

BUSINESS » INDUSTRY

CHENNAI, April 1, 2010

## How the AEC industry can reap ERP benefits

D. MURALI

SHARE · PRINT · T+



How do you achieve a successful ERP deployment in an AEC (architecture, engineering and construction) company? By involving the CEO, CFO, and the CTO in the choice of an ERP (enterprise resource planning) system for the business, says Balaji Sreenivasan, founder and CEO, Aurigo Software Technologies (P) Ltd, Bangalore.

The management's responsibility is not just to allocate the capital for purchase, but to make sure the system provides business efficiency, he adds, during a recent interaction with *Business Line*. "Also, it is very important to buy a standard ERP from one of the top international vendors, such as Microsoft, SAP and Oracle, who have worldwide experience and thousands of deployments. These leading business software providers spend hundreds of millions of dollars each year enhancing their ERP systems and bring in very substantial innovation to this domain."

Considering that IT (information technology) may not be the strong suite for a construction company, Balaji advises AEC businesses to assess their IT capabilities and to staff up properly or to outsource the operations part to knowledgeable

service vendors.

Since the ERP platforms mentioned above are generic, he reminds the CXOs of construction firms about the need to buy a complete industry-ready ERP system with a comprehensive solution for the construction and real estate sectors. This will be cost-effective because of the reduced customisation requirement, reasons Balaji.

My morning chat with him in Nageswara Rao park (<http://bit.ly/F4TAurigo>) continues over the email...

Excerpts from the interview.

*What can a well-designed and well-executed ERP system offer to the AEC industry?*

Let me review for you what a well-designed ERP system geared specifically for the AEC industry can do:

- 1) It gives you visibility into the totality of your business – accounting, estimation, construction management, progress on project completion and schedules, human resource management, and projections of profitability – during the entire project.
- 2) It helps you manage your cash flow, liquidity and banking relationships. Remember that banks, private equity, and other stakeholders want to invest in companies that have robust systems to control their financial risks.
- 3) Standard ERP platforms only automate the 4 Ms of any business, i.e. men, machines, material and money. However, industry-ready ERP systems, the trend today, will bring you the industry best practices so that you are not reinventing the wheel at every turn.
- 4) Specific to the AEC space, industry-ready ERP solutions help you with accurate estimation, digital archive of the schedule of rates, access to historic

The lu



SLIDESHOW



[Southern sizzlers](#)

Here is a pictorial tour of the first edition of Auto Show South 2010, which is being held at Cyberabad, near Hyderabad from May 14, 2010. Photos: P. V. Sivakumar [more slideshows »](#)

SLIDESHOW



[Boeing to demolish historic Plant 2](#)

After giving birth to some of the world's most significant aircraft, Boeing's Plant 2 is scheduled to be torn down this fall. Some vintage pictures from Boeing. Photos: AP/Boeing [more slideshows »](#)

**NEW**

## Diskeeper 2010

### Speed Up Your Systems

The only way to prevent fragmentation before it happens

**FREE DOWNLOAD**

RELATED TOPICS

[company information](#)  
[industrial production](#)

[marketing](#)

[research and development](#)

prices, automated bid tabulation, contract management and digital inspections including capture of site photographs.

5) Industry-ready ERP solutions also help you to seamlessly integrate core construction management processes with your accounting and scheduling systems. This streamlines the computation of running account bills in an error-free mode and also produces earned value reports.

6) It helps you comply with government regulations, AS 7 project accounting standards and owners' documentation requirements.

7) With built-in business intelligence, it helps you mine the data for information critical to your business.

8) Properly implemented and managed ERP system can improve your competitive position tremendously by driving business efficiency and not leaving decisions to gut feel.

*What are the challenges faced by AEC companies in India? How does IT address those challenges?*

Multi-billion dollar 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 subcontractors, hundreds of vendors and thousands of workers spread across miles of project site, they present a unique set of challenges that more often than not lead to severe delays and serious cost overruns.

IT solutions overcome most of the problems faced by the AEC industry.

Most projects lack in transparency. IT gives the project complete visibility for all processes: Accounting, estimation, construction management, progress on project completion and schedules, property sales and management, human resources, profitability by product lines, cost structure, etc. IT also enables the company to integrate all its business processes together so that it is easier to comprehend.

A recent survey on the infrastructure industry shows 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. IT helps remove these by automating all business processes, providing the required visibility and greater access to information.

There are several players in the construction industry and the most effective way for them to outrun competition is by properly implementing and managing ERP systems that would lead to increased profitability through reduced time and cost.

*Would you like to talk about the level of IT adoption in the AEC industry?*

AEC is still lagging in terms of IT adoption for several reasons. Construction companies' association with IT is still at a grass-root level. The lack of awareness in this segment is a major drawback. This however, is expected to evolve like the way it did in the western countries.

For many construction companies (and capital project owners) in India, IT spending is more a check mark purchase than a serious investment in productivity. They spend typically around 0.1 per cent of their turnover whereas the western companies in the same field are investing between 2-3 per cent of their turnover. Results will be in line with the investment. In addition, the pay scale of the IT professionals hired by the construction industry in India is much lower than the standard IT industry pay scale; hence they may not get the right people for the job.

One more reason has been the lack of industry-ready applications. Standard ERP platforms have been designed for the manufacturing industry and automate the 4 Ms of a business, i.e., men, machines, material and money, and do very little to automate estimation, tendering, plant and machinery, contract management and digital progress monitoring. Thus ERP systems by themselves fail to automate these processes causing a lot of manual play, which in turn leads to cost escalation and time delays.

*On the emerging trends in the ERP industry.*

With the upsurge in infrastructure investment in the country, construction and infrastructure companies are realising the role technology can play in increasing profitability. Therefore, there is an evolving trend towards adopting ERP with construction management systems that delivers in-depth workflows and configures to the work processes of the construction companies perfectly.

Ads by Google

**MSI Software Distribution**

Easy-to-use & Affordable Software Distribution Tool.  
Download Now!  
[ManageEngine.com/SoftwareDeployment](http://ManageEngine.com/SoftwareDeployment)

**Microsoft ERP Solutions**

Accounting, Finance, Inventory Mgmt eCommerce & BI with Microsoft  
[www.SystematicInc.com](http://www.SystematicInc.com)

**Manufacturing ERP**

How Manufacturing Companies Use ERP Solutions - Free Report From Infor!  
[Go.Infor.com](http://Go.Infor.com)

TODAY'S PAPER

[ePaper](#)

[This Day That Age](#)

[Crossword](#)

[Archives](#)

[Obituary](#)



GROUP SITES

[The Hindu](#)  
[Sportstar](#)  
[Frontline](#)

[Business Line](#)  
[Images](#)

The industry-ready ERP systems of today are 5 times cheaper, are platform-agnostic with reduced customisation and time to deploy, and mobile solutions for remotely monitoring project progress. These offer real-time accurate project information and executive dashboards that are proving to be a critical project management tool.

The one big advantage for the Indian construction companies is that as first-time technology adopters, they are not burdened with legacy IT investments. They can leapfrog into the latest feature-rich, easy-to-use, standard solutions available at a cost that is a fraction of what it was a decade ago.

*Do the current ERP technologies support cloud?*

Most ERP technologies are cloud-based and work from a remote server. Critical factors for ERP technologies in a cloud are security and privacy. Advanced technologies, especially Microsoft .NET based applications, are at an advantage in providing secure connectivity over the Internet and data privacy in the hosting environment. This encourages the SMEs (small and medium enterprises) in the AEC segment to implement ERP in their projects, for several reasons.

Traditional ERP systems are very expensive and complex to implement. They require high upfront costs for infrastructure, licences and implementation. In addition it is expensive to maintain these systems resulting in high TCO (total cost of ownership). Cloud reduces the expenditure of a company by eliminating the use of IT infrastructure and avoiding high capital costs. The time and cost spent on the maintenance of IT infrastructure are also removed, thereby reducing the costs involved in upgradation and customisation.

Moreover cloud-based ERP allows customers to scale their solution in line with their business growth. As an example, a small firm may want to start using ERP only for sales and distribution process, and as the business grows, it can expand the usage to include other functions such as supply chain management and inventory management. Only a cloud ERP can provide this type of flexibility in a cost-effective way. ERP on cloud provides the convenience of computing capacity on demand over the Internet. It also has the same flexibility and security of an on-premise deployment of ERP.

\*\*

[InterviewsInsights.blogspot.com](http://InterviewsInsights.blogspot.com)

Keywords: [AEC industry](#), [ERP](#), [Benefits](#), [D. Murali, Balaji Sreenivasan](#), [Interview](#),



[Email the Editor](#)

[Home](#)

[News](#)

[Opinion](#)

[Sport](#)

[Business](#)

[Arts](#)

[Life & Style](#)

[S & T](#)

[Education](#)

[Health](#)

[Classifieds](#)

[Today's Paper](#)

[Topics](#)

**Group Sites**

[The Hindu](#)

[Publications](#)

[Business Line](#)

[eBooks](#)

[Sportstar](#)

[Images](#)

[Frontline](#)