Growing with IT

One is yet to see aggressive adoption of IT in logistics and transportation, beyond the large players

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Logistics and transportation is indeed a unique vertical. It is macro in nature with numerous players in the fray. Except for a few leading ones, the industry is mostly unorganized. The often used cliché terms in IT like downtime, efficiency, agility, and scalability, becomes very real and takes centerstage in this vertical and time is indeed money. If we look at the logistics and transportation industry from an IT penetration perspective, it reveals a haphazard pattern. Despite the presence of numerous vendors, the total addressable market for IT vendors is indeed very ambiguous and only a few of large players have aggressively invested in IT. But with increasing competition, there is a growing trend of even mid to small-sized logistics and transportation companies slowly investing in IT. The lesser penetration of IT was also due to the fact that logistics as a vertical suffers from a dedicated ERP like solution tailor-made to Indian requirements.
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Ground Realities

Logistics and transportation, despite a potential vertical for IT services and product vendors, is a challenging one in terms of breaking it into big time apps deployments. Except for a very few companies, lack of solutions and domain depth also complicates the vendors’ ability to reach effectively with solutions meeting the core requirements. GS Ravikumar, CIO, Gati says, "One of the biggest problems this vertical faces when it comes to IT is the non-availability of a ready to deploy ERP. Either the few available solutions are way too expensive or do not meet the requirements. We realized this fact way back in 2000, and have developed our own ERP that today meets all our IT needs."

From a solutions’ perspective too, things are looking up with some niche product companies synchronizing their solutions more in tune to the vertical demands. Looking at the available statistics, the vertical is also on a growth path and IT vendors are hopeful that as the vertical grows, the logistics and transportation companies will aggressively invest in IT. For instance freight traffic on 3 major arteries of transport—rail, road, and air—is expected to grow significantly in the coming years. The Ministry of Railways has estimated that rail freight is likely to touch 1,100 mn tonnes by the end of 2012, and road traffic is expected to increase from 3,000 mn tonnes last fiscal to 3,700 mn tonnes by 2013. Experts say that they are already seeing growing awareness among logistics service providers in India to utilize the potential of IT for improved operational efficiency, reduction of labor costs, streamlining the shipping process, and improved customer service.

"Logistics service providers have very thin margins and hence their IT spend is restricted. The other area is low IT preparedness, highly varying business processes from one organization to another, lack of structured or widely accepted business practices (unlike manufacturing where processes are fairly common), and delayed decision making are the key challenges seen in this vertical," says Balaji Swaminathan, practice head, logistics, Ramco Systems.

Logistics and transportation are intertwined. Transportation becomes separate entity, mostly with companies that offer consumer centric services such as taxi cabs or dedicated commercial cargo companies. Consumer transportation service like ones provided by Meru Cabs mostly use web based and location based apps. Large passenger transport companies aggressively use web based ticketing systems. It is only in large cargo
companies with a big commercial fleet that technology plays a very critical role. For instance vehicle tracking system plays a critical role in managing the fleet movement and ensuring that nothing goes wrong in transit.

**Early Movers**

As we look at the solutions’ market, only a few of the companies have made their presence when it comes to offering solutions to the logistics space. Ramco Systems is one such company that is aggressively tapping into the logistics and transportation space with its solutions. Says Swaminathan, “Ranco has key offerings for the logistics industry like Integrated Freight Management System, Ramco ICD/CFS for the container freight stations, and Inland Container Depots and Ramco Transportation for ground transportation companies that handle both LTL and FTL consignments.”

Meanwhile companies that provide consumer transportation services are using innovative technologies like GPS and RFID to manage their fleet and offer better customer services. Says Nilesh Sangoi, CTO, Meru Cab, “With rapid consumerization of Near Field Communication (NFC) technology, it provides a highly affordable mechanism to track the smallest of item. At Meru, we use this technology to create a virtual cab queue at airports and other locations and then assign cabs on FIFO basis.”

It is interesting to note that vehicle tracking systems have been adopted by government departments as well. For instance the Tamil Nadu Civil Supplies Corporation (TNCSCL) has deployed a vehicle tracking system through GPS. The system was implemented on a pilot basis in Thiruvallur and Krishnagiri districts of Tamil Nadu. For example vehicles moving with PDS commodities from FCI godown to TNCSCL godown at Thiruvallur and Krishnagiri regions, and vehicles moving with PDS stock from TNCSCL godowns are tracked graphically in real-time with GPS instrument fixed in the vehicle for these 2 districts and the reports are monitored over the web.”

For the transportation vertical, in addition to pure apps, vehicle tracking is a big area and naturally one is seeing the emergence of specialist companies making aggressive forays into this space. Take the case of American Megatrends, which has developed a very innovative vehicle tracking solution called Falcon-i. This is a complete fleet tracking and monitoring solution, which provides the desired information for a vehicle owner to take well-informed decisions to enhance the productivity of their operations.

Falcon-i facilitates the organization formulate and streamline their logistics operations. The reports generated provide insights on the resource utilization and identifies key areas of improvement. This leads to higher productivity thereby increasing the profitability of the business. The solution works on the concept of live tracking, where every vehicle is tracked using CPS based gadget which communicates to the remote server using GPRS/GSM technology. The server hosts the Falcon-i web application. This application stores and represent the information sent by these gadgets in a meaningful and user-friendly format. It is displayed on maps to provide the location of the vehicles geographically along with various other parameters like vehicle speed, idle time, etc.

Says Sridharan Mani, director and CEO, American Megatrends India, “Falcon-i is totally developed in India by our R&D teams and it brings in high degree of operational efficiency to companies in managing their fleet on the move. The solution’s impact is multipronged.”

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mensely. We have done numerous deployments in India, and our customers have derived tangible cost savings as well as seen significant improvement in operational efficiency.”

Vehicle tracking and the related areas are clearly emerging as hot areas. Take the case of Steria which is going aggressive on the logistics and transportation space. Says Sachdev Ramakrishna, director, marketing, Steria India, “With an average of 20 km of new roads being built in India every day, improving the country's road transport infrastructure is a key priority for the government. There is already an acceptance of the need for electronic tolling. Leveraging secure RFID based solutions to enable faster and more reliable electronic toll management will be a key challenge that needs to be addressed.”

Steria has recently partnered with Neology for developing and delivering quality RFID solutions to the Indian market. The 2 entities will focus on developing RFID technologies for various areas where secure and reliable identification is a key requirement. This includes transportation, vehicle registration, vehicle and people identification, healthcare and other areas.

Looking Ahead

The scope of the vertical is immense making it an emerging hot vertical for the IT industry. But both product as well as service companies need to improve their domain expertise on this vertical and required to provide more innovative solutions beyond the mundane web tracking. The need however is to focus on end-to-end workflow automation and factor in various aspects of the logistics industry.

With the proliferation of new technologies, both logistics and transportation companies in India will increasingly look at technology as the key business enabler in days ahead. Experts say that companies in this vertical are increasingly not looking at IT as a cost center rather looking at it as an investment for higher operational efficiency. Moreover only few niche vendors have understood the Indian logistics and transportation industry. Clearly companies like Ramco Systems have a distinct edge in tapping more mandates from this segment. Despite that vendors need to provide custom specific solutions, meeting the requirements of this vertical. Looking at the current market dynamics, we can say that things are moving in the right direction.