

# [Capital budgeting](https://assignbuster.com/capital-budgeting-essay-samples/)

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Module 05 - Case Assignment The management at William’s Pharmaceutical is considering new computers and equipment to manage inventory and to expedite online orders and product shipment. The investment will be $100 thousand and the cost of capital is 15%. The company earned $500 thousand in sales last year and anticipates the new equipment could increase sales by 10% annually. Based on what you have learned about capital budgeting, would this be a profitable investment over the next five years?   
Years   
Total Sales   
Cash Flows   
Disc. Fact. (15%)   
Disc. CFs   
Cum. CFs   
0   
500, 000   
(100, 000)   
1   
(100, 000)   
(100, 000)   
1   
550, 000   
50, 000   
0. 869565217   
43, 478   
(56, 522)   
2   
605, 000   
55, 000   
0. 756143667   
41, 588   
(14, 934)   
3   
665, 500   
60, 500   
0. 657516232   
39, 780   
24, 846   
4   
732, 050   
66, 550   
0. 571753246   
38, 050   
62, 896   
5   
805, 255   
73, 205   
0. 497176735   
36, 396   
99, 292   
  
  
  
  
  
  
NPV   
$ 86, 340. 78   
  
Cost of Capital   
15%   
  
IRR   
49%   
  
MIRR (Reinvestment Rate 20%)   
34%   
  
Discounted Payback Period   
2. 38   
years   
Profitability Index   
  
  
1. 99   
  
Write a recommendation based on your understanding of capital budgeting. Include an interpretation of the following?   
Since all the techniques relevant to capital budgeting are indicative of viability of this project. It is recommended to the company that this project should be accepted along with the consideration of other qualitative factors which may arise during the life of the project. So the company should estimate the quantitative as well as the qualitative factors relevant to this particular project. However, on financial grounds, the project is advised to be opted.   
What is the discounted payback period?   
The discounted pay back of this project is computed as 2. 38 years.   
Would the investment produce a profit in five years?   
Yes, definitely the project would start earning profits in the year 3 of the project’s life as all the investment expenditure of the company will be recouped in year 3.   
What Modified Internal Rate of Return (IRR) and Internal Rate of Return (IRR) should the company expect over the next five years?   
Assuming the reinvestment rate of the project is 20%, the company may earn around 34% in respect of Modified Internal Rate of Return. However, the figure for IRR is computed to around 49% which is very attractive for the company.   
Is the NPV of the project worth the investment?   
The NPV of the project is computed as positive $ 86, 340 which is very encouraging and suggests that project is absolutely worthwhile for the company in future years.   
What is the profitability index of this project?   
The profitability index of the project is around 1. 99 which is very close to 2, therefore, the company should not be hesitated in opting this project.   
References   
Capital Budgeting. (n. d.). Web. 12 January 2012. Individual Rate of Return.(n. d.). Web. 12 January 2012. Profitability Index. (n. d.). Web. 12 January 2012.