**Module 2 - Case**

**COST–VOLUME–PROFIT ANALYSIS**

**Assignment Overview**

**The Annie Smith Dance Center**

The Director of Annie Smith Dance Center is asking for assistance with the financial aspects of running a professional group of performers. She wants financial information presented in an easy to read format and a better understanding of the profitability of the concerts and the organization as a whole.

The Annie Smith professional group features three styles of dance concerts each year. Two of the dance concerts showcase a different genre. The third performance is a Christmas Spectacular, which is the most popular and is therefore scheduled every year. The table below provides information about expected ticket sales for the performances.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Lower Orchestra Section (A)** | | | **Upper Orchestra Section (B)** | | |
| **Descriptions** | **No. of Seats.** | **Ticket Price** | **Tickets sold per performance** | **No. of seats** | **Ticket Price** | **Tickets sold per performance** |
| Hip-Hop Performance | 150 | $85 | 100% | 450 | $50 | 90% |
| Jazz and Tap Dance | 150 | $85 | 100% | 450 | $50 | 60% |
| Christmas Spectacular | 150 | $125 | 100% | 450 | $50 | 100% |

Ms. Smith has prepared a tentative schedule for the coming season. The table below also shows the type and number of performances and direct cost per type of concert.

|  |  |  |
| --- | --- | --- |
| **Descriptions** | **Number of Performances** | **Cost per Dance Concert** **(direct fixed costs)\*** |
| Hip-Hop Concert | 10 | $48,000 |
| Jazz and Tap Dance | 5 | 86,000 |
| Christmas Spectacular | 20 | 22,000 |
|  |  |  |
| Total Direct Fixed Costs |  | $156,000 |

\*Examples of direct fixed costs are costumes, rehearsals, royalties, guest artist fees, choreography, and salaries of production staff, music, and wardrobe for each of the concerts. This amount does not change with the number of performances.

Additional costs:

Variable costs associated with each performance are shown below.

|  |  |
| --- | --- |
| Musicians | $6,100 |
| Rental of auditorium | 2,500 |
| Dancers' compensation | 6,700 |

Annual general administrative and operating costs for the dance center are:

|  |  |
| --- | --- |
| Administrative staff | $185,000 |
| Insurance | 25,000 |
| Marketing | 115,000 |
| General office expenses | 90,000 |

**Case Assignment**

**Required:**

**Computations (use Excel)**

* Summarize key financial information in a table as shown below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Title** | | | | | | | |
|  |  |  |  |  |  |  |  |
| **Name of Dance Concert** | **Revenues/** **Performance** | **Variable Costs/** **Performance** | **Contribution Margin/** **Performance** | **Number of Performances** | **Total Contribution/** **Type of Dance Concert** | **Direct Fixed Costs** | **Segment Margin/** **Type of Concert** |
| 1. |  |  |  |  |  |  |  |
| 2. |  |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |

* Use the information in the table you completed to compute the number of performances required to break even for each concert. Do not include general and administrative expenses. These are separate computations for each dance concert.
* Compute break even for the organization as a whole (include all fixed expenses) and express the result in revenues instead of the number of performances.
* Ms. Smith wants the Dance Center to generate at least $200,000 in operating profit. What level of revenues does the performance group need to achieve to meet this goal? Prepare an income statement in good format to support the computations.
* Give a recommendation about changes Ms. Smith can implement to achieve the target profit. Support your idea with computations.

**Memo (use Word)**

Write a 4- or 5-paragraph memo to the owner of the dance center to assist her in interpreting the financial analysis. Start with an introduction and end with a recommendation. Each of the four or five paragraphs should have a heading.

**Short Essay (use Word)**

Start with an introduction and end with a summary or conclusion. Use headings.

* What are some shortcomings of multi-product even analysis?
* How does demand and resource constraints affect this type of analysis.

**Assignment Expectations**

Each submission should include two files: (1) An Excel file and (2) a Word document. The Word document shows the memo first and short essay last. Assume a knowledgeable business audience and use required format and length. Individuals in business are busy and want information presented in an organized and concise manner.