

Dots Exercise

1. Open the Excel file Dots_MER

2. Click on the tab titled “Unit Revenue and Cost Analysis”. This tab shows a typical demand curve, marginal revenue curve, variable cost curve, average fixed cost and average total cost. These are the same type curves you see in principles of microeconomics. The data table at the bottom contains the data on which the curves are based. You may want to review your understanding of the curves and the associated concepts. You can skip this step if you are comfortable with the concepts.

3. Click on the tab titled “Rev-Cost-Profit Graph”. This tab shows the graphs for Total Revenue, Total Variable Cost (Cogs), Gross Profit, Fixed Marketing Cost, Other Fixed Cost, and net profit. Marketing cost is treated as fixed cost but it can be changed by management discretion; therefore it is a discretionary fixed cost. We can therefore do a “What If” analysis to visualize the effects of a change in marketing cost or expenditure. Study the curves and the data table below to make sure you understand the graphs.

4. Click on the tab titled “Pro-Forma P&L Data”. This tab contains the data from which the demand and cost curves are plotted. It shows projected (Pro-Forma) income (Profit and Loss) estimates for each of sixteen marketing plans. The pink panel contains detailed financial statement data in accounting format. All plans have the same levels of marketing cost and fixed cost but the price per unit varies from a high of \$72 for plan 1 to a low of \$22 for plan 16. Naturally quantity increases as price is lowered so total variable cost and total revenue change accordingly. The green panel shows summary result for the sixteen different plans that have the same marketing cost (expenditure) but different prices. Note that plans 1,2, 15, &16 lose money.

5. So let’s pose a problem. Assume the company pursues a skimming price policy to secure as much market penetration as possible and that competition sells at a price of around \$32 (see red cell in pink panel). Our company cannot make a profit at this price. We lose \$69 (See dark green cell in light green panel). But, what if our company increases advertising and sales effort from \$25 to \$50 and keeps the price at \$32. Suppose further that management judges this combination of higher marketing effort and a price of \$32 will produce unit sales of 17 units.

In the pink panel go to cell P8 and change the marketing cost from \$25 to \$50; change cell P4 from 14 to 17 Units. Observe what happens to profit in the pink panes and on the Pro-forma P&L statements in the Green summary panel. Then click on the tab titled “Rev-Cost-Profit Graph” and observe the changes. You can do a similar “what if analysis” on all marketing plans,