

Financial Management

Break-Even Analysis

Break-even analysis shows at what point the meeting income will cover expenses. If the financial goal is to break even, it allows the projection of required attendance, number of exhibitors, sponsorship income, etc. needed to achieve that goal. If the meeting is designed to show a profit, that amount must be added as an expense. When the meeting breaks even, the profit will have been realized.

There are two ways to conduct a break-even analysis:

1. Break-even units

$$\text{break-even units} = \frac{\text{total fixed expenses}}{\text{price} - \text{variable cost per unit}} \\ \text{(contribution margin)}$$

- *fixed expenses* are those expenses that do not vary based on the number of attendees (ex., speaker fees)
- *price* is usually the attendee registration fee
- *variable costs per unit* are per person costs, or costs that change based on the number of people attending
- *contribution margin* is a term used to identify the amount of the registration fee that is contributed to covering fixed or overhead costs (price minus per person costs)

Example:

If a registration fee of \$200 is used to determine the income budget, and fixed costs of \$20,000 and per person (variable) costs of \$75 are used to determine the expense budget, the break-even units (number of attendees) will be 160.

$$\text{break-even units} = \frac{\$20,000}{\$200 - \$75} = \$160$$

In this case, the income and expense budgets should be based on 160 attendees.

2. Break-even price

If the registration fee has not been determined, calculate the break-even price.

$$\text{break-even price} = \frac{\text{total fixed expenses} + \text{variable costs}}{\text{number of attendees}}$$

Using the above example:

$$\text{break-even price (registration fee)} = \frac{\$20,000}{160} + \$75 = \$200$$

Source: *Professional Meeting Management, third edition*, published by the Professional Convention Management Association