



IT Helps

A Logistics Firm Grow Three-fold In Five Years!

The ability to serve its customers in the automotive industry with niche services has helped TVS Logistics stay ahead of the competition and grow at a phenomenal pace. The company owes this growth to certain best practices related to IT that have become part of its DNA. We take a look at how the firm leverages IT solutions like ERP, GPS, biometrics, et al to coordinate over 140 offices and manage its complex logistics operations.

Vandana Sharma
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“Excellent firms don’t believe in excellence—only in constant improvement and constant change.”

Thomas J. Peters

The transportation and logistics sector in India is a still only a quasi-mature and fragmented segment that operates without technology, more often than not. Globalisation, however, is pushing this vertical to evolve and adopt international best practices. In this

context, it is reassuring to know about a domestic player that has not only defined and systematised the hitherto disparate processes of its logistics supply chain, but has also set benchmarks for excellence before going global with its services.

TVS Logistics Services Ltd (TVSLSL), a Chennai-based third party logistics (3PL) company has crossed many a milestone in its 15 year journey to becoming one of the leading 3PL players in the country. It currently has six affiliate firms in India and overseas, over 140 offices, and joint ventures with firms in the US, UK, Thailand, Spain and Germany, with a few more alliances on the anvil.

The company made a foray into the logistics domain in 1994, beginning as the logistics division of TVS Sundram Iyengar and Sons, the flagship company of the TVS Group. It became a listed company in November 2004.

Taking challenges, head-on

In the automotive industry, servicing even one customer order can be quite complicated. Typically, a manufacturing facility requires over 50,000 parts at any point of time, of which about 5,000 are fast moving. Harinath Chakravarthy, CIO, TVSLSL, shed light on the challenges that plague the 3PL industry. "A 3PL service provider has a tough role to play as the job involves dealing with multiple suppliers to service a single order for its clients. There are specialist providers in the supply chain, like trucking agencies, labour contractors, standalone warehouses, and so on. It is time consuming to derive performance consistency from each agency involved. The only way in which we can survive in such a big and complex ecosystem is by having access to real-time information. And, it is only technology that can enable this."



Harinath Chakravarthy,
CIO, TVSLSL

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Today, despite these requirements, TVSLSL manages to ensure timely availability of parts and components for production with the bare minimum of inventory, by deploying the necessary technology across its processes and locations. It provides end-to-end solutions to its customers by coordinating between them and their suppliers. "Our strength lies in delivering these complex services by bringing a certain amount of intellectual horse power to the table and making sure that every thing, at every stage in the supply chain, works," says Chakravarthy.

The entire process is orchestrated, using different types of IT solutions. From sophisticated operations and supply chain automation solutions to GPS (global positioning system) and biometric devices; from a range of analytics and Web-based solutions to enable real-time access to information, to other IT hardware like servers, laptops and personal digital assistants (PDAs) that are required for executives on-the-move to access

TVSLSL's IT infrastructure

The company uses a rich mix of technology tools, which include:

- **Ramco's ERP suite**
- **A mobile gateway** integrated with the ERP system, which allows transmission and receipt of information feeds via SMS as well as e-mails.
- **An integration middleware platform** that facilitates integration of new technologies with existing technology platforms.
- **Dell servers** to host software applications.
- **A Web portal** created to serve as a self-service access point, where suppliers can log in and request for payments; route it to the TVSLSL accounts module in the ERP system; customers can check the status of their orders; and suppliers can know how their performance was rated in a particular month.
- **Interactive learning gateway:** This is an online learning portal meant for TVSLSL employees to impart training in IT, the rules of behaviour and simple disclosure, besides a basic induction into the TVS Logistics Group. It has an interactive voice module that gives users a score after every training session.
- **Specialised applications** integrated into **GPS and telematics devices.**
- **Biometric solutions:** The company makes use of a biometric device to record employees' attendance and shift-based start-up and leaving time. Special biometric devices are also used at locations where TVSLSL operates from inside its customer's facility. "We provide in-bound services to our customers, which means, we operate from within their facility. We have critical profiles operating from these facilities. But we don't use the client's network or any attendance recording system at their end for our attendance reporting. As soon as a shift starts, this device sends an alert in case an employee doesn't report," says Chakravarthy.
- **PDAs** are being used by all professionals on the move.
- **Video conferencing** solutions are used for rich communication exchange between locations.

data, the list goes on. [For more on the IT infrastructure of TVSLSL, please refer to the box.]

The tryst with ERP

Maintaining automation of the supply chain and visibility across each stage has always been crucial for TVSLSL. But the biggest transformation in the way the company operated came after its deployment of the ERP system in 2005. Prior to this, TVSLSL was using home grown IT systems and a specialised accounting package. But what led the company to switch over to an ERP system? Chakravarthy answers: “Given the kind of growth that we were experiencing, we felt the need to opt for a more sophisticated and integrated IT solution, like the ERP system.”

When the process of zeroing in on an ERP solution began, the company started evaluating some of the available solutions based on a couple of key criteria. Chakravarthy recalls: “We wanted a system that could offer most of the required modules, directly out-of-the-box, without the need for any modifications. Since we were experiencing expansion across regions, in India and overseas, this demanded language support and compliance with local laws and regulations and we needed a vendor who could provide it as part of the solution, as much as possible.

“Also, at a time when the technology life cycle is as short as five years, we wanted a solution that could enable us to port all the components from today’s platform to tomorrow’s world, and that too, economically.”

Measured against these requirements, Ramco System’s ERP solution came out on top, admits Chakravarthy.

Enumerating the modules of the ERP system, Prince Sudersanam, E-general manager, Base Component



Prince Sudersanam, E-general manager, Base Component Development, Ramco Systems

“As the new solution was very different from what was being followed, process re-engineering and change management were the key factors that would ensure a successful implementation.”

Development, Ramco Systems says: “Ramco has deployed its Web architected enterprise application with functions catering to 3PL players. It includes modules like a transportation management system, warehousing operations, procurement, sales, financials and human capital management, etc.” In addition to this, Ramco has also provided TVSLSL a powerful business intelligence solution, he adds.

Managing the supply chain

Since TVSLSL deals mainly with customers in the automotive industry that operate on tight delivery schedules, the terms and conditions under which it deals with vendors offer incentives for on-time performance, and penalties for non-compliance. This is because any delays in transit can lead to disruption of the production process at the customer end, resulting in huge losses.

So TVSLSL can’t afford to get anything wrong in the management

of its supply chain. But to achieve this was an extremely challenging task. Chakravarthy narrates the complexities: “When TVSLSL decided to automate its operations, the core team studied the Indian market the hard way, to map the firm’s expectations from the ERP and SCM systems. Logistics companies have rather unique requirements and dynamics. Because of these inherent complexities, most of the big players in the 3PL domain, like TNT and DHL, have opted for home grown systems. They usually never buy IT solutions off the shelf,” says Chakravarthy.

“Considering this, we decided to build a supply chain management (SCM) application. But then the question was—“With whom do we build this solution?” We mapped our requirements and then began discussions with Ramco Systems. Its team then put their technical hats on and suggested a few solutions to us. This entire brainstorming process—to chalk out what the solution ought to look like, how the contract was going to be created, how suppliers would be brought into the loop, and how the entire requirements of a customer would be serviced end-to-end—took three to four months,” he recollects.

The SCM module handles domestic transportation, international transport, time-to-market warehousing, material handling and so on and has been jointly built by TVSLSL and Ramco Systems, for which the two companies jointly own the intellectual property, says Chakravarthy.

The process of implementation

When TVSLSL started the ERP system’s implementation, the time frame was aggressive. Keeping in mind the complexity of TVSLSL’s requirements and the size of the application, a phased approach was

adopted and it took over a year to bring the business operations into the system, says Sudersanam.

He further elaborates: "As the new solution was very different from what was being followed, process re-engineering and change management were the key factors that would ensure a successful implementation. These were addressed through comprehensive employee training programmes."

TVSLSL laid a lot of emphasis on putting together a framework for dialogue with employees as it believes that keeping employees informed is very important. Chakravarthy says: "We have created joint task forces at even the lowest levels; this helps create a knowledge pool, which, in turn, speeds up decision-making even at the lower level."

TVSLSL has already got the Ramco ERP system implemented across all offices of its divisions. In addition, work is under way to implement the solution in its overseas subsidiaries and joint venture companies.

Leveraging IT to the fullest

To leverage the power of IT more effectively, TVSLSL has made two significant moves after the ERP implementation. Chakravarthy divulges more details: "We have upgraded to a new GPS technology stack to track vehicles and consignments in transit, which has alert-generating capabilities. This capability has been integrated with the Ramco ERP system. We have also integrated the ERP system with biometric devices. Apart from this, we have a system of using smart cards to check who is moving in and out of the organisation. This data is pooled into the ERP system's payroll module."

Having IT systems on board has helped TVSLSL achieve efficiencies of scale. Chakravarthy enumerates the improvements that ERP-led automation and allied plug-ins have brought about in its operations:

"Dynamic expansion: We have expanded dramatically, using IT. Currently, we have 140 offices in India compared to 45 in 2005, the year when we deployed the Ramco ERP system. Since then, we have witnessed a three-fold expansion.

"An honest view of affairs: Earlier when we had different home grown systems, each system was capturing data in a different format. But now, we can have a single version of data across the organisation. This ensures greater transparency and a better view of what is happening across the organisation.

"The ERP system has enabled access to real-time information, not only to those in the management and the employees, but also to our partners and customers. The latter get status alerts on shipments via the mobile gateway, about potential delays or on-time deliveries.

"Reduced costs: The ERP system has also greatly helped in reducing costs. Because of better, streamlined processes, in the first six months of deployment itself, the overall expenditure has come down by 3 per cent.

"Scalability: Irrespective of the high growth that we have been experiencing, we are able to scale much faster now. For instance, if earlier, 10 people could support a transaction volume of Rs 3 crore per person, the same 10 can now support twice that transaction volume, that too with the existing infrastructure.

"Better customer response: Despite the strict parameters that we follow to gauge customer satisfaction, we can confidently say that this aspect has improved, considerably."

Going forward

Ever since its inception, TVSLSL has looked around and adopted the best automation tools to better its various functions, and in the future too, the company plans to add to this bouquet of technologies. Chakravarthy explains: "The company wants to always be ahead of the next generation of technology. Thus, we are constantly at work to identify what needs to be yanked out and changed."

TVSLSL is also working at creating a buffet-like solutions' service package for its customers. Chakravarthy explains: "We want to create a pack that has solutions in the form of components; so that when we require only a set of two to three solutions to service an order in a certain market, we are able to just pick and choose components out of this buffet and serve the customer. We are putting our heads together to build such a solution with the help of Ramco Systems and a few other specialised vendors."

Another area that the company aims to focus on is to actively reduce the overall total cost of ownership of IT in the next three years. Currently, TVSLSL spends 4 to 6 per cent of its annual turnover on IT. It has a 20-member IT team and an extended team of over 200 IT vendors to whom it has outsourced its requirements.

The company also plans to innovatively monetise its sophisticated analytics capabilities by generating specialised analytical reports for its customers, as part of its support services offerings.

In the future too, TVSLSL plans to continually add to its IT portfolio to find solutions to its business challenges. We are sure our readers will be inspired by this technology-savvy company and use IT to put their own businesses on the fast-growth track. ■