

RICKS'S REQUEST

Since we are predicting energy, we will calculate profit by assuming attendance is a function of price, and merch sales are a function of the energy predicted by your model.

$$\text{Profit} = (\text{Price} \times \text{Attendance}) + (\text{Energy} \times \text{Merch} \times \text{Attendance}) - \text{Costs}$$

This formula will give us the optimal price on the basis of crowd energy prediction made by our final model.

We assumed that attendance is directly proportional to crowd energy and price is inversely proportional to crowd energy.