Logistics : Challenges, Look-ins in India

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ABSTRACT

The logistics industry in India is evolving rapidly and it is the interplay of infrastructure, technology and new types of service providers that will define whether the industry is able to help its customers reduce their logistics costs and provide effective services (which are also growing). Changing government policies on taxation and regulation of service providers are going to play an important role in this process. Coordination across various government agencies requires approval from multiple ministries and is a road block for multi modal transport in India. At the firm level, the logistics focus is moving towards reducing cycle times in order to add value to their customers. Consequently, better tools and strategies are being sought by firms in order to enhance their decision making. The present study emphasizes upon a perspective on these issues, outline some of the key challenges with the help of secondary information, and describe some interesting initiatives that some firms and industries are taking to compete through excellence in managing their logistics. The research focuses on the importance of logistics capability and its effect on firm’s performance in the e-commerce market. Logistics capability is perceived as the firm’s critical capability in providing a competitive advantage in both traditional and e-commerce market environments.

Keywords : Logistics management, e-commerce market, multi model transport.

INTRODUCTION

The Indian economy has been growing at an average rate of more than 8 per cent over the last four years (Srinivas, 2006) putting enormous demands on its productive infrastructure. Whether it is the physical infrastructure of road, ports, water, power etc. or the digital infrastructure of broadband networks, telecommunication etc. or the service infrastructure of logistics — all are being stretched to perform beyond their capabilities. Interestingly, this is leading to an emergence of innovative practices to allow business and public service to operate at a higher growth rate in an environment where the support systems are getting augmented concurrently. In this paper, the status of the evolving logistics sector in India has been presented, innovations therein through interesting business models and the challenges that it faces in years to come.

THE CURRENT SCENARIO OF LOGISTIC INFRASTRUCTURE IN INDIA

Globally, the logistics industry is valued at US$ 3.5 trillion and the Indian logistics industry is presently estimated at US$ 90 billion (Source: CII). The global logistics industry was valued at US$3.5 trillion in 2007, whereas US logistics industry size was around US$900 billion, 25% of the global logistics industry. Logistics costs in India are estimated to be around 13% of the GDP, which comes to around US$94 billion in 2006-07. However, India’s spending on logistics industry is much higher than the developed economies like the US (9.5%) and Japan (10.5%). Presently, Indian logistics industry is highly fragmented and is still evolving, with the top 100 listed players only having a miniscule 2 per cent market share.

Only India among the BRIC nations has slipped on the World Bank’s Logistics Performance Index. India’s ranking slipped to 46th in the 2012 World Bank’s Logistics Performance Index, which measures logistics efficiency and is now recognized globally. Five years ago, India was ranked 39. The drop in ranking is a matter of concern for the country, which is expecting a lot of foreign investment across sectors that require an efficient logistics system.

The Indian logistics market, valued at $14 billion a couple of years ago, is expected to grow at a CAGR (compounded annual growth rate) of 7-8 per cent. It is felt that the growth will continue, and might even scale newer heights, as the economy is experiencing a retail boom with Western companies such as Metro, Wal-Mart planning to start operation in this country, and large local retailers such as Shoppers Stop, Pantaloons, RPG and Big Bazaar planning to expand their operations in smaller cities. India has one of the world’s largest road networks, with a total length of 3.3 million kilometers. But much of this network does not meet Western standards. The Indian road transport market is forecast to rise to $40 billion by 2012 — it is currently $28 billion.

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PROBLEMS/CHALLENGES IN LOGISTICS MANAGEMENT IN INDIA

Logistics has always been a central and essential feature of all economic activity. Despite this importance, there is a long history of organizations paying little attention to their logistics. They traditionally concentrated their efforts into manufacturing products and considered the movement and storage of materials as an uninteresting errand that formed part of the overheads of doing business.

Recession in many markets, combined with new sources of competition, has raised the consciousness of customers towards value of service delivered to them by their service providers. Accordingly, the logistics industry has consciously strived to be at the focal point of strategy formulation and operational excellence to continue in its endeavor for providing maximum contribution in value creation. Globalization, consolidation, technology advancements and outsourcing have led to growth in the logistics services market. The capabilities of logistics service providers are growing along with the changing expectations of their clients. As the logistics services industry evolves, competitors are moving away from asset-based commoditized services to more strategic, information-based approaches. Some of the challenges faced by Indian firms in logistics sector are:

- Lack of sustained investment in planned infrastructure like warehouses, transport centers, ICDs etc.
- Cold Chain infrastructure is very sporadic. The concept of “Integrated Cold Chain” is non-existent.
- Major investments on these infrastructures have come from Government agencies like CWC, SWC, CONCOR etc.
- Current private sector initiatives are small and sporadic.
- Private sector warehousing are of poor quality, small, fragmented and does not meet infrastructure standards.
- No quality standards or benchmarks are followed in infrastructure creation.

KEY COUNCIL INSIGHTS AND RECOMMENDATIONS

While a lack of Logistics infrastructure is a burden, it’s also an opportunity. Starting fresh means adopting the best supply chain management principles, practices and technologies without having to migrate or upgrade legacy approaches. Manufacturers and retailers should devise a strategy to align with the organized-retailing infrastructure build-out, focusing key activities on designing a multi-tiered distribution network, setting basic transportation goals and expectations, and establishing solid partnerships.

Design a Multi-tiered Distribution Network

The key to a successful distribution strategy will be proximity. The tail that wags the distribution dog is transportation reliability. Transportation reliability or, more accurately, unreliability, will play a key role in determining the number of nodes required for distribution and the inventory to support it. Pure flow-through, or single-node distribution chains from plants directly to retailers, will be non-existent. CPG and retail firms will require significantly more infrastructure in India. For example, Reliance plans to build between 65 and 80 distribution centers to support its goal of $20 billion in revenue. That’s more than half the DCs currently in Wal-Mart’s supply chain, which supports over 10 times the revenue. Even as Reliance and Wal-Mart build distribution capability, manufacturers will have to match this distribution, not only at the local level, but also at regional and central points. These multi-echelon networks will replace lean, single-tiered U.S. philosophies based on just-in-time principles. Even firms with fast-moving goods will be required to set up decentralized, multi-tiered distribution networks.

Rely More Heavily on Inventory

Let’s face it, in the near term, India’s supply chains will not be highly reliable. Shippers accustomed to reliability and speed will have to reset expectations. To reduce the impact of highly-variable transportation, brought about by inadequate logistical infrastructure, firms must adopt inventory strategies similar to those used in small-part service industries. While service parts industries use inventory to buffer demand versus transportation variability, the resulting network structure is the same. Firms will need to stage inventory throughout multiple echelons to reduce the impact of transportation variability and high transportation costs. This multi-echelon staging will create networks with many distribution points and double-handling of products. By investing in additional capacity flow, like dock-doors and staging floor space, firms will add more capacity for quick off-loading, reducing the impact of increased transportation investments and costs. The ‘cringe factor’ of this strategy is reduced, considering labor and warehousing combine for less than a quarter of India’s logistics costs.

Reside Close to the Market

To buffer lead-time variability, firms should set up final distribution within the independent, local markets they plan to serve. By starting in only a few highly-concentrated cities, a regionalized distribution scheme will enable firms to support branded stores or distribution operations, while building relationships with other local entities to expand their presence. As volume grows and transportation improves, firms can convert regional stocking facilities to flow-through and add centralized facilities as sourcing and stocking points. However, to support this more efficient multi-tiered strategy, firms will need to vie for space now, as land grab efforts increase dramatically. Just last year, retail real estate costs accelerated faster in New Delhi than anywhere else in the world. While hot urban areas include Hyderabad, Bangalore and Mumbai, second-tier cities are quickly becoming targets of mall openings, accounting for 40 percent of those scheduled through 2010. Longer term, about 200 cities with under 2 million in population and 500 additional rural towns will be used as retail hubs, each catering to over 1000 villages.
Use Technology to Provide Visibility and Collaboration

To manage the inevitable explosion in items they will eventually carry, organized retailers are investing heavily in leading-edge systems to create a data foundation for providing visibility and optimizing operations. Early-stage retail ventures are starting with leading-edge planning and execution applications from SAP, Oracle, JDA, Manhattan Associates and i2 Technologies. These systems will greatly aid supplier collaboration and enable manufacturers to share in real-time information flow. They also will make it possible for retailers to build accurate sales histories from day one, creating a foundation for more robust planning capabilities in network design, inventory planning and transportation modeling.

Select a key partner. Today, third-party logistics in India accounts for a quarter of its transport industry, but is expected to grow to over $125 billion by 2010. Including distribution, the 3PL market is expected to hit $3.6 billion by 2012. This growth is being fueled, in part, by large investments in automotive and telecom manufacturing. 3PLs like Menlo are not only managing distribution, but many are also offering innovative assembly and manufacturing manpower, as well. And industrial real-estate developers Prologis and Aeroterm are entering the market by building on speculation. The partial introduction of the Value Added Tax (VAT) in 2005 is expected to drive more industries toward using 3PL services, since it benefits large warehouses in hub cities — huge investments many companies will want the service providers to make.

Set Basic Transportation Goals and Expectations

In India, the transportation network consists of few highways, small trucks and constrained speeds. It is projected that highways will improve, as recently funded projects are completed. The government has pledged to build 10,000 kilometers of new roads and improve ports by 2010. But the bulk of the infrastructure will likely come from private or foreign investment. For example, Mukesh Ambani, Reliance’s chairman, is building a new port city near Mumbai. His younger brother, Anil, is building a $4 billion suburban railway system in Mumbai. Several of India’s other wealthiest business developers are focused on developing energy for the country. As infrastructure improves, new market entrants will need transportation strategies that:

Focus on high asset utilization. While labor in India is inexpensive, compared to developed economies in the West, equipment and fuel are not. Comparatively, labor is the highest cost component in the U.S., but in India, it’s one-third the cost per kilometer of fuel alone (Exhibit 4 shows a logistical cost comparison between India and U.S.). Leveraging low-cost labor to maximize the utilization of assets will be a critical element to optimizing transportation strategies. By employing strategies such as “slip-seating,” one driver can be changed-over with another driver when his maximum driving time is reached, since there’s minimal financial impact to rest him for the day. Firms can utilize team-driving to improve not only equipment utilization, but also improve transit times and reduce variability.

Establish a Core, Senior Logistics Team on the Ground

Delivery success in the near term won’t be based on technology, but rather on relationships and communication. Firms won’t be able to manage transportation virtually from an office in Chicago or Amsterdam. Instead, they will have to build a strong physical presence in each region. Companies like Samsung have successfully penetrated India by employing a core, experienced operations team in each region. This team must be familiar with the regional service providers, restrictions and statewide regulations.

Set rigid provider qualifications. India’s carrier base will continue to consolidate and become more sophisticated as the shippers they serve invest and demand higher service. In 2004, DHL acquired Blue Dart to cover 13,000 locations in India. TNT and Fed Ex are aggressively entering the market and both have proven success rates creating global networks. In the meantime, companies need to put in place a set of rigid qualifications to set expectations for intermediaries and independent carriers. Firms need to rigorously qualify and measure carrier performance and communicate that data back to carriers.

Establish infrastructure others can use. Firms should consider infrastructure investments as potential future profit centers. Manufacturers will have an opportunity to not only build infrastructure for themselves, but to create distribution and transportation services that others can use. For example, Mahindra & Mahindra, an automotive company, established a business to manage its complex logistics processes. To take advantage of this investment, they became a 3 PL to others in need of logistics and distribution. Manufacturers can set up local distribution where plants are located and retailers can build infrastructure to support other non-competing retailers. To mitigate concerns about carrier reliability, firms can benefit by setting up dedicated fleets. To better utilize these assets, brokers and intermediaries can be leveraged to fill backhauls.

Invest Early in Technology

India’s telecom industry is extremely advanced compared to other industries. And while only 30,000 vehicles in the country have tracking capability, that’s expected to grow a total of 100 percent over the next five years. Already, telecom and software firms are scrambling for a slice of the 1.6 million-vehicles-a-year market. Firms investing in this technology for their dedicated fleets will find the infrastructure to support them substantial.

Focus on Establishing Solid Partnerships

Foreign firms that have been successful in India have done so with the right local support. Local relationships are the true key to success in India. Local companies can use their influence to make or break an initiative. To truly make an endeavor successful, firms should search for growing business groups with which to develop sustainable partnerships. To name a few examples, Tata Group is a diversified company known as a visionary in Indian business, and Bharti has proven it works well with multi-national partners. Firms need to look outside of traditional partnerships
to companies in other industries like Telecom. Even with limited supply chain experience, these potential partners possess nationwide connections and have proven success in growing businesses in this market. And while the big three Indian families control 30 percent of the country’s GDP, partnering with them can be challenging, since power and decision-making is confined to a few key players. To avoid failure, companies should look for firms with a proven track record of sustained partnerships.

CONCLUSION

The logistics industry will continue to be the focal point of strategy formulation, operational excellence and information technology to make maximum contribution in value creation for customers. Globalization, consolidation, technology advancements and outsourcing have only led to growth in the logistics services market and this industry will continue to evolve in the coming years. Industry research suggests that the interdependent factors like globalization and consolidation, increased outsourcing, security and risk management, technological advancements, increased customer expectations etc. will shape the Global Logistics Industry over the next 5-10 years.

Drivers like these and the push/pull pressures created by the market forces will not only trigger structural changes in the logistics industry resulting in specialization, consolidation, outsourcing, service migration, new markets, new services but will also create challenges around service, delivery, quality and cost as customer needs become more demanding and complex. SMEs, forming the core of the logistics industry, will be impacted by this transition in a major way and will have to focus on improvement of its internal operations, processes, technology upgradation, resource utilization, service quality, customer relationships, market intelligence, and financial strengthening, in a nutshell in overall capability enhancement — in order to respond to and gain from the changing environment.

The government is indeed trying to introduce counter-measures and shift freight transports from the roads to the rails. But, first, the rail infrastructure must be expanded and the connections to harbors and airports improved. The government should also induce some of the better-performing PSUs, particularly those engaged in infrastructure, such as power, transport, construction, etc., to expand and speed up their investment programmes. Finding resources for infrastructure development and speeding up investment in this sector should receive top priority, for, as the World Bank has observed, infrastructure is a key factor in improving the lifestyles of the masses and addressing the pressing issue of poverty.

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