Micro economics fiori pasta

Economics

Meet the Fiorifamilyand its Fiori Pasta Company. Papa Don is the president, son Tony is vice-president of sales, and daughter Gina is vice-president of production. Fiori Pasta produces high-quality pasta products. It has estimated its demand curve for its pasta to be P= 39. 898-0. 03757Q, This demand function has been given in terms of price. So to find the Total Revenue (TR) you need to multiply the above equation into Q (which is your quantity). TR= 39. 898Q-0. 03757Q2 MR= 39. 898-0. 0751Q where Q represents thousands of cartons (each containing five dozen packets of pasta) demanded per year by its wholesale customers.

Its cost of producing this spaghetti has been estimated to be: TC = 2, 500 + 12Q + 0. 01538Q2, where TC is measured in thousands of dollars. Fiori is having a management meeting to reconsider its pricing strategy. Its current price for the spaghetti is $27. 50 per carton. Since the current price is given we can estimate the current quantity to be 330 , 000 units. Don wants to maximize sales volume subject to earning a target profit of $500, 000 per year. Tony wants to maximize sales revenue since his bonus payment varies directly with sales revenues.

Gina wants to maximize profits so that the company can afford to install the latest high-tech manufacturing equipment. You have been hired to give an impartial analysis of pricing strategy for Fiori Pasta under the assumption that you will pursue a single price policy.

- As the consultant for Fiori Pasta, what price policy would maximize profits?
- What price policy will be chosen Tony Fiori?

- What price policy will Don Fiori choose? (Hint: plot the TR, TC, and Profit Function)

Prepare your report for presentation at the Fiori management meeting and make your case for one particular price policy. For Revenue Maximization- Toni’s Idea

MR= 0 MR= 39. 898-0. 0751Q= 0 When you solve for this you get the revenue sales maximizing quantity as Q= 531, 000 at a price of $19. 9 (this can be achieved by substituting the quantity of 531 into the demand equation given) Though in this method we are actually making losses as the price is low and the quantity isn’t enough to make up for the lost margin. Profit Maximization: Gina’s preference MR= MC MC= 12+0. 0308Q MR= Given above When you equate them to eachother you get the following profit maximizing quantity of 263, 437 cartons at these are to be sold at a rice of $30 (you get this price by substituting the profit maximizing quantity into the emand equation given at the beginning) Quantity maximizing to achieve a profit 500, 000 – Don’s preference Profit= Total Revenue- Total cost = 39. 898Q-0. 03757Q2-2500-12Q-0. 01538 = 52. 95Q2+27889Q-300, 000 On solving this quadratic equation (which is basically a function on excel, she doesn’t expect anyone to actually solve it, though there is an equation) You get two quantities= 376 and 151 So for the quantity of 376 we have a price of $25. 75 and $34. 24. I will explain this better later today. Hope it helps.