

Case study report: odi

Education



Case Study Report: Optical Distortion, Inc. (A)

When it comes to appealing characteristics, the three types of chicken farms are the same: less cannibalism, less feed cost, and less the temporary weight loss, and the retardation of egg production. From the perspective of cannibalism, which is originally 25% showed inexperience, flock mortality is reduced to an average of 4.5% when the ODI lens is used. On the contrary, the debeaking makes the mortality for cannibalism from 25% to only 9%, which is higher than the contact lenses used. In other words, farmers can save more 4.5% (9% minus 4.5%) chickens on their farm. In other words, farmers can save \$2.40(the price per hen)*4.5%*the number of chickens on the farm. From the perspective of less feed cost, the debeaking chicken only can eat the feed in the trough at least 3/8" deep, while the ODI lens used chicken only can eat the feed in the trough below 3/8" deep. At \$158 per ton for chicken feed, this would represent considerable annual savings, especially for large farms. From the perspective of less the temporary weight loss and the retardation of egg production, because of the fewer cannibalism and the trauma resulting, farmers can get more eggs. When it comes to unappealing characteristics, the details are as below.

Farm Types	Unappealing Characteristics	Small Farms	Labor cost	Lens cost
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The number of birds is too small to use the new technology

Medium Farms	Yearly cash flow is only \$375,000
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The melting point of the hydrophilic polymer is very close to the sterilization temperature

Not reused and the lens cost	Large Farms	Not reused	Lens cost
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As regards geographic areas, ODI should focus its efforts on California. Given the density of large farms in California (flock size of 50, 000 or greater), it seems prudent not only to perform the initial product introduction there but to focus the entire first year of business in this single West Coast state. The first year's planned production volume is approximately 20 million, essentially the same as California's chicken population. Success in this region could later force farms in other states to implement the lens simply as a means of staying competitive. As regards the target segment, it would seem that the focus should be initially on farms with a flock size of 50, 000 and over, which means the large farms. Since this would limit the overhead (fixed costs) needed to service these accounts (fewer sales and technical experts required). Also, by focusing on large farms, the sales team could interface with the farms directly, and there would be no need for a "middle man" to be involved in product distribution. Avoiding this intermediary would help keep costs down. For ODI, pricing considerations for a pair of lenses are as below.

Item	Fixed Cost

Advertising in Trade Publications	\$100, 000
Headquarters Expenses	\$184, 000(for the volume of 20 million pair)
Regional Office and Warehouse	\$196, 000
Costs of Molds	\$12, 000 x 3 = \$36, 000 (3 molds are needed to produce 21, 600, 000 pair annually)
Licensing Agreement with New World Plastics	\$25, 000 (per year, must be paid for the first and second year of production)
Item	Variable Cost
Per pair of lenses	\$0. 032

ODI Cost(per year): $TC = FC + MC$ TOTAL COST = $[(\$100, 000 + \$184, 000 + \$196, 000 + \$36, 000 + \$25, 000) / (50\% \text{ of } 475600000)] + 0.032 = \0.055 (5.5 cents) per pair Farmers Saving when using ODI lens(per year):

Item	Saving
Less Mortality	$\$2.40 \times (9\% - 4.5\%) = 0.108$
Less retardation of egg production	$0.3/12 = 0.044$
Less feed cost	$(0.2446 - 0.2368) \times 3/8 \times (\$158/2000) \times 365 = 0.084$

TOTAL SAVING = $\$0.108 + \$0.044 + \$0.084 = \0.236 (23.6 cent). The minimum price that ODI considered is 8 cents per pair, so the price stage is from 8 cents to 23.6 cents, and the ODI should adopt the price policy on entry which is set the price near 23.6 cents per pair. For the realistic goal for ODI by 1978 is the 50 percent penetration of such farms, when means ODI wants to reach the 50 percent of 470.8 million pairs, that is, 235.4 million pairs of the lens be sold and used in the farms.