

implementation process, the team took additional care to ensure that users never faced the same issues post implementation. During user acceptance testing, the solution was tested for stability, usability and performance," informed Varadarajan.

The solution consisted of modules for finance, sales, distribution, logistics, purchase and inventory, HR and payroll, management accounting, Continuous Process Production (CPP), ore management systems and plant maintenance. The Web-based system was implemented across the entire organization i.e. the corporate office, five factories and at over 60 marketing locations. It took the team about six months to complete the project and MCL went live with it on 1st April 2008. The centralized 24x7 data center is located at Chennai and houses all the servers required for the ERP system. This being a centralized setup, MCL has a vast MPLS WAN network connecting about 65 locations with its primary data center.

Multiple benefits

Ever since MCL went live with its ERP system, it has witnessed significant benefits. Varadarajan said that, thanks to the ERP system, it can understand the demand-supply matrix better and is in a position to plug the holes in the real-time information feeds that it makes available online. "This not only helps us earn monetary benefits, but it

also aids in achieving process efficiencies," he said.

In the cement industry, the efficiency of supply chain processes can often determine the fate of an enterprise. To this end, Ramco ERP currently acts as the central system for managing MCL's SCM processes. The system has completely automated the cycle of sales order to dispatch and, since real time information is available online, MCL can match the demand-supply equations more accurately and move materials accordingly.

"In fact, in many cases, we have eliminated the need for secondary handling i.e. godowns since we now have excellent information systems in place, which allow us to ship the product directly from our factories to the customer site. The analysis of ERP data led to the closing down of over 90% of stock points, which enabled us to save on stock holding, transportation and re-handling. This alone resulted in recurring annual savings of about Rs. 16 crores," said Varadarajan.

The ERP system has also helped the company streamline various operations resulting in much better efficiencies and recurring cost savings of about Rs. 40 crores per annum claimed Varadarajan. For example, the marketing operations have improved. With the close follow up of all pending orders, orders could be executed within 24 hours. This has led to increased customer satisfaction. Transporters freight is analyzed on a daily



N. Varadarajan,
Senior General Manager - IT, MCL

We also customized the integration of real time parameters of the plant operations with the ERP system. The team took additional care to ensure that the users never faced the same issues post implementation

basis. Based on this, logistics are derived. Stock transfers to depots are handled without any re-handling process, saving a lot of money for MCL.

"The data warehousing and MIS that we have built on our ERP is among the best in the industry and gives us valuable live reports even on the mobile phone. MCL managers can easily monitor the warehouse stocks, shipment in transit, shipment in waiting etc. on their mobile MIS systems and take effective decisions on the fly," added Varadarajan.

MCL has adopted the concept of a paperless office. It has developed an online e-approval system through a workflow process integrated with the ERP system. ■

rajendra.c@expressindia.com

Impact of ERP on key processes

Unit	Benefits of the ERP implementation
Production	<ul style="list-style-type: none"> Overall operations consistency has been achieved and productivity has been enhanced from 5 to 10 tonnes per hour. This implies recurring annual savings of about Rs. 8.5 crores Power generator utilization factor has been increased by 10% and consumption of electricity has been reduced by 10 units per ton by continuously monitoring factories operations using the real-time data in the ERP system. This indicates recurring annual savings of about Rs. 16 crores Expected cement bag weight has been achieved for 98.5% of production resulting in recurring annual savings of about Rs. 8.5 crores On average, variable costs decreased by Rs. 275 per ton
Materials	<ul style="list-style-type: none"> Better prices were realized from the vendor by comparing the unit prices, availing goods discounts and better credit periods as an integrated single company-wide database is available Inventory level has been reduced by monitoring materials received but not by materials consumed within the committed time. This resulted in recurring annual savings of approximately Rs. 1.8 Crores
Management Accounting	<ul style="list-style-type: none"> Variable costs are analyzed on a daily basis for each process center Fuel efficiency is analyzed with caloric value and the market price of the items to arrive at an economical fuel mix
Finance	<ul style="list-style-type: none"> Trial balances of all the factories are analyzed with greater detail All administrative overheads have been reduced without affecting the effective operations. Reduction is achieved mainly by business process redesign. For e.g. TT charges (bank charges for non-local transactions): All major payments are now made locally by negotiating with the excise/sales tax/electricity authorities rather than transferring the funds to factories. Similar reduction of administrative expenses resulted in a recurring annual savings of about Rs. 1.8 crores 100% adoption was achieved for the costing system which updates the P&L for the entire firm in real-time upon the entry of a transaction
Sales	<ul style="list-style-type: none"> With the close follow up of all pending orders, orders could be executed within 24 hours. This has led to increased customer satisfaction Transporters freight is analyzed on a daily basis. Based on this, logistics are derived. Stock transfers to depots are handled without any re-handling process Analysis of ERP data led to the closing down of over 90% of stock points, which enabled the company to save on stock holding, transportation and re-handling. This resulted in a recurring annual savings of about Rs. 16 crores
Mines	<ul style="list-style-type: none"> Performance is analyzed on a mine, equipment and shift wise basis. Based on this analysis, about 60% of heavy equipment has been withdrawn from the operations due to poor performance or underutilization. The number of shifts in mines was also brought down from three to two Re-handling of materials was brought down to an almost negligible level from an earlier re-handling rate of Rs. 18 per metric ton. These, put together, resulted in a recurring annual savings of about Rs. 3 crores