

Dynamic Pricing

You are in the business of purchasing last minute tee times from a local golf course at a low cost and reselling them to your customer base. The local golf course typically sells them to you two days before the date/time of the tee time. To be more specific, suppose it is Monday morning and Mike, the owner of the local golf course, offers to sell you 1 slot to be used on Wednesday at 8:00am. You can sell this slot to a single golfer. Figure 1 summarizes the likelihood you will sell the slot if you charge a certain price each day. What price should you set each day to maximize the amount of profit from the slot? What is the maximum you would be willing to pay Mike for the slot?

Price	Probability of selling the slot at the given price on Monday	Probability of selling the slot at the given price on Tuesday
\$10	0.51	0.85
\$20	0.47	0.79
\$30	0.42	0.67
\$40	0.37	0.47
\$50	0.26	0.31
\$60	0.18	0.08

Figure 1: Table of probabilities of selling the slot at a given price for each day