**Maryland Home and Community-Based Services (MHCBS)**

Maryland Home and Community-Based Services (MHCBS) is considering a major expansion that will enable it to attract a different clientele to its organization.  Currently, they serve only 34% of the frail elderly seniors and persons with disabilities in the local area.  The new chief CEO would like the organization to expand its revenue stream by investing in a senior multipurpose center serving healthy seniors by offering them arts and crafts and health and wellness programs.  The center will also contain an Internet café offering nutritious breakfast and lunch options.

The CEO has commissioned a needs assessment, and the study’s results reveal that there are approximately **120 seniors** in the local community who are interested in this center and the CEO expects growth of the aging population to be at least 10% each year.  Cost growth across all areas of expense is expected to rise by 5% each year.  The CEO has presented her proposal and financial information to the Board of Directors, and they have advised her that they are in full support of her strategy only if the program is a benefit to the community and if the organization can recoup its investment in **five years**.  The CEO has asked you if this can be achieved.  Based on the information presented in the scenario, calculate the two analyses and explain, in a brief memorandum to the CEO, their implications.

**1. Break-even volume = Total fixed costs / (Average charge per client – Average variable cost per client)**

Monthly Fixed Costs

* Utilities $590
* Health/Wellness Staff $2,500
* Arts/Crafts Staff $2,000
* Supplies $800
* Fitness Equipment Maintenance Contract $200

Variable Costs

* Monthly Lunch Cost $25
* Monthly Breakfast Cost $15

Add the total fixed costs = $6,090

Average charge per client = Monthly Membership Fee = $125

Average variable cost per client = Monthly Breakfast and Lunch Costs = $40

$6,090 / ($125 – $40) = 71.65 = 72

**2. Payback period:**

|  |  |  |
| --- | --- | --- |
| Year | Cash Flow | Cumulative Cash Flow |
| 0 | ($317,880) | ($317,880) |
| 1 | $46,920  | ($270,960) |
| 2 | $68,166  | ($202,794) |
| 3 | $93,404  | ($109,390) |
| 4 | $123,287  | $13,897  |
| 5 | $158,573  | $172,470  |

= 4 + (|-$109,390| / $123,287)

= 4 + 0.8873

= **4.8873 years**

**Feedback to Students:**

**Based on the break-even analysis, MHCBS would need to serve 72 clients a month in order to break even in their investment at the senior multipurpose center. Knowing there are already 120 interested seniors at this time should provide confidence to the CEO that this could be a wise investment.**

**Based on the payback period calculation, it will take MHCBS 4.9 years to recover the cost of its investment in a senior multipurpose center. This appears to meet the 5 year Board of Director’s time threshold.**

**Given the positive preliminary results of the two analyses, MHCBS should consider moving forward with further analysis and potential construction of the senior multipurpose center.**

**Note, further analysis could include a capital budgeting study that evaluates projected future cash flows on a net present value (NPV) discounted basis and consideration of the projects internal rate of return (IRR) weighed against the organization’s cost of capital. This is content that you will learn in HCAD 645 or within Chapter 14 of the suggested textbook - Gapenski & Reiter’s Healthcare Finance – An Introduction to Accounting & Financial Management, 6th ed. (ISBN: 978-1-56793-741-1)**