

2.26 (LO 3) Excel Contribution format income statement; decision making Harris Horticulture provides and maintains live plants in office buildings. The company's 850 customers are charged \$40 per month for this service, which includes weekly watering visits. The variable cost to service a customer's location is \$20 per month. The company incurs \$2,000 each month to maintain its fleet of four service vans and \$3,000 each month in salaries. Harris pays a bookkeeping service \$3 per customer each month to handle all invoicing and accounting functions.

Required

- Prepare Harris's contribution format income statement for the month.
- What is the expected monthly operating income if 150 customers are added?
- Mr. Harris is exploring two options to reduce the **annual** bookkeeping costs.

Option 1: Renegotiate the current contract with the bookkeeping service to pay a flat fee of \$20,400 per year plus \$1 per customer per month.

Option 2: Hire a part-time bookkeeper for \$27,000 per year to handle the invoicing and simple accounting. He would need to pay \$5,000 per year to have taxes and year-end financial statements prepared.

Compare the current bookkeeping cost with the two options under consideration at customer levels of 850, 1,000, and 1,100.

- Besides the bookkeeping costs incurred, what should Mr. Harris consider before he makes a change in bookkeeping services?

Cases

C&C Sports Continuing Case

2.27 (LO 1) Identify cost behavior Identify each of the following costs incurred by Universal Sports Exchange in terms of its cost behavior—variable, fixed, mixed, or step.

Required

- Monthly sales staff payroll of \$650 plus 5% sales commission on jerseys
- \$100 monthly rental for credit card processing equipment
- Cost of goods sold of \$22.00 per jersey
- The cost of price tags attached to each jersey
- Inventory insurance that costs \$2 per \$1,000 of sales
- Website hosting cost of \$25 per month

2.28 (LO 2, 3) Cost Equations and Contribution Format Income Statements Refer to Exhibit 2.11 on page 2-21.

Required

- What is Universal Sports Exchange's operating profit equation?
- If Universal Sports Exchange sells 55,000 jerseys, what total expense will be reported on the income statement?
- The *Daily News Journal* has approached Martin Keck, Universal's vice president for sales, with a \$20,000 annual ad campaign. If Martin accepts the ad campaign, what will change in Universal's operating profit equation?
- Assume that Martin Keck accepts the *Daily News Journal's* ad campaign and as a result Universal sells 65,000 jerseys. Prepare the contribution format income statement for the year.

2.29 (LO 1) Calculate expected costs Bohlander Botanicals develops hybrid tea roses. A relative newcomer to the field, Bohlander is looking for innovative ways to advertise its products to potential customers. Rose Mayfield, sales manager and avid online shopper, wonders about advertising the

company's roses on various gardening websites. She has contacted Kimland Media, Inc., an advertising firm specializing in Internet advertising campaigns, to explore some options.

After meeting with Rose, Sami Landon, regional sales coordinator, has suggested that Bohlander use a targeted marketing strategy by placing banner ads on a few gardening websites. Bohlander would pay for the service based primarily on the number of ad impressions (the number of times the ads are shown). Using past campaigns as a guide, Sami has prepared the following quarterly estimate for Bohlander.

Banner ad development (6 banners per quarter)	\$7,200
Banner ad placement	\$1.50 per thousand impressions
Estimated ad impressions	1,000,000
Banner ad click-throughs	\$0.60 per click-through

From past experience, Kimland Media estimates that 1% of all viewers will “click through” the banner ad to Bohlander's website. Of those viewers who click through, Kimland estimates that 20% will actually make a purchase.

Required

- What is the expected total cost per quarter of Bohlander's Internet advertising campaign?
- Given Sami's cost estimates, what is Bohlander's expected cost of acquiring a new customer through the campaign?
- Using the information you just calculated, what is the estimated cost to get one more person to click through and make a purchase?

2.30 Ethics (This is a continuation of Case 2-29) On March 15, Jeff Blake, Kimland Media's sales director, stopped by Sami Landon's cubicle. “Sami, I've been reviewing your accounts, and they aren't generating as much revenue as we had hoped. If you want to achieve your quota for the quarter, you're going to have to bump it up a bit.”

Sami thought for a few minutes about how she might increase her revenue pool. She could sign some new customers, but she didn't have any strong leads, and developing the ones she had would take too much time. She couldn't create new banner ads for her current customers. Then it dawned on her: She could increase her variable revenue through increased click-through counts on her existing banner ads.

Sami got on the phone and called her friends and family members. “I need a small favor. Would you go to www.tearosegarden.com and look for the Bohlander ad? Then just click through the ad as many times as you can.”

Required

- Was it ethical for Sami to enlist the help of friends and family to drive up the number of click-throughs to Bohlander's website? Why or why not?
- Would your answer to part (a) change if Sami's friends and family members actually made a purchase from Bohlander? Why or why not?
- What impact did Sami's actions have on Bohlander Botanicals?

Data Analytics Problems

2.31 (LO 2) Cost estimation using data analytics and Excel The city of Brownswood is trying to understand its road repair costs. As a starting point, Mark Winston, the city's finance manager, asked public works manager Rachel Morris to gather relevant data. Rachel provided Mark with a data set containing a list of completed pothole repair work orders and the related costs for a recent week. Mark has asked you to analyze this data set and provide some initial insights about the city's road repair costs.

The Excel data files for answering this problem can be found in WileyPLUS.

Required

- Prepare a visualization of the data set using the CHART tool in Excel to create an XY scattergraph chart. Comment on what the visualization reveals.