Capstone Exercise

MyITLab® Grader

You are on the budget committee for the formal Valentine's Day Ball at your university. The ball includes dinner and dancing. Your committee prepared a tentative budget outlining income and expenses. The primary sources of income are contributions from student organizations and ticket prices. Expenses include the actual cost of the dinner, facilities, parking, and other costs at a luxurious hotel in the city. Your goal is to balance the income and expenses, decide on the most appropriate ticket price per student, and ensure your budget falls within the limitations you must work with.

Goal Seek

Currently, the estimated budget has a deficit. The fastest way to try to reconcile the income and expenses is to use Goal Seek. The goal is to break even, that is, to have a zero balance. Your instinct is to adjust the ticket price per person to reach the goal.

a. Open *e06c1Dance* and save it as **e06c1Dance_LastFirst**.

b. Use Goal Seek to achieve a $0 balance by changing the ticket price per person.

c. Enter the value of the ticket price per person variable in the Q&A worksheet.

One-Variable Data Table

You believe that between 200 and 500 students will attend. Because the ticket revenue, chair setup, catering cost, and valet parking expenses are dependent on the number of students, you decide to create a one-variable data table to compare the budget effects based on different numbers of students attending.

a. Start in **cell E3**. Complete the series of substitution values ranging from 200 to 500 at increments of 20 students vertically down column E.

b. Enter references to the total revenue, total expenses, and balance formulas in the correct location for a one-variable data table.

c. Complete the one-variable data table, and then format the results with **Accounting Number Format** with two decimal places.

d. Apply custom number formats to make the formula references appear as descriptive column headings. Bold and center the headings and substitution values.

e. Answer questions 2 through 4 on the Q&A worksheet. Save the workbook.

Two-Variable Data Table

The break-even point for the one-variable data table is identical to the current model because all other variables are held constant. You want to compare the balances of different combinations of attendees and ticket prices per person using a two-variable data table.

a. Copy the number of attendees substitution values from the one-variable data table, and then paste the values starting in **cell E22**.

b. Type **$50** in **cell F21**. Complete the series of substitution values from $50 to $100 at $10 increments.

c. Enter the reference to the total income formula in the correct location for a two-variable data table.

d. Complete the two-variable data table and format the results with **Accounting Number Format** with two decimal places.

e. Apply a fill color to the cells closest to break-even without creating a deficit.

f. Apply a custom number format to make the formula reference appear as a descriptive column heading. Bold and center the headings and substitution values.

g. Answer questions 5 and 6 on the Q&A worksheet. Question 6 requires three combinations to list. Save the workbook.

Scenario Manager

You negotiated different cost per meal and ballroom rental rates based on 500, 400, 300, or 200 attendees. You estimated tentative ticket prices per attendee. To help you decide the target number of attendees, you need to use Scenario Manager.

a. Create a scenario named **500 Attend**, using the number of attendees, meal cost per person, ticket price per person, and ballroom rental variables as the changing cells. Enter these values for the scenario: **500**, **15.95**, **75**, and **12500**.

b. Create a second scenario named **400 Attend**, using the same changing cells. Enter these values for the scenario: **400**, **17.95**, **85**, and **12500**.

c. Create a third scenario named **300 Attend**, using the same changing cells. Enter these values for the scenario: **300**, **19.95**, **90**, and **11995**.

d. Create a fourth scenario named **200 Attend**, using the same changing cells. Enter these values for the scenario: **200**, **22.95**, **95**, and **11995**.

e. Generate a scenario summary report using the total revenue, total expenses, and balance as the results.

f. Clean up the summary as discussed in the chapter.

g. Answer questions 7 through 9 on the Q&A worksheet. Save the workbook.

Use Solver

You realize a perfect break-even point may be unrealistic, but you will donate any positive balance to charity. For this analysis, you will use Solver to keep the expenses constant while changing the number of attendees and ticket price per person.

Payment Options

SOFT SKILLS CASE S

You have been hired by a debt management company and given the task of working with recent graduates to help manage student loan debt. While the goal of your company is to make money, they value the importance of transparency in payment options. As part of your daily tasks, you will use Excel to build scenarios based on payment options to determine the best repayment choice for each graduate.

Open the file *e06b4Repayment*. Save the file as **e06b4Repayment_LastFirst**. Use Scenario Manager to create three scenarios to share with your client. Name the first scenario **Early payment**. Select **cell C5** as the change cell and use the value **8**. Create a second scenario named **Normal payment**. Select **cell C5** as the change cell and use the value **10**. Create a third scenario named **Extended payment**. Select **cell C5** as the change cell and use the value **20**. Create a scenario summary report using **cells C7** and **F3**. Be sure to format the scenario report accordingly, removing the extra row and column created by Excel. The client has expressed that he is most comfortable with a repayment plan that is no more than 7% of his monthly income. Based on the scenarios you created, enter the repayment plan you recommend in **cell E12.** Once completed, save and close the workbook, and submit it based on your instructor's directions.