Powering the supply chain with E-technology

Debasis Daspal
6/8/2006

HARRY PotterTM has thrilled the kid's world with its magic wand. But the way overwhelming customer demand of Harry Potter's book is met by efficient supply strategy has been understood by very few. Scholastic, the publisher and distributor of Harry PotterTM and other popular children's books used different magic-wand to weave magic in its vast supply network. It managed its distribution network through electronically powered supply chain. And the result was dramatic -- revenue was doubled and earnings per share were climbed over a five-year period. The publisher and distributor has successfully managed the phenomenal demands of Harry PotterTM through its cost-effective, customer-centric supply chain strategy built over improved electronic links it established throughout every nodes of its supply net-work. Similarly, Dell ComputerTM outperformed the competition in terms of shareholders' growth by over 3000% over an eight-year period, 1988-1996. The formula of this astounding success is again virtual integration, a strategy that is achieved by blurring the traditional boundaries between suppliers, manufacturers, and end users through electronically interlinking every parts of its supply chain.

But not everyone was so successful. Living.com purchased Shaw Furniture Gallery, one of the largest furniture stores in US, in March of 1999, to vertically integrate with top-line furniture manufacturers. After an investment of $70 million in e-business as the exclusive Amazon.com furniture link, Living.com declared bankruptcy on Aug. 29, 2000. The same fate met with Peapod, founded in 1989 and based in Illinois, US. Considered one of the America's leading and highly experienced on-line grocers, Peapod suffered a loss of $29 million in 1999, and was later sold out!

Why in some cases, does the new business model fail while in other cases it generates incredible success stories? Alternatively, if Dell and Scholastic can use the Internet and other electronic technology to develop such an effective business model, what inhibits other experienced firms like Peapod, once entertained more than 130,000 customers, from adopting similar techniques and improving their business performance?
"It is the better understanding of supply chain strategies in commensurate with organisation goals and overall business environment", says David Simchi-Levi of Massachusetts Institute of Technology (MIT). According to David, Internet technology has forced companies to redefine their business models so as to create new opportunities. While acknowledging that the influence of the Internet and e-commerce on the economy in general has been tremendous, he found that reasons for the failure of Living.com, the on-line furniture mall, are investment in a new information system that did not function correctly in the specific business environment. Moreover, switching to a carrier that had no experience with furniture delivery also led to an amazing 30% return rate, triggering to Living.com's downfall. Similarly, Peapod, the on-line grocery store, collapsed due to high delivery costs of its transporters.

These examples confirm that correct software tools when applied through right supply chain strategy can have a major impact on business performance. Developing integrated

supply chain strategy is a necessary precursor before implementing electronic technology. Peter Nygård, Chairman of Nygård International, a global clothing enterprise based in Manitoba, US, says: "As apparel manufacturers develop quick response methods, a limiting factor to the overall supply chain can be the textile cloth manufacturing industry. Integrated strategies must be established between the textile supplier, apparel manufacturer, retailer and ultimately, the consumer, to ensure rapid delivery of fabrics to coincide with the time of need." Nygård International with sales in excess of $300 million, manages a apparel supply chain within the US market and other key countries including Korea, Japan, Europe and Indonesia. At the centre of its efficient supply chain management of vast global network of suppliers and customers is installation of EDI or electronic data interchange.

Sheldon Leith, a partner with Ernst & Young's consumer products and retail group also observes: "The key value of automatic stock replenishing through electronic network system is that there's less labour and less stockpiled inventory. Overall, it automates paper-based processes, saves time and energy, which can be reapplied throughout the business."

But how much this electronically enabled stock-replenishment improves fill-Rate and customer satisfaction, which are so crucial in surviving today's volatile market. Consider the case of Wal-Mart, the world's largest retailer. It has been at the forefront of stock replenishing, offering shoppers more than a 98-percent chance of finding a complete selection. Wal-Mart uses Retail Link, a software system that provides vendors with up-to-date access to point-of-sale price and volume information, as well as its inventory positions and forecast of future needs. In the opinion of Narendra Mulani of Accenture and Hau Lee of Stanford University, who studied success formula of Wal-Mart, implementation of Retail Link helps the vendor to position the right inventories, and to interact with Wal-Mart about movement and promotions for products and categories. Also agreed Peter Nygård, Chairman of Nygård International. He found that using EDI within the supply chain is necessary to manage the constant change driven by consumer demand.

Technology has become a core component of virtually every supply chain innovation. The Internet brings immediacy to almost any supply chain event by capturing real-time customer demand, and by maximising visibility into asset status, including location of goods-in-transit, inventory positions, and supplier capacity. Use of technology, even as simple as using e-mail, can sometimes prove very effective. For instance, UK based photography firm Double Red, sends its photos by e-mail rather than by post. Its customer base has increased by 40 per cent because they can now meet tighter deadlines. Music retailers can now make it easy for customer to download music over the Internet rather than post out CDs. It is also cost-effective for software sellers to offer customers the facility of logging on, paying for their software and downloading - all via the company's web site.

E-powered business is estimated to skyrocket to $1.3 trillion in 2005 with the promises of convenience and cost reduction, as predicted by Forester Research group. In parallel, the

Internet and other emerging e-business models have produced expectations that many supply chain problems will be resolved by virtue of these new technology and business models. E-business strategies are supposed to reduce cost, increase service level, increase flexibility, and of course profits, albeit sometime in the future. Various electronic technologies inserted into supply chain give the supreme confidence to entrepreneur. Peter Nygård echoed the same buoyancy when he said, "the company guarantees 100 per cent correct orders delivered within 24 hours or the merchandise is free".

The writer is head of Supply Chain Management, KDS Accessories Division