving the efficiency of capital expansion projects as it provides both public and private agencies' visibility and control over the projects. Multi-billion rupee capital programmes that involve building hundreds of miles of highway, entire airports, shipping ports and even large SEZs are not simple to manage. With dozens of contractors and sub-contractors, hundreds of vendors and thousands of workers spread across miles of the project site, they present a unique set of challenges that more often than not lead to severe delays and serious cost overruns. The ideal solution would help optimise project design and construction by automating basic processes, and managing information in ways that increase return on investment for the entire infrastructure lifecycle.

The many small efficiency gains made possible by automation add up to huge cost savings, higher quality projects, and faster project completion. Making the case for automation is not merely harping on software adoption. A few statistics that vindicate this stand:

- Reports show that of the 1,035 infrastructure projects completed between 1992 and 2009, 41 per cent faced cost overruns and 82 per cent faced time overruns. Moreover, 65 per cent of the 441 road projects taken up by the National Highways Authority of India (NHAI) have suffered both cost and time overruns.
- To remove time lags, the government has imposed a new policy which states that construction companies cannot bid for other projects if they have more than three projects that are still incomplete.
- Time delays on infrastructure projects are estimated to be over 40 per cent while the average cost overrun is estimated to be over 13 per cent in any infrastructure project.
- Against the backdrop of increased focus



The government is planning to spend a total of Rs 280,000 crore on developing the overall infrastructure.

on the country's infrastructure development, IT spending by enterprises is expected to grow at a substantial pace to touch $40 billion in three years, according to Gartner.

Interestingly, in the infrastructure domain, the spend on implementing IT tools provides immediate return on investment (ROI). For example, even a mere 1 per cent cost reduction in a Rs 100 crore road project is sufficient to recover the investment made in technology. IT adoption in the form of a Capital Project Management System (CPMS) are the real needs of large infrastructure and construction companies that want to reduce their project costs and eliminate delays.

A top quality CPMS typically comprises several modules, each designed specifically for every stage involved before, during and after the project is completed. Automating the pre-project process would eliminate the burden of inaccurate estimates that would lead to budget escalations during project execution or lost projects, overpayment to sub-contractors and vendors, delays in schedules, improper planning, increased costs and low profitability. Moreover, automation from the pre-project phase would provide more accurate results. It also allows companies to access historic data, evaluate and tabulate bids and provide the apt results.

Briefly listed below are just some of the exciting things that CPMS can facilitate:

- Reduce time delays by approximately 17 per cent, project costs by approximately 6 per cent.
- Help in tracking performance and maintenance of equipment and taking corrective action as and when necessary.
- The location of project based records can be easily plotted on GIS maps if a firm has implemented a GIS and the CPMS is able to collect location information via GPS-enabled laptops or PDAs.
- Different users get to see displays configured to their needs.
- Online project management software gives instant, secure access to authorised users, on PDAs or computers, without the user having to be in a particular location when personnel spend time in the field and the office.

While labour is cheap in India, the cost of material and capital is very high. IT becomes the essential tool at the disposal of the owner and contractor to effectively deliver on the projects. Companies that step up to invest in technology and streamline their processes can definitely grow to become world-class players. CW

About the author

Balaji Sreenivasan is the President and CEO of Aurigo. He co-founded Aurigo in the year 2003 and has played a key role in developing and growing the company's business and global market share. He invests valuable time in building strategic relationships with customers, partners and resellers across the world to continually increase the product's market share and enter new geographies and markets. Balaji completed his Bachelor's degree in Engineering from NIT Trichy (India) and Masters at the University of Florida, Gainesville.