


Logistics en route

What's your next move?



One of the most important functions in any business is probably logistics, as no marketing, manufacturing or project execution can succeed without its support. With Indian pharma industry moving up and across the international value chain, companies are looking at optimising their logistics operations. At the same time, logistics service providers are gearing up to meet the growth and challenges presented by the pharma sector through their innovative solutions and products. There are whole lot of logistics solutions available in the market that include warehousing management, inventory management, cold-chain, outbound fulfillment, reverse logistics, distribution, etc. Hence, pharma companies have to carefully evaluate all the logistics options in order to make their supply chain robust.

Rakesh Rao takes a closer look at the complexities involved in running and maintaining efficient logistics in the pharma industry.

Logistics is a critical part of any industry more so for pharma, where the supply chain is highly complex and regulated. "It is well known that in pharma business speedy movement of goods is of utmost importance. Life-saving drugs are required to be delivered on time. Also, a critical aspect is the expiry period associated with the consignment. Therefore, pharma companies have to make sure that the medicines are delivered well before their expiry dates," states Pawan Jain, chairman, Safexpress Pvt Ltd.

P Yugandhar, senior director - global demand planning, Dr Reddy's Laboratories Ltd, feels that logistics is one of the critical chains in pharma industry, due to temperature sensitivity of the products. "We cannot have the product for more than a specified number of days in-transit. As we have to depend on third party logistics (3PL) for transportation, it is important to have sufficient controls on the logistics operators," he observes.

Present challenges

Pharma industry invests less than other industries in supply chain and logistics processes while investing more in manufacturing methods. While product R&D, manufacturing and product marketing continue to remain core focus areas for any pharma company, supply chain and logistics domains have started getting their due share of attention. "Traditional model of having huge inventories, distributed manufacturing and intensive distribution networks would only make a company less competitive in the market. Burden of having to compete with generic companies which already enjoy the benefit of having a lower R&D cost to develop the same product, necessitates reduction in procurement, manufacturing and distribution costs," says Sandeep M Naik, project manager & market segment leader (pharmaceuticals), Miebach Consulting India, a part of Miebach Consulting

Pawan Jain

chairman, Safexpress Pvt Ltd



Any mishandling of a biological drug can lead to chemical (in its salt content) changes and affect its stability. Therefore, before choosing a logistics company, the pharma firms should make sure that the logistics company understands the sensitivity of the issue and provides careful handling of the pharma products

GmbH - an international consultancy company providing integrated system planning for logistics.

Sunil Menon, head of operations - retail & institutional business, Fortis HealthWorld Ltd feels that pharma retailing face the supply-chain challenges such as availability/range, sourcing, warehousing, logistics, IT and connectivity. According to him, some of the logistics challenges faced by the industry include:

- Third party logistics channel not developed for specialised products
- Medicine transit time and storage
- Condition of supply
- Taxes-not uniform
- Rural market penetration - Manufactures have penetrated the market with layers of distribution channel
- Couriers on demand are only used by 29.1 per cent
- The strong reliance on own transporters makes wholesalers more independent and helps to uphold the high delivery frequencies

Naik believes that globalisation has opened up new markets and allowed

companies to optimise and outsource various components of their value chain including part of their R&D, production, packaging and distribution to regions / specialists which provide huge cost benefits. "As a result, pharma supply chains are facing greater and far more complex environments than ever before: regulations, compliance, taxes, structures, facilities, cost, service level and increasing problem of counterfeiting - all of which have to be addressed at a global, regional and local scale," he states.

The logistics scenario is changing in pharma industry in India, points out J P N Singh, director, Scorpion Express Pvt Ltd (SEPL), which specialises in railway logistics catering exclusively for pharma companies. SEPL has entered into an agreement with Indian Railways and leased SLR (second class luggage rack: 4 tonne) and VPU (parcel van: 25 tonne) to cater movement of active pharma ingredient (API), raw materials and finished formulation.

Due to inflation and the bank's prime lending rate (PLR) going up, the holding cost of material is very high, he points out. Further, companies are using software like

Sandeep M Naik

project manager & market segment leader (pharmaceuticals), Miebach Consulting India



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Reverse logistics

Globally, reverse logistics is considered to be the next frontier of productivity and efficiency improvement within the supply chain management (SCM) function. "Let us face it; returns are a part of any manufacturing business. Companies who adopt effective reverse logistics processes can essentially convert liabilities into assets and expenses into revenue generating opportunities," believes Michael R Blumberg, president, Blumberg Advisory Group Inc, and, chairperson of The Medical/Pharmaceutical Industry Committee at Reverse Logistics Association (RLA).

With the pharma industry specifically, he feels, reverse logistics presents opportunities for manufacturers to reallocate and redistribute products to areas where they are needed the most; identify and/or pre-empt potential quality issues as well as correct/prevent product defects; cost-effectively & rapidly eliminate waste & hazardous materials from the environment; and recovery & reuse materials from products that no longer have any economic value or useful shelf-life. "In short, reverse logistics has a dramatic impact on improving the top line revenue and bottom line profitability as well as overall levels of customer satisfaction and market expansion," Blumberg adds.

According to him, some of the trends in reverse logistics with regards to pharma industry globally are:

- **Recall management:** Development of policies & procedures to proactively deal with recalls in an efficient and productive manner as well as manage customer experience and public opinion in a positive manner
- **Disposal & destruction:** Implement low-cost and environment-friendly processes for the destruction and disposal of products that no longer have any economic value or useful shelf-life
- **Asset recovery & liquidation:** Recovery of material and contents that still have an economic value such as plastic and paper goods found in packaging material and extrusion and separation chemicals with active ingredients. It also includes charitable contribution of products to areas in need of economic relief and/or liquidation of finished goods that still have useful shelf-life and economic value but no longer being sold within the original market for which it was intended
- **Rebalancing & restocking of products:** Returns of overstock items and movement of these goods to markets and channels with higher demand
- **Optimisation of transportation & shipping costs:** Identifying alternative strategies and tactics for transportation and shipment of goods resulting in improved speed but reduced costs and increased utilisation of asset & resources

Although, pharma companies are adopting reverse logistics at a global level, the market in India is not very robust as every company has its own systems in reverse logistics. As per regulatory guidelines, reverse logistics from all distribution channels in healthcare is a mandatory requirement. "The reverse logistics of expired, non-saleable and broken medicine range has to be carefully documented and separately stored for safe disposal as per waste and disposal law. But, as no strict norms are currently available to cross check the entire returns chain, very often such material is disposed by the pharma companies as per the availability of opportunity. However, things are now shaping up and with increasing safety concerns, pharma companies are turning towards specialised reverse logistics service providers like us," says Jain.

SAP to control inventory and to monitor sales. "These companies are getting in the system of just in time inventory (JIT), in which logistics companies like us are playing a major role. They are shifting these movements from traditional transporter to express cargo and railway log companies. Instead of holding goods till making it full truck, they now believe in moving part consignment, as soon as it is ready. This is pushing their sales and has kept various inventory movement under control," says Singh.

Importance of efficiency

The drug manufacturers in India, big or small, have to comply to very high standards, mandatory practices and strict quality assurance requirements for finished products. Having done so in the best possible manner, the moment a manufacturer releases his finished stocks of goods for distribution to the market, the transporter takes over the responsibility of delivering the goods to company depots or distributors' godown. "During this process, problems such as improper segregation of goods, inadequate cold storage facilities, neglected first-come-first-use system are some of the evident irregularities. The reputation of pharma companies largely depends on efficient logistics management," feels Chandrashekhar Pitre, head marketing - India, DHL Express.

DHL offers a range of logistics solutions that are specifically designed to the needs of the pharma & life sciences industry. DHL's Worldwide Medical Express (WMX) is a modular cool-chain designed to allow the safe and secure delivery of time- and temperature-sensitive drugs, diagnostic specimens, samples from clinical trials and other life sciences products. *LifeConEx*, a specialised temperature controlled transportation solution offered by DHL, is created for providing services which support the life sciences industry's need to move temperature controlled products around the world.

According to Salem Ganapathi, managing director, Logistics Plus India

Pvt Ltd - an international supply chain management company that specialises in complete third party logistics services - the pharma industry has a lot of issues, which makes logistics important for its profitability. These include:

- The quality of goods, which is stored and moved, is critical as it is health related. For example, goods have to be stored in dust-free environment, which means warehouse floors have to be epoxy finished or temperature controlled, and may also require a positive air curtain
- As medicines have expiry dates, inventory management systems must be excellent
- Spurious drugs is a dangerous phenomenon in this industry; hence at distributor/stockists' level, it should be checked that there is no mix up
- In view of the low margins in the Indian pharma market - due to direct and indirect control - the logistics costs have to be monitored

Since logistics is very critical for pharma industry, logistics companies are trying to navigate and track more & more batches of drug products through an increasingly complex distribution chain, at faster speed, adhering to tighter controls. "But, despite the heady challenges, improvements are under way and the potential solutions exist for us to take greater control over our distribution processes," claims Pitre.

Outsourcing logistics services

Logistics experts believe that the pharma segment holds a huge potential, but the industry is still driven by cost and not by service quality. Most of the companies look for cheap transport facilities and hire public carriers, even if it means compromising with other crucial aspects. These transporters do not have proper knowledge about the product and tend to provide improper and

Sunil Menon

head of operations - retail & institutional business, Fortis HealthWorld Ltd



Logistics requirement is fast changing. Logistics service providers should understand the stringent rules and demanding storage conditions required for pharma products. They should be able to give end-to-end solutions - ie, from localised purchase to supply. Multiple points of distribution will give the strength to the 3PL companies

poor handling of medical products. "So, as far as the pharma industry is concerned, it still tends to be very conservative and traditional in logistics outsourcing," observes Ganapathi.

Pitre points out, "In circumstances where logistics skills are critical for the success of the firm and logistics is a core competency, organisations are more inclined to adopt in-house strategies. If logistics is not a core competency and there are not enough resources available for improving logistics competency, companies tend to outsource their logistics operations."

Logistics outsourcing market in pharma has not shown much variation or changes over the period except movement from traditional transporter to express cargo. "If you see companies have only shifted from depot system to C&F. Still the interstate tax formalities are so complicated which doesn't give them much freedom to make any drastic changes. Only promotional materials movement, which they were earlier doing through their C&F, are now being sent directly from their mother warehouse to the marketing

& sales representative (MSR)," says Singh. This outsourcing is saving the time as well as cost for pharma firms and logistics companies like GATI, Safexpress, XPS who have an all India presence are playing major role in that.

With more awareness on the part of both - the suppliers as well as the consumer - pharma firms have now begun to utilise the far superior services of 3PL providers who specialise in handling medical products. "The trends are changing and pharma companies are now realising that they are receiving value for money. Efficient handling of their supply chain reflects on their brand image and helps build the trust of consumers. More and more pharma firms are beginning to outsource their supply chain to bring down inventory and logistics costs, counter competition and enhance brand image. The 3PL concept is fast catching up," observes Jain, whose company - Safexpress - offers customised logistics services as per the demand of different sub-segments of the healthcare industry. Express distribution, samples distribution for medical representatives

J P N Singh

director, Scorpion Express Pvt Ltd



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Salem Ganapathi

managing director, Logistics Plus India Pvt Ltd



“The pharma industry has a lot of issues, including direct and indirect controls, spurious drugs, expiry dates, etc, which makes logistics very important for its profitability. So as far as the pharma industry is concerned, it still tends to be very conservative and traditional in logistics outsourcing”

(MRs), onsite customer support, and in-bound logistics consolidation are some of the services offered by Safexpress to its pharma customers.

Offer a right mix

The growing levels of dependency on outsourcing of logistics in the pharmaceutical industry increases the extent of third-party logistics providers' role. A 3PL provider's performance has a significant impact on the pharma companies' logistics performance. "JIT delivery service is critical for success in the pharma industry and there is a clear lack of integrated third-party logistics providers that are able to fully meet the requirements of the industry. In India, pharma companies are more inclined to outsource individual logistics functions, while keeping control of the overall process," opines Pitre.

There is significant potential for expansion and innovation for 3PL services providers, particularly in the use of technology and temperature controlled services. He feels that 3PL providers have the opportunity to stay ahead of the game if they manage to adapt their offering to the

changing demands of the market. Pitre adds, "Providing radio frequency identification tags for tracking materials in the supply chain as well as offering innovative cold chain services are examples of value-added services that 3PL firms can opt for to meet their pharma clients' demands."

Menon believes, "Logistics service providers should understand the stringent rules and demanding storage conditions required for pharma products. They should be able to give end-to-end solutions, ie, from localised purchase to supply. Multiple points of distribution will give the strength to the 3PL companies."

According to Pitre, big pharma firms have been looking at globalising their logistics processes, a move that has led some global providers to offer 'end-to-end' services, covering every aspect of the supply chain movement. An example is DHL Exel, which bagged a lucrative contract with pharma giant Wyeth in January 2007. "DHL was the first logistics provider to be given complete responsibility for the company's worldwide clinical trial material distribution," claims Pitre.

Chandrashekhar Pitre

head marketing - India, DHL Express



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Making a correct choice

So, what are the factors that a pharma company should take into consideration while selecting a logistics service provider? "Manufacturers place a great deal of emphasis on logistics outsourcing, while wholesalers place more emphasis on improving logistics competency. Logistics core competency, industry critical success factors, value of logistics to supply chain, competitive strategy, resource availability and operational performance of in-house logistics are factors impacting logistics outsourcing decisions," answers Pitre.

The logistics solutions for carrying any biological drugs involve super specialised system on packages (SOPs) & sophisticated handling as compared to logistics for the routine pharma products. The biological drugs mainly comprise vaccines, antigens, hormones, cytokines, and enzymes, which demand unbroken cold chain logistics solutions, where the desired temperature has to be maintained consistently as per its pharmacological stability requirements.

"Any mishandling of a biological drug can lead to chemical (in its salt content) changes and affect its stability. Therefore, before choosing a logistics company, the pharma firms should make sure that the logistics company understands the sensitivity of the issue and provides super-specialised and careful handling of the pharma products. The company should have a strong cold chain in place in addition to faster transit time and turnaround time (TAT)," says Jain.

Having an IT-edge

Though other industries have made use of IT-enabled logistics solutions, there has not been significant improvement in the area of logistics solutions in pharma industry. However, most companies are now gradually considering this aspect and working towards efficiency in logistics and supply chain management. In fact, some pharma companies have already introduced technology integration,

outsourcing transportation and warehousing. "As we have to track products with batch number, expiry date & expiry returns, it is very important that we have robust IT systems in place to address distribution, re-distribution, recall procedures & expiry settlement process, etc," states Yugandhar.

Dr Reddy's started its supply chain journey in 1999 with Accenture (erstwhile, Anderson Consulting) by redefining the supply chain and defining & measuring supply chain metrics. The company had upgraded its supply chain in 2004 by creating positions like demand planner, supply planner & giving more importance to logistics. "This is a continuous journey & we will keep upgrading it in every four to five years to meet our customer requirements," stresses Yugandhar.

Recently, Dr Reddy's migrated to MySAP (from SAP) and it plans to link

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the pharmacies are approaching the 3PL service providers to provide them with effective logistics solutions for the smooth functioning of the back-end operations.

"The pharma retail segment concept is fast catching up. As the logistics requirement of this segment is different from that of the chemists, there is a higher scope for innovation for service providers like us. More and more pharma

pharma industry. This is because packaging of pharma products has to be suitably tailored to ensure that the correct temperature is maintained throughout. "Logistics companies are coming up with offers like, an innovative packaging solution that is designed to ensure the express distribution, security, safe handling and priority treatment of time-sensitive shipments of non-infectious specimens (like test tubes of blood and urine)," informs Pitre.

Further, India is fast emerging as a sought-after destination for research & clinical trials. Hence, logistics service providers are gearing up to tap this opportunity. He observes, "To support the growth of the clinical trials sector in Asia, companies are coming up with solutions that would suit logistics services for the clinical trial logistics, targeted at pharmaceutical companies, central laboratories and contract research organisations engaged in clinical research and drug development."

To an extent, the current logistics scenario in the healthcare segment is still primitive. Moreover, the Indian drug regulatory authorities still do not have a process of accessing logistics norms, which encourages healthcare players to go for cheap solutions offered by the conventional transporters & truckers. However, the mood among logistics service providers is upbeat and can be summed up in Jain's word, "The trend is changing and the future holds promise for specialised 3PL service providers."

MPH



some the company's important stockists to its systems. "Our aim is to increase the profitability of all our partners coupled with sufficient product availability. We are working towards replenishment of stocks to our stockists at regular intervals, instead of the traditional month-end order phenomena," he informs.

Emerging trends

The pharma retail segment is a very promising & upcoming segment. The opportunities from the logistics perspective are very high, as most of

firms are opting for technologically superior logistics firms that provide specialised & customised services to the pharma companies," opines Jain.

With regards to logistics demand of pharma retailing, Menon says, "Requirement is fast changing and require large cold storage space. Centralised buying by the retail chain will ensure smooth movement of goods across state boundaries. Speed and large number of direct-to-store deliveries will change the supply chain demands."

Packaging has also become an important factor these days in the