## Review Classmates: Module 2 Mini-Project

|  |  |
| --- | --- |
| **Reviews** | 12 complete |

**Well done!**

You've sent 12 classmates valuable feedback that will help them improve. You can review another submission below or you can continue the course.

Right decision?



by Minna Soini

Submitted on July 3, 2016

like Flag this submission

### Part 1

Cut Here, Inc. is considering a new video rendering system for their in-house studio. Currently, there are two options. Each option involves a significant investment in an asset that has a multi-year useful life. The key benefits of each option are cash savings, which Cut Here equates to cash inflows (i.e., compared to the status quo scenario, in which it incurs significant costs in terms of labor, time, etc.).

Use the cash flow information provided in the Assignment Details section of the **Instructions** tab.

Then, use the following measures to assess the two options from a financial perspective. That is, compute the following measures for each option.

* Payback
* Accounting rate of return
* Net present value
* Internal rate of return

**PAYBACK:**

**OPTION A:**

Initial outflow $100,000.00

Year 1: $100,000.00 - $10,000.00 = $90,000.00

Year 2: $90,000.00 - $50,000.00 = $40,000.00

Year 3: $40,000 - $20,000.00 = $20,000.00

Year 4: $20,000.00 - $70,000.00 = -

$20,000.00 / $70,000.00 = 0.2857142

**3,29 years**

**OPTION B:**

Initial outflow $250,000.00

Year 1: $250,000.00 - $1,000.00 = $249,000.00

Year 2: $249,000.00 - $2,000.00 = $247,000.00

Year 3: $247,000 - $3,000.00 = $244,000.00

Year 4: $244,000.00 - $1,000.00 = $243,000.00

Year 5: $243,000.00 - $20,000.00 = $223,000.00

Year 6: $223,000.00 - $390,000.00 = -

$223,000.00 / $390,000.00 = 0.5717948

**5,57 years**

**ACCOUNTING RATE OF RETURN:**

**OPTION A:**

Cash savings: $10,000 + $50,000 + $20,000 +$70,000 + $80,000 + $10,000 = $240,000

$240,000 / 6 years = $40,000.00

$100,000 / 6 years = $16,666.66

($40,000.00 - $16,667) / $100,000 = 0.23333 ~ **23%**

**OPTION B:**

Cash savings: $1,000 + $2,000 + $3,000 + $1,000 + $20,000 + $390,000 = $417,000

$417,000 / 6 years = 69,500

$250,000 / 6 years = $41,666.66

($69,500 - $41,667) / $250,000 = 0.111332 ~ **11%**

**NET PRESENT VALUE:**

**OPTION A:**

$10,000 x (1/ 1+ 0.23333)^1 = $8108

$50,000 x (1/ 1+ 0.23333))^2 = $32870

$20,000 x (1/ 1+ 0.23333)^3 = $10660

$70,000 x (1/ 1+ 0.23333)^4 = $30252

$80,000 x (1/ 1+ 0.23333)^5 = $28032

$10,000 x (1/ 1+ 0.23333)^6 = $2841

$8,108 + $ 32,870+ $10,660 + $30,252 + $28,032+ $2,841 = $112,763  
**$112,763 v. $100,000**  
$12,763

**OPTION B:**

$1,000 x (1/ 1+ 0.111332)^1= $900

$2,000 x (1/ 1+ 0.111332)^2= $1619

$3,000 x (1/ 1+ 0.111332)^3= $2186

$1,000 x (1/ 1+ 0.111332)^4= $656

$20,000 x (1/ 1+ 0.111332)^5= $11797

$390,000 x (1/ 1+ 0.111332)^6= $206,985

$900 + $1619 + $2186 + $656 + $11797 + $206,985 = $224,143   
**$224,143 v. ($250,000)**  
($25,857)

**INTERNAL RATE OF RETURN:**

**OPTION A:**

NTV 25 % = $107,747  
NTV 26%= $104,912

NTV 28% = $99,480

26% +104,912 /($104,912 + $99,480) x 2% = **27,02%**

**OPTION B:**

NTV 9% = $251,119  
NTV 10% = $237,923

9% + 251,119 / ($237,923+251,119) x 1% = **9,51%**

Read the response to Part 1 and assign points below. Be sure to see the detailed rubric on the Instructions tab before assigning points.

* 0 pts - 0 points: No answer, completely irrelevant answer.
* 5 pts - 5 points: Insufficient, incomplete, lacks supporting evidence.
* 7 pts - 7 points: Passing, meets expectations.
* 9 pts - 9 points: Well above average, exceeds expectations.
* **10 pts - 10 points: Superior performance, excellent.**

### Part 2

Based on what you calculated in Part 1, which option would you recommend to Cut Here management?

Payback period for option A is little bit over three years (3.29 years) and for option B it is more than five years (5.57 years). So in option A managers will recover the cost of capital investment from the net annual cash flow much faster than in option B.

In option A when we compare the value of all future inflows to the amount managers have to invest to this project, we can notice that net present value is positive $12,763. So this investment looks good from the net present value perspective. Instead in option B the net present value is negative $25,857, which in financial perspective does not look favorable for company at all.

When managers are comparing the returns that they are getting on the investment they will notice that in option A (23%) the accounting rate of return (The difference between the average cash savings each year and the depreciation expense.) is more than double than in option B (11%).

Further calculations about internal rates (the discount rates that make the net present value of the project equal to zero) will show that option A’s exact discount rate will be 27,02% and option B’s rate will be 9,51%.

Based on calculations, managers should end up to the option A.

Read the response to Part 2 and assign points below. Be sure to see the detailed rubric on the Instructions tab before assigning points.

* 0 pts - 0 points: No answer, completely irrelevant answer.
* 5 pts - 5 points: Insufficient answer, incomplete, lacks supporting evidence.
* 7 pts - 7 points: Passing, meets expectations.
* 9 pts - 9 points: Well above average, exceeds expectations.
* **10 pts - 10 points: Superior performance, excellent.**

### Part 3

Describe some of the strengths and weaknesses of your analysis (i.e., specific measures, etc.). Also, what other considerations might influence your recommendation?

In option A in year zero the initial outflow is $100,000 and for option B it was much higher $250,000. In option A cash inflow occur quite regularly, when option B’s cash savings peak will occur in the later years. Managers have to wait long time to receive that cash, since it comes on sixth year. They might take into consideration that option A’s regular cash inflows might be more valuable to them as an investment.

If managers make their decision based on accounting rate of return, they have to take into consideration that it ignores the notion of cash flows, which was very different in these two options.

The net present values take into account the time value of money and it’s more accurate in terms of measuring the benefits and the costs of a capital investment. It’s also focus on cash flows and increases the feasibility of a project. Many managers like it also because it allows for comparability. Managers might not be sure what the appropriate discount rate or rate of return should be and this causes also uncertainty.

Read the response to Part 3 and assign points below. Be sure to see the detailed rubric on the Instructions tab before assigning points.

* 0 pts - 0 points: No answer, completely irrelevant answer.
* 5 pts - 5 points: Insufficient answer, incomplete, lacks supporting evidence.
* 7 pts - 7 points: Passing, meets expectations.
* **9 pts - 9 points: Well above average, exceeds expectations.**
* 10 pts - 10 points: Superior performance, excellent.

Please provide any overall feedback that you have for the author of this assignment. What is one strength of the submission? What is one area of improvement that you would like to suggest?

Submit Review

Excellent !!! I evaluated more than 20 peers... Kindly marking mine... thanks in advance.

<https://www.coursera.org/learn/managerial-accounting-tools/peer/crAeu/module-2-mini-project/discussions/threads/jBqzpFyDEeaCxw4CtnLVoQ>

Visible to classmates



Excellent !!! I evaluated more than 20 peers... Kindly marking mine... thanks in advance.

<https://www.coursera.org/learn/managerial-accounting-tools/peer/crAeu/module-2-mini-project/discussions/threads/jBqzpFyDEeaCxw4CtnLVoQ>