## Calculating Net Present Value & Sensitivity Analysis

Now that we have developed the annual cash flows of opening a new Core Fit location we can calculate the net present value.

We will also create a sensitivity table to show what happens to the net present value when we vary the discount rate and the monthly churn rate of members.

**Step 1**: Assume a discount rate of 15% and enter it into the spreadsheet in cell C4.

**Step 2:** Use the NPV function to calculate the Net Present Value in cell C47.

**Step 3**: Using the Data Table function, fill in the values for the sensitivity table.

[Insert Leonardo spreadsheet]

Now let us answer the following questions based on the model that we just built:

### Test Your Understanding

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1. At a 15% discount rate and the current cash flow model, what is the NPV of the project:
2. -$216,200
3. $866,767
4. $292, 907
5. -$85,000

[Correct Answer: C]

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1. Should Stella and Eddie open up a second location?
2. Yes, but in 2022, when the annual cash flow becomes positive
3. Yes, right now as planned
4. No
5. Yes, but only if the discount rate is 13%

[Correct Answer: B]

1. Looking at the data table, what is the NPV when the discount rate is 13% and the monthly churn rate of members is 6%
2. $842,300
3. -$166,477
4. $13,876
5. $78,025

Correct Answer: D]