

Case Study #3: Dell

The commercialization of the Internet in the early 1990s and the introduction of the World Wide Web in 1993 provided Dell with an opportunity to expand rapidly. The configure-to-order model had caused Dell to gain a competitive advantage and become the number one in PC shipments. Dell was able to turn its inventory over every five days and drive all the inventories out of the supply chain by replacing them with information.

The innovative direct sales model strategy brought numerous benefits for the company, namely cost savings that were passed on to Dell's consumers as reduced PC prices. The direct model also helped Dell to increase efficiency in booking and processing of customer orders as most of the processes were automated online. Direct sales to customers enable Dell getting a real time sense of demand information to optimize the rest of its supply chain.

In the beginning of XXI century Dell revise its supply chain design in response to changing technology and customer needs. The company switched to a segmented approach where they offered customers different product's choices, namely, configurable, preconfigured, and ready-to-ship. After more than a decade of tremendous success selling its PCs only online, Dell started to sell PCs in 2007 through Wal-Mart in the United States and the GOME Group, China's largest electronics retailer. Since about 2005, Apple has had considerable success selling its phones and computers through retail stores.

Currently Dell has two supply chain structures that it uses to serve its customers. For its corporate clients some individuals who want a customized personal computer (PC), Dell builds to order. As Dell added the retail channel, whose customers valued low price, its responsive and customized supply chain was no longer aligned with this new channel. Dell had to design a more efficient supply chain that was tailored to serve the low-cost channel using contract manufacturers in low-cost countries, even if it involves longer lead times.

Another interesting aspect is that since Dell assemble Just in Time, the company promotes flexible and sustainable relationships with suppliers to ensure they need to be ready for any raw materials orders at any time, safeguarding customer service level. For this reason, Dell requires its suppliers to concentrate Dell-specific inventory, that is, parts designed to Dell's specifications, near to Dell's assembly plants, in small warehouses called Supplier Logistics Centres (SLCs). Suppliers decide how much inventory to order and when to order based on Dell's target inventory level. Dell records suppliers' deviations from the targets to ensure customer service level. Dell withdraws inventory from the SLCs has needed, on average every two hours.

The Internet allows companies like Dell and Apple to bring new products to market quickly. This is particularly important in the computer and cell phone industry wherein products have short life cycles of a few months. Whereas the Internet allows a new product to be offered as soon as it is produced, the retail channel requires the entire supply chain to be stocked before customers can access the product.

As a result of online sales, total transportation costs in the Dell supply chain are higher than in a supply chain selling hardware through distributors and retailers. Dell sends individual PCs to customers from its factories, whereas a manufacturer selling through distributors and retailers sends large shipments on trucks to warehouses and to retailers. The Dell supply chain thus has higher outbound transportation costs.

Online sales allow Dell to significantly improve its performance for high-value, customized hardware in terms of both responsiveness and cost. For low-cost, standardized hardware, however, the online channel is significantly less attractive because its main strength, inventory reduction through aggregation, is not as valuable for low-cost, standardized configurations. Simultaneously, the weaknesses of the online channel—poorer responsiveness and higher transportation costs—become more significant for low-cost, standardized configurations.

To successfully forecast demand and plan production, Dell maintains a constant flow of data in two information loops: one between customers and the Dell sales team, and the other among sales, procurement, and suppliers. Key metrics are constantly shared with suppliers, including forecasted sales dollars, sales quantities, and parts requirements. In return, Dell receives data about how well suppliers can support these forecasts so as to guarantee Dell's sales team what products it can effectively promote.

Given the information provided and the previous knowledge you have on the company, please discuss the following topics:

1. Discuss the distribution strategies that are implemented by the Group.
2. Discuss about the possible inventory management police applied to Dell's suppliers to ensure JIT production.
3. Correlate the supply chain integration adopted by the company and the demand driven strategies. Comment the possible impact of internet in Dell's Supply Chain.