Zach's Garage Case

10/16的课前面有简单过一下要求。

Assignment 3: Pricing Analytics
(Individual assignment: 12% of your course grade)

Due on 10/28 at the beginning of class

Case & Data: The case and the Excel data file for this homework are available on Blackboard and on the Decision Pros website.

Zach wanted to know how people would respond if he starts to collect an entrance fee for his popular concert hall "Zach's Garage". He also has no idea how much he should charge, whether he should offer a student discount, or keep his concert hall free for students, and etc. Please use the analyses learned in class to help Zach finding answers to these questions.

Using the "ME-XL/Pricing/Run Analysis" option in the menu, and using the purchase likelihoods reported in the spreadsheet, answer the following questions:

Hint: to make this assignment simpler, you DO NOT need to round the optimal price up or down to a realistic price point. Simply use the optimal price point provided by the ME-XL Pricing Model is sufficient.

Question 1 (10 points): Assuming that the survey data contain a representative sample of Zach's Garage's customer base, at what price level would Zach maximize expected profit per month? Assume that the maximum capacity of Zach's Garage is about 250 per night, with an average of 12 events per month. And Zach's monthly cost is $3,000. What would be the total monthly attendance under this pricing strategy? What would be Zach's expected profit per month under this pricing strategy?
Hints: a) Please make sure that you use the following relationship between the Likert Scale and Associated Probabilities in your calculations. These are based on Zach's estimates.

Scale Options	1	2	3	4	5
Associated Probabilities	0%	0%	10%	40%	100%

*b) The total market size (per month) is: 250 (average attendance per night)*12 (average number of concerts per month) = 3,000.*

*c) To compute total expected revenue, use the formula TOTAL MARKET SIZE * LIKELIHOOD OF PURCHASE * PRICE.*

Question 2 (10 points): Zach does not want to lose the youngest customers, who are often students. Assuming that he does not charge an entrance fee to people 21 or younger, what would be the optimal pricing strategy to maximize his profit? What would be the total monthly attendance under this pricing strategy? How much would Zach's profit be at this price? Would Zach be able to breakeven?

Hints: a) Sort respondents by age, and apply the pricing model on those customers 22 years of age or older only.

b) When computing total profit, note that a portion of the total expected market will pay no entrance fee. Assume that 1/3 of the attendees are 21 years old or younger.

Question 3 (10 points): Assume that instead of allowing the youngest customers to attend for free, Zach also considers the option of charging a lower price to people 21 or younger by offering a discount. At what price would Zach maximize revenue from the younger segment of the population? What would be the total monthly attendance under this pricing strategy? Compare the uniform pricing strategy in Question 1, how much additional profit would this two-tier pricing plan bring in?