

Miracle Shield Auto Finish is the best car polish and paint protection available anywhere. It is a substitute for car wax, but it protects and maintains the shine of a car's finish at least 20% longer than regular car wax. It is sold in a bottle that is adequate for one application to one car. Regular wax, which is sold in a container that is enough for two applications, costs \$8.00/container.

About half of all cars have paint that has oxidized at the time wax is to be applied (the surface is rough), requiring cleaning with an oxidation cleaner before one can apply regular car wax. Oxidation cleaner costs \$5.00 per bottle (good for one application) and can be applied in about the same amount of time required to apply either an oxidation cleaner or regular wax, about two hours. An additional advantage of Miracle Shield, however, is that it both removes the oxidation and shines the car's surface in one step. Consequently, Miracle Shield can be applied directly to a car's surface that is already highly oxidized.

## Miracle Shield Auto Finish

1. Estimate the economic value of Miracle Shield by segment. Assume that Miracle Shield is the only alternative to car wax available in this market. You may assume that purchasers clean and wax their own cars, and that they value their time and labor at \$15 per hour.
2. Which pricing strategy do you recommend they pursue?

## Economic Value Estimation: No Oxidation Segment

- **CRV:  $\$8.00/2 = \$4.00$**
- **DV:**
  - Materials:  $20\% \times \$4 = \$0.80$
  - Labor:  $20\% \times (2 \times \$15) = \$6.00$
  - Total:  $\$6.80$
- **TEV:  $\$10.80$**
- **Price?**
  - $\$4.00 + \text{share of differential value:}$ 
    - For example,  $20\% \times 6.80 = 1.36, + \$4 = \$5.36$
    - Or  $50\% \times 6.80 = 3.40, + \$4 = \$7.40$

# Economic Value Estimation: Oxidation Segment

## ■ CRV:

- Car Wax:  $\$8.00/2 = \$4.00$
- Oxidation Cleaner:  $\$5.00$
- Total:  $\$9.00$

## ■ DV:

- Oxidation Cleaner Labor:  $2 \times \$15.00 = \$30.00$
- Materials:  $20\% \times \$4 = \$0.80$
- Labor:  $20\% \times (2 \times \$15) = \$6.00$
- Total:  $\$36.80$

## ■ TEV: **\$45.80**

## ■ Price?

- $\$9.00$  + share of differential value
  - For example,  $20\% \times 36.80 = 7.36$ , +  $\$9 = \$15.36$
  - Or  $50\% \times 36.80 = \$18.40$ , +  $\$9 = \$27.40$

## Which Pricing Strategy to Pursue?

- Assume we are considering prices of \$7.40 or \$27.40
  - Assume there are 100 customers, of which half need oxy
  
  - **Low Price Strategy**
    - Oxy:  $50 * \$7.40$
    - Non-Oxy:  $50 * \$7.40$
    - Total \$740
  
  - **High Price Strategy**
    - Oxy:  $50 * \$27.40$
    - Non-Oxy:  $0 * \$27.40$
    - Total \$1,370
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