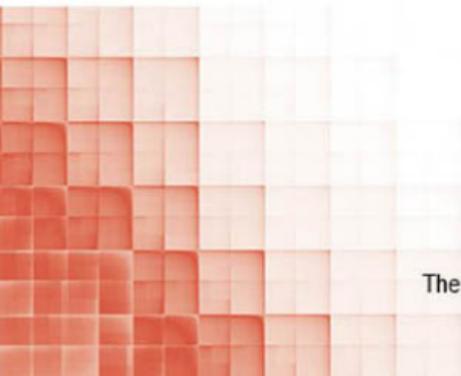


Sherman's Supply Chain Challenge: Stopping the Retailer from Overcharging for Soda

Chuck Munson, Washington State University

PEARSON CASES IN SUPPLY CHAIN MANAGEMENT AND ANALYTICS



The case is reprinted from *The Supply Chain Management Casebook* by Chuck Munson

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Sherman's Supply Chain Challenge: Stopping the Retailer from Overcharging for Soda

Chuck Munson[†]

Shawn Sherman, owner of Sherman's Soda, has reached his wits' end. As producer of the region's most popular liquid beverage, Sherman's Stay-Awake Soda, Shawn has a supply and demand problem. State U. college students, comprising his largest customer base, have been complaining about his high soda prices; meanwhile, Shawn is stuck with excess capacity and excess inventory because his product isn't moving fast enough.

A couple of years ago, Shawn signed an agreement with a regional grocery chain to be the exclusive retailer for Stay-Awake Soda. At the time, Shawn was happy to only have to deal with one distribution channel, and in return the retailer agreed to provide priority shelf space and joint marketing services. The variable production cost per case of 24 cans of soda was \$2.00, so Shawn decided to offer the soda to the retailer for \$3.00 per case—a 50% profit margin seemed pretty good to Shawn.

After an initial start-up period involving numerous promotion activities and free giveaways, the grocery chain settled on a sales price of \$6.00 per case. Sales were brisk indeed, and Shawn ramped up production to meet the stabilized demand of 3,600 cases per month. Shawn was initially happy to be earning \$3,600 per month, but he was

[†] Washington State University, Pullman, Washington, USA; munson@wsu.edu

bothered that the retailer was doubling the wholesale price and earning three times the profit that Sherman's Soda was earning. It was Shawn, after all, who had created the magic addictive and tasty formula that kept his customers alert during those early morning classes and late-night study sessions.

One day, Suzy Walsh, marketing director for the grocery chain, gave Shawn a call. "Students love your drink," remarked Suzy. "But I don't think that we're making all of the money from them that we could. I'm going to keep raising prices each month for six months to see what happens. Once we locate the best price point, we'll both be better off." Shawn hesitantly agreed. He, too, was curious to know how much consumers would be willing to pay.

Table 1 shows the retail prices for Stay-Awake Soda in the ensuing six months, along with the result demands.

Table 1 Retail Pricing Test for Stay-Awake Soda

Month	Retail Price	Demand
October	\$7.00	3,200
November	\$7.50	3,000
December	\$8.00	2,800
January	\$9.00	2,400
February	\$10.00	2,000
March	\$12.00	1,200

At the end of March, Suzy observed the results and determined, "Demand is clearly price-sensitive for this beverage. It looks like my revenue will be maximized if I charge \$7.50."

So for the next two months, monthly demand dropped by 600 units from its original stabilized point. But then Suzy's deputy director, Carol, reminded her that they should be trying to maximize profits, not just revenues. As a recent college graduate, Carol helped Suzy realize that a price point of \$9.00 would be best. So the June price was set at \$9.00, and the retailer's profits grew from \$13,500 to \$14,400 per month. Suzy was happy, and she notified Shawn that she had pinned down a final permanent retail price of \$9.00.

Shawn, however, was fuming. He had sat back for nine months during this pricing test, making less money than before and watching the retailer's profits skyrocket. "This is ridiculous!" said his wife at dinner. "You should be in charge of your drink, not Suzy. Why is her company making all the money? If customers are willing to pay \$9.00, then you need a bigger piece of that action. Go dust off your economics book, and figure out a proper wholesale price to fix this situation! I want you to retire in time to enjoy our dream vacation home before age 80!"

After careful study of the demand data from the past nine months, Shawn realized that his wife was right. Later the next day, he notified Suzy that he was raising the wholesale price to \$8.50. "That'll show her," he mumbled to himself. Suzy was stuck. Carol explained that they could still make money by selling the soda, but they'd have to raise the retail price to \$11.75 to maximize profits. "Well, now we'll be earning a stable \$4,225 per month," noted Carol. "Our windfall was nice while it lasted, but the supplier caught on. It is Shawn's recipe after all."

So, Sherman's Soda was now earning a hefty monthly income of \$8,450, but Shawn was still bothered. He didn't like the fact that customers were paying so much more for his drink than for the national brands, and production had dipped to 1,300 units per month. After some analysis, he decided, "I can double sales volume if the retailer will lower its price to \$8.50. I'm going to lower my wholesale price to \$6.75. Then I'll ask Suzy to lower the retail price to \$8.50. The grocery chain will surely be willing to agree because this will raise its monthly profit to \$4,550, and I'll be making \$12,350 per month. Customers will be happy with the lower prices as well. This is a win-win-win for everyone!"

Unfortunately for Shawn, Suzy did *not* subsequently lower the price to \$8.50 following the wholesale price decrease. Instead, she only lowered the price to \$10.88. Demand rose, but only to 1,648 units. The retailer earned \$6,806, but Sherman's profit fell to \$7,828. Looking at the figures from July to August, Sherman's Soda did worse, the grocery chain did better, and the supply chain as a whole did better. It appeared that the only way to help the supply chain and help his customers was to hurt himself. Shawn was frustrated. He wanted

to lower prices for consumers and increase overall demand, but when he tried to do that by lowering the wholesale price, the retailer gained, and the retail price didn't drop nearly low enough.

So, Shawn reluctantly raised the wholesale price back up to \$8.50. But he's left with a nagging feeling that both firms are leaving money on the table. What is the best retail price and resulting monthly demand? And how can Shawn encourage the retailer to lower the retail price to that level to boost demand without eating into Sherman's own profits? What should his wholesale price be? Is the only alternative for Sherman's Soda's to sell directly to consumers and cut out "the middle man?" Shawn doesn't have the time, resources, or energy to make that switch. On the other hand, he really wants to buy that dream vacation home before he retires.

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