Bill's Description of a Supply Chain (Chapter 4)

If he was to match the price of a forced air heating system, Bill knew he had to figure out a way to reduce the cost of the parts and materials that went into a system. To figure out how, he had to understand the supply chain that moved his parts from the manufacturer to the end-user. If he could eliminate the middlemen and their price markups, he might get the cost reductions he needed. Bill looked at the notes he had written on how the supply chain works:

The simplest supply chain consists of only two parties – the manufacturer and the end-user. But a direct transaction between these parties is often not practical, and so other parties get involved. The job of these middlemen is to provide needed services such as educating the customer about the product; ordering materials by the gross and selling by the each; holding inventory so the product is available when the customer needs it; and sometimes customizing the product for the customer's specific need or application. .

Subcontractors and general contractors typically buy materials by the project. They buy only the quantity they need for that job, and unless the item is common hardware, they rarely carry any inventory. They also wait to buy until they actually need the materials for the job. So contractors rely on retailers and distributors to have materials on hand, when they need them.

Retailers like Home Depot, or stocking distributors like Templeton Supply, fill this need for many contractors. They carry a large inventory of goods so that a contractor can pick up what he needs, when he needs it. They also answer questions, provide technical advice, and offer 30- or 60-day payment terms. This trade credit is especially important to contractors because it allows them to bill the homeowner and receive payment before they have to pay the supplier. Without trade credit, contractors would have to tie up a lot of capital in accounts receivable or request advance payments from their customers, which many are reluctant to provide.

As Bill read through his notes, he considered the irony of that last statement. Trade credit was an essential service that Templeton offered to contractors, yet it was also something that had brought the company to its knees. Bill knew there had to be a lesson learned here. He returned to his notes.

The retailer, or in this case Templeton, buys materials from a higher-level distributor or, if their purchase quantities are large enough, directly from the manufacturer. Typically, the retail distributor buys high-volume, fast moving items from the manufacturer; these represent maybe 15-20 percent of the total items. The remaining 80+ percent of items carried in inventory are low-volume and slow moving; the retailer has to keep them on hand, but does not want too many on the shelf. The smart retailer buys just enough to cover their immediate needs. Since these order quantities are too small for the manufacturer, they buy them from higher-level distributors who specialize in stocking these types of items.

The next level distributors generally sell only to the wholesale trade (i.e., retailers and other distributors). They typically order direct from the manufacturer, but occasionally from other distributors, particularly if the manufacturer is located offshore. Some specialty items can move through three or four levels of distribution between the manufacturer and the homeowner's contractor.

Sometimes these intermediaries are needed and sometimes they are not. Each intermediary buys the product at one price, adds some value, and resells it at a higher price. Depending upon the nature of the product and the services rendered by the intermediary, the mark-up may be as low as 20 percent or as high as 100 percent. If a specialty item goes through three or four levels of distribution, a part sold by the manufacturer for $1.00 may end up costing the homeowner $5.00 or more. If the customer needs the services provided by the intermediaries, the mark-ups are justified. If not, the mark-ups needlessly inflate the price.

But it is important to make clear that no one in the supply chain is price gouging or earning an exorbitant profit; they are just getting paid for the value (i.e., technical support, inventory, or trade credit) they provide in supplying goods produced by a far-off manufacturer to a local contractor who needs them to complete a job for his customer.

Bill knew that most of his competitors bought their parts from a local distributor, which meant they were paying the mark-up of at least one intermediary. If he could buy most of his parts directly from the manufacturer, he could save at least 20 percent, and likely a whole lot more. It all came down to volume purchasing, and here he faced a chicken and egg problem: To buy direct and get the best pricing, he needed to buy in large quantities. But to afford large quantities, he had to sell his systems in quantity, which meant selling at a low cost. Bill realized that if he was to be successful, he must quickly build his sales volume.