## 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]