

By

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There are several reasons attributed to the success of Asian Paints, including penetration into the rural markets, introduction of smaller pack sizes and an intricate understanding of the Indian market. But the fact that is not known to many is that Asian Paints derives its competitive advantage from its superior capabilities in Information Technology as compared to other paint majors. They have made substantial investment in hardware and in-house development of software suited to their specific needs. Their four factories, 54 stocking points and the central distribution centre are connected through computer networks. Their production plans are based on the market forecasts for a range of more than 2000 products (Different brands, shades and sizes) made using computerized forecasting models. Consequently they manage with the lowest inventories and offer the highest service levels in the paint industry. They have the capability to service more than 85% of the orders within 24 hours.

Effective use of IT in distribution can help companies:

- 🕒 reduce inventories
- 🕒 reduce delivery time/unproductive waiting time
- 🕒 reduce stock-outs/lost sales
- 🕒 respond faster to market changes
- 🕒 reduce rush orders
- 🕒 cut down overproduction
- 🕒 reduce unnecessary movement (forwarding and back-tracking)
- 🕒 reduce paper-work and wasteful processing
- 🕒 plan production better

All the above benefits result in improved service at a lesser cost. Looking at the enormous benefits, one may wonder as to why Indian companies have not computerized their distribution as yet.

Distribution in India is very unique as compared to other countries. Indian wholesalers operate with amazing efficiency when we look at the paltry margins (4 – 5%) they get from the manufacturers. However they do not follow proper systems and procedures that are amenable to computerization. Also they tend to keep large inventories to safeguard against the vagaries of the Indian environment, viz., “bandhs”, strikes and natural disasters. Hoarding and black-marketing is also prevalent in certain product categories. More over basic commodities like sugar, steel, fertilizers etc. continue to be rationed (as opposed to marketing) where the production people decide what should be consumed by the public. Since India is a

vast country (area – 3,287,263 sq. km.) with its population spread across 5 lakh plus villages and 3696 towns, physically moving goods from production units to consuming centers itself continues to be a big challenge to any marketer. Though India has progressed a great deal in the telecom sector, considerable improvements are to be made in the telephone systems before we can have reliable data transmission from one place to another. However, a number of Indian companies are realizing the importance of cutting the cost of distribution and are gradually resorting to the use of IT in distribution.

In the West, IT is short-changing the distribution systems. Electronic networking has become all pervasive. The boundary of the organization is blurring, as it becomes more of a network with electronic links forward into customers, backwards to suppliers and sideways to business partners.

In the case of industrial products, focus is shifting to supply chain management involving reduction of rejection rates, improvement of cycle times, and decrease in inventory throughout the supply chain. Hence companies are shifting to closer relationship with fewer companies. Major industrial customers such as Ford, GM, Motorola, Texas Instruments and Xerox have cut the number of suppliers they use by 20 per cent to 90 per cent during the past decade.

The interest in improving supply chain operations has resulted, in large part, because of the maturing of systems thinking, and the opportunities presented by information technology. Software suppliers provide products of varying quality (MRP, ERP etc.) to assist an organization in planning its logistics and supply chain operations.

Another interesting development is the use of Electronic Data Interchange (EDI). EDI has been around for some years, handling relatively simple transactions such as orders, invoicing, delivery, payment and so on. Currently major companies are shifting to EDI resulting in all participants in the supply chain joining the network. The ones that do not respond to this get locked out. It is becoming clear that the first stage in the use of EDI is concerned with simple efficiency but that as experience accumulates it stimulates new thinking about the sharing of information, partnership and supply chain improvement.

Susan Dentzer in an article on Death of the Middleman (U.S. News and World Report, May 22, 1995, Page – 56) says, “Middlemen who transported products from factories and farms to far away consumers have been a prime force in the U.S. economic growth over the past 175 years. But now those in the middle of the economic food chain are under pressure for a slew of reasons. And the overarching lesson is that the mix of falling prices, heightened competition and advancing information technology is transforming the economy in ways that we are only beginning to understand.”

In fact the conventional wholesalers and distributors in the U.S. numbering about 300,000 are under threat from 'power retailers' like Wal-Mart and Office Depot, which exact big discounts from large manufacturers, cut out the middlemen and sell to consumers at prices approximating yesteryear's wholesale ones. Wal-Mart operates on a Every Day Low Pricing (EDLP) policy i.e. it offers products at the lowest price in every location in which it operates. This is possible because all the Wal-Mart stores are linked to the respective suppliers through electronic networks. As and when products are scanned at the checkout counters in the stores, the information is transferred to the respective manufacturers instantaneously; thus enabling them to plan their production and distribution.

Wal-Mart has made heavy investments in IT, satellite communications, company-owned aircraft and videoconferencing facilities. These investments enable its 4,000 vendors to respond quickly to sales data beamed directly from stores. The company's 19 distribution centers serviced by 2000 company owned trucks manage to deliver new orders in less than 48 hours. Wal-Mart follows the logistics system called "cross-docking". In this system, goods are continuously delivered to warehouses, where they are selected, repacked, and then despatched to stores, often without ever sitting in inventory. Instead of spending valuable time in the warehouse, goods just cross from one loading dock to another in 48 hours or less. The store managers get into vide-conferencing to share best practices and learn from each other.

Wholesalers and distributors have also been squeezed by the rise of the mighty transportation companies, such as UPS and Federal express. Fred Smith, the founder of Federal Express, developed his vision based on system innovation. He realised that the major cost of overnight delivery would be sorting and handling. He decided to try a new system instead of establishing many small distribution points, which would be difficult to coordinate. He decide to have all incoming mail sorted at one central hub, Memphis.

His idea works every evening. At around midnight, some 65 federal Express planes converge in Memphis to disgorge about 600,000 envelopes and packages. The mail is quickly sorted on a 45 miles conveyor belts and loaded back into the planes by 4.00 a.m. When the planes arrive at their destinations, the mail is loaded into small delivery vans and rushed to recipients before noon.

With small-package delivery becoming more competitive and less profitable, FedEx moved into heavier cargo – especially overseas. The information technology and the transportation systems that FedEx developed to make sure it got packages to the right places overnight are now being harnessed to distribute other companies' products. Now the company has a Business Logistics Service s programme that handles every warehouse function from inventory management to book-keeping. FedEx promises delivery to any part of the world within 48 hours from its Singapore warehouse.

Sales Executives working for a number of U.S. companies use their note-book PCs to establish connection with the main server of their company before starting their sales negotiations. They collect the customer specifications and feed in to their PCs to get a prompt response from the company on the prices. De-featuring or adding features also gives prompt response on prices from the company. After settling on the features and the price, they connect to the production planning to get the possible date of delivery. Then finally the order is entered into the company records and scheduled for production even before the sales executive leaves the customer's premises with the payment for the product.

Until recently Anderson Windows, a US based company, made a range of standard windows in large batches, but more and more customers demanded unique designs. Trying to keep up with demand was a nightmare. The product ranges increased from 28,000 to 86,000 and fifteen page quotes were not unusual. An increase in errors damaged the company's quality reputation. The answer was to issue distributors and retailers an interactive electronic catalogue and design package. Now dealers can process orders in one-fifth the time, and the direct link with Anderson's production system mean that turnaround time has improved and error rates have plummeted. Although the product list has grown to 188,000, fewer than one in 200 van loads contain an error. The company can now produce in lots of one and exactly satisfy customer requirements.

Some companies offer all the above facilities on the internet itself. For Example, Dell Computer of US sells PCs not by model but by configuration. A typical phone customer dials in with a configuration and a budget in mind, and uses an interactive exchange with the sales rep at the other end to identify an optimum, involving permutations on capacities and speeds of different components, that will meet her budget.

Dell's Website automates this process. Customers choose the broad-type of the system: a high-end multi-media, or a gamers or a home-office machine. They are then directed to a screen where each sub component of the configuration is displayed. There are separate lists of CPU-type, memory, hard disk, multimedia components, modems *et al.* Customers can change their choices, and as they do so, get the price for the selected configuration on the screen. When they are satisfied, they can close the deal. At Dell's end, this system is linked to its just-in-time manufacturing system. (Business Today – Ideas, March 22, 1998)

### **Distribution Of Services:**

Service industries like Banking, Distance Learning, Stocks and Securities Trading, Currency-trading have benefited a great deal by the use of IT. Banks use ATMs to deliver their services. With smart-phones it is possible to carry—out banking operations sitting at home.

Education as we know is undergoing a major paradigm shift. MBA on a Cd-Rom is a reality to-day. With the use of Multi-media and video-clippings the lessons are delivered through a computer. In India, Kirloskar Multi-Media and Baron Hexa (both based at Bangalore) are two firms which have done some pioneering work in the area of computer based training. In this mode, it is possible to get the best authors to write the lessons. We can also build FAQs (Frequently asked questions and their answers) quizzes and assignments into the lessons. It is possible to restrict entry to advanced lessons unless a person acquires minimum proficiency in basic lessons as tested by the computer based quizzes. By this process if a person manages to get to the end of the Cd-Rom, it may ask for the printer to be switched on to enable the computer print the degree certificate for the student.

B.School, a subsidiary of Brilliant Tutorials is launching an unique distance learning MBA programme. It comprises of hundred lessons made available to the students in the text, audio and video formats. People of repute have authored the lessons. At this rate, the classrooms and the teachers may become a thing of the past. Satellite-based, real-time, two-way, full motion video-conferencing is also being used for distance learning. Indira Gandhi Open University has acquired capabilities to conduct such classes.

Advances in telecommunications and information technologies have reduced the time and place barriers of doing business. Companies have dedicated satellites across the globe to pass information from one division to another. A company like American Express, which has the largest number of credit cards in circulation, is able to make claims that they could service customers in any part of the globe within eight hours; thanks to the satellite communication.

### **Cyber Distribution:**

Virtually anything can be distributed through the cyberspace. Internet has emerged as a major competitor to postal system with more and more mail getting distributed electronically (E-Mail). A lot of software is distributed through the internet. They allow users to download the sample version for trial before placing a firm order. Banking services are distributed through the net (e.g. <http://www.sfnb.com> ). The World Wide Web offers a number of distance learning programmes. (See <http://www.hoyle.com/distance.htm> for a listing of different distant learning courses on the net.)

Consumer product companies typically tie-up with banks for money collection and courier companies for distribution of goods and they use the web for promotion and order-booking. Even religious organisations operate in a similar fashion. Visitors to these sites can browse through their videos, audios and books and place orders for the same by giving their credit card particulars. A person in distress can also

receive prayers through the net and communicate with the Godmen. Of course, in return, they will ask for donations and support to their religious activities. Even God needs money to sustain his ministry!

The largest book shop in the world, Amazon is on the web (<http://www.amazon.com>). It has over two and a half million titles. But such stock is only virtual – the company buys in to match customer orders.

Currently internet has a large number of sites that distribute pornographic material (e.g. <http://www.smutland.com> ). It is forecast that it would soon be possible to have virtual-sex. That is you slip into a virtual-reality body suit and when your partner (lying somewhere in cyberspace) fondles your computer-generated image, you actually feel it on your skin and vice-versa.

In sum, we notice the convergence of IT, telecom and systems thinking in distribution. As such, distribution itself is getting integrated with broader business functions like operations management, marketing, information systems, financial management and strategy. Companies can gain sustainable competitive advantage by making the right kind of investments in IT, telecom and systems to improve distribution. It has been amply demonstrated by the case histories of Asian Paints, Wal-Mart and FedEx.

In the case of Industrial products, investments in IT lead to greater coordination, collaboration, cooperation and communication (4Cs) between the company and its customers. This helps companies to develop intricate understanding of each other's business and customize products and services to suit the specific needs of the user.

As far as India is concerned, there is a tremendous scope for improvement. Apart from Asian Paints, companies like Dabur, HLL and Godrej have made large investments in IT for distribution. No big strategic thinking has gone into revamping distribution in India. Another example of the use of IT in distribution can be found in Box 6.2

#### Box 6.2

#### SKYWAY AND THE LOGISTICS REVOLUTION

By Don Peppers and Martha Rogers, Ph.D.

Until recently, the buying cycle from purchase to delivery could take days or even weeks. During that time, products and inventory might cross the United States a handful of times before finally being delivered to the end user. Today, thanks to constant improvements and innovations in technology, shipping companies are transforming themselves into hubs for information management, and traditional shipping is quickly giving way to a logistics revolution.

Skyway Freight Systems, Inc. (<http://www.skyway.com/>) is a leading provider of integrated logistics solutions and information technology-based supply chain management services. Whereas traditional shipping companies focus only on moving inventory from one location to another, Skyway takes things one step further as a logistics company that rethinks the whole order-to-delivery sequence. Skyway Direct-to-Store provides customized solutions that reduce demand fulfillment time and cost by integrating technology into its delivery mechanisms. Its logistics people can contact drivers on the road using cell phones and email, while customers can track the progress of their deliveries - everything from personal computers to office equipment - on the Skyway Web site.

Further, Skyway can customize its programs to include a variety of value-added retail services, such as whole order delivery. Using whole order delivery, shipments from multiple origins with different modes of transport can be merged in transit and delivered as a single order with one set of paperwork to the store or consumer. By using technology, Skyway is developing better and more cost-efficient ways of helping its clients do business with their customers. By customizing its services, it is earning the loyalty of its customers - giving them what they want the way they want it.

If you are interested in providers of logistics-supply chain software, you will find a list of them in Marketplace1to1 (<http://www.1to1.com/I1to1/061898/>).

Source: INSIDE 1to1, June 18, 1998, E-Mail Newsletter published by Marketing1to1/Peppers and Rogers Group