**Food and Beverages at Southwestern University Football Games**

Southwestern University (SWU), a large state university in Stephenville, Texas, 30 miles southwest of the Dallas/Fort Worth metroplex, enrolls close to 20,000 students. The school is the dominant force in the small city, with more students during fall and spring than permanent residents.

A longtime football powerhouse, SWU is a member of the Big Eleven conference and is usually in the top 20 in college football rankings. To bolster its chances of reaching the elusive and long-desired number-one ranking, in 2013 SWU hired the legendary Billy Bob Dillon as its head coach. Although the number-one ranking remained out of reach, attendance at the five Saturday home games each year increased. Prior to Dillon’s arrival, attendance generally averaged 25,000–29,000. Season ticket sales bumped up by 10,000 just with the announcement of the new coach’s arrival. Stephenville and SWU were ready to move to the big time!

With the growth in attendance came more fame, the need for a bigger stadium, and more complaints about seating, parking, long lines, and concession stand prices. Southwestern University’s president, Dr. Marty Starr, was concerned not only about the cost of expanding the existing stadium versus building a new stadium. Starr told the stadium manager, Hank Maddux, to develop a break-even chart and related data for each of the centers.

He instructed Maddux to have the food service area break-even report ready for the next meeting. After discussion with other facility managers and his subordinates, Maddux developed the table below showing the suggested selling prices, and his estimate of variable costs, and the percent revenue by item. It also provides an estimate of the percentage of the total revenues that would be expected for each of the items based on historical sales data.

Maddux’s fixed costs are interesting. He estimated that the prorated portion of the stadium cost would be as follows: salaries for food services at $100,000 ($20,000 for each of the five home games); 2,600 square feet of stadium space at $3.00 per square foot per game; and six people per booth in each of the six booths for 5 hours at $10 an hour. These fixed costs will be proportionately allocated to each of the products based on the percentages provided in the table. For example, the revenue from soft drinks would be expected to cover 20% of the total fixed costs.

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| Item | Selling Price/unit | Variable Cost/unit | Percent Revenue |
| Soft drink | $2.50 | $0.65 | 25% |
| Coffee | $2.00 | $0.40 | 20% |
| Hot dogs | $2.50 | $1.20 | 20% |
| Hamburgers | $3.00 | $1.40 | 20% |
| Popcorn | $3.00 | $1.90 | 10% |
| Misc. snacks | $1.50 | $0.80 | 5% |

Maddux wants to be sure that he has a number of things for President Starr:

1. The total fixed cost that must be covered at each of the games;
2. The portion of the fixed cost allocated to each of the items;
3. What his unit sales would be at break-even for each item—that is, what sales of soft drinks, coffee, popcorn, hot dogs, and hamburgers are necessary to cover the portion of the fixed cost allocated to each of these items;
4. What the dollar sales for each of these would be at these break-even points; and
5. Realistic sales estimates per attendee for attendance of 60,000 and 35,000. (In other words, he wants to know how many dollars each attendee is spending on food at his projected break-even sales at present and if attendance grows to 60,000.)

He felt this last piece of information would be helpful to understand how realistic the assumptions of his model are, and this information could be compared with similar figures from previous seasons.

**Discussion Questions**

1. Prepare a brief report with the items noted so it is ready for Dr. Starr at the next meeting.
2. What is your recommendation concerning the ability of the food service to be self-supporting?
3. Mr. Maddux is concerned whether the food service items are the correct items. What do you recommend concerning the items for sale?

Adapted from J. Heizer and B. Render. (2000). *Operations Management* (6th ed.). Upper Saddle River, NJ: Prentice Hall, pp. 274–275.