CAREER CLUSTER
Finance

CAREER PATHWAY
Corporate Finance

INSTRUCTIONAL AREA
Financial Analysis

CORPORATE FINANCE EVENT

PARTICIPANT INSTRUCTIONS

PROCEDURES

1. The event will be presented to you through your reading of these instructions, including the Performance Indicators and Event Situation. You will have up to 30 minutes to review this information to determine how you will handle the role-play situation and demonstrate the performance indicators of this event. During the preparation period, you may make notes to use during the role-play situation.

2. You will have up to 15 minutes to role-play your situation with a judge (you may have more than one judge).

3. You will be evaluated on how well you meet the performance indicators of this event.

4. Turn in all your notes and event materials when you have completed the role-play.

PERFORMANCE INDICATORS

1. Discuss the capital budgeting process.

2. Discuss the use of net present value.

3. Calculate the net present value.

4. Calculate the internal rate of return.

5. Explain the relationship between the internal rate of return and net present value.

EVENT SITUATION

You are to assume the role of a financial analyst at C.H. NEWTON BUILDERS, a real estate developer. The CEO (judge) has asked you to evaluate a retail investment project that is under consideration.

C.H. NEWTON has been very successful developing real estate in the market. The company has historically focused on the development of residential housing units. David Newton (judge) has recently become interested in commercial retail space and has identified a project that looks promising.

The retail space is for sale for $1,080,000. The land is valued at $160,000 and the building at $920,000. The building is leased to a quality tenant with a five-year lease at $40,000 per year. The building is located in an area that is becoming increasingly fashionable. The business broker you are working with expects that the property will be worth $1,600,000 in five years' time.

The residential investments at C.H. NEWTON are currently yielding a 13% return. You have been instructed to use a 13% rate of return in your analysis of this project. At the asking price, does an NPV analysis of this project indicate that it would be a good deal? What is the IRR on the development? The CEO (judge) is considering making an offer of $990,000. At this price would the property generate an IRR sufficient to meet C.H. NEWTON'S return expectations?

You will present and explain your calculations to the CEO (judge) in a role-play to take place in the CEO's (judge's) office. The CEO (judge) will begin the role-play by greeting you and asking to see your calculations and hear your ideas. After you have presented your material and have answered the CEO's (judge's) questions, the CEO (judge) will conclude the role-play by thanking you for your work.

JUDGE'S INSTRUCTIONS

DIRECTIONS, PROCEDURES AND JUDGE'S ROLE

In preparation for this event, you should review the following information with your event manager and other judges:

1. Procedures

2. Performance Indicators

3. Event Situation

4. Judge Role-play Characterization
   Participants may conduct a slightly different type of meeting and/or discussion with you each time; however, it is important that the information you provide and the questions you ask be uniform for every participant.

5. Judge's Evaluation Instructions

6. Judge's Evaluation Form
   Please use a critical and consistent eye in rating each participant.

JUDGE ROLE-PLAY CHARACTERIZATION

You are to assume the role of CEO of C.H. NEWTON BUILDERS, a real estate developer. You have asked one of your financial analysts (participant) to evaluate a retail investment project that you are considering.

C.H. NEWTON has been very successful developing real estate in the market. The company has historically focused on the development of residential housing units. You have recently become interested in commercial retail space and have identified a project that looks promising.

The retail space is for sale for $1,080,000. The land is valued at $160,000 and the building at $920,000. The building is leased to a quality tenant with a five-year lease at $40,000 per year. The building is located in an area that is becoming increasingly fashionable. The business broker you are working with expects that the property will be worth $1,600,000 in five years' time.

You have asked the financial analyst (participant) to calculate and present some analysis of the project. Your residential real estate investments are currently yielding a 13% return. You have, therefore, indicated that C.H. NEWTON'S required rate of return on this project is 13% and wonder whether at the asking price, if an NPV analysis of the project would indicate that this project is a good deal. You also want the analyst (participant) to calculate the IRR on the development. You are considering making an offer of $990,000, and want to know whether at this price the property would generate an IRR sufficient to meet your return expectations.

The financial analyst (participant) will present and explain the calculation to you in a role-play to take place in your office. You will begin the role-play by greeting the analyst (participant) and asking to see the calculations and hear about his/her ideas.

During the course of the role-play you are to ask the following questions of each participant:

1. Without changing any of the cash flows, in what circumstances might this investment become attractive to C.H NEWTON?

2. Do NPV and IRR analysis always agree on whether a proposed investment creates value for the firm?

3. Are there other capital budgeting techniques that we might use to evaluate this project?

Once the financial analyst (participant) has made their presentation and has answered your questions, you will conclude the role-play by thanking the analyst (participant) for the work.

You are not to make any comments after the event is over except to thank the participant.

SOLUTION

Capital Budgeting is the process in which a business determines whether projects such as building a new plant or investing in a long-term venture (real estate) are worth pursuing. Oftentimes, a prospective project's lifetime cash inflows and cash outflows are assessed in order to determine whether the returns generated meet a sufficient target benchmark.

Ideally, businesses should pursue all projects and opportunities that enhance shareholder value. However, because the amount of capital available at any given time for new projects is limited, management needs to use capital budgeting techniques to determine which projects will yield the most return over an applicable period of time. Popular methods of capital budgeting include Net Present Value (NPV), Internal Rate of Return (IRR), Discounted Cash Flow (DCF) and payback period.

Net present value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows. NPV is used in capital budgeting to analyze the profitability of an investment or project. NPV compares the value of a dollar today with the value of that same dollar in the future taking inflation and returns into account. If the NPV of a prospective project is positive, it should be accepted. However, if NPV is negative, the project should probably be rejected because cash flows will also be negative.

Internal Rate of Return (IRR) is the rate of return that a given project is expected to generate. The IRR is the discount rate that makes the net present value of all cash flows from a particular project or investment equal to zero. Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project. IRR can therefore, be used to rank several prospective projects a firm is considering. If all other factors are considered equal, the project with the highest IRR would probably be considered the best.

Project NPV
In order to solve this problem, we will need to perform a present value calculation on each of the cash flows to be received over each of the next five years, including $40,000 annual payment and the 1,600,000 Future Value of the property. Using a financial calculator:

N = 5
I = 13
PMT = 40,000
FV = 1,600,000
PV = 1,009,105.15

The gross Present Value of the cash inflows, discounted at 13% equals $1,009.105.15.

Cash Inflows – Cash Outflows = NPV
1,009,105.15 – 1,080,000 = (70,894.85)

At a price of $1,080,000, C.H. NEWTON would be overpaying by $70,894.85. This project would have a negative NPV and should not be undertaken.

Project IRR
IRR is the discount rate that will result in an NPV of zero. Using a financial calculator:

N = 5
PMT = 40,000
FV = 1,600,000
PV = -1,080,000
I = 11.377%

At an11.377% discount rate (also known as hurdle rate and/or the opportunity cost of capital) the present value of all the cash inflows will be equal to the cash outflow to purchase the property. The IRR on the project is less than the required rate of return and therefore should not be undertaken at this purchase price.

The $990,000 offer
Participants should realize that before any financial calculations on this offer are completed that the answer will be 'yes' at a purchase price of $990,000 this project makes sense. The NPV of the cash inflows was $1,009,105.15 so any cash outflow (purchase price) less than that amount will create a positive NPV and generate a return greater than 13%.

Cash inflows – cash outflows = NPV:
1,009,105.15 – 990,000 = 19,105.15

Key Points (Answers to Judge's Questions)

- Reduce cash outflows (purchase price) or reduce the required rate of return.
- The NPV method and the IRR method for analyzing investments should agree on whether the investment/project creates value for the firm. The methods might not always agree on the ranking of different investment alternatives due to timing issues and the sensitivity of cash flows to time horizons.

- Discounted Cash Flow (DCF) Analysis and Payback Period are other methods for conducting capital budgeting.
    - Discounted cash flow (DCF) analysis uses future free cash flow projections and discounts them (most often using the weighted average cost of capital) to arrive at a present value, which is used to evaluate the potential for investment. If the value arrived at through DCF analysis is higher than the current cost of the investment, the opportunity may be a good one.
    - Payback period is the length of time required to recover the cost of an investment. The payback period of a given investment or project is an important determinant of whether to undertake the position or project, as longer payback periods are typically not desirable for investment positions. Calculated by taking the cost of a project and dividing it by the annual cash inflows

JUDGE'S EVALUATION INSTRUCTIONS

Evaluation Form Information

The participants are to be evaluated on their ability to perform the specific performance indicators stated on the cover sheet of this event and restated on the Judge's Evaluation Form. Although you may see other performance indicators being demonstrated by the participants, those listed in the Performance Indicators section are the critical ones you are measuring for this particular event. Please note that an overall score of 70% indicates a *minimum level of acceptable performance.*

Evaluation Form Interpretation

The evaluation levels listed below and the evaluation rating procedures should be discussed thoroughly with your event chairperson and the other judges to ensure complete and common understanding for judging consistency.

Level of Evaluation	Interpretation Level
Exceeds Expectations	Participant demonstrated the performance indicator in an extremely professional manner; greatly exceeds business standards; would rank in the top 10% of business personnel performing this performance indicator.
Meets Expectations	Participant demonstrated the performance indicator in an acceptable and effective manner; meets at least minimal business standards; there would be no need for additional formalized training at this time; would rank in the 70-89th percentile of business personnel performing this performance indicator.
Below Expectations	Participant demonstrated the performance indicator with limited effectiveness; performance generally fell below minimal business standards; additional training would be required to improve knowledge, attitude and/or skills; would rank in the 50-69th percentile of business personnel performing this performance indicator.
Little/No Demonstration	Participant demonstrated the performance indicator with little or no effectiveness; a great deal of formal training would be needed immediately; perhaps this person should seek other employment; would rank in the 0-49th percentile of business personnel performing this performance indicator.

CORPORATE FINANCE, 2014

Participant: _____

JUDGE'S EVALUATION FORM
SAMPLE EVENT

I.D. Number: _____

INSTRUCTIONAL AREA: Financial Analysis

Did the participant:		Little/No Value	Below Expectations	Meets Expectations	Exceeds Expectations	Judged Score
PERFORMANCE INDICATORS						
1.	Discuss the capital budgeting process?	0-1-2-3-4-5	6-7-8-9-10-11	12-13-14-15	16-17-18	
2.	Discuss the use of net present value?	0-1-2-3-4-5	6-7-8-9-10-11	12-13-14-15	16-17-18	
3.	Calculate the net present value?	0-1-2-3-4-5	6-7-8-9-10-11	12-13-14-15	16-17-18	
4.	Calculate the internal rate of return?	0-1-2-3-4-5	6-7-8-9-10-11	12-13-14-15	16-17-18	
5.	Explain the relationship between the internal rate of return and net present value?	0-1-2-3-4-5	6-7-8-9-10-11	12-13-14-15	16-17-18	
6.	Overall impression and response to judge's questions	0-1-2	3-4-5	6-7-8	9-10	
					TOTAL SCORE	