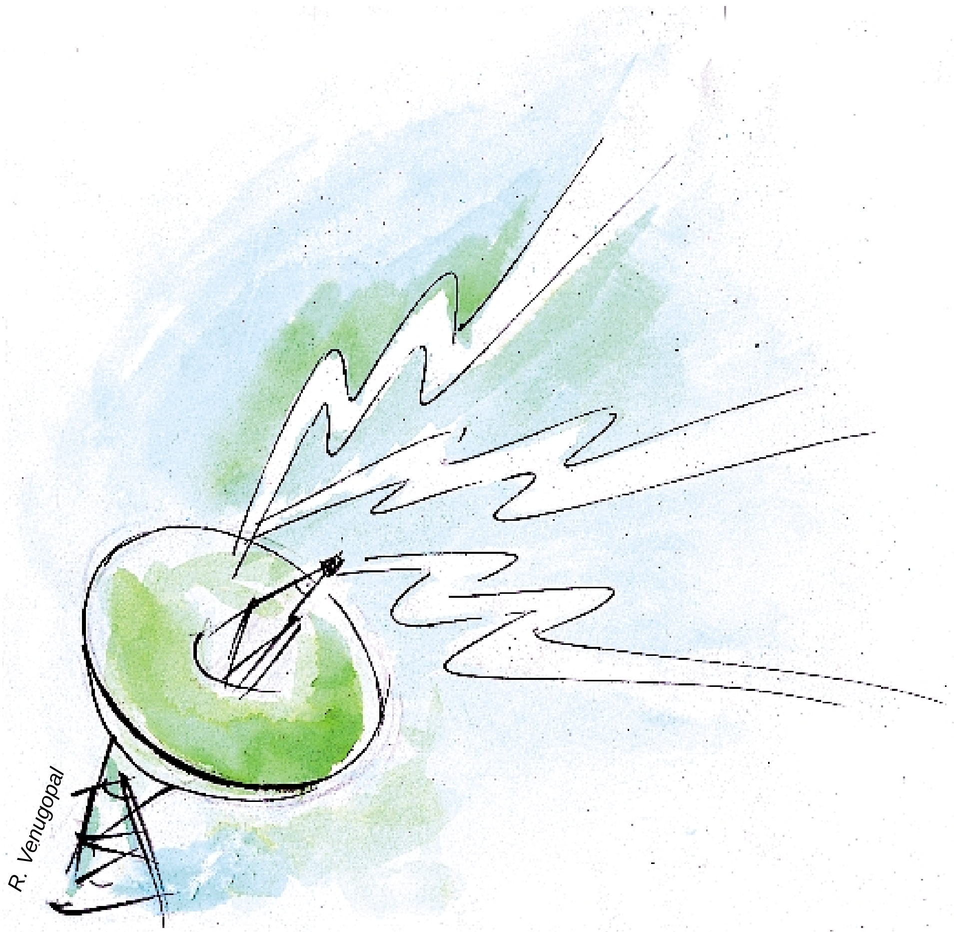
LOGISTICS

Behind the



ELECTRONIC commerce has its limits. One can see a product online, order and even pay for it online. But, the delivery has to be physical. Logistics thus emerges as a key component in the battle for supremacy in the great Web bazaar.

The US is the place for electronic shopping. Something like three-quarters of all e-commerce in the world currently takes place in the US. The country also accounts for nearly 90 per cent of all commercial Web sites.

The 1999 Christmas shopping season in the US was marked by two significant developments. First, there was the virtual explosion in Internet retail sales (though the total size of such sales was still limited to a meagre 1 per cent of total retail sales). Second, and more important, there were terrible delivery snarl-ups. Several retail chains including giants such as Wal-Mart announced as early as the first week of December that they could not guarantee delivery of orders by Christmas.

The 1999 Christmas holiday Internet shopping in the US thus generated as

scenes

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many stories of failed and late deliveries as of explosive growth. A series of hackers' attacks also disabled, albeit temporarily, some of the best-known e-commerce Web sites. These developments therefore raised the most obvious question: Can Web merchants deliver goods on time?

The pioneers of e-commerce did not pay much attention to the issue of logistics, particularly the distribution, warehousing and delivery aspects. They were more concerned with Web site design and marketing. The dependence on organisations such as United Parcel Services or Federal Express or the government's postal department for delivery was total.

Also, the number of items traded on the Web were (and still are) limited; mainly books, flowers, toys and music and financial products.

Two things thus became clear: First, transportation cost turned out to be the biggest deterrent for those in favour of online purchases of physical products. Second, traditional warehouses and distribution centres proved unsuitable for catering to the requirements of e-commerce.

But then, this should not have come as a surprise. Even in physical shopping, shoppers after having visited the stores and chosen the goods and paid for them at the counters, are also required to arrange for the delivery of the goods. Either they themselves carry the goods back home or fix up with others to have them delivered. In other words, they do this at their own expense, both in terms of time and money.

Replicating this operation efficiently down to an individual consumer can prove to a difficult task for a Web merchant. Financing it can make the job even harder.

The delivery problems revealed that the distribution system of traditional retailers is at a disadvantage. Even Wal-Mart, which is rated highly for its distribution system, found its system unable to cope with individual orders. It, therefore, decided to outsource its distribution.

Is outsourcing always the answer? It certainly seems to work for long distance deliveries by road. UPS for example has been the biggest beneficiary of the e-commerce boom.

But there is a problem. Many e-commerce firms are finding it risky to opt for outsourcing for picking and packing. The contractor working for many Web merchants will not be able to give all of them equal priority. Precisely for this reason, more and more e-commerce merchants are planning to have their own giant automated warehouses. For example, Webvan, an online grocery store in the US, proposes to spend $1 billion on building a string of state-of-the art warehouses throughout the US.

The problem of e-commerce logistics, according to some, can be eliminated if the goods and services can be delivered over the Internet itself. A beginning has already been made. For example, many computer software packages can now be digitally downloaded. Perhaps the next items to follow will be music, films and even newspapers and books.

Theoretically, it should be possible to download a new book at the click of a mouse. The music business is already heading towards e-distribution with predictable consequences. The first commercial release of a piece of music over

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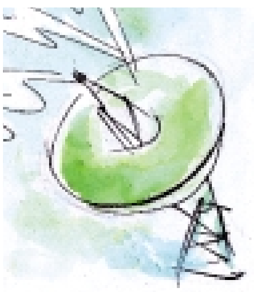

India is emerging as a focus market for international logistics companies.

the Internet before its appearance in the record shops is believed to have attracted a flood of lawsuits. The spread of the MP3 digital music format has put fear in the minds of record industry executives who are concerned at the prospect of people making an infinite number of perfect, but illegal, copies of any music that is put on the Web. All this might call for new copyright laws. It might be necessary to have new sets of rules and regulations for digital rights management on the Web.

The Internet,though by its very nature global in reach, has been used so far mainly to tackle the logistics problems of retail sales. This is because before e-commerce can go global,it needs to overcome obstacles such as cultural, linguistic and regulatory barriers. For example, in Europe, a major market for e-commerce after the US, tax and regulatory obstacles are deterring prospective American vendors. This may be one of the reasons why American Web sites do not accept orders from outside the country.

The shipping industry has been one of the laggards in embracing Internet and e-commerce. However, of late, there has been a flurry of activity as is evident from the emergence of a number of portals catering to different segments of the economy. Within the next few months, not less than 20 portals are likely to offer a platform for sale and purchase of second-hand vessels. Similarly, around 15 portals are offering platforms to make transactions in liner shipping. And, this might lead to fragmentation of liquidity. The competition among portals would intensify on considerations of costs and value addition and not all of them would be able to provide all of these in the best possible way.

The Indian scene

India spends about 13 per cent of its GDP on logistics related services, according to a study undertaken by the Michigan State University. This makes India a focus market for international logistics companies.

In the past few years, some of the world's leading logistics service providers such as GeoLogistics, Kuehne & Nagel, Union Transport, Ahlers Bridge N.V., and Nissin Corporation, among others, have made their presence felt in the Indian market either by launching subsidiaries on their own or through joint ventures with local firms.

But , different companies are looking at different things in terms of logistics. Thus, GeoLogistics in India proposes to launch a Web-based track and trace facility to offer information on pick-up, departure, arrival and delivery.

Rajeev Bhatnagar, Managing Director, Union Transport, feels that Web enablement of the Customs and other related departments can speed up delivery despite the present infrastructure problems. But the issue of infrastructure must be addressed soon, more so because of rising trade volumes. "The way the freight forwarding business is being done at present must change as the demand for value-added services will only increase," Bhatnagar observes.

Rohan Ajila, Managing Director, Indiamarkets.com, a portal in the business-to-business (B2B) segment, says logistics companies are trying to integrate tracking systems into their core business. The problems related to delivery in e-business can be solved if the supply chain is managed effectively.

Sumit Gupta, CEO, Maritimei.com, a global maritime e-biz portal, says that road transport operators are now being forced to shape up and offer value-added services. He feels that the Net is going to drive middlemen out of the trade and force road transport operators to become more transparent.

Many B2B portals, apart from providing trade platforms, are also planning to provide complete solutions to enable e-fulfilment and are in the process of tying up with logistics companies, and verification and credit rating agencies.

XPS Cargo Services, the door-to-door express distribution division of Transport Corporation of India, has introduced e-link, a distribution channel for

The old economy tries to catch up...

e-commerce. To have an edge over its competitors, XPS is investing heavily in acquiring state-of-the-art technology and a strong multi-functional cargo tracking system with good EDI software and Web page interface to its existing communication and systems through which 70 per cent of its branches are already linked. Once cyber laws related to payment come into force in India, e-tailing and e-shipping, it is felt, will be further smoothened.

Pune-based Dynamic Logistics, the leading logistics service provider for Telco, Whirlpool and Godrej, among others, has developed warehouse management and transport management systems to share information with customers, vendors, dealers and transporters and the Internet has come as the ideal and most economic mode of disseminating information.

While e-commerce is clearly transforming customer interaction on many levels, there seem to be more questions than answers about how the Internet will ultimately affect logistics service providers. One thing is clear: Investors and customers expect businesses to take full advantage of the opportunities offered by the Web. While it is the front-end of Web-based e-commerce that gets most of the publicity, the key to success lies in the back-end – inventory, financial transactions, and the delivery of product and customer service.

(With reports by Viswanath Kulkarni)